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Typography in interactive spaces and the process of reading

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Abstract

New interactive communication approaches by using typography and graphics have become common in many places in recent years. The development of virtual tools reveals new expressions with regard to the typography and the use of space. New media and multimedia tools are vital parts of communication in the developed world and we can say that actual information technology based ways of communication have a significant effect on individuals for a variety of reasons. It is seen that different manners in the transfer of meaning can be created by using new media and multimedia tools which have an important role in our lives today. On the other hand, creating the meaning of the word can also be done by narrative simple methods. The use of digital trends related to typography can provide an intuitive, conceptual approach to the meaning of the word. Evolution of new media and multimedia tools has lead to different interactive solutions which are effective in art and design. The purpose of this study is to investigate existing experimental forms with regards to typography and evaluation of them in terms of readability and legibility. This article aims to finding out relations between the meaning and form approaches to the typographical creations in the design.

Keywords: typography; interaction; communication; new media; multimedia;

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1.Introduction

We are living in a process where the thoughts are transmitted in images and voices, where the form of transmission became as important as the content. Access to information has become fast and easy with script transferred from parchments to numerical notebooks. Also, different communication forms have appeared as widespread information tools became a part of our lives; and this provides a chance for us to experience the information both at visual and audio levels. Existing communication types bring different disciplines together. The way of work of the structure we are in is understood by defining the relation between layers and the definition of tissues. One of the best methods to understand these relations is to treat the information in a comparative way and with control (Lidwell, Holden & Butler, 2003). Through the mobile devices which can realize simultaneous information flow, access to information becomes easier. McLuhan has considered the transformation of communication tools and the relationship between the individual and this transformation; and he explained the communication-based differences between Tribal society and the Western society. McLuhan has emphasized the change in different communication types and perception forms brought by life style; and he compares the oral culture of tribal society with alphabetical and electronic fronts. According to McLuhan, the greatest discovery of 19th century was “invention of the method of invention” (McLuhan, 2001). Change of thinking and interpretation methods means the change of society. An invention causes difference on the integrity of society and senses (McLuhan, 2001).

Words are transformed into a part of visual world when written, and they are stable. In comparison with the dynamism of audio world, the stable structure of visual world is not individual. Readable and non-readable concepts appear at the opposite of the word audio and they join the senseless world of reader (McLuhan, 2001). The form of transmission by typography has a force of affecting the perceptive power of individual. Typography consists by determining the size of font character and line breaks. But, on the other hand, it should also be considered how information is to be placed on a book, paper or on standard computer screen (Sassonn, 2002). The adaptation skill of individual can easily internalize the new things. When we examine the formation of new interaction forms, we see that the coded information belongs to the individual's non-digital daily life (Jacob, Girouard, Hirshfield, Horn, Shaer, Solovey & Zigelbaum, 2008). Utilization of digital elements and interaction with individuals has brought new communication forms together. When Manovich makes the definition of “New media”, he considers the communication types with wireless networks at any time and any place (Manovich, 2001).

1.1. Reading experience in interactive spaces

“Net art” category of Ars Electronica, which is the most prominent festival of computer-based arts in 1995, indicates the transformation of modern culture and media. According to Manovich, computers that were used as production tools in 1960s were transformed into universal mass communication devices and used as memory and distribution tools as well (Manovich, 2001). The information to be transmitted realizes a simple cruise. Muriel Cooper has developed a new work named “The Visible Language Workshop” (VLW) at MIT Media Laboratory which emphasizes the generation of new method and new graphic communication forms that appeared. According to Muriel Cooper; transformation from mechanical society to an information society brings together new forms of communication, new visual and audio languages and expectations for new training, production and applications. The new interface design developed by Cooper “Information Landscape”, forms the text permutation and transitions according to content and this provides a chance for the user to move inside a three-dimensional textual world, among the words (Cooper, 1975) (See Figure 1).

The studies conducted by Cooper on graphical communication process and generation of high quality graphics refer to a new period where digital tools are used for the construction of meaning.

The samples of this new term emphasized by Cooper reveal designs generated by numerical typography. With the integration of typography to the space, internal elements are used in different ways and information is transferred. Interactive columns created by Small design firm provide the audience a chance to examine six different stories via touch screens. Audience will navigate among the texts by sliding their fingers on the screen. The images and text of the subjects are designed in an expandable way. The interactive screens where the user can directly interact with images and letters and make settings according to own expectations turn the learning experience into an interesting and fun method (See Figure 2).

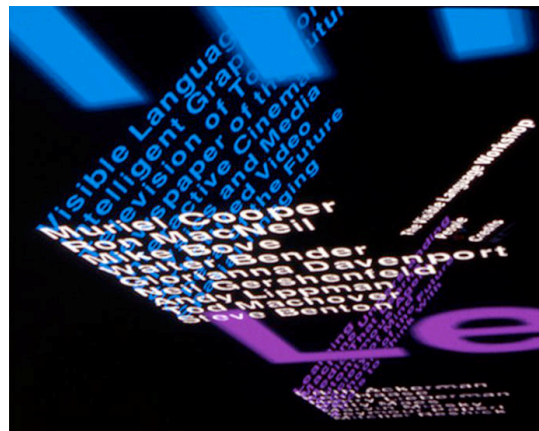


Figure 1. Visible Language Workshop, 1994. (<http://indexgrafik.fr/muriel-cooper/>)

Another remarkable idea of Small design firm is the project of “Hall of Ideas” where the thoughts that changed the world in a better way throughout the history are presented in an interactive way. The project was prepared for The Mary Baker Eddy library in Boston and it includes a hall where real-time computer animations are reflected and integrated. The structure at the center of the hall is designed by Howard Ben Tre and it has a look of decorative pond; and it makes the virtual images fall onto the ground of hall, provides a vision of water drops (See Figure 3). According to the perception of Muriel Cooper, one of the most prominent and progressive designers of 20th century, computer-based design does not only emphasize how information is seen on the screen but also the review of the machinery that designed it according to the structure and language of subject (Cooper, 1994). The concept of “Information Landscape” is used to state that information is on the sky just like the interstellar and the reader can meet them by instantaneous jumps; thereby completing the journey when discovery continues while moving and words only gain meaning once the last phase of process is reached. According to Cooper, information is useful only when it is understandable. We can understand the information via content and relate it with previous knowledge; virtual or real information scenery provides a meaningful and ongoing content experience (Small, 1996).



Figure 2. Interactive Columns, 2011.

(<http://smalldesignfirm.com/project/new-york-historical-society/#interactive-columns>)



Figure 3. Hall of Ideas, 2002.

(<http://smalldesignfirm.com/project/mary-baker-eddy-library/#hall-of-ideas>)

According to Manovich, the interaction we realize by looking at a rectangular surface from a certain distance belongs to a much older period. Although computers became widespread only in the last ten years, the visual information transmitted via a screen had been used for centuries as in Renaissance paintings, 20th century cinema etc (Manovich, 2001). Flaman painter Jan van Eyck has used typography and transferred information both as visual and as audio with his work “Johannes de eyck fuit hic 1434” almost generating a paradox. We cannot think of space as a structure which we experience in physical ways only. According to Hutchins (1995), cognitive comprehension is realized by paper, pen, and calculator and increasingly by computer-based support and information systems. Visualization has an important and expanding role within the cognitive systems (Ware, 2004). Visual

exhibition provides an interaction between the human and computer. We obtain more information from the integration of sight and other senses. Typography used for transmission of an expression has importance from many angles. Its impact on reader and forms of perception create changes in its meaning. The perception, interpretation and conclusion skills of an individual might not be the same with another.

It is very hard to determine final evidences on the transmission process of information. The apprehension of letters and words is a scientifically examined issue and the process also reviews the process of human brain's generation of meanings from letters and words (Hillner, 2009). The phonetic alphabet where meaning is abstracted from sound and transformed into a visual code makes it easier for us to perceive the expanding technological transmission forms. Technological breakthroughs are related with our changing forms of feeling and interaction between senses. According to Lupton, while reader tries to generate his/her own meaning, this also improves him/her mentally. Today, the dominant concept is not defined as reader and writer but as "user" (Lupton, 2004). It is almost impossible to determine strong evidence about the reading process and the scientific results are mostly related with the ways of comprehending the letters (Hillner, 2009). The technological breakthroughs that appear also reveal changes in sensual rates. We need conceptual skills to analyze the text and it is said that these skills rely on several neuro-physiological processes (Saenger, 1997). McLuhan (2001) asks the question "Does the internalization of letters change the ratio among our senses and differ the cognitive processes?" (p. 37) and thereby focuses on the form of internal retention and form of perception. According to McLuhan, a new process launched from inside or outside of a culture changes the ratio among our senses and creates disproportions about the feelings. Senses that interact with each other are exposed to a concern of identity as the balancing force disappears (McLuhan, 2001). The functional use of elements required for distinguishing the letter makes it readable. But, on the other hand, when we look at the concept of readability, this means that reading as we know it is not necessary in order to understand something and that meaning can be transmitted via different ways. A work of Graffiti might seem insufficient in terms of readability, but we can feel the anger of transmitter (Ambrose & Harris, 2012).

2. Conclusion

With the inclusion of widespread communication elements and new interfaces, our ways of communication have changed and new concepts appeared. It is seen that the typography used in communication plays an important role in transmitting the information. Typographic form affects the process of reading and perception and it consists an important part of interpersonal communication. Typography is not stable anymore and it has become a concept that is updated continuously. In conclusion, the methods being used are as provocative as the information itself and it affects the process. By using the mobile technologies and communication networks around us, information can be updated in different forms and in different places. Information transmitted by using the widespread information technology elements provides an unusual experience and makes it possible for us to sense the information in many different forms.

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