JAPANESE TYPOGRAPHY ESSENTIALS: JAPANESE TYPE BETWEEN JAPANESE & LATIN CHARACTER

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Abstract

Japanese Graphic Design works have distinctive characteristics in the use of typography. The different writing systems of Japanese and Latin characters cause differences in the formation of typography. The research was conducted to explore the differences in character and arrangement between typography for phonetic symbols, ideography in script and Latin. The research was conducted by experiment through comparison, taking 5 font samples each from 3 different letter forms. The results of the research describe the differences in character formation, the basic axis of letters.

Keywords: Graphic Design, Typography, Japanese Letter Character Identity

1. INTRODUCTION

Typography is a discipline that studies the formation and appearance of letters, not only as symbols of verbal sounds but also as elements in design. The art of typography refers to the arrangement of letters as the main element (Wijaya, 1999). The difference between Japanese typography and Latin letter typography is based on the complexity of Japanese character writing. The Japanese language has a writing system that uses Chinese characters (kanji), ideograms; hiragana and katakana, and the Roman alphabet (Romaji) (Igarashi, 2007).

Compared to proportional Latin fonts, Japanese font arrangement uses monospaced metrics, consistent font scaling, and lacks italicization or emphasis. Typesetting is part of word arrangement, aiming to create an optimal reading experience.

Figure 1. Monospaced metrics in Japanese characters

The use of Latin fonts in Japanese advertisements that feature English tends to be limited to short phrases or individual words rather than blocks of text, partly because some English phrases are easier for Japanese people to understand (Goldstein, 2011). This leads to a combination of Japanese and Latin fonts in design.

Figure 2. Proportional metrics in Japanese characters

2. LITERATURE REVIEW

Japanese characters, which are a form of calligraphic writing, are categorized into five types: seal script (篆書, *tensho*), clerical script (隷書, *reisho*), semi-cursive (行書, *gyōsho*), Mincho (明朝), and cursive (証書, *shousho*) (Caldwell, 2013; Qiu et al., 2017; Turgut, 2014). Japanese fonts are divided into Mincho, Gothic, Round Gothic, and display types. Mincho has a similar appearance to Serif fonts, featuring strokes with hooks or triangular shapes. Gothic is equivalent to Sans Serif fonts, characterized by clean, unadorned strokes. Round Gothic or Round Sans has clean ends and rounded corners on the character lines.

2.1. Impression Between Japanese Font and Japanese Calligraphy

Previous research was conducted to compare the rankings between calligraphy and Japanese fonts. The results found that Japanese fonts have a high impression related to comfort, while Japanese calligraphy has a high impression related to creativity (Mukai et al., 2017).

3. RESEARCH METHODS

The research was conducted with a comparative study between Japanese and Latin writing in Japanese fonts, focusing on differences in font anatomy, character central axis, and monospacing versus proportional characters. The comparative study was carried out using Adobe InDesign, a graphic design software for layout development.

3.1. Character Selection

Based on the type of characters, Latin and Japanese fonts were collected with 3 uniform characters. The collection of characters was divided based on differences in letter shapes and language differences. Characters were selected based on differences in letter shapes, including Mincho, Gothic, and Calligraphic.

3.2. Character Comparison

The selected characters were arranged in Adobe InDesign for comparison. The alphabet used for the characters A, I, U, E, O with different Japanese fonts represents different letter appearances, as shown in Figure 3. The arrangement consists of 2 Mincho fonts, 1 Gothic font, and 2 Calligraphic fonts.
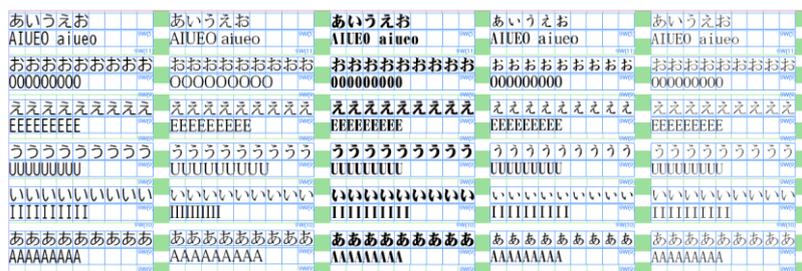

Figure 3. Arrangement of Japanese Characters

4. RESULTS AND DISCUSSION

The comparison was done by selecting 5 different fonts. Each font was arranged in 6 rows, with the first row consisting of A, I, U, E, O in both uppercase and lowercase. Rows two through six contained each vowel character, namely I, U, E, O, as shown in Figure 4.

Figure 4. Comparison of Japanese Characters in Terms of Letter Shapes

In the next experiment, each row was marked with a baseline, for both Japanese and Latin fonts, as shown in Figure 5. The baseline allowed for a comparison of the baseline axis of characters within the same font for both Japanese and Latin scripts.
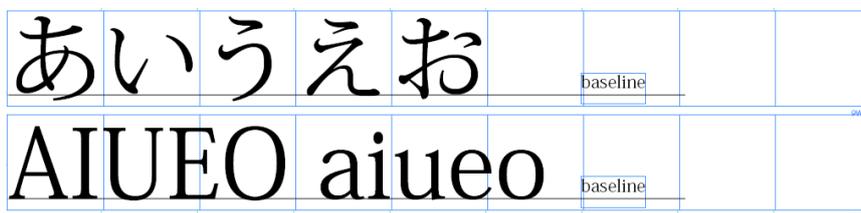
Figure 5. Manual Baseline Adjustment

In the next experiment, each row was marked with a baseline, and the most prominent examples of contrast between Japanese and Latin letters within the same font

were selected. In this case, Japanese characters showed irregularities in relation to the baseline. Some characters did not reach the baseline, while others extended beyond it.

Figure 6. Manual Baseline Adjustment for Contrasting Characters

When comparing Japanese kana characters with Latin letters in the same line, it is evident that Japanese characters lack a consistent baseline, unlike Latin letters that adhere to a baseline. This is because Latin letters are aligned to the baseline, whereas Japanese kana characters do not have a fixed baseline.
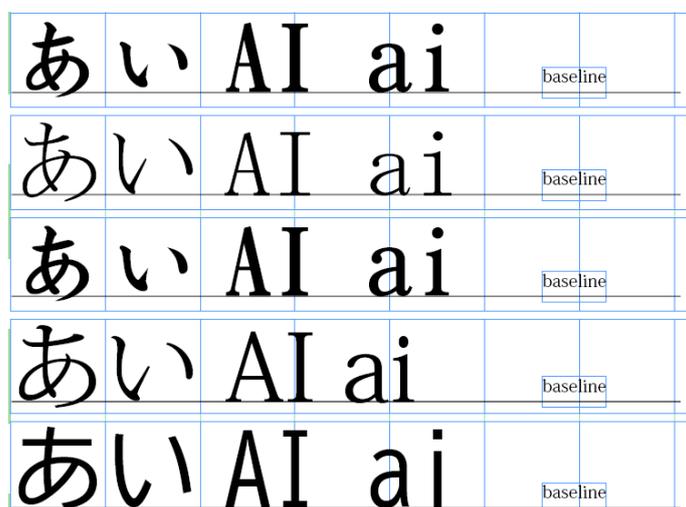
Figure 7. Baseline in a Single Font with Japanese and Latin Characters

In the next experiment, Japanese characters were compared with Indonesian characters, but instead of using a baseline, intersecting lines were used. The intersecting lines address the monospaced metric scale of Japanese characters. This is due to Japanese characters being generally square and uniform, unlike Latin characters which are proportional.

Measurement with intersecting lines led to the conclusion that Japanese characters do not use a baseline. Even though the same font was used for Latin characters, Japanese characters appear to float with their central axis positioned in the middle, a concept referred to as the Center of Gravity, as shown in Figure 8.

Figure 8. The Use of Intersecting Lines to Determine the Main Axis of Japanese Characters

5. CONCLUSION

The differences between Japanese and Latin fonts are influenced by the writing systems used in each country. This is evident from the comparison results, where Japanese characters use ideograms and kana, while Latin uses the alphabet. These differences lead to variations in character arrangement, as demonstrated by the use of baselines and intersecting lines in the comparison.

The results show that Japanese fonts, despite being written with letters and scripts, have a distinct structure. Japanese characters are centered around a point called the Center of Gravity, whereas Latin characters are centered on the baseline. Japanese fonts do not have a consistent baseline; this is apparent as some characters touch the baseline while others do not. Additionally, Japanese fonts are monospaced, unlike Latin fonts which are proportional, making Japanese characters squarer and uniform in scale. Kerning, or the spacing between letters in Latin alphabets, is determined based on the type of font, whereas in Japanese characters, the spacing depends on the central axis of the characters. Lastly, Japanese characters are more uniform in size and shape, with each character being relatively consistent, unlike Latin characters which exhibit more variation. This uniformity is attributed to the monospaced scaling of Japanese characters.

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