

TYPOGRAPHY

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Typography in Publication Design

Ariyaka

The early typeface leads modern industrialization of letterpress printing in Thailand.

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Abstract: The pioneer of Ariyaka, known as an Aryan language, and Ariyaka typeface had benefited the development of mass media production in graphic design such as newspapers, political posters and several official regulations. People were educated and they started to learn modern technology from then on. This research focuses on the aspects of typesetting and the shapes of Ariyaka typeface compared with the original Latin typeface (Roman alphabets). During the history of printing in Thailand, Ariyaka Typeface has been used in a minority and limited parts only in area of Buddhism studies, but the creation of typographic form is very outstanding. Ariyaka typeface reveals some potentials of using in visual communication and graphic design and it may give some interesting results in the process of experimental works and future suggestions.

Key words: *Thai, typography, Ariyaka.*

1. Introduction

Typography has been broadly used as a tool for communication. In early decade, It appeared as a knowledge of design and arrangement dealing with aesthetics, functions and understanding. Typography is a combination of language, culture and widespread technology, differed from origins. The letterpress printing has been brought to several countries in Asia by Christian missionaries from the West, the same as modern technology, medication and trade. In Thailand was no exception, in early period; Westerners had influences in many areas; for example, medical science, machines and printing. Even the first Thai metal cast typeface for letterpress printing was invented by the Westerner for religion purpose, recording events in the form of newspapers and Bible.

Besides, Thai typeface has complexities in using alphabets and vowels. Moreover, there are words included Pali and Sanskrit, Buddhist sacred scriptures, known as the language of many of the earliest extant Buddhist scriptures as the liturgical language of Theravada Buddhism. After Thai letterpress was completed by an American missionary, King Rama IV,

the fourth king of the Chakri dynasty of Thailand, invented Ariyaka typeface for spreading Buddhism in Pali and Sanskrit. The pioneer of Ariyaka, known as an Aryan language, and Ariyaka typeface had benefited the development of mass media production in graphic design such as newspapers, political posters and several official regulations. People were educated and they started to learn modern technology from then on. Ariyaka typeface has particular characteristics that differ from other typeface in Thai language such as; the shapes of types and special regulations. The way of creating this typeface is also fascinating though in term of typographic system, publication design and typographic design.

2. Development of Thai typography

Thai alphabets are originally come from ancient Khmer letters, which can be seen from carved stone plates around 1043 A.D. (Punnotok, 2010) In detail, the calligraphic system or writing at this period was revealed in one lined format, which may consider that alphabets and vowels were carved and aligned in fine kerning and spacing. Then, there were significant changes in term of positioning vowels as well as the shapes of Thai letters were developed, however, the evidences haven't occurred in printing materials yet. In 1796 A.D., the first published of Christian manuscripts were printed by woodblock printing technique, which included both text that can be read, pronounced in Thai, nevertheless it revealed Roman alphabets, and images by western missionary committees.

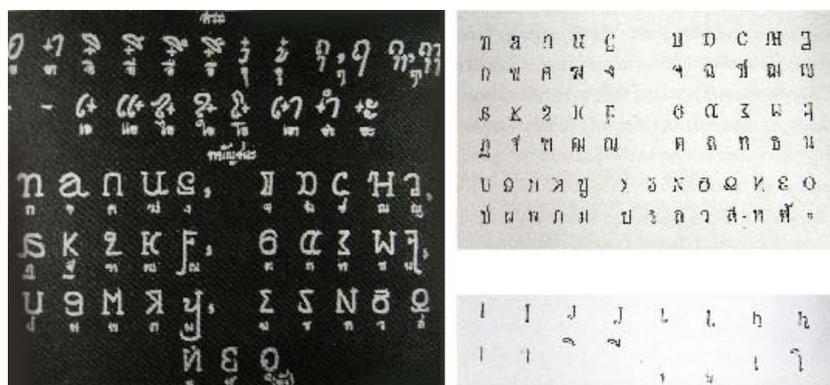


Figure.1 (Left) King Rama IV, the fourth king of the Chakri dynasty of Thailand.
 Figure.2 (Right) Ariyaka typefaces are arranged in 33 alphabets and 8 vowels.
 (Kamthorn Sathirakul, 1984: 134)

There were several metal cast of Latin types imported from western, some of them were made in Burma or Singapore and shipped to Thailand. Until the American missionary group consisted of Dr. Dan B. Bradley created Thai typefaces, printed the early Bangkok calendar

and many official announcements, letters for the King of Thailand. Afterward, Dr. Bradley also presented both Thai and Latin typefaces to King Rama IV, totally interesting in modern printing techniques and western technology; during he served his priesthood in Bavornnivhet temple in Bangkok. Ariyaka has one special regulation about positioning vowels, which are always placed after alphabets. The main propose of this invention is to translate ancient Pali for easily memorizing and educating Buddhism in Thailand and there had a strong intention to replace the former typefaces. Because of Ariyaka rules have created the major difference between ordinary Thai writing also in calligraphy, it have limitations and generally used in Thai Buddhism until the present time.

2.1 Ariyaka typefaces in comparison

In this investigation is focusing on the creation and development of typeface, which relate in printing and design. Ariyaka has two main classifications; consist of sharp edge, cornered Ariyaka for printing process and rounded hand shape for hand written. In the area of printing process, this typeface has 33 alphabets, 8 vowels and 10 in numbers. Also at that time, the area of studying Buddhism remained limited because of many manuscript were written in Khmer alphabets and there was some difficulties in translating into Thai and complicated to understand and teach accurately. This set of Ariyaka typeface was created to written several Buddhist manuscripts in Pali replacing the ancient Khmer alphabets, which has various types and they are complicated. (King Rama IV, 1958)

Sharp-edge cornered letters of Ariyaka reveals the intentions of King Rama IV that most of Ariyaka letters were influenced by Roman alphabets (A-Z), Latin letters. Although, some of Ariyaka alphabets were originally created by Rama IV, which are almost similar with others Latin types in line and strokes. (Jurairut, 1998) Focusing on shape and strokes of the letters, Ariyaka types can be grouped in pairs, in other words, these may thought that the King invented a letter then made another alphabet by mirrored, rotated or inverted the originals and there are 11 in connective pairs (22 letters), 11 unpaired alphabets, 8 vowels as shown. (Jurairut, 1998)

2.2 Analysis method

These Ariyaka typefaces are related in primitive Thai publication letter casting process and design that were first printed as Buddhist documents around 1843 A.D., at the same period, the invasion of Christian and missionaries committees from Western especially American missionary introduced a set of metal types, Roman alphabets, these effects has brought the great development in area of mass production medium, publication design and original Thai letters and typography in system. In history of Thai letter (Khumthorn, 1994) mention that King Rama IV received set of Latin letters and machine from American

missionary. During the King Rama IV priesthood, Ariyaka types were produced and printed, which appeared between 1843-1847 A.D. As the relation showed, Ariyaka typeface is among Latin and Thai letters, hence, the study of this connection will bring benefit and create logical understands about types development and design process in very first period of printing in Thailand. The analysis procedure using two different typefaces, Latin and modern Thai letters, in comparison to define as follows



Figure.3 and 4 Ariyaka types categorize into 11 pairs from 33 alphabets.

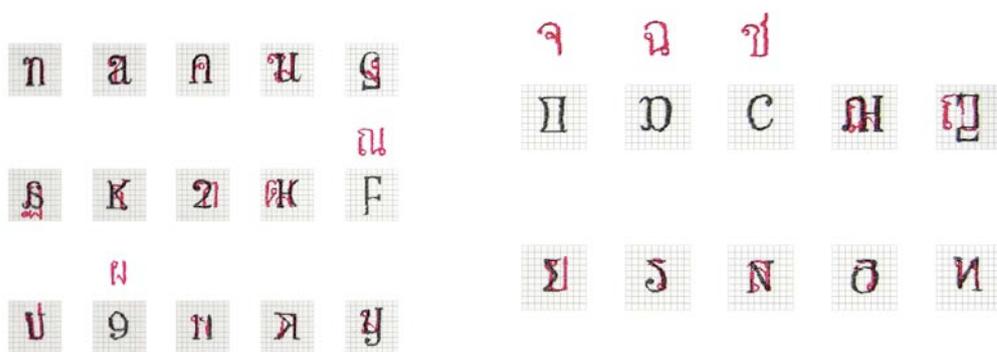


Figure.5 and 6 Ariyaka typefaces compare with Thai alphabets (created after Ariyaka types.)

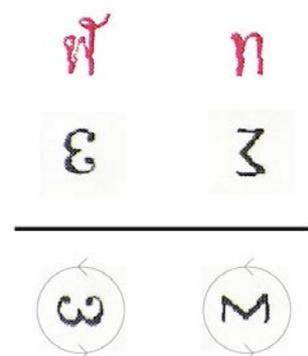


Figure.7 Sample of Ariyaka letters, with special characteristics

(Figure 5 and 6): by creating two combined layers and reviewing each similar letters then there are similarities and differences in details and it could be categorized, reveal in groups. By reviewing and considered sample of Ariyaka letters, four characteristics were defined:

- Structure: Alphabets, which most of the parts are similar to Latin types and Thai typefaces in shape, strokes and width.
- Starting point: Alphabets, which the starting points, the heads of the alphabets, are similar to Latin letters and Thai letters and considered by relating with Thais hand written manners.
- Significant shape: Alphabets (Figure.7), which have special forms that some parts of the alphabet are similar to Latin types and Thai letters such as; circle, zigzagged shape.
- Others: Alphabets, which can be categorized in term of relevant shape and stroke.

2.3 Analysis results

- With the viewing groups defined as given above, in comparative, many parts of Ariyaka letters are similar to Latin types, which may consider that it were created by reproducing from Latin as category 1 revealed. However, the similarities also reveal relationship between Ariyaka typeface and the unique Thai Alphabets. In addition, we can imagine that typeface designer intended to select Latin types, which were closely similar to the original Thai letters and transformed the Latin types by using several techniques; such as, invert, copy and rotated forms. This process of making letters showed the imagination of designers, moreover, techniques that they used during the process and how they overcome the limitations in printing have been used generally in graphic design, illustration and the production of visual media nowadays.
- Some outstanding characteristics (similarities) reveal some potentials focusing on graphic design, which can be used to create other alphabets in Thai or developed into other mass media; calendar, posters, logo for instance.
- From the analysis above, we may consider that Latin type has rigid form and obvious construction, which were advantageous to printing process and machine at that period. Type designers may concern the difficulties about making the original Thai letters and time consumption during metal casting process so, they applied the set of Latin alphabets, which followed by limitation of the process and printing knowledge.

- Although, the origin of designing Ariyaka typeface are still unclear, we could assume that techniques of creation and design methods can be adapted to other areas of production relate to modern industrialization in the local community.

3. Conclusions

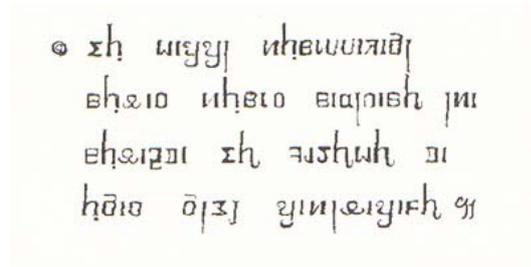


Figure.8 A carved Ariyaka letters on stone plate, present, Rama IX temple, Bangkok (Suwat, 2009)
 Figure.9 Ariyaka letters are printed wildly in Buddhism manuscripts and using currently.

Ariyaka typefaces were designed by using the knowledge of Latin letters as a primary basis and used techniques of craftsmanship related with modern design methods to get various shapes of typography. This idea of development shows benefits of learning typography design process and experiments evaluated by participants. Blankenship (2003) purposed that the Latin letters are able to recognize as formal, rigid, symmetrical, and mechanical. Most of these characteristics harmonize technology and knowledge. Additionally, Latin letters not only reveal Western thoughts, also emphasis on benefits of innovation and diversifies, as well as consider about efficiency, process, clear communication and manufacture. Latin letters had a great influence to Thais around ninetieth-century that Latin typography began to be used as educational materials for Christian missionaries, and then utilized as a mean of expression in which letters served as images and forms, independent of their linguistics. On the other hand, Ariyaka was known as a language of civilized country, which concreted that Thailand has own language. King Rama IV's genius for printing publication, as an inventor, would use Ariyaka letters as a national language that level with the others and this creation of typography encouraged peoples in scope of Thai national typography development in the followed era. Ariyaka typefaces have been using until nowadays, but there are several limitation in printing process and design, which are deficient in development and not suitable for computer age, so Ariyaka types are using most in area of Buddhism education. It is extremely exciting of seeing new visual approaches using Ariyaka typeface in modern publication design that I am really patiently waiting for seeing it.

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