Washington Romanized Indic for LaTeX 2ε

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1 Introduction

The Washington Romanized (WNRI) Indic package enables texts encoded in the 8-bit Classical Sanskrit/Classical Sanskrit eXtended (CS/CSX) encoding to be typeset in TeX without modification of the input scheme.

This package defines the font shape groups for the WNRI fonts and adapts them for use with LaTeX 2ε. These fonts were designed by Thomas Ridgeway in 1993 at the Humanities Academic Computing Center (HACC), University of Washington, Seattle, WA. I took the liberty on behalf of the successor to HACC, the Center for Advanced Research Technology in the Arts and Humanities (CARTAH), to update the package.

The Washington Romanized Indic family of fonts is based on the Computer Modern Roman fonts. The fonts retain the CMR encoding in positions 0 to 127. The 'upper ASCII' (positions 128-255) contain characters of the CS/CSX encoding for transliterated Indic languages. CS/CSX is a system used by scholars of Indology to facilitate the exchange of data via a stable medium. This convention is well on its way to becoming a standard

Although WNRI is based on the CS/CSX character set, these fonts were developed to contain other characters of which all are not recognized in the CS/CSX standard. Some of these are drawn from the IBM-PC character set, other transliteration systems, and other languages which might be encountered in an Indic context, and which, as Ridgeway remarked, may be useful to someone working in "east-of-Suez contexts."

However, as the International Standards Organization Working Group for the Transliteration of Indic Scripts (ISO/TC46/SC2/WG12) is currently developing a standard transliteration (which will seems like a further extension of CS/CSX), most of the anomolous and unused characters in the inventory of WNRI will be replaced by attested and accepted 'standardized' counterparts. Therefore, please be advised that the current WNRI font encoding will change as a result of this standardization. The changes, however, will definitely reflect current practice.

Ridgeway originally made these fonts available on a 'need-to-know' basis; that those interested may obtain and use them to their needs. However, it has been

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more than five years since these fonts appear to be last touched. I feel that these fonts deserve a larger audience and so have updated them for use with LaTeX 2_ε. In keeping with Ridgeway's original wishes for the font, you are welcome to circulate the fonts and information about them to other individuals you feel might be able to benefit from or contribute to the enterprise with their suggestions.

Some of these have had little or no real world testing, so evaluate before committing to their use, particularly any san serif and typewriter faces. Also, the WNRI characters still do not have kerning values applied to them. Additionally, as the WNRI fonts do not place the correct information about their heights and depths in the metric files, TeX's native accent operations will not work on these fonts.

I don't know whether Thomas Ridgeway is still working on these fonts or not. The WNRI fonts were originally stored on the infamous, but sadly, now defunct, Blackbox[1] server.

The original release of WNRI contained two other fonts called Washington Gerald Barnett Old English and Washington Puget Sound Salish. These have been removed from the package as support for them was non-existent. Any previous releases of WNRI are obsolete as of this release. Numerous files have been removed and the structure of the fonts have been slightly rearranged. The Postscript and TrueType versions of WNRI are also obsolete as of this release due to the modification of certain glyphs.

2 The Fonts

Washington Romanized Indic	
`wnrib8.mf`	bold 8pt
`wnrib10.mf`	bold 10pt
`wnribi10.mf`	bold italic 10pt
`wnrii8.mf`	italic 8pt
`wnrii10.mf`	italic 10pt
`wnrir8.mf`	roman 8pt
`wnrir10.mf`	roman 10pt
`wnris8.mf`	sans serif 8pt
`wnris10.mf`	sans serif 10pt
`wnrit8.mf`	typewriter 8pt
`wnrit10.mf`	typewriter 10pt

3 Modifications and Updates

The METAFONT files have been modified to account for minor changes in centering of accents and distance of accents from base character.

The next update will be a revision of the characters in the font. The unused and obsolete glyphs will be replaced by commonly used characters which are not represented in WNRI. Such characters are r-underring and l-underring.

[1] `blackbox.hacc.washington.edu`

4 Implementation

This update package consists simply of a style package which redefines the `\rmfamily`, `\sffamily`, and `\ttfamily` fonts, and provides two font definition files which setup the WNRI Roman, San Serif, and Typewriter fonts.

To specify WNRI as the primary font invoke `wnri` through the `\usepackage` command.

4.1 Style Code

The style file specifies `OT1` as the default encoding and also changes the substitution defaults for this encoding. If `\familydefault` is not changed directly, then the change to `\rmdefault` will automatically change the main font too.

Default for `\rmfamily` will be Washington Roman Indic Regular and for `\ttfamily` Washington Roman Indic Typewriter. Also, assume that for LaTeX the standard magnifications are available.

```
⟨*package⟩
\renewcommand{\encodingdefault}{OT1}
\DeclareFontSubstitution{OT1}{wnr}{m}{n}
\renewcommand{\rmdefault}{wnr}
\renewcommand{\sfdefault}{wnss}
\renewcommand{\ttdefault}{wntt}
⟨/package⟩
```

4.2 The Font-Definition Files

The Washington Roman Indic family exists in medium, bold, italic, sans serif, and typewriter series. All of the other shapes will be given substitution shapes.

```
⟨*wnr⟩
\DeclareFontFamily{OT1}{wnr}{}
\DeclareFontShape{OT1}{wnr}{m}{n}{
   <5> <6> <7> wnrir8
   <8> <9> <10> <10.95> <12>
   <14.4> <17.28> <20.74> <24.88> wnrir10 }{}
\DeclareFontShape{OT1}{wnr}{bx}{n}{
   <5> <6> <7> wnrib8
   <8> <9> <10> <10.95> <12>
   <14.4> <17.28> <20.74> <24.88> wnrib10 }{}
\DeclareFontShape{OT1}{wnr}{bx}{it}{
   <5> <6> <7> <8> <9> <10> <10.95> <12>
   <14.4> <17.28> <20.74> <24.88> wnribi10 }{}
\DeclareFontShape{OT1}{wnr}{b}{n}{ <-> ssub * wnr/bx/n }{}
\DeclareFontShape{OT1}{wnr}{b}{it}{ <-> ssub * wnr/bx/it }{}
\DeclareFontShape{OT1}{wnr}{m}{it}{
   <5> <6> <7> wnrii8
   <8> <9> <10> <10.95> <12>
   <14.4> <17.28> <20.74> <24.88> wnrii10}{}
\DeclareFontShape{OT1}{wnr}{m}{sl}{ <-> ssub * wnr/m/it }{}
```

```
\DeclareFontShape{OT1}{wnr}{m}{sc}{ <-> ssub * wnr/m/n }{}
\DeclareFontShape{OT1}{wnr}{m}{sf}{
   <5> <6> <7> wnris8
   <8> <9> <10> <10.95> <12>
   <14.4> <17.28> <20.74> <24.88> wnris10 }{}
```
⟨/wnr⟩

The Washington Roman Indic San Serif family has only the medium series.

```
⟨*wnss⟩
\DeclareFontFamily{OT1}{wnss}{}
\DeclareFontShape{OT1}{wnss}{m}{n}{
   <5> <6> <7> <8> wnris8
   <9> <10> <10.95> <12>
   <14.4> <17.28> <20.74> <24.88> wnris10  }{}
\DeclareFontShape{OT1}{wnss}{b}{n}{ <-> ssub * wnss/m/n }{}
\DeclareFontShape{OT1}{wnss}{bx}{n}{ <-> ssub * wnss/m/n }{}
\DeclareFontShape{OT1}{wnss}{m}{sl}{ <-> ssub * wnss/m/n }{}
\DeclareFontShape{OT1}{wnss}{m}{it}{ <-> ssub * wnss/m/n }{}
⟨/wnss⟩
```

The Washington Roman Indic Typewriter family has only the medium series.

```
⟨*wntt⟩
\DeclareFontFamily{OT1}{wntt}{}
\DeclareFontShape{OT1}{wntt}{m}{n}{
      <5> <6> <7> <8> wnrit8
      <9> <10> <10.95> <12>
      <14.4> <17.28> <20.74> <24.88> wnrit10  }{}
\DeclareFontShape{OT1}{wntt}{m}{it}{ <-> ssub * wntt/m/n }{}
\DeclareFontShape{OT1}{wntt}{m}{sl}{ <-> ssub * wntt/m/n }{}
\DeclareFontShape{OT1}{wntt}{m}{sc}{ <-> ssub * wntt/m/n }{}
\DeclareFontShape{OT1}{wntt}{m}{ui}{ <-> ssub * wntt/m/n }{}
\DeclareFontShape{OT1}{wntt}{bx}{n}{ <-> ssub * wntt/m/n }{}
\DeclareFontShape{OT1}{wntt}{bx}{it}{ <-> ssub * wntt/m/n }{}
\DeclareFontShape{OT1}{wntt}{bx}{ui}{ <-> ssub * wntt/m/n }{}
⟨/wntt⟩

\endinput
```