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THE EFFECT OF CONTROLLING THE WEIGHT VARIABLE ON THE TYPEFACE ATTRIBUTE ASSESSMENT

Jelena Žarko [1], Uroš Nedeljković [1]
[1] Faculty of Technical Sciences, Graphic Engineering and Design, Novi Sad, Serbia

Introduction

The design of the typeface affects the impressions of the observer, but the nature of that effect is still unknown. Based on the review of existing research that attempts to quantify the psychological effects of typographic design, it can be concluded that most research on typography has dealt only with legibility. Several empirical studies have directly investigated the relationship between typefaces and response[1], but their results varied. Although each of these studies made a worthy initial effort, these studies failed to research the causes of typefaces that have a representative range of design features.

The subject of this paper is the isolation of the weight variable and the investigation of its relationship with typeface personality attributes.

The main goal of this paper is to provide empirical support for theoretical assumptions, building on previous researches on the typeface personality and typographic rhetoric to show how specific typographic characteristics influence the experience of writing itself.

Problem Description

A common problem that has arisen in previous research is that typefaces vary in many variables, i.e. width, weight, contrast, and skeleton. Therefore, it is difficult to determine specifically which universal and specific characteristics of the typeface affect the very impression of the typeface.

Methods

For the purposes of the research, stimuli were designed with the help of which hypotheses were tested in an experiment with the subjects.

Participants in this research are a group of 60 students from the Faculty of Technical Sciences[2]. A prototype of a string of letters **'Hafonurmtgesbiv'** is formed (Figure 1), which varies only according to the 10 typeface weights. 20 typeface personality attributes were examined for 10 typeface weights of the string 'Hafonurmtgesbiv'.

Hafonurmtgesbiv	Ultra Light
Hafonurmtgesbiv	Thin
Hafonurmtgesbiv	Light
Hafonurmtgesbiv	Book
Hafonurmtgesbiv	Regular
Hafonurmtgesbiv	Medium
Hafonurmtgesbiv	Bold
Hafonurmtgesbiv	Heavy
Hafonurmtgesbiv	Black
Hafonurmtgesbiv	Extra Black

Figure 1

Stimulus model created for 10 different typeface weights

Results

Based on the results analyzed using arithmetic means, certain rules in the perception of the typeface can be noted. As the typeface weight increases, the feeling of Femininity and Elegance is decreasing (Figure 2a). Contrary to the typeface personality attribute Feminine, it can be noted that with the increase in the typeface weight, the influence of Loudness and Masculinity typeface personality attribute increases (Figure 2b). A similar trend was noted in typeface personality attributes Professional, Academic, Serious and Technical (Figure 2c), while with the typeface personality attributes Direct and Pretentious no trend was noted (Figure 2d).

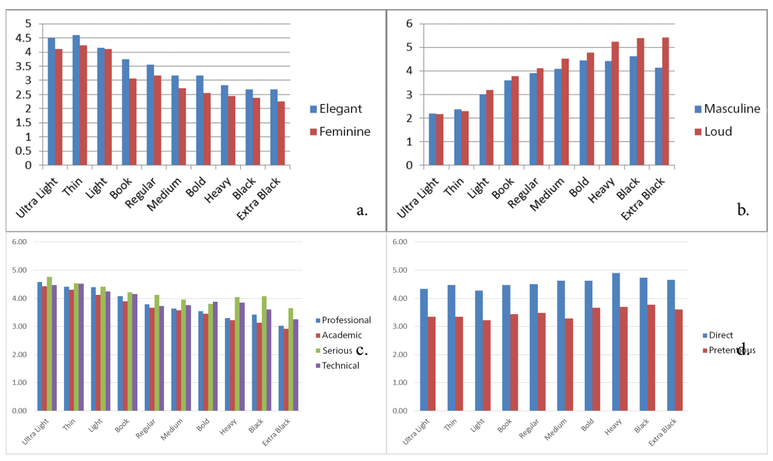

Figure 2

a. Comparison of results for the attributes Feminine and Elegant;
b. Comparison of results for the attributes Masculine and Loud
c. Comparison of results for the attributes Professional, Academic, Serious and Technical
d. Comparison of results for the attributes Direct and Pretentious

Factor analysis of the main components, which includes only the typeface weights, shows that typeface weights were grouped into three factors that differentiate for each typeface weight. The results showed which typeface personality attributes describe each group of typeface weights. The typeface weights were grouped according to the weights between which are lower percentage contrast (Figure 3).

The results of factor analysis of the main components on the typeface personality attributes, showed that attributes formed three groups of factors in which increasing/decreasing the typeface weight affects the increase/decrease of attitude towards the typeface personality attributes. The first factor (Professional, Serious, Academic, Formal, Technical and Dignified), is most pronounced in the weight Ultra Light and their expression decreases linearly with increase of the weight. The same case is with the second factor (Attractive, Friendly, Elegant, Feminine and Warm), it is most pronounced in lighter weights and their expression decreases linearly with increasing of weight. In the third factor (Masculine and Loud), expression of attributes increases linearly with the increase of weight, i.e. they are most pronounced in the weight Extra Black and least pronounced in the weight Ultra Light.

Discussion / Conclusion

This research was conducted with the goal to make a functional classification of the typefaces that connects all aspects of the typeface personality attributes and visual rhetoric in such a way that will be functional, understandable and accessible to the public regardless of the level of education. The results showed that the participants consistently attribute certain typeface personality attributes to certain typeface weights.

Based on results, we can conclude that the typeface weight is an important factor, which should be paid attention to when choosing a typeface. Proper choice of weight affects the tone and attitude towards the text itself.

A new research question arises here, to what extent and in what way does the typeface weight as a factor can affect the personality in serif letters? For this kind of research, it will be necessary to create a new set of typeface weights with serifs as an additional feature.

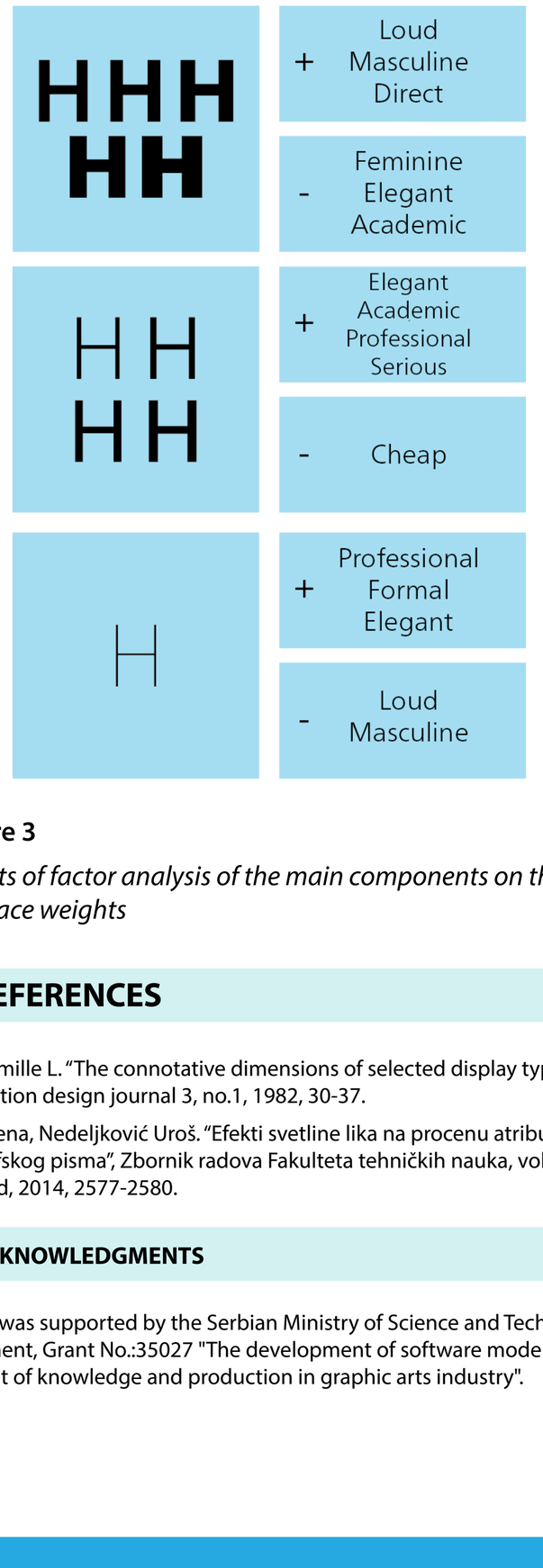

Figure 3

Results of factor analysis of the main components on the typeface weights

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