

Milestones in the development of Sinhala typography in the 19th century

A critical analysis of the cultural and social context of the development of Sinhala types and book typography in the 19th century

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Abstract

This study explores the key developments of Sinhala type and typography in the 19th century with a primary focus on evolution in the early decades. Sinhala script was a monolinear, script with a long tradition of writing on palm-leaves. In the 18th century with the introduction of the movable type the adaptation of Sinhala script to composing with metal blocks started. This study contextualises the stylistic and technical decisions that formed the appearance of the Sinhala printed letterforms and typography, in the cultural, social and political background of the 19th century Ceylon. This study discusses the key developments such as introduction and evolution of stroke modulation and composition of typefaces and typographic developments of the period.

It is conclusive that the Western standards of typography influenced the style of missionary printing enterprises of this time, and this study attempts to identify the motives, challenges and the background which led to specific decisions. Sinhala types and typography of three key contributors; Dutch Press in Colombo; Serampore Mission Press in Serampore and The Wesleyan Methodist Mission Press in Colombo is analysed and presented. This study does not cover the period exhaustively, rather investigates the key entities, events and printed material that contributed to the milestones in the development of Sinhala typography of the period, in a cultural, political and technical framework.

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1. Introduction

1. The literature from the time refer to language and script in many different transliterations such as Cinghalaese, Singhalaese and Sinhalaese. In text the term Sinhala is used to referring to the script and language.

2. This dissertation uses 'Ceylon' as opposed to 'Sri Lanka' as the it was known

This dissertation focuses on Sinhala¹ typography and printed letterforms in the early 19th century and the factors that influenced the development of them. The transformation of Sinhala script from letters written on a palm leaf to typographic letterforms printed on paper with metal typesetting began in the 18th century. However, traces of the current style of letterforms and typography are first seen at the beginning of the 19th century with the advent of Sinhala printing and publishing by the British missionaries. Histories of printing and linguistics of Ceylon² provide an insight into the development of the Sinhala printing and language, and the influences of politics and socioeconomics. Until now, how these circumstances affected the style of typography, type making process and the letterforms has not been explored in particular depth.

This study attempts to collate how the cultural and social transformations of early 19th century Ceylon affected the printing and publishing industry and how those changes affected typography and letterforms in the subsequent years. Additionally, this document seeks to systematically study the precise historical events and personalities that influenced the type making process and the Sinhala types of the period. While this study does not claim to be conclusive, it covers a range of organisations, personalities, incidents, and original printed material that are representative of the time and the themes discussed.

This dissertation examines significant contributions by three principal printing and type making operations; the Dutch Press in Colombo; the Serampore Mission Press in Serampore, India; and the Wesleyan Mission Press in Colombo. The most active and influential missionary printing outfit of the time, Wesley-

an Mission Press, operated between the years of 1814 to 1878. The secondary sources consulted build an understanding of the atmosphere of 19th century colonial Ceylon and the context in which the developments in typography and type making took place is based on the consultation of primary sources including correspondence, reports and personal accounts of involved parties. The imperfections of printing caused by the circumstances of the time do not warrant a conclusive analysis of the letterforms; rather this study attempt to analyse the letterforms within the context of the research findings.

This dissertation attempts to contextualise the early transitional years of Sinhala typography and type, in relation to technology, culture and the social conditions of the time. This study only concerns a limited sample of books from the time that corresponds to historical events. An in depth analysis of wider range of material could potentially uncover further insight into the period. Understanding of the constraints and conditions that shaped the current Sinhala letterforms opens up space for further studies in the evolution of the Sinhala printed letter, and widens the possibilities for Sinhala type design.

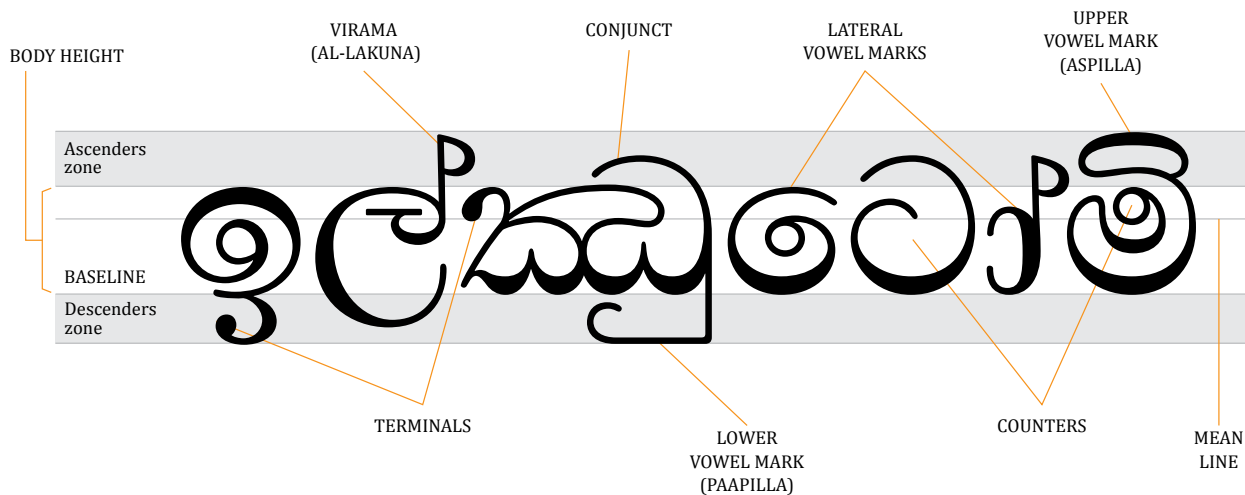


FIG1.1 Sinhala typographic anatomy.

	ā	ae	āē	i	ī	u	ū	voc ɾ	voc ɿ	voc ɻ	voc ɿ̄	e	ē	ai	o	ō	au
ක	කා	කෑ	කෛ	කී	කී̄	කු	කූ	කෘ	කෘෘ	කෞ	කෞ̄	කෙ	කේ	කෛ	කො	කෝ	කොෞ
ද	දා	දෑ	දෛ	දී	දී̄	දු	දූ	දෘ	දෘෘ	දෞ	දෞ̄	දෙ	දේ	දෛ	දො	දෝ	දොෞ

FIG1.1 Table presenting the consonants (Ka) and (Da) combined with each vowel of the syllabary and the resulting glyphs of this combination.

FIG1 The current forms and anatomy of Sinhala script.

Source: Saraiva, R. (2012). *An overview of Sinhala type design from the 18th century to the present*. Postgraduate. University of Reading.

1.1 Sinhala script

Sinhala is a native script to Sri Lanka and, used for writing Sinhala one of the two national languages of Sri Lanka. rooted in Brahmic script family. Sinhala is also used to write Buddhist literature in Pali and Sanskrit languages. Sinhala has gone through three main stages of development: linear, semi-linear and circular. Starting with early horizontal and vertical lines of the Brahmi script forms on the stone inscriptions. Semilinear forms of the script are represented in Sigiriya mirror wall inscriptions written in 8th – 10th century CE. With the Buddhist palm leaf manuscript tradition, the graphical forms of the Sinhala letters became more circular. A metal or wood stylus is used for writing on palm leaf and the letterforms were monolinear. Current Sinhala letterforms are dominantly formed with round smooth strokes. In general, the letterforms are wide and dense with complex strokes occurring inside the primary form.

It is an alpha syllabary with the consonants have an inherent vowel and absence of the inherent vowel is marked with Al-lakuna (commonly referred in Indic scripts as Virama). Different vowel marks are combined to base consonant forming syllables. These marks are applied in different positions (above/below the consonant or before/after a consonant). Some combinations of consonant-vowel mark combinations form ligatures that are visually disconnected from the base characters. The composition of the language is explained in other studies

දේව බන්ධනමට ගෙනයන=

සැමවට ආදරේ ආනන්දයක් පලවුවේ
පවංගනන අයවත්වෙතුව සමබන්ධකර
සෑය සැමවේ ඉගැන්වීමේ
සුරකකමට ආදියය

- 1. ආ. ම නම් මොකද
- 2. එක් මනුෂ්‍යයෙක
- 3. මනුෂ්‍යයා අධිගුව නිබන්ධනක්
මොන දෙයකිනද
- 4. සර්වයෙහුන් ආනන්දයෙහුන්ය
- 5. ආ. ආනන්ද නම් මොන දේද
- 6. එක් සප්තවක
- 7. ආ. එක් සප්තවක නම් මොකද
- 8. කුසලයෙහුන් කල්පයෙහුන් අධිගුව නිබන්ධන
පරික්ෂාකරනවාද එක් තත්ප්‍රමාවක
- 9. මෙයින් වැඩිගැනර මොකද ප්‍රානද
එකක්සර්වයද
- 10. ප්‍රාණය

FIG 2 A start page of Singaleesch Belydenis Boek, (1744)
Dutch Government Press in Colombo p. 31 200 x 260 mm 80% Source: Bayerische Staatsbibliothek

2. Sinhala typography in the 18th Century

3. The first recorded printing in Sinhala script is the Joannes Ruell's 'Gram

4. J. Corea, 'One Hundred Years of Education in Ceylon', *Modern Asian Studies*, vol

5. This dissertation uses the word 'fount' to indicate metal type.

6. M.W. Jurriaanse, 'Gabriel Schade and his invention of the Sinhalese type',

7. T. Kularatne, 'The Wesleyan Methodist Mission in the Printing and Publishing

Sinhala movable types were first used by the Dutch Press in Colombo in 1737.³ The Dutch Reformed Church and the Dutch East India Company established the press with the primary focus of printing pamphlets carrying notices from the government called 'plakkatens' and Sinhala bible. The Press remained active until the British took over the control in 1796 and had developed a distinctive style of Sinhala letterforms and typography. The Dutch rule in Ceylon was trade oriented and peace and order was a priority. Although the Press printed bible and Christian scriptures, the missionary activities were not widely supported by the Dutch rulers. The missionaries of the Dutch Reformed Church were more successful in educating the populace than proselytization.⁴

The type making tools and the and the Sinhala types used by the Dutch Press were made locally. Gabriel Schade who was the baas (superintendent) of the armoury took up the task of setting up a press and making the founts for Sinhala in 1825.⁵ Schade was in charge of fine metal work required in producing and maintaining the guns in the Dutch armoury. At his first attempt, he prepared the moulds for two Sinhala founts and tools required for making type. He was a skilled craftsman with an understanding of mechanics and well-versed in metalwork.⁶ Regardless of his competency in metal craft, he must have received help from Sinhala scribes and native silversmiths.⁷ These helpers must have been from Southern and coastal areas, given that Dutch only had wide access to the coastal areas of Ceylon. The change of Governor and management delayed the work by Schade until



FIG 3 Palm-leaf manuscript from 12th century. *Abhidhānappadīpikā* / Poleman 6642 H. Poleman, (1967). A *Census of Indic manuscripts in the United States and Canada*. New York: Kraus reprint corporation.

8. Memoir Left by Jacob Christiaan Pielat to His Successor, Diederik Van Dom

9. Kularatne, *History of Printing*, p. 21

1734. The printing office was active in 1736 with a press sent from the Dutch Government in Java.⁸ Considering the available technology of the time, it would likely have been a low country wooden hand press.

Apart from the Sinhala types, the type foundry at Dutch Press produced types for Tamil and Malayalam.⁹ The Press primarily produced government notices known as plakkatens, religious publications and school books. Between 1736 and 1791, the Press printed a total of sixty-three books in Sinhala, Tamil, Portuguese and Dutch, excluding the plakkatens. Dutch soldiers were employed at the Press and it is likely that they had native helpers and correctors to help with the language.

1.1 Typography of the Dutch Press

The introduction of printing meant adapting a language to metal type composition model, and Sinhala printing led to reforms in the usage of the Sinhala language. The Sinhala typography of the Dutch Press is a hybrid of Western language and typographic standards styles and elements of the palm leaf manuscript traditions. Portuguese first introduced paper to Ceylon in the 16th century but was not in wide use. The palm leaf manuscripts were the only reference on Sinhala typesetting available for Dutch compositors.

One prominent reform of the Sinhala language, based on a typographic application, is the introduction of word boundaries to Sinhala.¹⁰ Classical Sinhala texts were written on palm leaf manuscript as a single sequence of characters without spaces between the words.¹¹ The early plakkatens from the Press does not include word boundaries and follows the same structure as palm leaf manuscripts. In later publications the word boundaries are introduced, but there are inconsistencies in breaking words as standards for the division was not in place.

Hyphenation was introduced in the text with a relatively shorter double horizontal lines -this is an important development. Sinhala did not develop a conventional hyphenation system in the later years. The development of word-breaking might have diminished the requirement for hyphenation. The colon was also introduced to Sinhala by the Dutch Press. Two Sinhala punctuations seen in palm leaf manuscripts have been discarded in the Dutch Press work. The *kakapada* (crows foot) or double comma which is used to mark end of a phrase. And appli-

10. The consonants and vowels indicate a start of a word in Classical Sinhala writ

11. J. Dissanayaka, *Encyclopaedia of Sinhala language and culture*, (2012) p. 524

පියානවරුන්ට කල ආරක්ෂාව මෙන් මොහුන්
 ධන් ආරක්ෂාකරදොවදුරනවාමසඳ: නමුනිහං
 සෙග සෙහෙහවනිනටු පුත්තයානනන අප
 ගෙ නයකටු ගෙසුස් ක්‍රීස්තුස්වහංස නිසා: මේ
 සියළු දෙම අපට දෙවාවදුරු සැරියව නමුන්
 වහංසව යාඤාමෙවින:මනුවහංසගෙ නමගෙත්
 අපෙ යාඤාව [මෙලෙස] තිඤ්ඤකරඤ්ඤමුව
 සවගිහස්නලගෙහි අපෙ පියානනි
 නමුනිහංසගෙ නමග සුඛමෙවයි
 නමුනිහංසගෙ රාජ්‍යය එන්ධමෙවයි
 සවගිහස්නලගෙහි සෙම හුම්ගෙදීන් නමුනිහං
 සෙග කුමනික ගෙදන්ධමෙවයි
 අපෙ නිතිපත මොර්නග අපට අද දෙවාවදු
 රුනවාමසඳ
 අපෙ වරදකරයින්ට අපි ඤාමෙවනන සෙම
 අපෙ වරදවනින් ඤාමෙවනවාමසඳ
 අපට උපද්‍රවලට අනුමනකර නපුරනුත් අප
 ගලවාදුරනවාමසඳ

මක්.

FIG 4 A page of Singaleesch Formulier Boek, (1738) Dutch Government Press in Colombo 200 x 260 mm 80% Source: Bayerische StaatsBibliothek



පියානකිරුනකි කල ආරක්‍ෂාව මෙන් මොහුන්
 ඩන් ආරක්‍ෂාකරදොවදුරනවාමසාදෙ: නමුනිහං-
 සෙගෙ සෙහෙහවනනකු පුත්තූයානකන අප-
 ගෙ නයකවු ගෙසුස් ක්‍රීස්තුස්වහංස නියා: මේ
 සියඵ් දෙම අපව දෙවාවදුරුණ සැරියව නමුන්-
 වහංසෙව යාඤ්‍යවෙමින්: ඔහුවහංසෙගෙ නමගෙන්
 අපෙ යාඤ්‍යව [මෙලෙස] තිඤ්ඤකරකුකුමුව

සවගිහස්නලගෙහි අපෙ පියානනි

නමුනිහංසෙගෙ නමගෙ සුඛවෙවයි

නමුනිහංසෙගෙ රාජ්‍යය එන්ඛවෙවයි

සවගිහස්නලගෙහි සෙම හුමියෙදීන් නමුනිහං-
 සෙගෙ කැමැත්ත ගෙදෙන්ඛවෙවයි

අපෙ නිතිපත මොජ්නග අපව අද දෙවාවදු-
 රුණවාමසාදෙ

අපෙ වරදකරයින්ඛ අපි සමාමවන්න සෙම
 අපෙ වරදවඵන් සමාමවනවාමසාදෙ

අප්ව උපඬුවලව අහුණකර නපුරුනුක් අප
 ගලවාඅර්නවාමසාදෙ

මක්.

FIG 5 A page of *Singaleesch Formulier Boek*, (1738) Dutch Government Press in Colombo
 200 x 260 mm 80% Source: Bayerische Staatsbibliothek

cations of *peiyala* (the use of *pe* with kundaliya on either side of a line, word or a passage) which marks the had to be repetition of a text block. Repeating verses and phrases is a characteristic of Buddhist chantings and scripture, and peiliya was a way of saving space.

The prominent use of kundaliya (කුදලියා)- a traditional Sinhala punctuation mark-as a typographic artefact is a characteristic of the Dutch press. Kundaliya is the most common punctuation mark in Sinhala palm leaf manuscripts with a range of functions in the text.¹² A single occurrence marks the end of a phrase or a sentence, where a pause is required. Double and triple kundaliya indicates the end of sections. Three sets of double kundaliya marks the end of a chapter.¹³ Kundaliya was also used as a decorative element to fill in the margins.

Compositors at the Dutch press extensively used kundaliya, as both a punctuation marker and a decorative element in conjunction with Western typographic decorations and borders. Highly decorated multi-line initials are another notable characteristic borrowed from Latin script typography. Some initials are custom cut and full of decorative elements, while in other instances a character from larger size fount was used with multiple kundaliya to decorate around the character.

Sinhala Ilakkam, the numerations system commonly seen in Sinhala Astrological tables was used by the Dutch throughout the publications for page numbers, chapters numbers and the date of publication.¹⁴ Although there are no major multilingual publications from the press, title pages of the books contain a Dutch title page followed by a Sinhala title page. Even with the limited founts for both Sinhala and Latin scripts, compositors have attempted to set two title pages in an identical layout.

Christian scriptures and Buddhist and Sinhala classical texts are fundamentally different in organisation, hierarchy and function. Sinhala punctuation and the shapes of the letters were heavily influenced by the format of the Buddhist texts and the process of writing on the palm leaf. Introduction of new punctuations, omitting of selected Sinhala punctuations and retaining the kundaliya portrays the Dutch Press's approach to adapting Sinhala for new kind of text content and the composing with movable type.

12. Ibid. p. 659, 660, 666.

13. Kularatne, *History of Printing*, p. 5

14. H. Wijayawardhana, *Numerations in the Sinhala Language*. (2009)

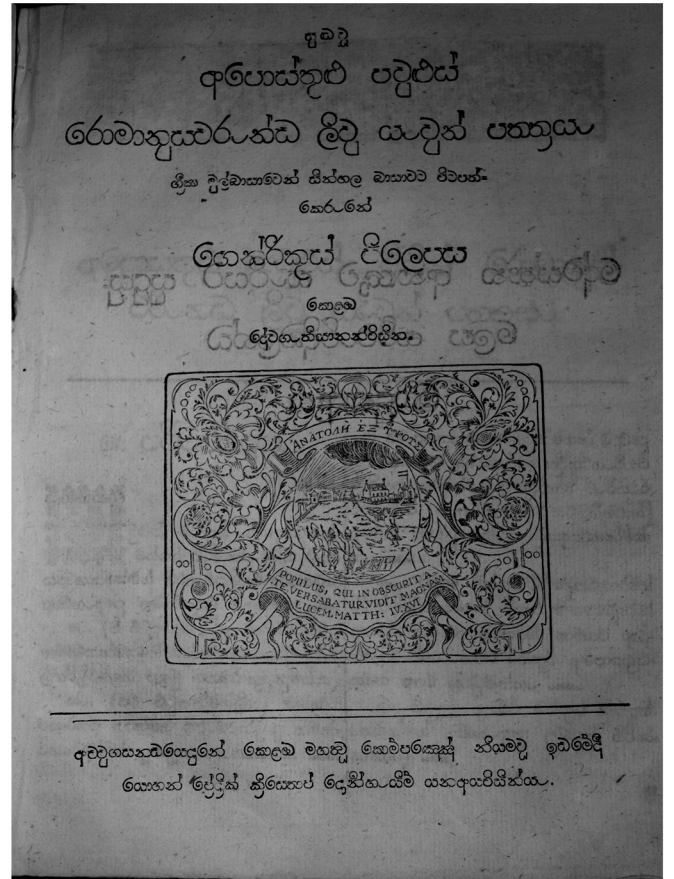
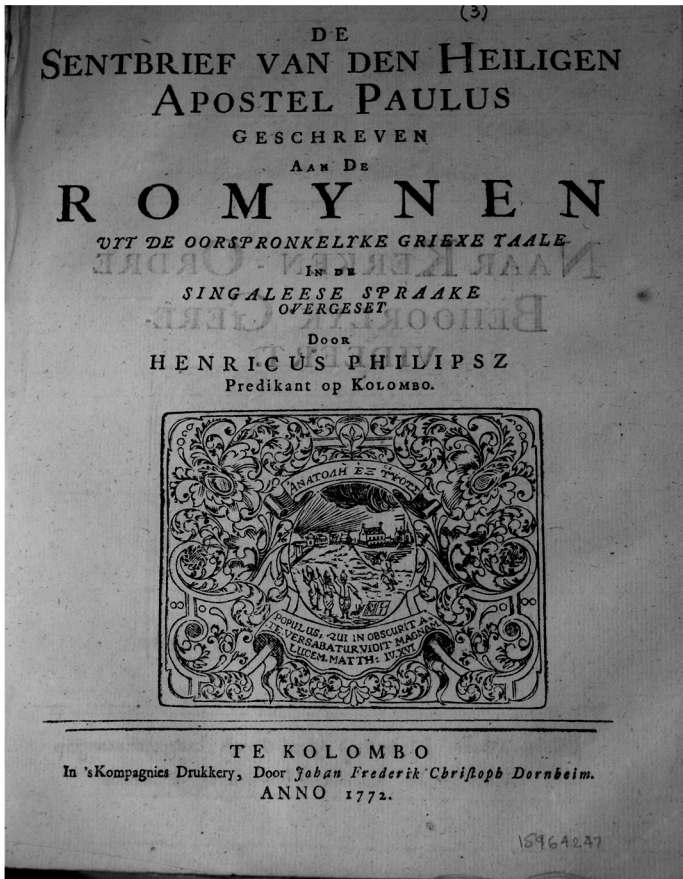


FIG 6.1 Title pages of *Sensbrief van den*, (1772) Dutch Government Press in Colombo

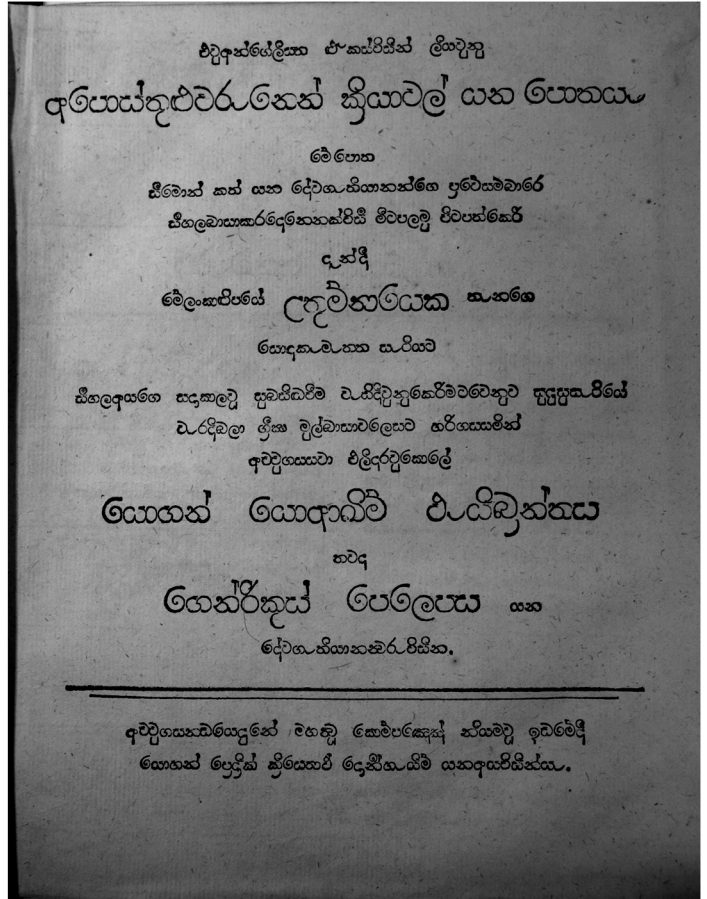
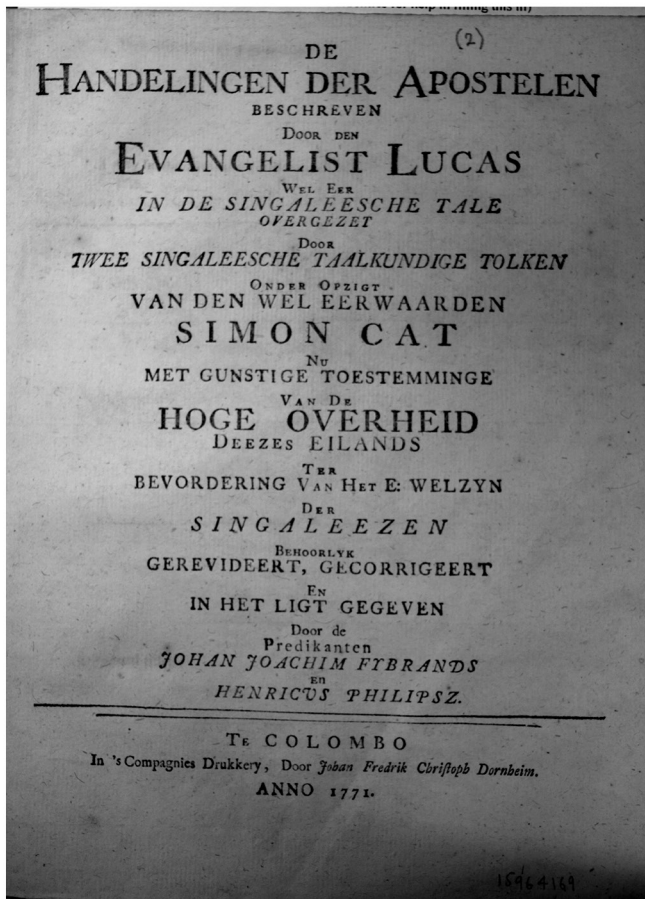



FIG 6.2 Title page of *De Handelingen*, (1772) Dutch Government Press in Colombo



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ම. ආ. 
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FIG 7 Different styles of decorated initials of the Dutch
 Sinhala Types. *De Handelingen*, (1772) Dutch Govern-
 ment Press in Colombo 60%
 Source: Library of Colombo Meuseum

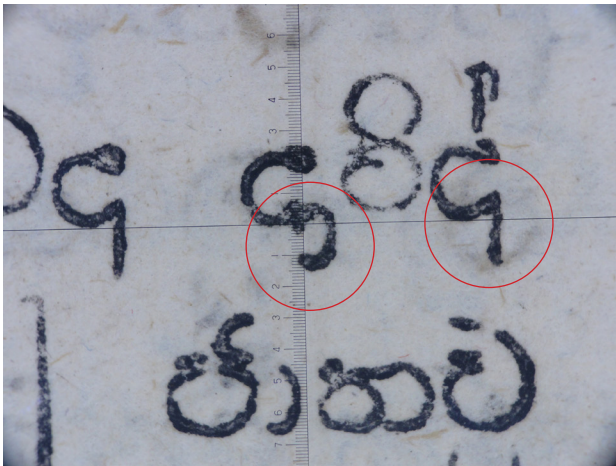


FIG 8.1 Da and Daa stroke behaviour



FIG 8.2 The Aa ligature

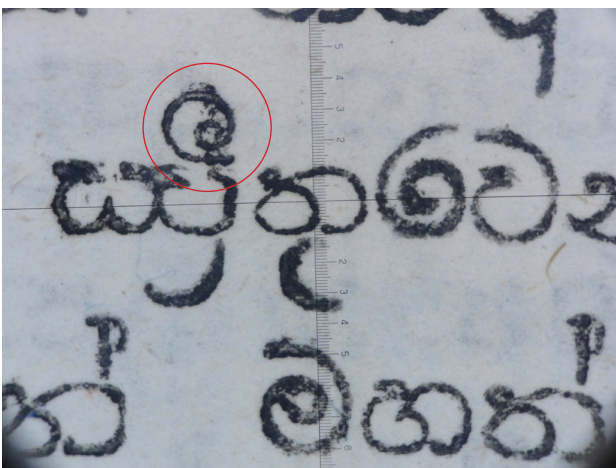


FIG 8.3 Three pieces are used to compose one consonant ligature.

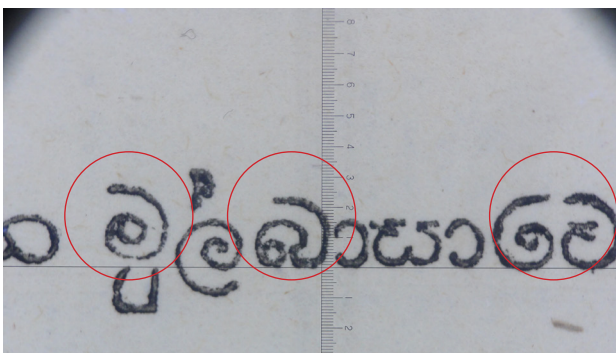


FIG 8.4 The open and extended exit strokes.

FIG 8 Characteristics of Sinhala types by the Dutch Press, Source: The Angus Library and Archive, Oxford

2.2 Style, composition and influences

Schade cut only two founts in 1729, and the smaller fount would have been a later addition. The Sinhala type produced in 1729 were damaged by the late 1830s. Another Dutch soldier was trained and continued the typesetting work after the demise of Schade in 1837. The foundry at the Press produced three Sinhala founts in 12, 18 and 36 pica sizes. [image: GSO1-03 comparison] The style and proportions of the three founts are identical except for differences caused by the punchcutting, and the 18 pica design is analysed here. The monolinear nature, longer exit strokes and the overall shapes these founts are evidence of the influence of letterforms of palm leaf manuscripts.¹⁵ The Sinhala palm leaf manuscripts had a long running tradition with many different styles of writing. [image: palm leaf work vs. GSO1]

15. Kularatne notes that Rull's books would have been a basis to the Schade's Sinhala designs. But a close comparison of the two styles suggests otherwise.

Two founts that Schade produced in 1729 had fourteen sorts each, according to historian Juranesses. This fount uses a compound sorts system to form consonant ligatures. The character set is small since the vowel symbols (pili), are separate sorts with a modular approach to the composition of ligatures¹⁶. The consonant ligatures are formed by combining base consonant sorts with smaller pili (matra) sorts. For some consonant ligatures such as ක්‍රී (krii) , ක්‍රෝ (kroo) two to four separate sorts are used.

16. A *sort* is a piece of metal type.

Dutch Sinhala founts contain a range of idiosyncrasies in design and unique ligature characters. The straight vertical endstroke of letter ද (da) is unique to this fount. The 'Aa' matra ligatures which are only available for base consonants ක (ka), න (na), ත (ta), (nna), (ga), (ha) which of the exit stroke terminate in the baseline region. The අඟ (Ae) is a single character in a linguistic context, but in visual composition it is a combination of the vowel අ (a) and mark ඟ. In the Dutch Press type there is a dedicated ligature for අඟ (ae). and it is likely that Schade based his designs on a Sinhala manuscript with fast written letters where these ligatures are common.¹⁷

17. See W. A. De Silva, *Catalogue of palm leaf manuscripts in the Library of the Colombo Museum* (1938). Colombo. Silva categorized and identified four styles of writing and presents a detailed analysis of the letterforms and layouts of Sinhala palm leaf manuscripts. An in-depth study of the Dutch Press Types and the styles of Sinhala palm leaf writing could identify the exact sources used by Schade.

Christian scriptures and Buddhist and Sinhala classical texts are fundamentally different in organisation, hierarchy and the function of the text. Sinhala punctuation and the shapes of the letters were heavily influenced by the format of the Buddhist texts and the process of writing on the palm leaf. Introduction of new punctuation, omitting of selected Sinhala punctuation and retaining the kundaliya portrays the Dutch Press's approach to adapting Sinhala for a new kind of text content and composing with movable type.

The Dutch Press was a government operation and the Dutch missionaries were not involved in the type-making or the printing process. The heavy influence of the palm leaf manuscript style in the early 18th century Sinhala types and typography completely diminished in the 19th century when the British colonisation and missionary proselytization efforts were much more aggressive than the Dutch colonisation.

Map of Sri Lanka (1780-1815)

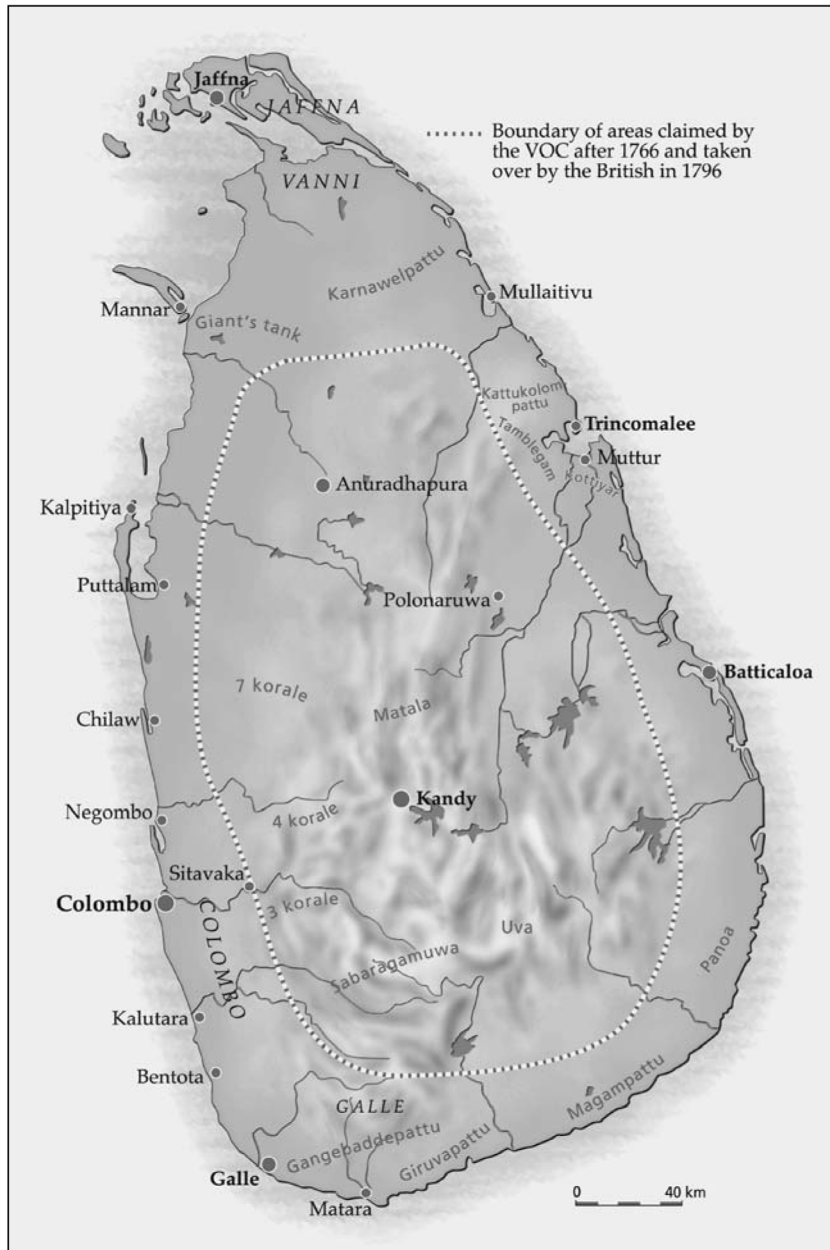


FIG 9A map of 19th century Ceylon

3. A background of 19th century Ceylon

18. The Crown declared its interest in Ceylon in the negotiations at in Lille, control of Ceylon was officially handed over from Dutch to the British Crown with Treaty of Amiens in 1802.

19. Kandyan Convention is an agreement signed between the Kandyan Chiefs and the British government on 2nd March 1815. The King Sri Wickrama Rajasinghe was disposed and the Kandyan chiefs accepted the King of Great Britain as the

20. The unrest is credited to the unrest and dissatisfaction among the people towards administrative decisions and ignorance of Buddhist traditions by British rulers. This resulted Uva–Wellassa uprising of 1818, causing significant losses to British. But the British managed to defeat the rebellion with enforcements brought from India. In 1848 British faced Matale Rebellion, and successfully defeated without a losing a single British soldier. This defeat marked the end of violent rebellions against the British. Requests made by Wesleyan Missionaries to start a Mission in Kandy in 1818 was declined by the Governour, on the grounds that Kandy and the central areas are not safe. Situation remained unchanged until late 1830s.

21. Citation needed.

During the 19th century, the political change from monarchy to that of the colonial rule established by the British drastically impacted the social, economic and cultural atmosphere of Ceylon. For about two centuries before the advent of British rule, the coastal areas of Ceylon were under the rule of the Portuguese and, subsequently, the Dutch, with the central parts being ruled by native monarchs. In 1795, the East India Company (EIC) took control of the majority Dutch-occupied regions, and governed them from the Madras Presidency; its base was in southern India. In 1798, a Crown and EIC government was instated in order to accommodate the interests of both the British Government and EIC.¹⁸ The Kandyan Convention, 1815 abolished monarchy and the entire island became a British Colony.¹⁹ In spite of the abolition, the central parts of the country were not widely accessible to the British until the 1850's, largely due to a mutiny led by Kandyan aristocrats, who opposed the British rule.²⁰ The British government became stable by the mid-1800s and by the late-1860s, the central, northern and southern parts of the country were connected with developments in railway and road infrastructure. The success in coffee, tea and cinnamon plantations fuelled the economy and development of other industries.²¹

3.1 Missionary education and printing

The establishment of the colonial rule paved the way for missionary activities in Ceylon. During the 19th century, the evangelical movement had gained significant momentum in England, and it started looking towards spreading Christianity in its colonies. English, European and American missions, such as The Colombo Auxiler in 1812, the Wesleyan Missionary Society in 1814, the Church Missionary Society in 1818 and American Mission in Jaffna in 1816 established base in Ceylon. The government declared a religious neutrality in the colonies and at the Kandyan Convention British agreed to to safeguard Buddhism and protect its position. However, until the 1890s, the Colonial Government actively endorsed and supported the missionary activities in the island which led to mutinies in 1848.²² The missionary activities revolved around three main goals in the process of converting Buddhists; providing the Christian scriptures in Sinhala dominance in the education system and supressing local ideologies.

The traditional education system in Ceylon was organised around Buddhist temples and *Piriven* or monasteries for the Buddhist monks. Buddhist temples were the closest to an organised school system for the public. The *Piriven* and the Buddhist temples were dependent on the patronage from the monarchy and the continuous political turmoil in the Kandyan Kingdom caused a decline in Buddhist activity by the mid 19th century. The Dutch Reformed Church had a set up a network of schools in the southern and western coastal areas and the British colonial government reopened these schools. However, throughout the 19th century the state run schools suffered from irregular funding and improper administration.²³ The educational needs of the colony were neglected in the first half of the 19th century as the Government prioritized reinforcing Ceylon as a strategic colonial outpost²⁴. The missionary schools, mostly in the city areas, were nevertheless stable, consistent and well-supervised. The government did not possess the resources to improve or maintain the education system and introduced a partial funding system for privately-run schools in 1850s. Missionaries were able to further expand their school system into rural areas with this support.²⁵ From 1812 to 1832 the missionary societies opened two hundred and thirty five schools, which taught approximately 10,000 pupils.²⁶ The missionary school system opened the opportuni-

22. See K.M. De Silva, *Social policy and missionary organizations in Ceylon, 1840-1855*, (1965)

23. At first government paid an allowance to Wesleyan missionaries for teaching in state run schools, but this arrangement only sustained till missionaries started their own schools.

24. Corea, 'One Hundred Years' p.151.

25. See S. Jayaweera, 'Religious Organizations and the State in Ceylonese Education', *Comparative Education Review*, vol 12(2), (1968) p. 159-170.

26. G. Mendis, *Ceylon under the British* (1948) p. 42



FIG10 *Daniel Gogerly*

ty for an educated native population. However, this number does not apply to converts from Buddhism to Christianity, as a culture of nominal christians were in place. Government schooling was generally the easiest way to secure a job in government and the missionaries' perceived successes in converting the native population were largely superficial.²⁷

27. K. Malalgoda, *Buddhism in Sinhalese society, 1750-1900*. (1976) p. 32

3.2 *The rise of the print document production*

The Buddhist practice of preaching had created a strong oral tradition on the island. During a bana (the Buddhist practice of preaching), monks orated relevant passages and followers would sit around in a circle and listen.²⁸ Reading and writing was taught at temples, but was practiced only by Buddhist monks and other educated laymen.²⁹ The palm (ola) leaf manuscripts contained the most of the traditional knowledge in Buddhist literature and prose, astrology and Sinhala medicine, spells and chantings relating to traditional Sinhala rituals.³⁰ Tenant writes that the Sinhalese people considered reading to be a 'operation of magic' and the educated who comfortably read Ola leaf manuscripts were 'embarrassed' by the same letters printed on paper.³¹ Respect for the content of the manuscripts and reverence towards the educated classes by the labouring population could greatly explain why reading and writing were regarded as sacred activities.³²

In the first half of the 19th century, Wesleyan Mission Press was the largest printing operation in Ceylon.³³ They produced a large body of literary work, grammar books, reading books for schools and dictionaries in Sinhala during the 19th century, which contributed towards making reading a widespread activity.³⁴ In 1820 Benjamin Clough writes about plans for a reading book for schools. He realised the youth attending the schools were excited to be acquainted with 'the art of reading'. There was lack of reading material in 'common routine of practices, history and science' in Sinhala, even as ola leaf manuscripts. The classical Sinhala language was too 'high' in which the Sinhala New Testament and Sinhala classical literature was written. Missionaries did not allow any classical Sinhala works with religious significance in the schools.³⁵ Even though the children of natives attended the Christian schools, in many instances, Buddhist monks were invited, regularly to teach children 'higher degree of Sinhalese reading' at home.³⁶ The common reading books and period-

28. In the Foreword by T. W. Rhys Davids in M.L. Shedlock, *A Collection of Eastern Stories And Legends*. (1910) p. 4

29. Kapuwa (demon doctor), Wedarala (a doctor practicing traditional Sinhala medicine or ayurveda), Aristocrats holding ranks in Kings Court.

30. Worshipping of regional gods and demons are not originally Buddhist practices.

31. J. Tennent, *Christianity in Ceylon*. (1850) p. 45

32. Even today, in regular circumstances books are treated with an added respect among the Sinhalese.

33. Other missionary printing operations were considerably small and the Government Press only became a quality printing operation under management of R L Skeen in 1860's. The Government Press has published a considerable amount of publications and has been recognised for its high quality of production. See Kularatne

34. R. S. Hardy *Ceylon and its Methodism*, p. 80. cited in R. S. Hardy, *Jubilee memorials of the Wesleyan Mission, South Ceylon*. (1864) p. 283

35. C. Godakumbura, *Sinhalese literature*, (1955) p. 346

36. *ibid.*

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[Printed at the Wesleyan Mission Press.]

FIG11 Advertisement on dictionaries by Wesleyan Missionaries, William Buckley Fox and John Callaway, with a vocabulary by the latter enclosed in a letter from Callaway to Joseph Taylor, 9 October 1820.
Source:

icals published by the Wesleyans in later years are attempts to counter this situation.

Missionaries adopted Spoken Sinhala for their work and seem to have avoided Classical Sinhala. Either because the style of Classical Sinhala was too difficult to comprehend or because it was synonymous with Buddhist literature. William Tolfrey, with help from a few natives, translated an updated version of the bible from 1816-1817. His translations were based on the Sanskrit and Malay translations from the Serampore press. The first versions of this bible had a twenty-two page glossary of the new words he introduced. It is likely that the Serampore translation style and approach influenced his work. After the sudden death of Tolfrey, Wesleyan Missionary Benjamin Clough and Church Missionary Societies Carter continued the translation with support from natives. Benjamin Clough is one of the most prominent missionaries of his time, as his work in Sinhala studies and writing shaped many of the standards in the later years. He was often consulted in translations involving Sinhala.

This simpler and approachable variant of Sinhala became mainstream towards 20th century and was another reason for rise of public literacy. Although there was a growing interest in reading, by the mid 19th century the country had no commercial publishers nor was there a significant demand for purchasable literature.³⁷ Clough notes that was 'no private speculation in printing' in early decades of the 19th century. However, in 1860s saw the advent of commercial printing. The pocket size dictionaries and smaller versions of the Bibles printed by Wesleyans in this decade signifies the demand for cheaper books.³⁸ The Missionary activities contributed towards popularising reading and set standards for printing in Sinhala. In Despite these accomplishments, their campaign did not succeed in increasing the appeal of conversion to the populace. In fact, their intrusive activities did more to fuel Buddhist resistance, leading them 'to retaliate and meet the missionaries on their own grounds.'³⁹

37. Clough

38. Citation , pocket Citation commercial printing

39. Malalgoda, *Buddhism in Sinhalese*, p. 205

40. See D. Swearer, Lay Buddhism and the Buddhist Revival in Ceylon. *Journal of the American Academy of Religion*, XXXVIII(3), (1970) p. 255: Among the interpretations, 1864 celebration of the Jubilee of the Wesleyan Methodist Missionary Society, rise of the Sinhala middle class, and founding of *Paramadhammacetiya pirivena*, which produced Sinhala Buddhist scholars who later became leaders of the movement are seen

3.3 Attacks on Buddhism and the Buddhist revival

The Buddhist revival movement in Ceylon originated in 1850s and was the climax of cultural and social transformation in the 19th century. There are differing interpretations of the Buddhist revival movement's origins.⁴⁰ However, the activities of the revival movement were undoubtedly in response to evangeli-

cal activities and the intensive campaigns to attack Buddhism by the missionaries. The Buddhists first started openly opposing missionary activities in 1848 in protest of Wesleyan missionary Daniel John Gogerly's book *Kristiyani Prajnapati*. Gogerly, a prominent figure among contemporaries, arrived in Ceylon in 1818 as head printer for the Wesleyan Mission Press. He was a layman and soon he developed an interest in missionary activities and joined the mission. He was the superintendent of the Matara district and became well-versed in the Pali language and Buddhist literature with help from Buddhist monks in Southern Ceylon. Gogerly published work in both Sinhala and English and pioneered the study of the Pali language and Buddhist literature in the western world. But his work has been scrutinised as being influenced by the colonial mindset and biased to the missionary agenda.⁴¹ In 1831 he insisted on using the press primarily to attack 'this 'wretched system' (Buddhist beliefs) and directing all efforts to 'pull down this veil of Satan'.⁴⁰ This mindset was not an accident. The missionary writing of the time was clouded with the imperialist paradigm and the idea of being a greater authority of civilization.⁴³ From 1849-1861, the Wesleyan Mission Press printed and distributed more than 1 500 000 pamphlets.⁴² The majority of these pamphlets targeted buddhist beliefs and traditional ritualistic practices of Sinhalese and Gogerly's 'controversial style' of writing provoked the educated Buddhist communities.⁴³

The revival movement succeeded by capitalising on insecurities among the Sinhala Buddhists caused by the missionary campaigns. The Buddhist leaders realised the importance of printing to counter the missionaries. The establishment of the first Buddhist presses, Lankoparakara Press(1862) in Galle and Sasanabhiwarddhidakaka Samagama (circa 1860) is recognised as the starting point of first phase of the 'recovery of Buddhist confidence', as the Buddhists were able to reply to the attacks from missionaries. The revival movement followed the same strategies as missionaries and distributed pamphlets, newspapers, periodicals in defense of Buddhism. Durlabdi Vinodini by Mohottiwatte Gunannda Thera, a prominent leader, was an answer to Gogerly's *Kristiyani Prajnapati*.⁴⁶ Revival movement gained momentum with establishment of a network of Buddhist schools in the 1870s onwards. Missionaries were aware of the fact that revival movement was jeopardizing their missionary efforts.⁴⁷ the missionary activities continued to improve the standard of education and printing was responsible for increas-

41. See Elizabeth J. Harris, 'Manipulating Meaning: Daniel Gogerly's Nineteenth Century Translations of the Theravāda Texts' *Buddhist Studies Review*, 27 (2), (2010)

42. Quoted in M. Y. Cooneratne *English Literature in Ceylon, 1815-1878*, (1968) p. 90-91

43. See Elizabeth J. Harris, *Theravāda Buddhism and the British encounter* (2006)

44. J. Murdoch, and J. Nicholson, *Classified catalogue of printed tracts and books in Sinhalese*. (1868) p. 4

45. *Ibid.* p. 9

46. Ironically Gunanada Thera received early education from a Christian school.

47. Jayaweera, 'Religious Organizations', p. 164

ing literacy in Ceylon. communicating their message to the natives and the Buddhist Revival movement benefited from the work of missionaries.

4. Serampore Mission Press types

The first Sinhala fount produced by the type foundry at the Serampore Mission Press laid the path to a new style of Sinhala letterforms that matured through the century. In the 19th century, the Serampore Mission Press was the leading missionary printing and publishing outpost in the region, providing Bibles and publications in more than 40 languages.⁴⁸ The Serampore Missionary Society and the press, under supervision of William Carey, Joshua Marshman and William Ward undertook translating of the bible into oriental languages, making new types and printing.⁴⁹

48. S. Khan, *William Carey and the Serampore Books*

49. M. Khan, *William Carey and the Serampore books (1800-1834)*, (1961) p. 229

The type foundry at Serampore produced and sold founts for many languages, including Chinese and Indian scripts. A group of native punchcutters were employed at the type foundry; Panchanan Karmakar followed by his pupil and son-in-law Manohar Karmakar were principal punchcutters. Manohar took over from his father-in-law in 1803 and cut type for at least 15 languages. Serampore press engaged with reputed calligraphers and scribes of each language to provide models for punchcutters, which in some instances were based on handwriting samples.⁵⁰ By 1812 the foundry was cutting types for many scripts in mainland India. Although Serampore Mission did not undertake any Sinhala translation work, a Sinhala fount was in production.

50. *Ibid.*

4.1 First Sinhala fount

Arrangements for printing of Christian scriptures in Sinhala at the Serampore Mission Press were already in place before the establishment of British missionary societies in Ceylon.

CINGALESE.

අදුරෙහි උන් දනන් මහකුළු එලියක්
දුටුහ නවද මරනා රටේද වයාච්චිද
උන්ආයව එලියක් උදුලනෝය.

FIG 13 Specimen of Sinhala type by the Serampore Mission Press type foundry in 1811-1812, As in *Facsimile of the Specimens of the Sacred Scriptures, in the Eastern Languages* (1816), 100%
Source: From the photocopied in Linotype-Paul Archive, University of Reading

51. W. Harvard, *A narrative of the establishment and progress of the missions to Ceylon*

52. Extracts from the First Report of Culcutta Bible Society (1812) in the appendix of

53. Ibid.

54. *1st Memoir of the Serampore translations for 1808.*

55. . The name is mentioned as Gregoriua Zoyza in Hardy, *Jubilee* p. 28

56.

57. Extracts from the Second Report of Culcutta Bible Society (20 Feb 1813) in the *Select Extracts of the correspondence of the British and Foreign Bible Society.* (1814),

58. The press recovered from the damage of the fire within a few months.

59. *Memoirs of Serampore*

60. Kularatne, *History of Printing*, p. 63,64

Printing of Sinhala scriptures was one of the first undertakings by the Calcutta Auxiliary Bible Society, established in February, 1811.⁵¹ Rev T J Twisleton, the first Chaplain and Superintendent of Schools in Colombo, was engaged with the society in this matter. Calcutta Auxiliary Bible Society agreed to bear the cost of printing 5,000 copies of the New Testament in Sinhala at Serampore. The earlier Sinhala translation by the Dutch Press were to be used for this edition. An incomplete translation of the Old Testament preserved at the Dutch church in Colombo was to be revised and completed by Rev. Griffening, a Dutch minister born in Colombo.⁵²

Twilstone sent copies of the Sinaha scriptures printed by the Dutch press, with a specimen of letters for an improved type to Serampore.⁵³ The particulars of this specimen are not recorded, but it is likely that a Sinhala scribe employed in government work produced the sample specimen for Twisleton. The first Sinhala fount was in the works by August of 1811 at Serampore Mission press.⁵⁴ Manohar Karamakar who was at the helm of punchcutting department at the Serampore type foundry at this time was probably in charge of cutting the Sinhala fount. In 1812 Gregory de Silva⁵⁵, an experienced printer s employed by the Dutch Government Press in Ceylon and another Sinhala corrector was sent to Serampore to aid William Ward in printing of Sinhala New Testament.⁵⁶

In August, 1812 the Colombo Auxiliary Bible Society was established by with highest ranking officers of the Ceylon Government in the committee. The primary objective of the society was to provide bible or fragments of its texts in local languages at low costs. The earlier arrangements by Twisleton were revised as the new committee decided that the old translation by the Dutch was faulty and not to an adequate standard. The order was reduced to two thousand copies from the old translation, to address the immediate demand for Bibles.⁵⁷ For the time-being, a new translation was already in production by William Tolfrey, a civil servant in the British Civil Service in Ceylon.

The high quality paper bought for the Sinhala New Testament was destroyed in the fire of 1812.⁵⁸ On 31st December 1812 the Sinhala New Testament was put to press.⁵⁹ Due to the urgent circumstances, it was printed, bound and sent to Ceylon in batches and it lacked a comprehensive title page.⁶⁰ The first batch of two thousand copies of St. Matthew and St. Mark arrived in Colombo in November 1813 and rest of the New Testament

දෙවියෙහි මාඡනාඡරියේ මඡද. (නෘඤ) නවදී
 එනන සිටියන්ගෙන් සමභරෙක් [ඒ] ඡයා මොහු
 ඒලිඡස්භව ඡඛගසන්මය නියා. (නෘඤ) නවදී ඒක්
 සනායේම මහුන්ගෙන් එකෙක් දිව යොනාසියක්
 ගෙන නවදී ඡාඡුල්කාඛියෙගලා රඡුක්දඛන ඡාඡා
 ලනනාඡෙඡව පෙටිය. (නෘඤ) එහෙත්වෙනඡය
 ඒලිඡස් මහුව ගලවඛ එද්දේ ඛලමුව නිඡුනාවෙසි
 කිවුව. (ඛි) නවදී යේපුසිටහඡෙඡ දෙවනුව
 මහත් සබ්දයෙන් ඡඛගසා සත්රිඡා ඡරියයේක.
 (ඛිඤ) නවදී ඛලව නෘමිපෙලෙ නිරය ඉහලහිඡ
 පහලව දෙකඛව ඉරුඡෝය නවදී හුමි කමපාවු
 ඡෝය නවදී පඡීනපුඡීඡෝය. (ඛිඡ) නවදී මනි
 ඡලඡල් ඉඛඡරී නවදී මත්සුදියන්ගෙ ඡඡෝක
 සරීරඡල් කිඛ්දුඡෝය. (ඛිඡ) නවදී ඡලඡල්ඡලිඡන්
 නික්ම ලනනාඡෙඡගෙ ලප්පාදිඡමෙන් පසු සුඛන
 ගරයව ඡාඡුල්ඡී ඡඡෝකඡයව පෙඡුඡෝය.
 (ඛිඡ) නවදී සියයකව නායකයන් මහුසහ යේපු
 සිටහඡෙඡව රකවල්ඡාවොත් හුමිකමපාවද යෙදු
 නාවු කාරනාවල්ද දැක ඛොහොම හියපත්වෙමිඡන්
 ඒකාඡතයෙන් මොහු දෙවියඡඛහඡෙඡගෙ පුත්
 නුයාය කිවුව. (ඛිඡ) නවදී ගාලිලේයේහිට යේ
 පුස් ඡහඡන්සේව මෙහෙ කෙරීමට ලනනාඡෙඡගෙ
 පාරෙඡුඡන ඛොහොම සත්රියො දුරිඡ්ඡලා එනන

FIG14 The New Testamant in Singhalese (1814), Serampore Mission Press, title page
 Source: Library of Colombo Meuseum

arrived in January 1814. This publication is omitted from the Serampore Mission Press reports from the subsequent years, probably because it was not a translation from the mission.

This edition had many shortcomings and did not align with the requirements of the missionaries in Colombo. Despite the Sinhala compositors involvement, the edition had faults and was expensive. This edition was 1183 pages in octavo size, too large and bulky for easier distribution and use.⁶¹ The committee decided that the revised translation should be printed in Colombo, minimising the cost. In response to the request from Colombo, the secretary of the Calcutta Auxiliary Bible Society purchased a the larger Sinhala fount(SPO1) from Serampore Press and sent it to Colombo. 'Punches, matrices and 12 mounds of type' for Sinhala arrived in Colombo on 15 March 1813.

61. Ibid.

4.2 *The smaller fount*

By May 1815 the Colombo Bible Society press was in operation and the gospels of Matthew and Mark were printed using the type from Serampore. Usability and appropriateness of the type for the printing of bible were in question. In 1814 William Ward of the Serampore Mission Press suggested a smaller Sinhala fount, suitable for printing in octavo. However, neither the Colombo Society and the Calcutta Bible Society had the necessary funds for the type at this time. The Committee of Colombo Auxiliary Bible Society (CABS) realised the advantages of a smaller Sinhala fount and by June 1816 patterns for a smaller Sinhala fount were in development.⁶² In 1816, the British and Foreign Bible Society agreed to bear the cost of the new Sinhala fount to be produced at Serampore. On 15th of July 1816, the Colombo Auxiliary Bible Society sent an order for a Sinhala fount in a smaller size. 'Patterns' for the type were enclosed with the order.⁶³

62. In the appendix of Thirteenth Report of the BFBS. (1817). *The Ninth Report of the*

63. Extracts from the Fourth report of CABS. (1816) in the *The Fourteenth Report of the*

64. The full name of Don Abraham is presented in different records.

The 'patterns' sent to Serampore consisted of letters written by Don Abraham, a native Christian, and Petrus Panditta Sekara, a converted Buddhist monk.⁶⁴ These two men were among the most educated and best-informed natives according to Clough. Petrus was particularly reputable native at this time. Petrus Panditta Sekara was a Nayaka Thera (a leader) in the Southern Buddhist priesthood in the name of Shree Dharma Panditha Tera before his baptism in the Christmas eve of 1814 in Colombo. He was well-versed in Pali, Buddhism and Sinhala sciences and his conversion was a major advantage for missionaries. Both men

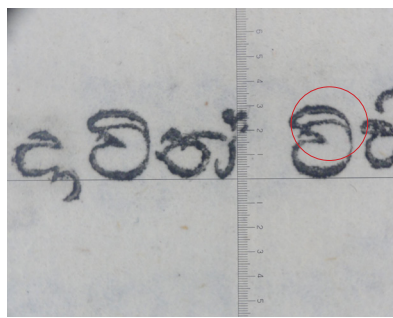


FIG 15.1 Calligraphic modulation of the characters. The continuous top stroke that turns in towards the body of 'vi' is consistent on all the strokes that turn in on the top.

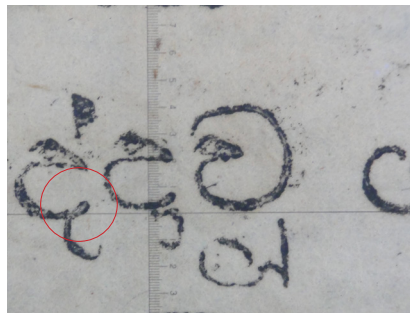
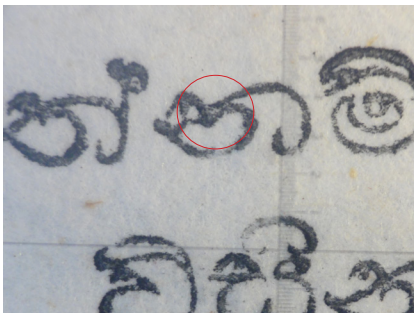


FIG 15.2 The loop behaviour of the na joint and the da is evidence of handwritten forms.

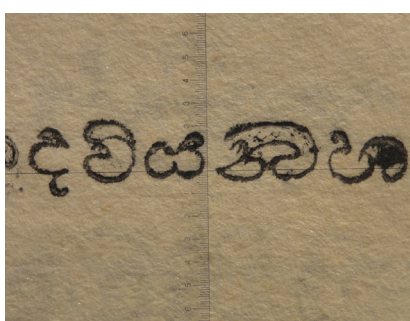
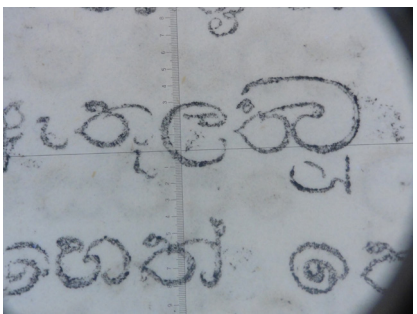


FIG 15.3 Long outstroke of the consonant conjuncts. SPO1 on left, SPO2 on right

FIG 15 Characteristics of Serampore Sinhala types.



FIG 16 Evidence of tools used for the writing samples.

In a series of experiments with writing tools that was available in the early 19th century it was concluded that the writing might have been done with a pointed nib pen with some modifications done in the punchcutting process. The stroke modulation did not 100% match any single angle of reed pen or other calligraphic tools. But without details on Petruss' familiarity and level of skills using the tools it is not a conclusive of what tools were used.

Writing samples: Mohomad Dakak

preached in Sinhala and were involved in the translation projects and printing of Sinhala scriptures. They participated in the translation headed by William Tolfrey. After the demise of Tolfrey, Don Abraham was appointed the Assistant to Rev. Carter of the Church Mission and Petrus was appointed as an assistant to Clough in the continuous process to translate the bible.⁶⁵

In the early 1800s, The Serampore Mission Press was planning to reduce type sizes of all non-Latin founts while maintaining the clarity and readability. 'Largeness of the oriental types' caused higher printing costs, limiting the number of copies and Sinhala was one of the most expensive to print.⁶⁶ The plan was finally executed by John Lawson, who joined the Serampore press in 1812.⁶⁷ Lawson was a skilled punchcutter and not only he reduced the type sizes, but improved the quality of the designs as well. He worked with native punchcutters of Serampore, who completed the founts he started.⁶⁸ Given Lawson's role in cutting smaller types, it is likely that he was involved in cutting the second Sinhala fount. Ward, who previously supervised Sinhala printing, would also likely have contributed.

65. Extracts from the Quarterly Letters & etc 1826

66. 1811, A third Memoir of the Translation carrying at the Serampore in a letter addressed to the society (1812)

67. Timothy Whelan, *Baptist Autographs in the John Rylands University Library of Manchester, 1741-1845*, (2009) p. 415

68. F. Ross, *The printed Bengali character and its evolution*. (1999) p. 51

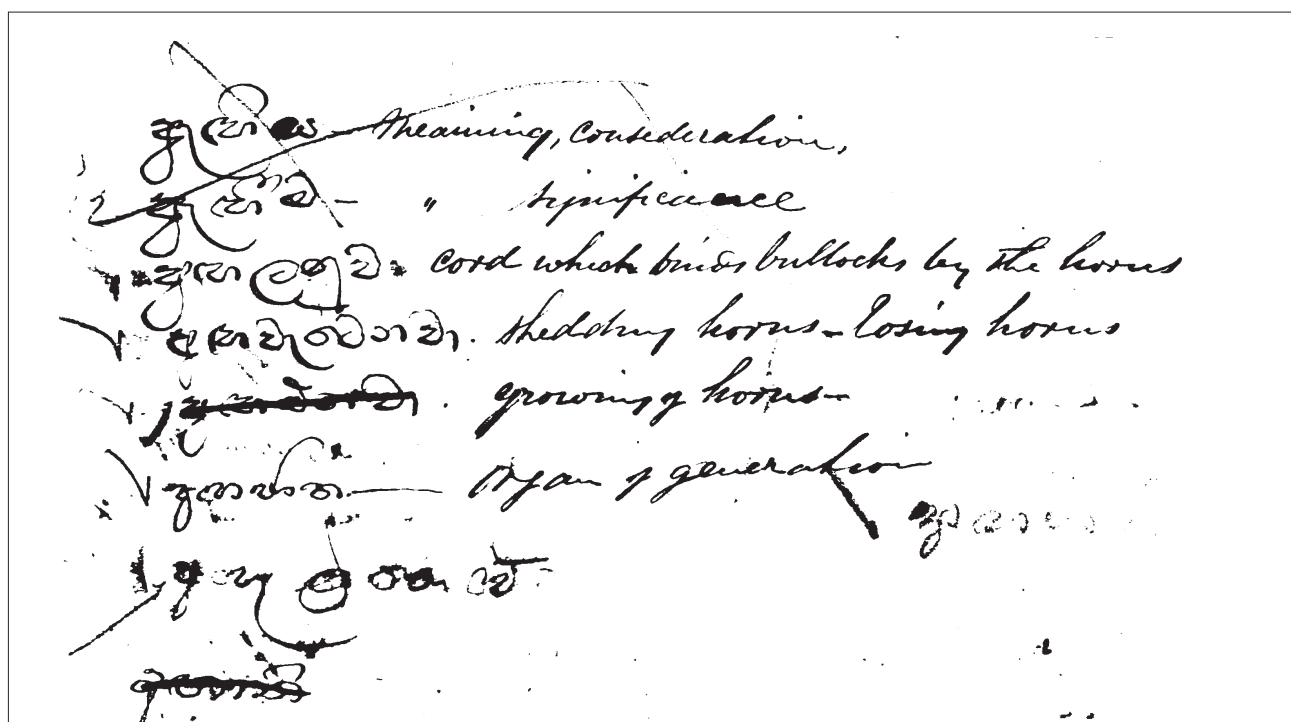


FIG 17 A writing sample from mid 19th century. Written on a back of a dictionary

Source: Authors private collection

Stroke modulation was not completely new to the script, Since 15th century pen and paper was in use in Ceylon and writing with the pointed nib pen created a stroke modulation, that might be considered by the missionaries as a standard for the writing samples.

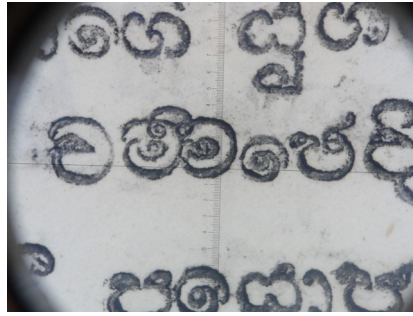
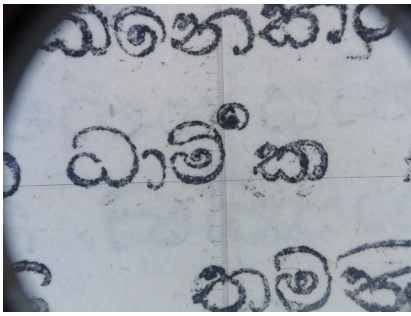


FIG 18.1 The disjointed ୪ (repeya) is a distinct characteristic. For some touching conjuncts the repeya is attached to the base character.



FIG 18.2 Inconsistent placement of pa-pilla (the bottom vowel stroke). This inconsistency is present throughout the font.

FIG 18 Composition of the Serampore Types. *The New Testament* (1817) Wesleyan Mission Press in Colombo
Source: Author's private collection

4.3 Style, composition and influences

The two Serampore Sinhala founts are a milestone in Sinhala typography and type making for few reasons. It is the first instance in which Sinhala letters has a stroke modulation. The Wesleyan Mission Press continued to using the Serampore types while continuously revising and adding to them and they used the Serampore types as a base for own founts. The large Sinhala fount from Serampore Press (SP01) was used in the *Cinghalese Translation of the New Testament* (1813). Regardless of the presence of the two compositors from the Ceylon Government Press, the composition and the typography completely deviate from the early Sinhala Dutch Typography. Kundaliya is not used in this edition, but Sinhala numerals; as used as in the Dutch press. It is likely that the general structure and the typographic style of the Serampore Press's Indian languages Bible continued to influence their other publications in Indic scripts. Considering the fast nature of the job, printing is of a high quality. This is the first instance in which parentheses is seen used in Sinhala bible text.

The typeface moves away from the round stroke structure of the Dutch Press types. The top stroke behaviour of the characters such as ම(ma), ඔ(o), ට(va) turns inside to the main body making the characters compact. This exit stroke is true for the all characters and as a result the letterforms are contained in appearance. The stroke structure of the letterforms such as න(na), ත(ta), ක(ka), ද(da) is evidence of the influence of written forms and the of the notable characteristics is the introduction of the circular 'eye' with a counter.

The letterforms has been condensed vertically, specially in group consonant ligatures such as බ(khi), බ(bi), ම(mi), ධ(dhi), ඩ(vi), to accommodate the characters into the type height.

Composition of both the SP01 and SP02 are similar. Both founts employ the same 'compound sorts system' to form consonant ligatures as in the Dutch Press types. The inconsistent nature of the symbols (pili), which in some instances offset from the base consonants is evidence to that the letterforms are not adapted to the composition method. The differing distances between the base consonants and the vowel symbols (pili) and inconsistent horizontal placement breaks the visual integrity of the typeface.

Both the large (SP01) and the smaller (SP02) founts were based on the samples sent from Ceylon. It is likely that the stroke modulation was present in the written samples, and the Seramp-

ore punch cutters reproduced the modulation from them. The Portuguese introduced paper to Ceylon in the 16th century and by the 19th century, pens and paper were in use in the government service. The samples sent to Serampore were for writing. If the samples were produced by the missionaries using their available stationary, it is likely that a pointed nib pen was the accompanying writing implement.

While the individual letterforms of the SPO1 and SPO2 are closer to written forms and more fluid in construction, the composition and combinations of consonant ligatures lack the same qualities. In the process of adapting the letterforms from the written samples into punches, it is likely that Serampore punchcutters used the composition model of the Dutch Press types. However the Serampore Sinhala types introduced a new model of letterforms based on the forms of Sinhala letters written on paper, as opposed to the Dutch Press types based on the palm-leaf forms.



FIG 19 Engraving of the Wesleyan Mission House in Pettah (1864)

5. Establishment of the Wesleyan Mission Press

The most influential contributions to the development of Sinhala typography, type and printing in the 19th century were undoubtedly made by the Wesleyan Missionaries. Their work in the translation of scriptures, type making and printing resemble work by the Serampore Mission in Bengal.⁶⁹ They were the largest printing and publishing outfit in 19th century Ceylon, producing a body of work that contributed to the standardisation of the Sinhala language and grammar, in spite of being heavily influenced by the missionary agenda.⁷⁰

A group of six missionaries from Wesleyan Missionary Society in London, led by Dr Alexander Coke left Britain in 1813 for Ceylon. After a six month journey, they arrived in Ceylon through Bombay. In July 1814, The Wesleyan Missionary Society was formed as two circuits based on the linguistic division and nature of distinct cultures. The 'Southern Singahalese District' consisted of Colombo and the southern coastal areas, where the majority natives speak the Sinhala language.⁷¹ The 'Northern Tamil District' consisted of northern and eastern coastal areas where the majority of the population spoke Tamil.⁷² The districts had separate administration and accounts, and the printing enterprise in Colombo was managed by the Southern District.

Unlike the other contemporary missionary societies in Ceylon, Wesleyan missionaries were prepared to start the printing operation immediately. Two missionaries in the party, William Martin Harvard and Thomas Squance, were both acquainted with the craft of printing. Harvard realised the opportunity to set up a printing press in Ceylon and with Coke,

69. R. S. Hardy *Ceylon and its Methodism*, p. 80. Cited in *Jubilee* (1964)

70. Kularatne, *History of Printing*, p. 69

71. Harvard, *A Narrative*, p. 345

72. The Tamil district had its own printing press in Batticaloa.



FIG19 William Martin Harvard
Source: Kularatne, *Histroy of Prinitng in Ceylon* (1996)



FIG20 Benjamin Clough
Source: Kularatne, *Histroy of Prinitng in Ceylon* (1996)

he sourced provisions for a printing press. A collection of books from Coke's personal library was selected for the mission's library to aid in the Missions translations activities. Although the plans for a printing press was not conceived initially, with Harvard's efforts missionaries were equipped to start printing by the time they left Britain.

Harvard arrived in Ceylon with the printing press and equipment in 1814.⁷³ He was appointed the superintendent of the Mission in Colombo and the Press. With support from the Andrew Amour, a British priest in Colombo, the Wesleyan Mission started its activities in a house on the main street of Pettah. Harvard immediately set up the printing press and started printing a spelling book for Sunday school and a Hymn book. Wesleyan Press produced superior quality work to any of the previous printing work executed in the country, and the press started receiving requests for printing from other institutions. The 3rd Report of Colombo Auxiliary Bible Society (CABS) was printed at the Wesleyan Mission Press, regardless of having a printing operation at the CABS. The success of this report led to a strong collaboration between the two missionary societies in printing and publishing.

73. Harvard and his wife stayed back in Bombay due to the health conditions of his wife.

5.1 Scope of printing and publishing

Printing was the primary tool for missionaries in proselytising Christianity and the Wesleyans saw the printing press as their biggest asset.⁷⁴ Printing Christian scriptures and religious texts contributed directly to the goal of spreading the word of God, and other publications such as grammar books, dictionaries and general literature had an indirect impact by providing necessary knowledge for missionaries. By 1862, the press had printed around 1.5 million separate publications in Sinhala, English, Tamil, Portuguese and Burmese.⁷⁵ In 1878 alone missionaries printed 138 publications. Their body of work covers a wide range including, Bibles and portions of scriptures, biblical and theological texts, educational publications such as grammar books and dictionaries, general literature and periodicals, tracts and pamphlets and ephemera such as notices, invitations and advertisements.⁷⁶ Apart from own publications, the Wesleyan Press frequently printed orders from other Christian organisations. CABS was the principal sponsor of printing Bibles and Wesleyan's reputation for the quality secured them orders from Church

74. Quoted in M. Y. Gooneratne, *English Literature in Ceylon, 1815-1878*, (1968) p. 90-91

75. There are records of attempts to cut a Burmese fount at the Wesleyan type foundry.

76. James Nicolson undertook the task of evaluating and recording the work by the Mission Press in 1860s. He only managed to catalog the printing work from preceding twenty years, but speculated this number based on the records. The categories are based on his categorisation presented in a letter to Missionary Committee in 1864, quoted in Kularatne, *Weslyan Mission* (1996)

—also called අක්ෂර : at other times he is called *Cartkeya*; and in this island *Kutte-regama deviyo*

අක්ෂරිකි s. (අක්ෂර and කි *je-wel*) crystal

අක්ෂරිකි s. (අක්ෂර and කි *churning*) the name of a plant: (*prema spinosa and longifolia*) fire is produced by friction of two pieces of this wood and no doubt has its name from that

අක්ෂරිකි s. (අක්ෂර and කි *deficiency*) scarcity of bile, indigestion, inappetency

අක්ෂරිකි s. (අක්ෂර *the fire of the stomach i. e. the digestive faculty* කි *one of the names of hanuman the chief of the monkeys*) The name of a celebrated saint, generally called *agastya*. This name is given to him in consequence of his digestive powers, and the attribute alludes to the story of his devouring and digesting *Vatapi* a demon who had assumed the form of a sheep

අක්ෂරිකි s (අක්ෂර and කි *mouth*) among the *hindus* it means oblations to the gods in consequence of their passing through fire as their mouths:—in *Singhalese* medical books it is the name of a plant (*plumbago Zeylanica*)

අක්ෂරිකි s. (අක්ෂර and කි *preserving*) the preserving of sacred fire

අක්ෂරිකි s. (අක්ෂර and කි *dust*) the name of an insect of a scarlet colour

අක්ෂරිකි s. the name of a plant (*ornithorhpe cobbe*)

අක්ෂරිකි s the name of a plant see අක්ෂර

අක්ෂරිකි s. (අක්ෂර and කි *friend*) Resin, so called from its befriending fire

අක්ෂරිකි s. (අක්ෂර and කි *raising*) smoke

අක්ෂරිකි s. (අක්ෂර and කි *power*) gold

අක්ෂරිකි s. (අක්ෂර and කි *a crest*) flame of fire; also, saffron; the name of a plant (*grislea tomentosa*)

අක්ෂරිකි s. (අක්ෂර and කි *a room*) a place where water is heated for bathing

අක්ෂරිකි s. (අක්ෂර and කි *crest*) saffron

අක්ෂරිකි s. (අක්ෂර and කි *pillar*) the flame arising from a large fire

අක්ෂරිකි s. (අක්ෂර and කි *burnt offering*) the name of a custom which prevails among the *hindus* of keeping their sacrificial fire constantly burning

අක්ෂරිකි s. the person whose business it is to attend the sacrificial fire for the purpose of keeping it constantly burning

අක්ෂරිකි s. the name of a plant (*prema integrifolia*)

අක්ෂර s. a sickle

අක්ෂර s. chief, principal, first, prior, excellent, exalted; best, much, most; fore, front; end, top, summit, point, upper part

අක්ෂර s. (අක්ෂර and කි *perfume*) a costly perfume;—the name of a plant (*a species of the spilanthus*)

අක්ෂර s. (අක්ෂර and කි *born*) first born, an elder brother; also, a Bramin

FIG 21 Cloughs Sinhala-English Dictionary (1830) Wesleyan Mission Press in Colombo. 80% Source Google Books

77. Kularatne, 'The Wesleyan Methodist', p. 236

78. Benjamin Clough was particularly interested in publishing work that benefit the missionaries who wanted to study Sinhala and Sinhalese culture. Printing of the dictionary

79. For a complete bibliography of Wesleyan Missions work see XX. Hardy writes extensively about some of the important publications of the press.

80. Kularatne, 'The Wesleyan Methodist', p. 233

81. Hardy, *Jubilee memorials*, p. 56,57

82. Ibid.

83. Kularathne, *History of printing*, p. 43

Missionary Society, the Christian Vernacular Education Society, The Bible Society, The Ceylon Religious Tract Society, Friend in Need Society, Christian Literature Society and other Christian organisations and private individuals.⁷⁷

Being able to speak and understand Sinhala, was essential for missionaries in Ceylon.⁷⁸ In the 1820s Wesleyans started publishing resources for learning Sinhala, and in the process produced some of the most significant publications on the Sinhala language and culture to be published in the 19th century. Between 1815 to 1868 they published twenty-nine educational publications covering spelling, grammar, history, oriental literature and arithmetic.⁷⁹ The Clough's Dictionaries are the greatest achievement in the early years of press. Benjamin Clough compiled it, and it was printed in two editions; English-Sinhalese edition with twenty-five thousand words in 1821, and Sinhalese-English edition with 40 000 words in 1830.⁸⁰

The Mission also published periodical called *Lanka Nidhana* (Treasure of Ceylon) in Sinhala which consisted articles on 'subjects related to the island'.⁸¹ Wesleyans printed and distributed a staggering amount of ephemera portraying the illusive nature of Buddhism and 'devil worshipping'. A notice and handbills challenging 'demon-priests' to demonstrate their abilities was distributed in 'all directions' and displayed all public places.⁸² These ephemera could be the single most distributed work by the Wesleyan Mission Press. The wide variety of publications that Wesleyans produced required expertise in complex Sinhala typography and by the 1860s Wesleyan Press compositors were producing high quality Sinhala -English multilingual typography.

5.2 Administration and management

Despite the quality of printing and typographic execution, the press was not profitable and not well-administered until the 1870s. While there was interest among the missionaries to be involved in printing and publishing work, throughout the first four decades, there was no single person in charge of the administration of the press. Even the missionaries who were in charge of supervising the printing had to divide time between the press and regular missionary activities. In 1818, Harvard requested the Wesleyan Missionary Society in London to send a dedicated layman to supervise and administrate the press.⁸³ In response

to Harvard's request the London Society sent Daniel Gogerly in 1818. Although Gogerly managed to improve the efficiency of the press, and quality of the work, he was not in charge of the finances and administration. In 1819 Harvard left Ceylon finishing his tenure and missionaries in Colombo William Buckerly Fox, Benjamin Clough and John Callaway managed the affairs of the press. All three missionaries had great interest in literature and printing the enterprise, but none of them were in charge of book-keeping. An incident where the press used all the paper in the warehouse without realising ultimately delaying the production, proves the problems of management. Financial difficulties caused by loss of sponsors and the lack management caused missionaries to consider closing the press in 1823. However, between 1823 to 1827 the press was still functioning in small scale. In 1828 Clough took over the administration of the press and managed to make it profitable, donating some of the profit back to the Society.⁸⁴

84. Clough to Townby on 23 November 1830

85. Alexander Johnstone, Chief Justice of Ceylon in a letter to Wesleyan Mission Committee 1817 praised the Wesleyan mission's work in translation, printing and publishing.

86. Kularatne, 'The Wesleyan Methodist', p. 233

87. Hardy, *Jubilee memorials*, p. 285

Making profit was not a primary goal of the Wesleyan printing enterprise and they were in the forefront in providing material for 'moderate prices'.⁸⁵ From the beginning, most publications were either sponsored or pre-sold. Even by the late 19th-century majority of the work of the press came from other Christian organisations. The school books from the mission were distributed free of charge among the students, as only a handful could afford to purchase.⁸⁶ Retail sales of books was not present until the 1860s. Singhalese Religious Tract Society opened a book depot in Colombo and made a considerable profit in 1863-64 selling Sinhala, Tamil and English tracts.⁸⁷ Despite the difficulties in the early 1820s, the missionaries were determined to keep the press running, as it was an essential to their activities.

5.3 *Printing conditions*

Initially, the quality of the Wesleyan printing work was higher due to two factors; equipment and material were all new and, Harvard, who was in charge of the press was a trained printer with experience in the organisation of a printing press and understanding of western typography.⁸⁸ Before joining the mission, Harvard, born in 1790 in London, worked in printing and type making at Fry and Co. in London. The operations of the press became a priority because of Harvard's dual roles as the in charge of the Colombo Mission and the Superintendent of the

88. Upon Governor's request he overlooked the refurbishing of the Government press in xx. Harvard was invited by the Governor to take care of the government press He was invited by the governour to take charge of the Government Press, The Colombo Auxiliary Bible Society

Printing Press. During his short tenure in Ceylon from 1814 to 1819, Harvard developed the Wesleyan Mission Press into a fully fledged printing operation.

In its beginnings, the Press had only essential equipment and supplies brought from London. Among the material were a 'complete printing press, a box of printing ink, four boxes of printing types, packing-cases of printing paper'.⁸⁹ Harvard understood the requirements for an efficient operation and acquired necessary tools and equipment, trained the staff and established partnerships with other organisations. CABS Press was not efficient due to lack of skilled staff and outsourced most of their work to Wesleyans. Harvard made an agreement with CABS to provide printing services for discounted prices and on 2nd May 1816, CABS closed down their press, and two printing machines were relocated to Wesleyan Mission Press. In 1820 with the addition of a 'new press with ironwork' Wesleyan had four printing presses in operation.⁹⁰ Three of them were probably wooden presses and the iron press was a Stanhope press built in 1800's. The printing ink was produced in-house following the instructions from Serampore Mission Press.⁹¹ In the later years, ink was imported in from England. The paper was imported from England and, in some instances from India.⁹² But constant interruptions of paper supply caused delays in production.⁹³ The attempts to produce paper locally with support from the government failed due to lack of knowledge of the craft.⁹⁴

In 1816, Press moved to the first dedicated space in the Dam Street, Pettah. It was part of the Wesleyan Mission House, a compact complex specifically built to house all the activities of the mission. It had dedicated space for printing and book-binding offices, a type foundry and a warehouse.⁹⁵ Operations remained in this premises until relocation to a newly constructed building in Colpetty, in 1879. By the 1870's the scope of the printing was expanding and missionaries felt the need for a more spacious and organised space for the press and the publishing department. James Nicholson, a missionary whose contributions are discussed in chapter 6, undertook the moving the press to the new establishment.

Wesleyans faced the challenge of finding skilled and trained labour for the printing press throughout the early 19th century. The craft of printing and operating complex machinery was new to the natives. Acquiring workmanship and skills required for printing took a considerable time and commitment. In many instances, the missionaries recruited 'intelligent boys' from

89. Harvard, *A Narrative*, p. 245

90. Harvard to Buckerly 10th April 1818 *Extracts from the Quarterly Letters to the Committee*. vol 4

91. Harvard, *A Narrative*, p. 295

92. Hardy, *Jubilee memorials*, p. 283

93. Clough October 1819 *Extracts from Quarterly Letters*

94. Harvard, *A Narrative*, p. 395

95. *Ibid.*

96. Harvard, *A Narrative*, p. 400

97. *Ibid.*

98. *Ibid.* p. 271

99. Harvard, *A Narrative*, p. 243

100. Multiple references about the quality of Silverwork is seen in literature by Civil servants of Ceylon.

‘respectable families’ who attended their schools to work in the press. The quality of execution suffered as it was very difficult to get the ‘men to pay proper attention’.⁹⁶ Harvard had to supervise the work carefully, and ‘teach, scold or praise, as circumstances’.⁹⁷ Harvard hired Emanuel Jantz, an experienced printer to who worked at the Government Press to manage the press. Jantz proved to be an excellent printer and later became the Head Printer.⁹⁸ By the year 1817, the Wesleyan Press had a staff of thirty-one under Harvard’s supervision. A clerk to manage the book room, a Tamil translator, a Sinhala translator, eight press operators, three English compositors, two Tamil compositors, four Sinhala compositors, five book-binders, four folding boys and two letter founders.⁹⁹ For work in the type foundry, it is likely that silversmiths were hired as punchcutters. Silverwork was a thriving craft in Ceylon by the 19th century, and there were skilful silversmiths.¹⁰⁰ In few occasions, due to administration issues press faced financial few occasions and, many skilled workers left for jobs in other printing presses.

6. Types and typography of Wesleyan Methodist Mission Press

In the first half of the 19th Century, the Wesleyan Mission Press shaped the style of Sinhala typography. The typographic style of the Wesleyans became the defacto standard for Sinhala typography for three reasons. The reputation of the Press for its quality and output must have encouraged the other printing presses of the time to follow their style and execution. Additionally there were no other presses which produced the Sinhala or Sinhala-Latin multiscrypt work in the volume of Wesleyan publications and the workers who trained at the Press left for jobs in other printing presses in the 1830s, and it is likely that they continued the style and practices.

The Wesleyan Mission Press was praised for the beauty and the quality of its execution. However, missionaries were critical of the quality of their work and constantly attempted to improve the quality.¹⁰¹ At the Paris Universal Exposition of 1878, Wesleyan Press was awarded an 'Honorable Mention' for their work.¹⁰² The Press presented a series of Sinhala and Sinhala-Latin multiscrypt books in 'Printing and Books Class' and a series of Sinhala and Tamil books used in Government Vernacular Schools in 'Education of Children, Primary Instruction and Instruction of Adults Class'.¹⁰³ Wesleyans succeeded and became pioneers as they had financial backing and government support. Through the years, they had missionaries who were trained in printing, technical proficiency and were acquainted with western typography-they had proficient missionaries who were dedicated to improving the standards of literary work.

101. Kularatne, *History of* (2006)

102. Minutes of a meeting of the District Committee for the South Ceylon District held at Colpctty. Colombo from 15th to 23rd January. 1879. Quoted in Kularatne, 'The Wesleyan Methodist', p. 236

103. *Paris Universal Exhibition of 1878- Catalogue of the British colonies*, (1878) p. 70

Class 3. TRIANDRIA.

පහති ම. පුෂ්පිකීන්ද්‍රණය
Pagati 3. Purusayin-tundeni.

Panicum.

Order 2. DIGYNIA.

භ්‍රම ම. පත්‍රිකීන්ද්‍රණය
Krama 2. Stojin-dennā.

2 ♀ <i>fluitans</i> , ○ <i>flavidum</i> , ○ <i>colomum</i> , ○ 1 <i>stagnum</i> , ○ <i>crus-corvi</i> , <i>compositum</i> , 3, 2 ♀ <i>aristatum</i> , 2 ♀ <i>paspalodes</i> , 2 ♀ <i>grossarium</i> , ○ 1 <i>italicum</i> , ○ 1 <i>alatum</i> , 4, ○ <i>cimicinum</i> , 5 2 <i>Ischemoides</i> , ○ 1 <i>miliaceum</i> , β 2 1 <i>polygamum</i> , 2 1 <i>arboreacens</i> , 2 1 <i>curvatum</i> , 2 ♀ <i>trigonum</i> , 2 ♀ <i>repens</i> , 2 ♀ <i>brevifolium</i> , 2 f <i>contractum</i> , M. 2 <i>patens</i> ? 2 f <i>plicatum</i> , R. 2 1 <i>hirsutum</i> , M.	floating. yellowish. purple, pond, Crow's-foot. compound-spiked. <i>Spikes alternate, scattered.</i> red-awned. Paspalum-like. white-awned. Italian. tall. <i>Spikes fascicled.</i> spotted. <i>Panicled.</i> white. Little-Millet. <i>cultivated.</i> Guinea-grass, Tree, curved. triangular-seeded. creeping. short-leaved. close-panicled. spreading. plaited. hairy.	වල්බද්දමු සීන් වලමාරුකු සීන්මාරුකු වෙල්මාරුකු වෙල්මාරුකු <i>Spikes alternate, scattered.</i> රතුබටතන වල්බින්ද්‍රමු සුදුබටතන තනහාල ඔරුතන <i>Spikes fascicled.</i> බුද්දහිතන <i>Panicled.</i> අලවොරතන වල්මෙමොරි මෙමොරි රටතන භාලාගස් දෙහිතන බටදල වල්තන රල්තන බුබදල	Wal-bada-amu. Heen-wal-māruku. Heen-māruku. Māruku. Wel-māruku. Ratu-bata-tana. Wal-bin-amu. Sudu-bata-tana. Tana-hāl. Bēru-tana. Roo-deni-tana. Mōra-tana. Wal-meneri. <i>Meneri.</i> Rata-tana. Nalā-gas. Deeni-tana. Bata-dālla. Wal-tana. Rali-tana. Boo-bata-dālla.	Rumph. amb. 6. t. 5. f. 3. S. R. Burm. ind. t. 11. f. 1. S. E. P. A. S. E. S. A. Burm. ind. t. 10. f. 3. Engl. bot. t. 1076. Burm. ind. t. 11. f. 3.	Colombo, සැ. Colombo, රු. Colombo, රු. Colombo, cult. රු. Colombo, සබ. Ceylon. Caltura, T R. Colombo, T M. Caltura, T R. Ceylon, cult. රු. Colombo, සබ. Caltura, රු. Ceylon, cult. රු. W. Indies. Caltura, සබ. Kandy. Caltura, සබ. Colombo, රු. Colombo, රු. Colombo, රු. Caltura, T S. Kandy, T M. Caltura, T K. Colombo, T R. Oowa, රු. Colombo, රු. Caltura, රු. Caltura, රු. 3 Korles, T G. Engl. bot. t. 1076. Adam's Peak. Brit. Oowa, රු. Bengal. Dombera Peak. R. 4 Korles, රු. Māle, රු. Caltura, රු. Caltura, රු. Ceylon, රු.
46. DIGITARIA, DIGITARIA. <i>Per.</i> i. p. 84.					
2 ♀ <i>umbrosa</i> , 2 1 <i>ciliaris</i> , 2 ♀ <i>linearis</i> , ○ <i>longiflora</i> , ○ <i>distachya</i> ,	alternate-spiked. ciliated. linear-spiked. long-flower'd. two-spiked.	බුකුකරි හිතන සීන්කොන්දෙරු කොන්දෙරු	Boo-tut-tiri. Hee-tana. Heen-kontēru. Koniēru.		Colombo, T R. Oowa, රු. Colombo, රු. Caltura, රු. Caltura, රු.
47. MILIUM, MILLET-GRASS. <i>Willd.</i> i. p. 358.					
2 <i>ramosum</i> ,	branched.	සීන්කුරුලුතන	Heen-kurulu-tana.		3 Korles, T G.
48. AGROSTIS, BENT-GRASS. <i>Willd.</i> i. p. 361.					
○ <i>panicca</i> , 2 1 <i>diandra</i> ?	bearded. diandrous.	බුබල්තන ගවරතන	Boo-balu-tana. Gawara-tana.	Engl. bot. t. 1076.	Adam's Peak. Brit. Oowa, රු.
49. MELICA, MELIC-GRASS. <i>Willd.</i> i. p. 381.					
2 <i>latifolia</i> , R. 2 <i>nerosa</i> , M. 2 <i>barbata</i> , M.	broad-leaved. nerved-leaved. bearded.	රටකෝතන කෝතන	Rata-gō-tana. Gō-tana.		Bengal. Dombera Peak. R. 4 Korles, රු.
50. POA, MEADOW-GRASS. <i>Willd.</i> i. p. 385.					
2 1 <i>bifaria</i> , ○ 1 <i>rynosuroides</i> , ○ 1 <i>amabilis</i> , ○ 1 <i>chinensis</i> ,	two-rowed. bipinnate. Indian. Chinese.	කරල්කුරුතන ඉදලකුරුතන කුණ්තන	Karal-kuru-tana. Idal-kuru-tana. Kooni-tana.		Māle, රු. Caltura, රු. Caltura, රු. Ceylon, රු.

FIG 22 Alexander Moon, *A catalogue of the indigenous and exotic plants growing in Ceylon...* (1824) Colombo, Wesleyan Mission Press. Source: From Google Books

6.1 *The rise of a new typographic style*

Wesleyans completely disregarded the aspects of palm leaf manuscripts found in Sinhala typography by the Dutch Press. The Sinhala punctuation mark kundaliya is not seen in the Wesleyan publications throughout the first years. The Serampore types do not seem to have produced a kundaliya in their fount, but with the type foundry in operation, Wesleyans could have used the kundaliya. The Wesleyans move introduced a new standard to the early 19th century Sinhala typography. The kundaliya became a punctuation reserved for Pali texts, Buddhist texts and Classical Sinhala texts. The grammar books and other non-religious books also omitted the kundaliya. By the early end of 19th century, the kundaliya was not in common Sinhala writing anymore.

The decorated initials found in the Dutch Press no longer appeared and, even in the works of other presses in the late 19th century, it is no longer seen. As mentioned in 3.2, William Tolfray's new translation of the Bible introduced many new words and standards to Sinhala, the increased word breaks is one of them. The double horizontal lines introduced by the Dutch Press is not present in the Wesleyan Bibles, and the words are being broken in the middle in many instances, fitting the justified setting.

In the 1820s, the Press printed a range of Sinhala-Latin multiscrypt books which shaped the typographic standards of the century. The multiscrypt printing of the press had an effect on shaping typography of Sinhala. The Wesleyans kept using the Sinhala numeral system in mix with the Arabic numerals until the mid 19th century. In the early Bibles, the verses are numbered with Sinhala numerals and the pages are numbers and footnote numbers are presented with Arabic numerals. *Catalogue of the Indigenous and Exotic Plants Growing in Ceylon* (1824) is a one of the most sophisticated multiscrypt publication of this period. The Catalogue contains parallel text in Sinhala and English with transliteration of the Sinhala in Latin script. The titles, classification numbers and descriptors in Sinhala employs Sinhala numerals while the same in English and the transliteration use the Arabic numeral system. The lists, in which the values of the numbering become greater, are set with the Arabic numerals, even when the collation order and the primary entry is in Sinhala. However. A collection of extracts from the New Testament published in the same year *The Christian Institutes; or the Sincere word of God...* completely omit the Sinhala numerals. This publi-

වූ බලාපොරොත්තුවීමක් නිබන්ධනාත්මක පාප
යන්ද්‍රදෙසා තවත් යාගයක් නොතිබෙන්නේය.

5. පරිවේදය.

දිනයන්හා ආත්මයන් ගැන
නාය.

පෙ.බ. xii.
22. 23.

යහපත්වූ දිනයන් ගැන.

ගී. ciii. 20.
2 පේතු. ii.
11.

සවිශේෂයේ දිනයන්ගෙන් ගනුන්හැකි 2 සම. xiv.
සමූහයක් අත්තේය මනුෂ්‍යයින්ට වඩා බල 20. 17.
වත්ව ආනවන්තව යහපත්ව ඔවුන් සිටිති 1 සම. xxix.
මක්නිසාද මනුෂ්‍යයෝ පූර්වයේ දිනයන්ට ගී. viii. 5.
වඩා මදක් නිව්ව මවනු ලැබූහ.

දෙවියන්වහන්සේගේ සභාව මේය උන්වහන්සේ
හන්සේගේ අභිප්‍රාච ඉස්වකරන්නාවූ උන්වහන්සේ
හන්සේගේ මෙහෙකරුවෝය. xxxii. 2
ගී. ciii 21.

දෙවියන්වහන්සේගේ සිංහාසනය වටකර වැසී. viii.
සිටින සුබවූ තෝරාගන්නාවූ ආලෝකයෙහි දු 38.
තයෝ මොවුන්ය තවද ප්‍රධාන දිනයාවූ මී 1 ගී. v. 21
කාආල මවුන් අතරෙහි උතුන් අධිපතිව 2 කොර. xi.
සිටින්නෝය. 14.

පූර්වකාලයෙහිදී මනුෂ්‍යයින් සමග කථාකර
න්වද නොයෙක් කාණ්ඩවල් ඔවුන්ට පෙන් ගෙන්.
වාදෙන්වද පැමිණෙන්නාවූ දේ ඔවුන්ට පලි විවාර. xiii.
දරවුකරදන්ව පූර්වයේ ඔවුන්ට කියනු ලැබූ සෙක්. i. 14
දේ සත්‍ය සැබෑව තිබුණුවත් ඔවුන්ට ආක් දන් xxii.
සිදෙන්වද දෙවියන්වහන්සේ සිතිය දිනයන් 23.
පවුසේක. ප්‍රකාශ. i. 1.

FIG 23 Andrew Armour, *The Christian Institutes; or the Sincere word of God...*(1824) Wesleyan Mission Press, Colombo.
Source: Colombo Muesuem Library

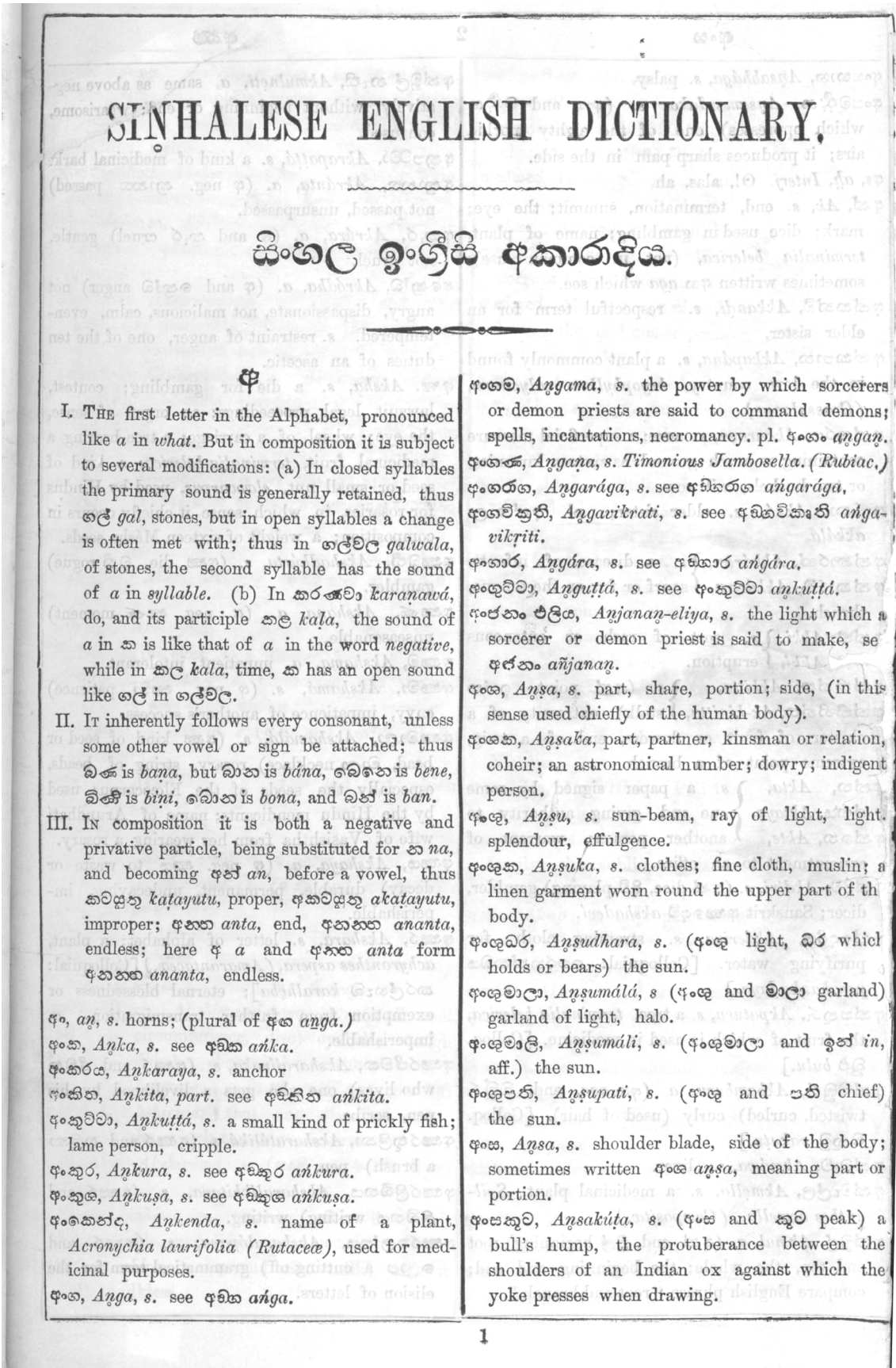


FIG 24 Benjamin CloughSinhalaese English Dictionary New and Revised edition...(1895) Wesleyan Mission Press, Colombo. Source: Authours private collection
By 1890s the press was producing its highest quality material.

උලිඳ, *s.* the moon. 62. (උඵ a star, and ඉඳ, chief)
 උලලඛ්ඝනා, *n. skt.* leaping over.
 උවන්=උඤ්චුන්, though it were he; though he were there.
 උවන, *s.* face, countenance. (උවනේ *loc.* 79.)
 උවිඳ, *s.* a name of Vishnu. 62.
 උෂ්ණ, *m. skt.* heat, warmth. 88.s.
 උෂ්ණිම, *m. n. skt.* a turban, diadem. 78.s. (උෂ්ණ heat, and
 ඊෂ to oppose)
 උස්, *adj. s.* high, lofty.
 උස, *s.* height, loftiness.

උභ

උභ, *m. skt. and Pali,* thigh. 86.s.

උච

උච්ච, *nom. of උච්චි. q.v.* 91.s.
 උච්ච, *f skt.* Rik, or Rig Veda, one of the four great religious
 writings of the Hindus. (*v.* චේද)
 උච්චි, *m. skt.* Rishi, or holy person, a saint; there were seven
 orders of Rishis. 53.s. 91.s.

උච්ච

උච්ච, *num. m. f. n. skt. and Pali,* one.
 උච්ච, *s.* united, peaceful, acquiescing, (67. collectedly)
 උච්චපස, (*or* උච්චපසව) on one side, standing aside, as a
 mark of respect. 92.
 උච්ච, at that time; then.
 උච්චව, *s.* alone, solitary, 106.
 උච්චනිත්, *m. f. n. skt. and Pali,* alone, solitary, 106.s. (*nom. m.*
 උච්චනි; *fem.* උච්චනිනි)
 උච්චානා, *f. skt.* close and undisturbed attention. 67.s. උච්චානා,
 intent upon, undisturbed.
 උච්චව, *s.* together with.
 උච්ච, when it comes. 22 (*from* උච්චව)
 උච්ච, *m. f. n. pron. skt.* this. උච්චත්. 105.s. *Pali* උච්ච.
 උච්චන, that place, there. (=උච්ච that, and තැන place) උච්චනිත්.
 51. from that place, thence.

FIG 25 Rāhula, T. and Macready W. *Sella Lihini Sandese*(1865) Wesleyan Mission Press, Colombo. 219 pages
 Source: Authors' personal collection.

cation uses the new fount cut in the 1820s, and it is likely that the Sinhala numerals were not cut for the new fount.

Wesleyan missionary James Nicholson (1834-1902), who arrived in Ceylon in 1861, is responsible for starting a new style in Sinhala typography and typeforms. He was a trained printer and sent to Ceylon to supervise the press.¹⁰² He was influential in moving the press into a new complex in 1870s. Nicholson was particularly interested in publishing economical pocket editions of the New Testament and a Bible in an 'attractive form'. His *A Pocket Dictionary of The English And Sinhalese Languages*, is evidence of his interest in pocket versions of books. He was motivated in improving the quality of typography as he developed two new Sinhala founts with aim 'prominent', 'readable' and 'attractive' forms. Some of the key publications from the press in this period shows greater care for typography and quality of execution. *Sella Lihini Sandese: The Sella's Message (1865)* is one of the finest work from the press, which employs all five Sinhala founts from the Wesleyan Press. (FIG XX) The improvements in the typography of the Wesleyan Press is evident in the comparison of the 1821 and 1892 editions of the Cloughs *A Sinhalese - English Dictionary*.

After the initial hurdle of sourcing a Sinhala fount was solved with arrival of Serampore type and subsequent amendment of the type, missionaries became aware of the style and aesthetics of the letters. There are two key periods which the type foundry was highly active and show significant development. The early 1820s, when Harvard, Callaway and Fox, the missionaries who acquainted with printing was in charge and the press was in good financial grounds. With the financial difficulties in late 1820s there was no new developments in type-making and, Benjamin Clough who was in charge of the press in the 1830s to 1840s did not have a background in printing. The next period, 1860s, the missionary activities were thriving and printing was a main tool in the activities. 1864 was the 'Jubilee Year' of the Wesleyan Press and Wesleyans were preparing for the celebrations from the 1860. James Nicholson, who 'knew printing' In both periods the missionaries who 'knew printing' arrived in Ceylon in 1861, and he is responsible for the some of the significant developments of the Press.

104. He had a keen interest in Printing activities of the press. He compiled a bibliography of the work by Wesleyan Missionaries and prepared detailed reports on the history of the Press.



මනෙවු විසින් ලියන ලද

මහල වු න්‍යානාය.

෧ පරිච්ඡේදය.

෧. ආබ්‍රහම්හේන් පුත් දවිත්හේ පුත්‍රවු යේසුස් ක්‍රිස්තුස්වහන්සේගේ පරම්පරාවේ පොතය :-
 ෨. ආබ්‍රහම්හේන් ර්සාන් ජනිතකෙළේය ර්සාන්හේන් යාකොබ් ජනිතකෙළේය යාකොබ්හේන් යුදස් ද මහුගේ සහෝදරයන්ද ජනිතකෙළේය. යුදස්හේන් එරස් ද සාරාද එමර්ගේ ගබ්‍රියෙහි ජනිතකෙළේය එරස්හේන් එසෙප්‍රාම් ජනිතකෙළේය එසෙප්‍රාම්හේන් ආරම් ජනිතකෙළේය.
 ෩. ආරම්හේන් අමිනාදබ් ජනිතකෙළේය අමිනාදබ්හේන් නාසෙය්‍යාන් ජනිතකෙළේය නාසෙය්‍යාන්හේන් සල්මොන් ජනිතකෙළේය. සල්මොන්හේන් බෝවස් රාකබ්ගේ ගබ්‍රියෙහි ජනිතකෙළේය බෝවස්හේන් ඔබ්‍රන් රුත්ගේ ගබ්‍රියෙහි ජනිතකෙළේය ඔබ්‍රන්හේන් යෙසෙස් ජනිතකෙළේය.
 ෪. යෙසෙස්හේන් දවිත්රජ ජනිතකෙළේය.
- දවිත්රජහේන් යම් සත්‍රියන් හෝමෝ ලාරියස්ගේ පායකී වූවාද ආගේ ගබ්‍රියෙහි සාලමොන් ජනිතකෙළේය.
෫. සාලමොන්හේන් රොබෝඅම් ජනිතකෙළේය රොබෝඅම්හේන් අබියා ජනිතකෙළේය අබියාහේන් ආසා ජනිතකෙළේය.
 ෬. ආසාහේන් යෝසාප්ත් ජනිතකෙළේය යෝසාප්ත්හේන් යෝරම් ජනිතකෙළේය යෝරම්හේන් ඔමියස් ජනිතකෙළේය.
 ෭. ඔමියස්හේන් යොආනම් ජනිතකෙළේය යොආනම්හේන් ආබ්‍රාම් ජනිතකෙළේය ආබ්‍රාම්හේන් එසේ

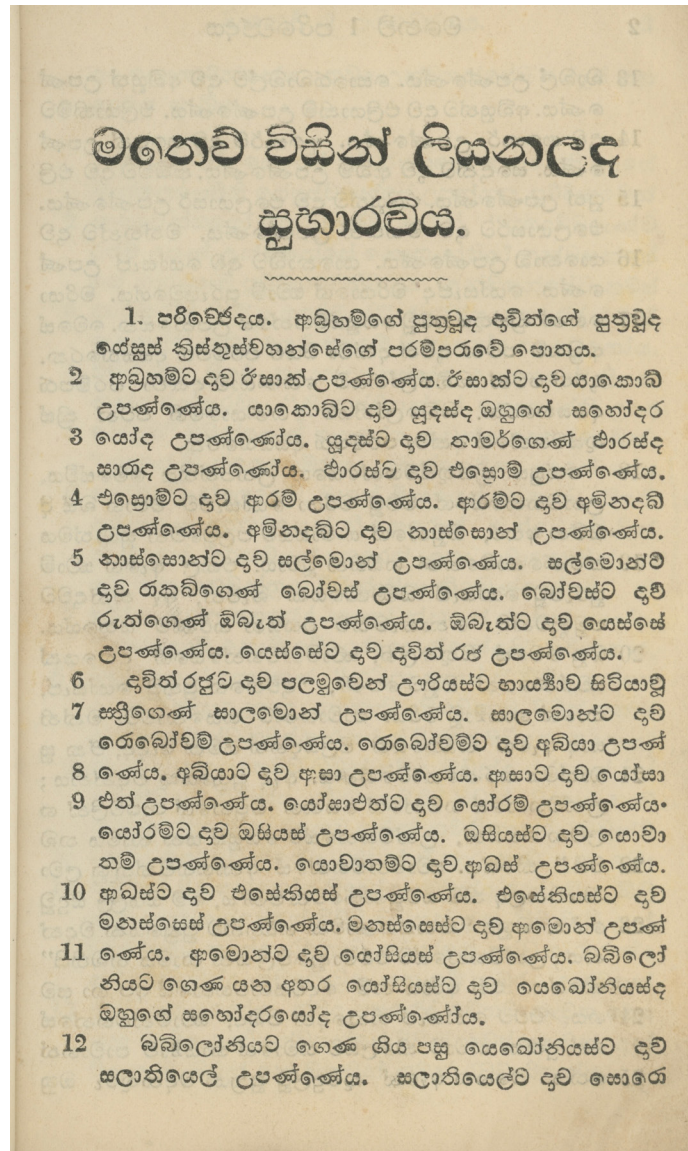


FIG 27 *The Singhalese Translation of the New Testa-
ment...*(1865) Wesleyan Mission Press, Colombo.
100%
Source: Authors' personal collection.

Improvements of the type and typography from 1817 to 1860. The New Testament was the main running publication of the Wesleyan Press with many editions over the years.

FIG 26 *The Singhalese Translation of the New Testament...*(1817) Wesleyan Mission Press, Colombo. 219 pages 80%
Source: Colombo Meusem Library

මනෙවු විසින් ලියනලද

සුභාරම්භය.

1. පර්වෙණදය. ආබුහම්මේ දුතු වූද දව්ගේ දුතු වූද දේසුස් ක්‍රියාණුස් විහන්සේගේ පරමපරමේ පොතය.
2. ආබුහම්මට දව ඊසාක් උපන් ගේය. ඊසාක්ට දව යාකොබ් උපන් ගේය. යාකොබ්ට දව සුදස්ද බ්‍රහ්මගේ සහෝදරයෝද උපතොන්ගේ. සුදස්ට 3. දව තාමර්ගෙන් එරස්ද සාර්ද උපතොන්ගේ. එරස්ට දව එප්‍රොම් උපතේගේ. එප්‍රොම්ට දව ආරම් 4. උපතේගේ. ආරම්ට දව අම්නාදබ් උපතොන්ගේ. අම්නාදබ්ට දව නාස් සොන් උපතොන්ගේ. නාස්සොන්ට 5. දව සල්මොන් උපතොන්ගේ. සල් මොන්ට දව ග්කබ්ගෙන් බෝවස් උපතේගේ. බෝවස්ට දව රූග් ගෙන් ඕබ්ග් උපතේගේ. ඕබ්ග්ට දව ගේස්ගේ උපතොන්ගේ ගේස්ට දව දව්ග් රජ උපතොන්ගේ.
6. දව්ග් රජුට දව පලවුබේග් උග් ර්ග් යස්ට් භාය්නාච ස්වියාඩු සහිගෙන් 7. සාලමොන් උපතේගේ. සාල මොන්ට දව ගේබෝවම් උපතොන්ගේ. ගේබෝවම්ට දව අබ්ගා උපතොන්ගේ. අබ්ගාට දව ආසා උපතේගේ. 8. ආසාට දව ගේසාඑන් උපතොන්ගේ. 9. ගේසාඑන්ට දව ගේරම් උපතේ ගේ. ගේරම්ට දව බ්‍රහ්මස් උපතේ ගේ. බ්‍රහ්මස්ට දව ගොවානම් උප තොන්ගේ. ගොවානම්ට දව ආබස් උප 10. තොන්ගේ. ආබස්ට දව එබේනියස් උපතේගේ. එබේනියස්ට දව මනස් සෙස් උපතේගේ. මනස්සෙස්ට දව. ආමොන් උපතේගේ. ආමොන්ට 11. දව ගේසියස් උපතේගේ. බ්‍රහ් ලෝනියට ගෙන යන අතර ගේසිය යස්ට දව ගේබෝනියස්ද බ්‍රහ්මගේ සහෝදරයෝද උපතොන්ගේ.
12. බ්‍රහ්ලෝනියට ගෙන ගිය පසු ගේබෝනියස්ට දව සලාතියෙල් උප තොන්ගේ. සලාතියෙල්ට දව සොගේ 13. බාබල් උපතොන්ගේ. සොගේබා බල්ට දව අබ්ගුන් උපතොන්ගේ. අබ් ගුන්ට දව එලියානම් උපතොන්ගේ. එලියානම්ට දව ආසොර් උපතොන්ගේ. 14. ආසොර්ට දව සදෙක් උපතේ ගේ. සදෙක්ට දව ආබ්ම උපතේ ගේ. ආබ්මට දව එලියුන් උපතේ 15. ගේ. එලියුන්ට දව එලියාසර් උපතේගේ. එලියාසර්ට දව මන් නන් උපතේගේ. මන්නන්ට දව 16. යාකොබ් උපතොන්ගේ. යාකොබ්ට දව ගේසැස් උපතොන්ගේ. ගේසැස්ද මර්ගාගේ ස්වාමි දුරුසුගේ. මර්ගා ගෙන් ක්‍රියාණුස් නම් වූ දේසුස් විහන්සේ 17. උපතේ ගේ. මෙගේ ආබුහම් පටන් දව්ග් දක්වා සියළු පරමපර දස සතරෙක. දව්ග් පටන් බ්‍රහ්ලෝ නියට ගෙන යාම දක්වා පරමපර දස සතරෙක. බ්‍රහ්ලෝනියට ගෙන යා මෙහි පටන් ක්‍රියාණුස් විහන්සේ දක්වා පරමපර දස සතරෙක.
18. දේසුස් ක්‍රියාණුස් විහන්සේගේ උන්පත්තිය මෙගේ විය. උන්වහන් සේගේ මව් වූ මර්ගා ගේසැස්ට ඊලාසා බස් දී සිව්න අතර, බ්‍රහ්මගේ සැවා

A

FIG 28 New Testament (1868) Wesleyan Mission Press, Colombo. . xx pages . p. 12
Source: Google Books

Two column layout introduced in late 1860's

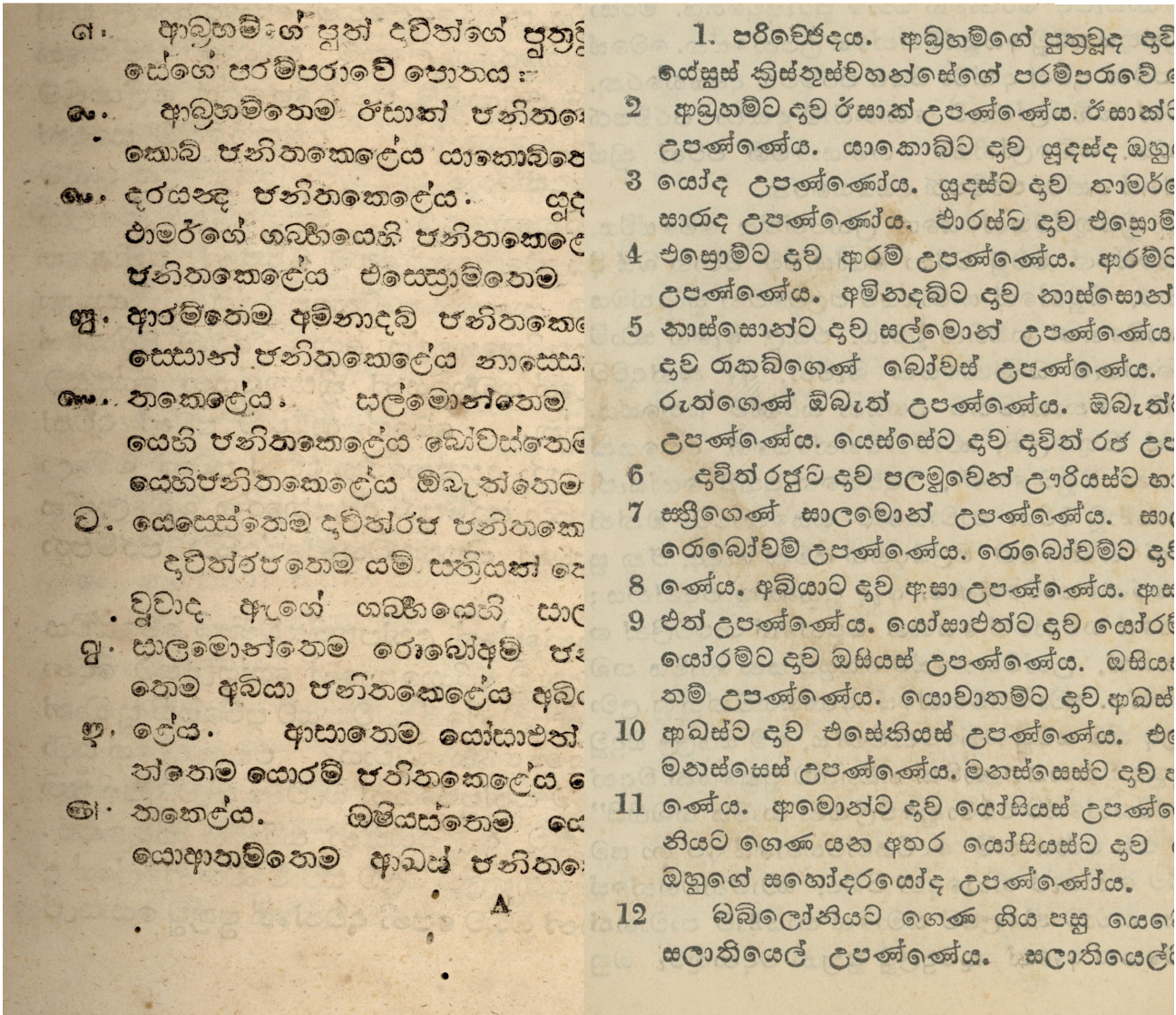


FIG 29 Comparison of types from *New Testament 1817* (left) and *New Testament 1818* (right) The text is the first 12 versus of the New Testament. Images scaled to equal type height.

THE LORD'S PRAYER.

සවයියෙහි වැඩ සිටින අපගේ පියානන්වහන්ස. ඔබව
හන්සේගේ ආමය පුඩවේවා. ඔබවහන්සේගේ රජය පවතී.
ඔබවහන්සේගේ කැමැත්ත සවයියෙහිමන් සුමයෙහිදී කර
නු ලැබේවා. අපේ දවස්පතා හෝපතා අපව අද දී වදාලමු
නව. අපේ නායකාණ්ඩව අපි. නොව වෙනත්නායකවන් අපේ
නායන් අපව නොවේ වදාලමුනව. අප පරි. නොවේවනොහ
මුණුවා අපුරෙන් අප හැඳවා වදාලමුනව. මක්නිසාද රජය
සත් පරි. නොවේ මහිම. වසන් සදාකල්හිම ඔබවහන්සේගේ
මය අමෙහි.

FIG 30 Specimen of the improved Singhalese type, cast at the Wesleyan Mission Foundry(1816). Source: *Extracts from Quarterly Letters, etc.*, No. 19, April 1822, p.50.

6.2 Setting up the type foundry and early types

William Martin Harvard setup a type foundry at the Wesleyan Mission Press in 1816 with the primary objective of amending Sinhala types from Serampore. Since the establishment of the foundry, all the Sinhala founts and types used at the Press were cut and cast in-house. Hardy writes that the missions foundry produced five Sinhala founts by 1864.¹⁰⁵ Only the government press had a type foundry, but there is no evidence of Government press producing original founts at this time.¹⁰⁶ With the advent of commercial printing in 1860s, and there were 'several type casters' in Colombo by 1870.¹⁰⁷ And the most notable private type foundry Cooray and Company was established in 1892.¹⁰⁸

105. Hardy, *Jubilee* p. 45

106. Records reflect that Government press imported types, but without indication of where from.

107. An attempt to steal type from the Government Press is reported in 1870 and the Report indicates the thefts intended to sell types for melting and reusing the type metal. 'Report of the Government Printer (1870) p. 468

108. Kularatne, *History of*, p. 278

109. *Ibid.* p. 276

The smaller fount from Serampore arrived in Colombo broken and incomplete. After waiting for a new set of types for a few months, Harvard decided to set up a type foundry and cast the missing characters. It seems that the setting up of the foundry did not require significant resources or labour. Harvard hired a punchcutter and a mould maker and immediately started work. As mentioned in 5.3 the silverwork was a common and thriving industry, there were many skilled silversmiths in Colombo and Harvard must have hired silversmiths for the punch cutting and casting type. No information surrounding the punch cutters' identities was found during this study. As for the equipment, at the request of CABS, the government granted permission to use a set of moulds and matrices from the Government Press at the Wesleyan Type Foundry.¹⁰⁹ It is likely that the matrices and moulds of the SPO1 was also moved from the CABS press along with the printing machines in 1816. In October 1816, Harvard sent a request to London society for the following items from for the type foundry in October 1816. Within a few months, Harvard managed to complete the Serampore types with locally cut and cast types. He even sent a sample back to London as a curiosity to the missionaries museum.

In the early 1820s, many new additions and improvements were introduced through the type foundry. The typecase for Serampore Sinhala types was revised by the Wesleyan missionary John Callaway in 1819. Even after the additions by Harvard, two founts from the Serampore Press were defective. Certain characters were missing, or without enough types. Composition took longer as some of the smaller and defective. Callaway who was the Superintendent of the Press from 186 to 1819 attempted to solve the problem by introducing a new layout to the type

110. John Callaway 29th June 1819
Extracts from the Quarterly Letters p. 84

case. He did a count of ‘average number of times each character occurs in a sheet of demy’; a frequency analysis of Sinhala text.¹¹⁰ Based on this he produced a new layout that was one third of the original size of the Sinhala type case. His work probably led to the introduction of the new Sinhala composition by the Wesleyan Mission Press.

111. Benjamin Clough 1820
Extracts from the Quarterly Letters

By 1819 the founts from Serampore Press did not suffice the requirements of the press. The compound consonants characters used up to three pieces to compose. Due to their ‘smallness of the body’ the vowel symbols (pillam) were broken or bent and did not print in the text and looked inferior to the other languages.¹¹¹ Missionaries were most likely comparing their Sinhala work to the other scriptures printed at the Serampore Mission Press, and attempting to emulate their style and quality. By 1821 the Sinhala types used at the Wesleyan Press had taken ‘very considerable improvements’ In 1818 the Press attempted casting a new fount on ‘small pica body’ with the vowel symbols attached to the consonant. This decision might have been based on the Callaway’s analysis and marks the beginning of the composition structure of Sinhala.

This fount was in use by early 1820s and can be considered as a significant improvement over the early compositions. The stroke structure of the Serampore types are still present in the new fount with minor adjustments to fit the new composition. The the connected vowel symbols improves the visual integrity of the letterforms and the rhythm of the overall texture. However, Gogerly was not happy with the quality of the new types cast at the Foundry. In 1824 he writes that the He writes that the quality suffered from the imperfections of the type, which was created by the men at work and the low quality of type metal.

මහවැව් විසින් ලියන ලද සුභාරම්භ

මහවැව් විසින් ලියන ලද සුභාරම්භ.

FIG 31 Comparison of SPO1(top) and WPO2(bottom) used in title size. Scaled to match body sizes. The SPO1 which was used as a body type in the early years was still in use by 1860 as a title face. Nicholson introduced the new WPO2 as an attractive face for the titles in 1861.

6.3 A new style and modulation

James Nicholson was the most influential missionary who worked in type making at the Wesleyan Press. Soon after arriving in Ceylon, he drew plans for two new Sinhala founts. The first fount (WPO2), 'A Sinhalese fount, of Great Primer' which was in development by 1864, is a landmark in Sinhala typography as the traces of highly modulated structure of letterforms is first seen in this fount. It was a 'bolder face' than any of the previously produced typefaces for Sinhala and meant for use in handbills, lesson books and Scripture cards in a prominent and more readable form. The second 'fount of Brevier' (WPO3) was smaller than any of the Sinhala founts made. This fount was specially cut for the pocket editions that Nicholson printed in the later years. The both founts were in use by 1865.¹¹²

112. Nicholson to Missionary Committee, 01 March of 1864

It is likely that the WPO2 was cut first. Nicholson's intention for an 'attractive face' with a 'prominent' form suggests he was aiming the look correspond directly to Great Primer size of Latin typography. The development of high contrast Latin Moderns was taking place in this period in Britain, and Nicholson who arrived in 1861, only had a few years of acquaintance with the Sinhala script. Although there is no indication of the particular contribution of Nicholson in making drawings or cutting the punches, he made the 'arrangements' and was 'engaged' of the process.

The stroke modulation of the WPO2, does not directly resemble modulation of any of the previous Sinhala founts and the weight is introduced to make the type 'bold' while maintaining the stroke structure.

The smaller fount (WPO3) that was cut after the WPO2, and the same stroke modulation of the WPO2 is introduced in this fount, with a lower contrast. But the texture of the impression is darker than any of the previous Sinhala founts. The addition of this extra weight based on the structure of WPO2 is evident in (sa), (ka), (na), (ta), (la), and. The addition of the weight might have been affected by the limits of punchcutting process in small sizes.

The founts that the Wesleyans produced in the early 19th century were solving specific technical problems in adapting the script to the method of composing with metal type. In the 1860s, the document production in Sinhala became a mainstream industry and the types produced in this period were focusing on addressing the specific typographic and stylistic needs of the

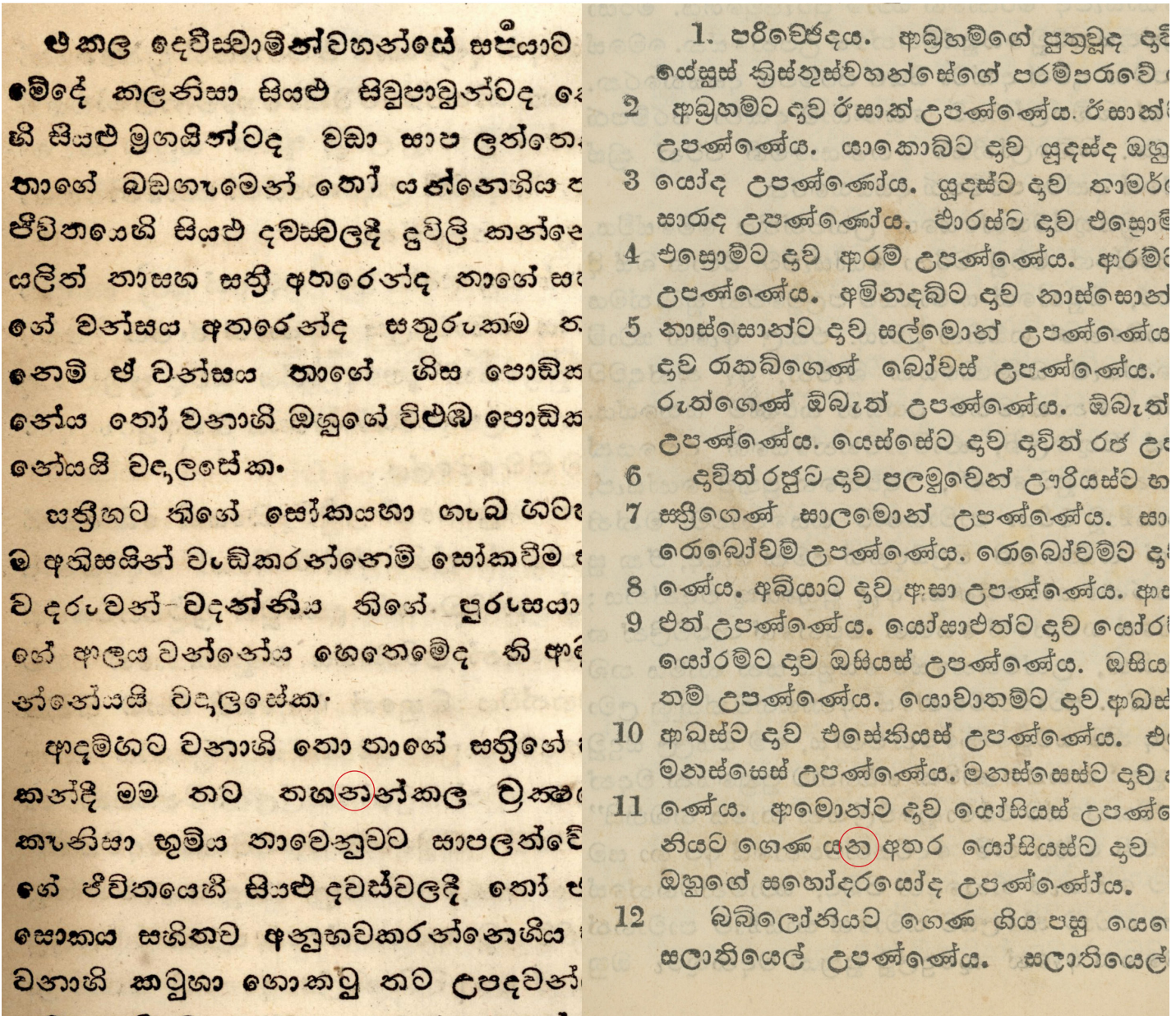


FIG 32 Comparison of types from *New Testament* 1824 (left) and *New Testament* 1868 (right) Different text contents. Images scaled to equal type height.

The 1824 version is set with the WPO1, the improved compositions based on the Serampore design, and the 1868 is set with the WPO3, the smaller text fount developed in early 1860s. The letterforms have been overall narrowed and the strokes are much behaved and typographic in nature.

time. It is natural that the references to the Western typography influenced the style, as the technical framework of printing with metal type were built around Latin script and typography. However, the Wesleyan Missionaries attitude towards the native belief systems and culture might have influenced their decisions to overlook and ignore some of the peculiarities of the traditional Sinhala letterforms. In the later years of 19th century the native type foundries continued the style and the high contrast model became popular.¹¹³

113. R. Saraiva, (2012). An overview of Sinhala type design from the 18th century to the present.

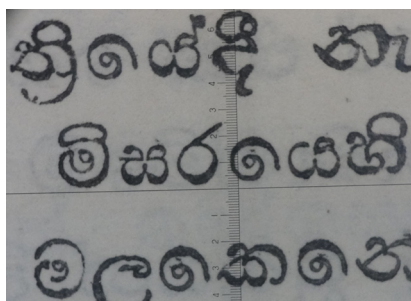
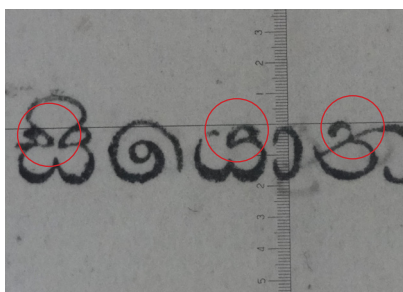
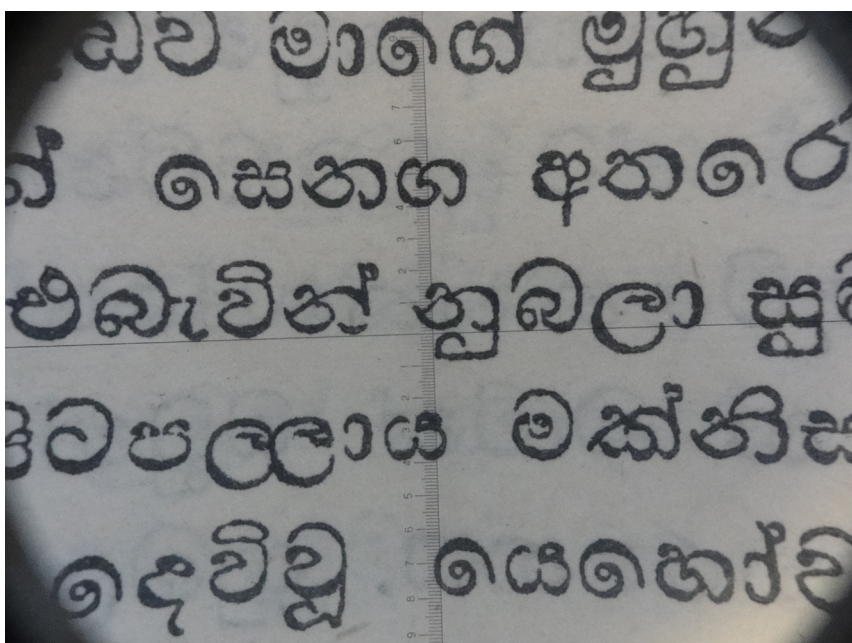


FIG 33 Details of WPO3 from the *New Testament* (1868) Wesleyan Mission Press in Colombo. Source: Authours private collection.



This is the first found to introduce the 'teardrop' instroke instead of the 'loop', is introduced which became an standard of Sinhala typographic forms.

ඉංග්‍රීසි, දෙමළ අකුරු සහ අනිකුත් මුද්‍රණ උපකරණ
මිලදී ගැනීමෙන් ඉතා අගනා මුද්‍රණාසර පවසාතියක්
ඇතිකිරීමෙන් පිහිටුවනලද උසස් ජාතික සේවයකට
කරනු ලබන කෘතඥතාවයත්, සිංහල මුද්‍රණ සිල්පයේ
අලංකාරයත් සමග රටේ කමිමානන දියුණුවට කරන
ඉතා උසස් ආධාරයක්ද වන්නේය.

FIG 33 Specimen of N. J Cooray and Sons Sinhala body 12pt size. (circa 1905)

Cooray foundry started in 1892 is known as the leading foundry which produced types for many commercial printing outfits in the 1900s. They picked up the style of the Wesleyan Mission types.

7. Conclusion

The 19th century was a time of change in Ceylon, and the Sinhala script transformed into a rich typographic script by its conclusion. The British Missionaries were leading printers until the advent of commercial printing operations and the Buddhist Revival Movement's printing in the 1860s. Wesleyan Methodist Mission Press in Colombo was the first amongst the equals of time and had a significant impact on the development of the document production in Sinhala. Missions' work in printing and publishing set standards in language and grammar, Sinhala-Latin multiscript typography and modulation of Sinhala letterforms. Their contribution to the development of typography was influenced by the hostile and repressive attitude of colonists towards the natives and their culture.

The increasing demand for new kinds of Sinhala written content and complex documents in the early 19th century introduced many reforms to the Sinhala language. The influence of palm-leaf manuscript styles seen in the early 18th-century Sinhala printed material diminished in the 19th century, and new standards were introduced. The Western typographic examples as well as other Indic script publications from Serampore Mission Press influenced the work of the Wesleyan Press. The shapes of the letterforms and stroke modulation had great variety and styles in the 19th century, but the modern Western-style influenced high contrast modulation introduced in the 1860s became the standard. The 1860s onwards there was a great increase in printing activities in Ceylon and all outlets adopted the styles and solutions developed by the Wesleyan Press. This was the dawn of commercial printing in Ceylon and presses were attempting to emulate Wesleyan standards.

It is conclusive that, the Western typographic standards and trends of the 19th century influenced the shape of Sinhala letterforms and the style of typography. Technical framework of the metal composition developed for Latin typography posed restriction when adapting the Sinhala script for printing. However, this influence is not an isolated incident of cultural invasion, but part of a wider series of social and economic adjustments that took place under British colonial rule and the evangelical missionary movement. Exploring the circumstances in which these historical models developed, and motives and agendas influenced the decisions made in this time, aids in developing a better evaluation criteria of typeforms engaging in further research in the visual development of Sinhala type and typography.

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A note on sources

This work is heavily based on work by Tilak Kularatne on the History of Printing in Ceylon. The primary sources of correspondence referred by Kularatne was re evaluated and re interpreted in context of typography. Some of the reports and correspondence of the missionaries are available in various libraries across Europe, but due to the time restrictions the extracts of the reports and correspondence was used. In a future research using the original material the original samples of drawings might be uncovered. The typeforms in printed material are deformed and affected by the printing conditions and the high quality images of types analysed and presented here are best representation of the letterforms.

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