# PUBLISHER SURVEY OF ETHIOPIC LAYOUT & FORMATTING PRACTICES

THE 1<sup>ST</sup> SURVEY OF THE W3C ETHIOPIC LAYOUT REQUIREMENTS TASK FORCE

#### 1 Purpose of This Survey

This goal of this survey is to determine the best practices of document layout and formatting for literature written in the Ethiopic script. The information gathered from the survey will be used to define an international standard governed by the World Wide Web Consortium. The resulting standard will be free to use by software companies who in turn may then apply the information to correctly format Ethiopian literature in electronic forms such as web pages, eBooks, and by word processors.

Many languages have a long history of writing in Ethiopic script and have developed different conventions and styles of writing. All of these styles can be supported by software provided that the appropriate information is collected. The aim of this survey is to collect the necessary information to support all writing traditions present and past —many of which may be unknown to the survey team. Please feel free to provide any additional information that you feel is important. The questions in the survey primarily attempt to resolve discrepancies in the most commonly observed practices of general literature.

This survey process and the standardization work activity are conducted by volunteers with a deep interest in Ethiopic literature and layout and who do not stand to profit from their involvement. You are also invited to join them to follow the work as well as to participate in its development as you desire.

#### **References and Points of Contact:**

The Ethiopic Layouts Requirements draft specification:

http://w3c.github.io/elreq/

The W3C Ethiopic Layout Task Force's mail archive with subscription information:

https://lists.w3.org/Archives/Public/public-i18n-ethiopic/

#### **RESPONDENTS CONTACT**

| Name:   |   |
|---|---|
| Company or Institute:                         |   |
| Role at Institute:                            |   |
|   |   |
| Years involved with literature or publishing: |   |
| Literature or publishing languages:           |   |
| Areas of expertise:                           |   |
|   |   |
|   |   |
| Email:  | _ |
| Phone:  | _ |

#### **INSTRUCTIONS**:

Please respond to the survey questions to the best of your ability based on practical experience. Survey question cover a very wide range of topics -please do not guess an answer. It is preferred that a question is left unanswered when the respondent is uncertain or the topic is outside of one's experience and expertise.

Please use additional space as needed. Questions on the meaning of survey questions may be addressed to the provider of this survey. You are welcome and encouraged to provide any additional information that you think is relevant.

#### 2 Characters and phrases

#### 2.1 Font styles

(W3C Ethiopic Layout Gap Analysis 2.3)

Arriving along with the adoption of mechanical printing technology in the 20<sup>th</sup> century authors begun applying stylized text to their words and phrases to convey prosodic stress to the reader. For example, font size, font style (typeface), and underlining would be used for emphasis. The approach to emphasis was limited by the printing technology available to the printing agency and would also change as per the individual preferences of authors to copy editors.

Toward the end of the last century, desktop publishing software gave authors with the ability to easily apply non-traditional forms of text styling such as bold, italic, outlining, highlighting and so on. This further diversified the means of expressing emphasis but also has led to a decrease in the consistency in what a given stylization connotes.

Recommended practices for emphasis are not known to have been established at a national level and every organization engaged in publishing will apply its own in-house conventions. The goal of this section is to arrive at a recommendation for emphasis that would be suitable for most publishers when targeting the average reader.

#### 2.1.1 Size Change

Change of letter size has been used in the past a means to impart emphasis. This practice has a visual impact similar to bold emphasis. An example:

```
፫ኛም ፡ በጓኋኳቋ ፡ አንጻር ፡ ለሚገኙ ፡ ከቧ ፡ እስከ ፡ ቷና ፡ እስከ ፡ ሯ ፡ ላሉት ፡ እነጓኋኳቋ
ም ፡ ሳይቀሩ ፡ ለመላው ፡ ለ፳፫ቱ ፡ ዲቃሎች ፡ ለራብፆች ፡ ብቻ ፡ ፍጹም ፡ ዐመላቸው ፡ ወይም ፡
ዋየላቸው ፡ ዋ ፡ ነው ፤ ቅተላቸው ፡ ኹሉ ፡ ህየንተ ፡ ዋ ፡ ኹኖ ፡ በዋ ፡ ፈንታ ፡ ገብቷል ፡፡ ዋ ፡ ደ
ማሞ ፡ ቅተሉ ፡ የአ ፡ ምሳሌ ፡ ስለ ፡ ኾነ ፡ ዉሕ ፡ ተብሎ ፡ ስለ ፡ ኹለት ፡ ዋየል ፡ ይቈጠራል ፡፡
ቅተላቸው ፡ ቀርቶ ፡ በዝርዝር ፡ ፌደል ፡ ሲጣፉ ፡ ግን ፡ ቧቷቿ ፡ የነበሩት ፡ ি ኢ ፡ ቲሕ ፡ ቺአ ፡
ያሰኛሉ ፤ ይህነን ፡ ደግሞ፡ ዘርዝሮ ፡ ሲተፉት ፡ በዉሕ ፡ ተዉሕ ፡ ቸዉሕ ፡ ያሰኛልና ፤ ቅተ
ላቸው ፡ እንደ ፡ ጓኋኳቋ ፡ በ፪ ፡ ወገን ፡ መኾኑ ፡ ስለዚህ ፡ ነው ፡፡ ልብ ፤ ልቧ ፡ ዐስቧል ፡ የተባ
```

Typeface size change for emphasis found in Mazgaba Fidal by Kidane Wolde Kifle, p. 43.

| 1. | Should size changes be recognized as a form of Ethiopic emphasis?                 |
|----|---|
|    | $\square$ No opinion $\square$ Yes $\square$ No $\square$ Other (Please explain): |
|    | · · · · · · · · · · · · · · · · · · ·   |
|    |   |
| 2. | If you answered "Yes" to Question 1, how much larger should letters be made?      |
|    | □ No opinion □ Increase by % □ Other (Please explain):                            |
|    | · · · · · · · · · · · · · · · · · · ·   |
|    |   |

#### 2.1.2 Style Change

In addition to changing the letter size, another past practice has been to change the letter style (typeface) as a form of emphasis. This is sometimes done with a change to a more antiquated style and may be used in quotation, in particular with a language change to Ge'ez. An example:

```
ቤተ፤ (ብ፡ አብያተ። ዕብ፡ ባይተ።
ሱር፡ ቤታ። ዕረ፡ በይተ)፤ በቁሙ፡ ማደሪያ፡
መኖሪያ፤ ሥራ፡ መሥሪያ፤ በደንጊያ፡ በብረት፤ በሙ፡
በና፡ በንጨት፤ በኖራ፡ በሚቃ፡ በሣር፡ በጨሪቃ፡ የሚ
ሠራ። ውስጠ፡ ክፍትንት፡ ያለው፡ ዕቃ፡ ቦታ፤ ዋሻ፡
ፍርተታ፤ ጉሬ፡ ጉድጓድ፤ ታላቁም፡ ታናሹም፡ ማና
ቸውም፡ ኹሉ። አቀትሎ፡ ለቤተ፡ ምክራም፡ ውለ
ቤተ፡ ሐጋይ፤ ይትህጉሎ፡ አብደት፡ ዘቀርን፡ ነኔ፡ ወ
ይተክሉ፡ አብደት፡ ካልኣን። ይቀሥፎ፡ ለዐቢይ፡
ቤት፡ በድቀት፡ ወለንኤስ፡ ቤት፡ በንፅንት። ባኢ፡
ቤትስ። ቤት፡ ምሩግ፡ (ዓም፫፡ ፲፭። ፯፡ ፲፩። ኢሳ
፳፮፡ ፳። ምሳ፳፩፡ ፱)።
```

Typeface change for emphasis found in Maṣḥafa Sawāsew Wages Wamazgaba Qālāt Hadis by Kidane Wolde Kifle, p. 268.

| 1. | Should a font style be recognized as a form of Ethiopic emphasis?  |
|----|--|
|    | □ No opinion □ Yes □ No  |
| 2. | If you answered "Yes" to Question 1, please describe systematically how & when this style of emphasis is made: |
|    |  |
|    |  |
|    |  |

#### 2.1.3 Underline

Underline is a non-traditional form of emphasis that was adopted by some authors in the early 20<sup>th</sup> century. The characteristics of the underline itself may change from one printing agency to the next where the underline position below a line of text can vary as well as the line thickness.

Sample of underline found in YaMāychaw Kwusolañā. By Mekonnen Zewdie p. 56.

|  | hould <u>underline</u> be recognized as a form of Ethiopic emphasis?  □ No opinion □ Yes □ No □ Yes, under these circumstances only:         |
|--|--|
| $ \begin{array}{ccc}  & & \\ 2. & & \\  & &$ | Fyou answered "Yes" to Question 1, please remark on proportions for "x" and "y below: $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ |
| h –  | Letter height.   |
| 0 -  | Vertical offset of the line below the base of the text as some fraction "x" of the height "h".   |
| T –  | Average stroke thickness of letters.   |
| t –  | Underline thickness as some faction "y" of stroke thickness "T".   |
|  | □ No opinion □ x = . y =   |

#### 2.1.4 Bold

Boldface text is a common style of emphasis for Latin script. Computer software can create bold text automatically from a regular font that was not designed for a boldface. The use of boldface for Ethiopic has been controversial when applied to the classic style, and less divisive when applied to more modern thinner styles that have been designed for digital screens.

| <b>C</b> | A         |   |
|----------|-----------|---|
| SHIPVEV  | Questions | • |
| Jaive    | Questions | • |

| 1.                       | Should <b>bold</b> be recognized as a form of Ethiopic emphasis?  □ No opinion □ Yes □ No □ Yes, under these circumstances only:   |
|--------------------------|--|
| 2.                       | If you answered "Yes" to Question 1, under what Ethiopic font styles should bold be supported?  □ All styles □ Thin styles only (e.g. みそかり) □ Other (Please explain):  |
| 3.                       | If you answered "Yes" to Question 1, how much thicker should bold Ethiopic letters be?  □ No opinion □ Following the same rules for Latin □ Other (Please explain):  |
| Lik<br>vir<br>app<br>Eth | te boldface text, computer software can automatically "slant" a regular style font to create a tual italic face. In a true italic typeface the letter shapes are also optimized for the slanted bearance (compare the shapes of 'n' to 'n'). Some past attempts have been made to create niopic letter shapes for use as an italic face, but have not seen wide spread adoption. In part a lack of adoption may have been due at least in part to the commercial nature of the font. |
|                          | Should <i>italic</i> be recognized as a form of Ethiopic emphasis?  □ No opinion □ Yes □ No □ Yes, under these circumstances only:   |
| 2.                       | If you answered "Yes" to Question 1, please recommend a reference work that demonstrates a good quality Ethiopic italic style.  □ No opinion □ The following references are recommended:   |
|                          |  |

#### 2.1.6 Headings

Chapter, section and subsection heading styles will combine one or more of the above styles to form a composite header style. A variety of heading styles are provided by word processors that a user may select from. Web browsers and eReaders will support a default style.

| <b>Survey Questions:</b> |
|--------------------------|
|--------------------------|

| 1.        | What heading style rules would you want software to support?  |  |
|-----------|---|--|
|           | □ No opinion □ Latin heading rules are fine. □ The following:   |  |
|           |   |  |
|           |   |  |
|           |   |  |
| 2.′       | 1.7 Default Emphasis  |  |
| exa       | a number of publishing contexts, a default, or generic, form of emphasis is defined. For ample, in the Hyper Text Markup Language (HTML) the tag " <em>" indicates a general rm of emphasis that can be defined on a per-language basis.</em> |  |
| <u>Su</u> | rvey Questions:   |  |
| 1.        | Which form of text emphasis is best as a default for Ethiopic?  |  |
|           | □ No opinion □ The following (Please list):   |  |
| 2.        | Do any emphasis practices change depending on Ethiopic language?  |  |
|           | □ No opinion □ No □ Yes (Please explain): :   |  |

## 3 Writing Style Best Practices

## 3.1 Numbers & digits

(W3C Ethiopic Layout Gap Analysis 2.7)

The Ge'ez numbers can be found written in two styles where the upper and lower bars (lines) can be either separated or connected.

| THEZE         | Isolated style – the numeral bars do not connect. |
|---------------|---|
| <u> 10836</u> | Joining style – the numeral bars are connected.   |

| 1. | Wł  | nich style should be the default? $\square$ No opinion $\square$ Isolated $\square$ Joined |
|----|-----|--|
| 2. | Are | e both styles desirable? □ No opinion □ Yes □ No   |
| 3. |     | ooth styles are desired: When would the isolated style be used? Please explain:            |
|    | b.  | When would the joined style be used? Please explain:                                       |
|    |     |  |

#### 3.2 Text boundaries & selection

(W3C Ethiopic Layout Gap Analysis 2.8)

Text boundaries mark the end of a written word. Space and punctuation symbols are the most common boundary markers. In some special cases, such as abbreviations, a punctuation may be included as part of a word (e.g. **a/C**, **b/A**, etc.). In word processors and web browsers, double clicking a word will select it for copying or cutting. The boundary markers are used to demarcate the beginning and end of the selection. The Ethiopic wordspace, ":", marks the end of a word but is not treated consistently by software as a boundary marker. For example, some web browsers will not include wordspace and Microsoft word will treat wordspace as a letter and extend selection to the end of a line.

| 1. | Should selecting an Ethiopic word for copying, also include a right side wordspace if present? □ No opinion □ Yes □ No □ Other (Please Explain):                                   |
|----|--|
| 2. | When a forward slash, "/", occurs between letters of a word should the slash be treated as part of the word during a selection?  □ No opinion □ Yes □ No □ Other (Please Explain): |
|    | <del></del>  |
| 3. | If you answered "Yes" to Question 2 above, what other punctuation should be treated the same as forward slash?   |
|    |  |

#### 3.3 Quotations

(W3C Ethiopic Layout Gap Analysis 2.9)

Classical Ethiopic literature applying quotation marks will employ double guillemet (« ») in a primary style and single guillemets (‹ ›) in a secondary style. Single guillemets will be used for inner-quotation and single word quotation. Modern Ethiopic writing will additionally utilize Latin quotation marks similarly (" ", ' '). The choice of Latin script quotation may represent either an author preference or a software limitation that made guillemets unavailable or difficult to access.

#### **Survey Questions:**

| 1. | Which style should be the default for Ethiopic literature: $\Box$ No opinion $\Box$ «» $\Box$ ""  |
|----|---|
| 2. | Are both styles appropriate for Ethiopic literature? □ No opinion □ No                            |
|    | ☐ Yes (Please Explain):   |
| 3. | What form is appropriate for outer quotation: □ No opinion □ Single □ Double                      |
| 4. | What form is appropriate for inner quotation: □ No opinion □ Single □ Double                      |
| 5. | What are the preferred quotation marks for modern Ethiopic literature?                            |
|    | □ No opinion □ «» □ "" □ It depends (Please Explain):   |
| 6. | Is the single quotation mark usage statement correct?   |
|    | □ No opinion □ No □ Yes □ Other rules (Please Explain):   |
| 7. | Do any other rules apply to quotation usage in Ethiopic writing?                                  |
|    | ☐ No opinion ☐ No ☐ Yes (Please Explain):   |
| 8. | What symbols should be used for "inner quotes" (i.e. quotation marks occurring within quotation)? |
|    | □ No opinion □ No □ Yes □ Other Rules (Please Explain):   |
| 9. | Are "block quotes" indented?  |
|    | $\square$ No opinion $\square$ No $\square$ Yes $\square$ Other Rules (Please Explain):           |
|    |   |

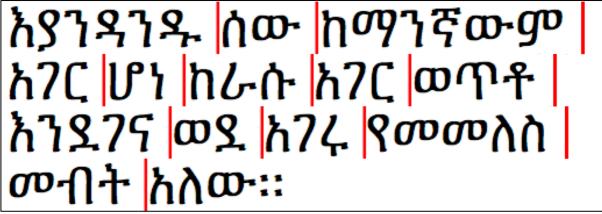
10. If block quotes are indented

### 4 Lines and Paragraphs

#### 4.1 Line breaking

(W3C Ethiopic Layout Gap Analysis 3.1)

Word processors and text readers such as web browsers, eBook devices, etc. will automatically format the sentences of a paragraph over a number of lines as allowable by the available width of the viewing area. These software systems apply formatting rules that govern where and how a line may end and a new line begin.



Example of allowable line breaking locations.

Line breaking rules for Ethiopic are given in the following.

A line may start with:

- A letter.
- A number.
- A tab.
- A non-terminal or non-joining punctuation (such as « < " \$ ( [ { } ).

Conversely, a line may not start with:

- Space, "".
- A terminal or joining punctuation (such as: ?!; ::) ] } / % " > » : : : : space, math operators).

| 1. | Are the above rules valid?   |
|----|--|
|    | □ No opinion □ Yes □ No (Please Correct):                              |
|    |  |
|    |  |
| 2. | Are any additional rules needed to govern how a line may end or begin? |
|    | □ No opinion □ No □ Yes (Please Explain):                              |
|    |  |
|    |  |

#### 4.1.1 First Paragraph Rule

Paragraph indentation is a regular practice in Ethiopic publishing, and not common in hand written manuscripts where a Hareg or Mekfel will be used instead. Some Western publishers will apply a special rule where the first paragraph of a section is *not* indented. It is unknown if this rule is also appropriate for Ethiopic publishing. An example follows:

## **መቅድም ።** ፊደል፡ ማለት፡ የነገር፡ የቃል፡ ምልክት፡ አምሳል፡ ወይም፡ መግለጫ፡ ጣስታወቂያ፡ ማለት፡ ነው፤ ሥዕል፡ እንደ፡ ማለት፡፡ ዐይነተኛ፡ ፍችው፡ ይህ፡ ነው፡ የቀረውን፡ በግስ፡ ይመለከቷል፡፡ የፊደል፡ ተራ፡ የተፋለሰና፡ አልፍ፡ አ፡ ከርስቱ፡ ከቀዳማዊነት፡ ተነቅሎ፡ በርሱ፡ ፋንታ፡ ሆይ፡ ሀ፡ መዠመሪያ፡ ፊደል፡ የኾነ፡ ከሣቴ፡ ብርሃን፡ ከሚባለ ፡ ፡ ፡ ፡ ፡ ፡ ፡

Example: First paragraph of section with indentation.

|  |               | መቅ           | ንድም <u>።</u>                |              |   |  |
|--|---------------|--------------|-----------------------------|--------------|---|--|
| <b>ማ</b> ለት <i>።                                    </i> | ፍችው ፡ ይህ ፡ ነወ | ፦፡ የቀረውን፡ በግ | ስ <i>፡ ይመ</i> ለከቷል <i>።</i> | የፊደል፡ ተራ፡ የተ | ት ፡ ነው ፤ ሥዕል ፡ እን <i>፤</i><br>Իፋለሰና ፡ አልፍ ፡ አ ፡<br>ቴ ፡ ብርሃን ፡ ከሚባለወ |  |
| :  | :             | :            | :                           | :            | :   |  |

Example: First paragraph of section without indentation.

| How much should a regular paragraph be indented?   |  |  |  |  |  |
|--|--|--|--|--|--|
| $\square$ No opinion $\square$ Same as English indentation $\square$ Other (Please Explain):                     |  |  |  |  |  |
|  |  |  |  |  |  |
| Should the first paragraph of a section be indented?   |  |  |  |  |  |
| $\square$ No opinion $\square$ Never $\square$ Always $\square$ Under special rules or context (Please Explain): |  |  |  |  |  |
|  |  |  |  |  |  |
| Should a new paragraph be indented following a list?   |  |  |  |  |  |
| $\square$ No opinion $\square$ Never $\square$ Always $\square$ Under special rules or context (Please Explain): |  |  |  |  |  |
|  |  |  |  |  |  |
| Are there any other special rules for when to, or not to, indent a paragraph?                                    |  |  |  |  |  |
| □ No opinion □ Yes (Please Explain):   |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

## 4.2 Hyphenation

(W3C Ethiopic Layout Gap Analysis 3.2)

In traditional Ethiopic writing the wordspace separator symbol, ":", negated the need for word hyphenation across a line of text. When wordspace fell out of favor in modern writing the practice of splitting a word across lines of text continued. The reader would know to mentally reconstruct a word by relying on knowledge of lexicon and context.

| Survey Ques | stions: |
|-------------|---------|
|-------------|---------|

| • | When wordspace, ":", is used, what rules for splitting a word across lines apply?  □ No opinion □ None, a word may be split anywhere □ The following rules:   |  |  |  |  |  |
|---|---|--|--|--|--|--|
|   | When space, "", is used, should Ethiopic writing use a hyphen "-" to split words across lines?  |  |  |  |  |  |
|   | □ No opinion □ Never □ Author's decision □ Other (Please Explain):  |  |  |  |  |  |
|   | When space, "", is used, and if words should be split across lines (with or without a hyphen), are the following rules for word splitting suitable?  • Words are split at a morpheme boundary, for example: 化十- |  |  |  |  |  |
|   | <ul> <li>Words are split at a syllable boundary.</li> <li>Words of a single syllable are not split over lines.</li> <li>Words of two letters are not split over lines.</li> </ul>                               |  |  |  |  |  |
|   | <ul> <li>Words of two fetters are not split over files.</li> <li>Words are split after a prefix.</li> <li>Words are split before a suffix.</li> </ul>   |  |  |  |  |  |
|   | <ul><li>Numbers are not split over lines.</li><li>Words are not split at the final letter.</li></ul>  |  |  |  |  |  |
|   | ☐ No opinion ☐ Yes ☐ No, a word may be split  |  |  |  |  |  |
|   | □ No or Incomplete (Please Explain):  |  |  |  |  |  |

#### 4.3 Justification

(W3C Ethiopic Layout Gap Analysis 3.3)

In justified text, the non-printed or "white space" between words is treated as "stretchable". The width of the white space can be stretched to some aesthetically pleasing size that may vary between individual words across a printed line. In Ethiopic justification, the white space between the Ethiopic word separator, ":", and the words it separates is likewise allowed to stretch. This stretching of white space may be either symmetrical ("centered") or, in the asymmetrical case, the stretching is always between the right side of ":" and the following word –this style is referred to here as the "word bound" justification.

## 4.3.1 Justification with Punctuation and Wordspace in Word Bound Style

In "word bound" justification the word separator, which may be either an Ethiopic Wordspace, ":", or a punctuation symbol, appears to adhere to the word on the left side as if it were its final character of the word. The following figure illustrates the "word bound" style:

```
የኒል፡ ወንዝ፡ ስላለ፡ ዝናም፡ የማይዘንምበት፡ የም
ስር፡ መሬት፡ ብዙ፡ ዓይነት፡ ፍሬ፡ የሚያልራ፡ ፍሬያም፡
መሬት፡ ይሆናል። በሐምሌ፡ ያ፡ የወንዙ፡ ውሀ፡ ሊነሳ፡
ይጀምራል፥ ከፍ፡ አያለ፡ ሂዶም፡ በመስከረም፡ አገሩን፡
በሞላው፡ ሐይቅ፡ ያደርገዋል። ውሀው፡ ከሚቻለው፡ ስፍራ፡
```

Ethiopic justification in word bounded style (Erikson, 1921 (1913 EC))

#### 4.3.2 Justification with Centered Wordspace and Punctuation

In the second major form of Ethiopic justification the white space around word separators is stretched equally on both the left and right sides; giving the appearance of the separator being centered between the words it divides. The following figure illustrates the "centered" style:

```
እኔም ፡ መለስሁና ፤ «ቢሆን፡ ቢሆን ፡ በሰብአዊ፡

ርጎራኄ ፡ ለፈጸማችሁት ፡ በጐ ፡ ተግባር ፡ ዋጋ ፡ መጠ

የቅ ፡ ባልተገባችሁ ፡ ነበር ፡ ዋጋ ፡ የምትጠይቁስ ፡

ከሆነ ፡ ያሳደጋችሁበትን ፡ ዋጋ ፡ እየሠራሁ ፡ እንድ

ከፍል ፡ ጠይቁኝ ፡ እንጂ ፤ ለማሳደጊያ ፡ ዋጋ ፡ የመን

ፈሴን ፡ ነፃነት ፡ እንድከፍላችሁ ፡ ትፈልጋላችሁ ?

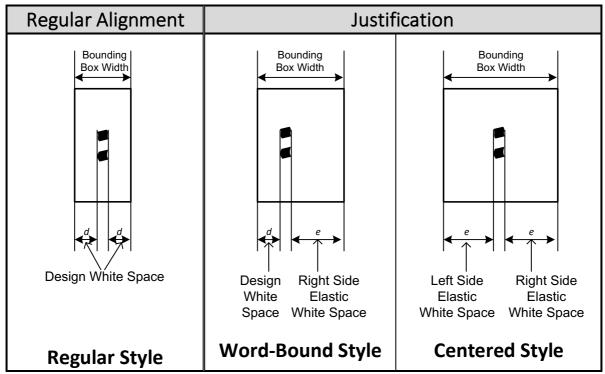
በፍጹም ፡ መጥፎ ፡ ጥያቄ ፡ ነው ፡፡ በወዳጅነትም ፡

ሆነ ፡ በውለታ ፡ አስጠግቶ ፡ የሰውን ፡ መንፈስ ፡ ለመ

ያዝ ፡ መሞከር ፡ ታላቅ ፡ ስሕተት ፡ ነው ፤» አልሁት ፡፡
```

Ethiopic justification in centered style (Gubenya, 1973 (1966 EC)).

The following figure presents the stretching of white space from the point of view of the symbol's typographic bounding box. Here the "design white space" (*d*) is the space between the visible symbol and the box border, is itself stretched (*e*) as needed to meet line justification:



Depiction of white space around Ethiopic Wordspace for three modes of text justification.

| 1. | . Which justification spacing style should be the default used by applications?       |  |  |  |  |  |
|----|---|--|--|--|--|--|
|    | □ No opinion □ Word Bound Style □ Centered Style □ Other (Please Explain):            |  |  |  |  |  |
|    |   |  |  |  |  |  |
| 2. | Are both styles appropriate? If so, in what contexts can the two styles be used:      |  |  |  |  |  |
|    |   |  |  |  |  |  |
| 3. | Are names known for these different formatting styles?   \[ \sum \text{No opinion} \] |  |  |  |  |  |
|    |   |  |  |  |  |  |

#### 4.4 Counters, lists, etc.

(W3C Ethiopic Layout Gap Analysis 3.4)

#### 4.4.1 Ordered List Counter Suffix

In Ethiopic ordered lists a number of symbols are used for the list marker (or "suffix"). For example "/", ":-", ".", ")" and even ":".

| 1.  | What is the best default marker symbol?  |  |  |  |  |
|---|--|--|--|--|--|
|   | $\square$ No opinion $\square$ / $\square$ :- $\square$ ) $\square$ . $\square$ : $\square$ Software default |  |  |  |  |
|   | ☐ Other (Please Explain):  |  |  |  |  |
| 2.  | How much, if any, white space follows the suffix?  |  |  |  |  |
|   | ☐ No opinion ☐ Same as with western lists ☐ Other Policy (Please Explain):                                   |  |  |  |  |
| 3.  | Do copy editors or publishers set a policy for list counter suffix, or leave it up to the author to decide?  |  |  |  |  |
|   | □ No opinion □ No □ Yes □ Other Policy (Please Explain):   |  |  |  |  |
| 4. Of historic interest: when are ordered lists first found in Ethiopic writing and in what form? |  |  |  |  |  |
|   | ☐ No opinion ☐ In the following publication and year:  |  |  |  |  |

#### 4.4.2 List Counter Suffix Alignment

Ethiopic corpus will present lists with two styles of alignment. These are a left side alignment at the list counter, or alignment along the list marker ("suffix"). Layout software will align a list at the marker in keeping with the later style. The former style (left justified at counter) may reflect a limitation of the layout technology employed and not a preference of the author, copy editor or typesetter. A depiction of these two alignment styles is presented in the following figures:

```
ሀ/ መሥተ ኃብዕ
ለ/ አርባዕት
ሐ/ አርያም
መ/ ውለስት
ሆ/ መወድስ
ረ/ ክሥተት ፡ አርያም
ሰ/ ዋዜጣ ፡ ምዕራፍ
ሸ/ ስብሐተ ፡ ነግህ
ቀ/ የጾም ፡ ምዕራፍ ፡ በሙሉ ።
```

**A:** Alphabetical list aligned justified on counter left.

| v/  | <i>መሥተጋ</i> ብዕ    |
|-----|-------------------|
| ስ/  | አርባዕት             |
| æ/  | አርያም              |
| /ሐ/ | <i>መዋሥዕ</i> ት     |
| w/  | <i>መ</i> ወድስ      |
| 4./ | ክሥተት ፡ አርያም       |
| ሰ/  | ዋዜማ ፡ ምዕራፍ        |
| ส/  | ስብሐተ ፡ ነግህ        |
| ቀ/  | የጾም ፡ ምዕራፍ ፡ በሙሉ። |

**B:** Alphabetical list aligned on marker.

| 1. | Which alignment style is preferable?                 |
|----|--|
|    | □ No opinion   |
|    | ☐ Align along left side of letter (Style A)          |
|    | ☐ Align along the right side of the marker (Style B) |
|    | ☐ Other (Please Explain):                            |
|    |  |

#### 4.4.3 Numbered Lists

Ethiopic literature will apply ordered numbered list using both Ethiopic and Western numeral systems. The question of best list counter suffix for Ethiopic literature arises here as well. Examples for consideration:

| Ethiopic N | Ethiopic Numeral Lists |            |                  |                |  |  |
|------------|------------------------|------------|------------------|----------------|--|--|
| <u>ة</u> : | ดู้/                   | <u>ā</u> ) | <b>يَ.</b>       | <b>&amp;:-</b> |  |  |
| ĝ:         | <b>g</b> /             | <u>ē</u> ) | <b>g.</b>        | <b>@:-</b>     |  |  |
| ţ:         | ក្ត/                   | ក្ត)       | <u>r</u>         | ŭ:             |  |  |
| <b>@:</b>  | <u>გ</u> /             | <u>ā</u> ) | <b><u>ö</u>.</b> | <u>ő:</u>      |  |  |
| :          | :                      | :          | •                | :              |  |  |
| Western N  | Numeral Lis            | ts         |                  |                |  |  |
| 1:         | 1/                     | 1)         | 1                | 1:             |  |  |
| 2:         | 2/                     | 2)         | 2                | 2:             |  |  |
| 3:         | 3/                     | 3)         | 3                | 3:             |  |  |
| 4:         | 4/                     | 4)         | 4                | 4:             |  |  |
| :          | :                      | :          | :                | :              |  |  |

| I. | What is the best list counter marker for Ethiopic numeral lists?   |  |  |  |  |
|----|--|--|--|--|--|
|    | $\square$ No opinion $\square$ / $\square$ :- $\square$ ) $\square$ . $\square$ : $\square$ Software default                             |  |  |  |  |
|    | ☐ Other (Please Explain):  |  |  |  |  |
|    |  |  |  |  |  |
| 2. | What is the list counter suffix preference with western numbers (0-9)?  □ No opinion □ Same used for Ethiopic numbers □ Software default |  |  |  |  |
|    |  |  |  |  |  |
|    | ☐ Other (Please Explain):  |  |  |  |  |
|    |  |  |  |  |  |
| 3. | Are there any sub-list (nested list) considerations?   |  |  |  |  |
|    | □ No opinion □ No □ Yes (Please Explain):  |  |  |  |  |
|    |  |  |  |  |  |
|    |  |  |  |  |  |

#### 4.4.4 Alphabetical (ሀስሐመ) Lists

The Unicode standard encodes Ethiopic syllables for many languages using Ethiopic script past and present. Alphabetic lists are commonplace in Ethiopic literature, but will conform to the letter inventory of the language of the surrounding content. The alphabetical style lists specified here do not encompass *all* languages using Ethiopic, but only those with a demonstrated requirement as found in corpus or stakeholder input.

| Ge'ez      | Amharic | Blin | Tigrinya<br>(Eritrean) | Tigrinya<br>(Ethiopian) |
|------------|---------|------|------------------------|-------------------------|
| v/         | υ/      | v/   | υ/                     | υ/                      |
| ۸/         | ۸/      | ۸/   | ۸/                     | ۸/                      |
| ሐ/         | ሐ/      | ሐ/   | ሐ/                     | ሐ/                      |
| æ/         | æ/      | æ/   | æ/                     | an/                     |
| w/         | w/      | ۷./  | 4/                     | w/                      |
| ۷./        | ۷./     | ሰ/   | ሰ/                     | 4/                      |
| ሰ/         | ሰ/      | ส/   | ช/                     | ሰ/                      |
| ቀ/         | ሸ/      | ቀ/   | ቀ/                     | ฬ/                      |
| n/         | ቀ/      | ቐ/   | ቐ/                     | ቀ/                      |
| ተ/         | n/      | n/   | n/                     | ቐ/                      |
| ጎ/         | ተ/      | ተ/   | ተ/                     | n/                      |
| ነ/         | 干/      | 干/   | 干/                     | ተ/                      |
| <b>አ/</b>  | ጎ/      | ጎ/   | ነ/                     | 干/                      |
| h/         | ነ/      | ነ/   | ፕ/                     | ኅ/                      |
| <b>ø</b> / | ፕ/      | ፕ/   | <b>አ/</b>              | ነ/                      |
| 0/         | አ/      | አ/   | h/                     | ኝ/                      |
| H/         | h/      | h/   | ኸ/                     | አ/                      |
| የ/         | ኸ/      | ኸ/   | Φ/                     | h/                      |
| ደ/         | Φ/      | መ/   | 0/                     | ኸ/                      |
| 1/         | 0/      | o/   | H/                     | <b>ω</b> /              |
| ന/         | H/      | H/   | ዠ/                     | 0/                      |
| ጰ/         | ዠ/      | ዠ/   | የ/                     | H/                      |
| ጸ/         | የ/      | የ/   | ደ/                     | ዠ/                      |
| θ/         | ደ/      | ደ/   | T/                     | የ/                      |
| 6./        | ጀ/      | ጀ/   | 1/                     | ደ/                      |
| Т/         | 1/      | 1/   | <b>m/</b>              | ጀ/                      |
|            | ጠ/      | ሻ/   | ക/                     | 1/                      |
|            | ക/      | ጠ/   | ጰ/                     | <b>m</b> /              |
|            | ጰ/      | ക/   | ጸ/                     | ക/                      |
|            | 8/      | ጰ/   | 6./                    | ጰ/                      |
|            | θ/      | ጸ/   | т/                     | ጸ/                      |
|            | 6./     | θ/   |                        | θ/                      |
|            | т/      | 6./  |                        | <i>L.</i> /             |
|            |         | Т/   |                        | т/                      |

| 1. | Are there any mistakes in the above lists?                       |  |  |
|----|--|--|--|
|    | □ No opinion □ No □ Yes (Please Explain):                        |  |  |
| 2. | Should "ህለሐመ" lists be added for other languages?                |  |  |
|    | □ No opinion □ No □ Yes (Please Explain):                        |  |  |
| 3. | Should "n" be included in lists other than Ge'ez?                |  |  |
|    | □ No opinion □ No □ It depends (Please Explain):                 |  |  |
| 4. | How is the end of sequence handled?                              |  |  |
|    | □ No opinion   |  |  |
|    | □ Sequence as radix, e.g.: & T vv vħ                             |  |  |
|    | □ Columnar radix, e.g.: ל ד טט טלי                               |  |  |
|    | $\square$ Wrap to next column, e.g.: & $T$ $V$ $V$               |  |  |
|    | □ Other (Please Explain):  |  |  |
|    |  |  |  |
| 5. | How should the end of the syllabary matrix handled? □ No opinion |  |  |
|    |  |  |  |

#### 4.4.5 Abegede (አበንደ) List

The **harg** ordering is potentially desirable to any language using the Ethiopic syllabary. The ordering is less likely to be found in the writing practices of languages that have a written tradition of under a hundred years. The language specific orders shown here are only those found utilized in corpus.

| Ge'ez   | Amharic  | Tigrinya<br>(Eritrean) | Tigrinya<br>(Ethiopian) |
|---|--|------------------------|-------------------------|
| Ge'ez  ኢ/ በ/ 1/ ደ/ ሀ/ ወ/ ዘ/ ለ/ የ/ | አ/ በ/<br>1/ ደ/<br>ሀ/ ወ/ ዘ/ ነ/<br>ተ/ ሐ/<br>የ/ ከ/ አ/ ም/<br>ነ/ ነ/<br>የ/ ተ/ ተ/<br>ተ/ ተ/ ተ/ |                        | (Ethiopian)             |
|   | の/<br>   | 17                     | コ/<br>の/<br>ネ/<br>T/    |

| 1. | Are there any mistakes in the above lists?                          |  |  |
|----|---|--|--|
|    | □ No opinion □ No □ Yes (Please Explain):                           |  |  |
| 2. | Should "አበንደ" lists be added for other languages?                   |  |  |
|    | □ No opinion □ No □ Yes (Please Explain):                           |  |  |
| 3. | Should "n" be included in lists other than Ge'ez?                   |  |  |
|    | □ No opinion □ No □ It depends (Please Explain):                    |  |  |
| 4. | How is the end of sequence handled?                                 |  |  |
|    | □ No opinion  |  |  |
|    | □ Sequence as radix, e.g.: \$ ז אא אח                               |  |  |
|    | □ Columnar radix, e.g.: \$ ז אור אור                                |  |  |
|    | $\square$ Wrap to next column, e.g.: $?$ $?$ $?$                    |  |  |
|    | ☐ Other (Please Explain):   |  |  |
| 5. | How should the end of the syllabary matrix be handled? □ No opinion |  |  |

#### 4.4.6 Beseshele (กกัก) List

Introduced during the late 1970s (possibly by the Ethiopian Language Academy). The ordering is based on letter shape similarity to facilitate easier learning of the syllabary. Complete details of the

TBD: Obtain list details: the sequence, languages supported, etc.

| ^           | •         |      |
|-------------|-----------|------|
| SIIKWAW.    | / NIIACTI | nncı |
| Survey      | Questi    | UHS. |
| <del></del> |           |      |

| 1. | Do publishers have need for "กิกักัก" lists for ordering sequences?             |
|----|---|
|    | □ No opinion □ No □ Yes (Please Explain):                                       |
|    |   |
|    |   |
| 2. | Should "กิกัก" lists be added for other languages?                              |
|    | □ No opinion □ No □ Yes (Please Explain):                                       |
|    |   |
| 3. | How is the end of sequence handled?   |
|    | □ No opinion  |
|    | □ Sequence as radix, e.g.: ጰ ለ ለ ለ  |
|    | □ Columnar radix, e.g.: \$ ד אור אר   |
|    | $\square$ Wrap to next column, e.g.: $?$ $?$ $?$ $?$                            |
|    | ☐ Other (Please Explain):   |
|    |   |
| 1  | How should the end of the syllabary matrix be handled? □ No opinion             |
| ٦. | 110 w should the end of the syndodisy matrix be handled: \(\sigma\) 100 opinion |
|    |   |

#### 4.4.7 End of List Continuation

An observed formatting practice is to begin a paragraph in-line with the last item in a list. The paragraph may flow immediately from the last item, or some indentation ("offset") may be applied. This practice is illustrated in the following figure:

Sample for in-lined paragraph continuation at end of list.

| 1. | Should a paragraph continue directly from the end of a list?  □ Never □ Always □ Under special rules or context (Please Explain): |
|----|---|
| 2. | When appropriate, what is the width of the paragraph offset (if any) from the final list item?                                    |
|    | □ Same as paragraph indentation □ No offset □ Other (Please Explain):   |

#### 4.5 Initial letter styling

(W3C Ethiopic Layout Gap Analysis 3.5)

Word Processors, Web Browsers and eReader software can support "initial letter styling" layout practices used for the writing of many languages. An example is "Drop Cap" commonly used with Latin script:

all me Ishmael. Some years ago—never mind how long precise-ly—having little or no money in my purse, and nothing particular to interest me on shore, I thought I would sail about a little and see the watery part of the world. It is a way I have of driving off the spleen and regulating the circulation. Whenever I find myself growing

Sample of a three-line drop cap of the capital letter "C".

A number of related styles are also for initial letter styling (e.g. Raised Cap, Sunken Cap, Drop Cap with Runaround).

| 1. | Are the initial letter styles used for Latin script applicable for Ethiopic?  □ No opinion □ All □ Some, the following: |
|----|---|
| 2. | Are there other initial letter styles required for Ethiopic writing?  □ No opinion □ Yes, please describe:              |
|    |   |

## 5 Layout & pages

#### 5.1 Page numbering, running headers, etc.

(W3C Ethiopic Layout Gap Analysis 4.4)

The "Header" and "Footer" section of a book is used to hold information such as the: Author Name, Book Title, Chapter Title, Page Number, and sometimes a decoration symbol. Ethiopic language publishing is believed to follow the same conventions as used in the West. Ethiopic publishing adds the practice of presenting the page number with Ethiopic numerals; a choice that is left to the author's discretion.

| 1. | Where in a book is page 1 counted from?                               |  |  |
|----|---|--|--|
|    | □ No opinion □ Front Cover □ First internal page □ First printed page |  |  |
|    | ☐ Other (Please Explain):   |  |  |
|    |   |  |  |

#### 5.1.1 Page Numbering

In Ethiopic book publishing, the first numbered page will generally be seen on the  $\mathfrak{APP}$  section. When a  $\mathfrak{APP}$  section is not present, numbering is expected to begin at the  $\mathfrak{APP}$ . The prevailing modern Ethiopic practice is to begin counting pages from the inner cover page (this is a matter of perception, by some views the outer cover is the first page and the inner cover, which is generally empty, is not counted). Thus, the first printed number appearing at either the  $\mathfrak{APPP}$  or  $\mathfrak{APPP}$  or  $\mathfrak{APPP}$  is not "1" (or " $\mathfrak{E}$ ") but the physical page count up to this point (for example "4" or "5").

| 2. | Where in a book is page 1 counted from?  |
|----|--|
|    | $\square$ No opinion $\square$ Front Cover $\square$ First internal page $\square$ First printed page                        |
|    | ☐ Other (Please Explain):  |
|    |  |
| 3. | Where does the first printed page appear?  □ No opinion □ መቅድም □ መግቢያ □ Other (Please Explain):                              |
|    |  |
| 4. | Are there any other special considerations with page numbering? For example, page numbering of appendices, etc. □ No opinion |
|    |  |

#### **5.1.2 Preface Page Numbering**

Increasingly, modern authors and publishers are adding additional front sections and moving "page 1" out to either the **and R.P.** Prior to "page 1" preceding pages may be numbered in one of two ways. In the first convention where pages are numbered with Ethiopic numerals, the preface numbering may be alphabetic in the **UNA** counting system or in the **LANCE** sequence (for example in Deste Tekle Wold's "**OLA: PACT: and 10: ANTE**").

In the second convention where pages are numbers with Western numerals, the preface page numbering will apply Ethiopic numerals. Under both conventions the preface page number begins on the first printed page after the cover.

| 1. | Are the above descriptions accurate?   |
|----|--|
|    | $\square$ No opinion $\square$ Yes $\square$ No $\square$ Other (Please Explain):    |
|    |  |
|    |  |
| 2. | Are there any other page numbering conventions that should be supported by software? |
|    | $\square$ No opinion $\square$ Yes $\square$ No $\square$ Other (Please Explain):    |
|    |  |
|    |  |

#### 5.2 Other page layout & pagination features

(W3C Ethiopic Layout Gap Analysis 4.5)

A practice of publishers in the West and elsewhere is to avoid printing the last line of a paragraph at the top of a page. To avoid starting a new page with a single line, one or more addition lines of the paragraph will be moved over from the previous page.

| _        | <u> </u>          |
|----------|-------------------|
| SIIKWAW. | ( )IIIACTIANC!    |
| Juivev   | <b>Questions:</b> |
|          |                   |

| 1. | What is the minimal number of lines that can appear at the start of a page?       |          |  |
|----|---|----------|--|
|    | □ No opinion □ One □ Other: □ □ Other (Please Exp                                 | lain):   |  |
|    |   |          |  |
|    |   |          |  |
| 2. | . Are there any other page numbering conventions that should be supported by so   | oftware? |  |
|    | $\square$ No opinion $\square$ Yes $\square$ No $\square$ Other (Please Explain): |          |  |
|    |   |          |  |
|    |   |          |  |