THE ANATOMY AND HISTORICAL DEVELOPMENT
OF SINHALA TYPEFACES

S. S. M. R. Samarawickrama
October 2016
Start by doing what's necessary; then do what's possible; and suddenly you are doing the impossible

- Francis of Assisi
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(118044K)

Degree of Doctor of Philosophy

Department of Architecture

University of Moratuwa
Sri Lanka

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Thesis submitted in partial fulfillment of the requirements for the Degree of Doctor of Philosophy

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University of Moratuwa
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October 2016
DECLARATION

I declare that this is my own work and this thesis does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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S. S. M. R. Samarawickrama

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The above candidate has carried out research for the PhD thesis under our Supervision.

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Supervisor: Prof. Samitha Manawadu Date

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Supervisor: Prof. Ratnasiri Arangala Date

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Supervisor: Prof. Girish Dalvi Date
ABSTRACT

*Keywords: Type Anatomy, Typeface, Sinhala Typography, Letterform and Sinhala letter*

This thesis is an epistemological study, which presents various knowledge-building activities for Sinhala typography. Initially, it presents a historical analysis on Sinhala typefaces and the morphological characteristics of letters. These characteristics articulate the anatomy of Sinhala.

The historical outline on the Sinhala letters and typefaces are discussed in relation to the introduction of the printing press and various technological developments. Using this a chronological timeline of Sinhala typefaces was developed. Followed by gaps in the current typographic knowledge, and its limitations are analyzed and discussed. The core contribution of this thesis is a comprehensive study on the anatomy of Sinhala based on distinct visual properties of each letter. We report how these visual properties are manifested in typefaces from 1737 CE to 2013 CE. These visual properties are also compared with existing typographic knowledge systems from scripts around the world.

We suggests 59 (sub categorized into 19) visual properties distinct to the Sinhala letter. We believe that our research on the morphological characteristics (visual properties, referencing lines, grid and vocabulary) that defines the anatomy of Sinhala fill up the existing knowledge gap in Sinhala Typography.

The thesis reveals that the existing typefaces were developed intuitively by designers or copied, adapted to overcome technological changes. It also speaks of an absence of formal knowledge on Sinhala typography, more specific to typefaces design. As a result, the number of typefaces designed today (considered as original typeface designs) is lesser than of what was found prior to the introduction of digital (Sinhala) typefaces used as body text.

The thesis primarily contributes knowledge towards building a theoretical framework for Sinhala anatomy, it also contributes knowledge to type design process, typographic pedagogy, typographic history, and methodology that can be adopted by other scripts to define the anatomy and to analyze typefaces.
Dedication to my husband, my inspiration,
to Mikhail and Raphail
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<td>AS</td>
<td>Ascending stroke</td>
</tr>
<tr>
<td>BS</td>
<td>Base Stroke</td>
</tr>
<tr>
<td>CABS</td>
<td>Colombo Auxiliary Bible Society</td>
</tr>
<tr>
<td>CC</td>
<td>Combined or Conjunct Consonants</td>
</tr>
<tr>
<td>CTTA</td>
<td>Kotte</td>
</tr>
<tr>
<td>DF</td>
<td>Distinct feature</td>
</tr>
<tr>
<td>DNA</td>
<td>Department of National Archives</td>
</tr>
<tr>
<td>DS</td>
<td>Descending stroke</td>
</tr>
<tr>
<td>DVP</td>
<td>Distinct visual Properties</td>
</tr>
<tr>
<td>GP</td>
<td>Government Press</td>
</tr>
<tr>
<td>MNLSI</td>
<td>Ministry of National Languages and Social Integration</td>
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<td>NAS</td>
<td>Non-alphabetical signs</td>
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