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CTYPE

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and Writing

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PRIMARY TYPEFACES

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Introduction

Design helps the systems of daily life run smoothly, letting users and readers ignore how things are put together. Design should sometimes announce itself in order to shed light on the system, exposing its construction, identity, personality, and politics.

- Ellen Lupton (Lupton, 2004, p. 173)

Introduction

Typography shapes language and makes the written word 'visible'. As the screen is increasingly becoming the way we acquire information, the manner in which text is displayed matters. Our processes of reading and writing are fundamentally reliant upon our abilities to use and interpret words. Typefaces can link the writer and the reader in new ways that go beyond the mere exchange of words on a page. The form and function of type, then plays a significant role in our ability to make meaning. Moreover with the proliferation of images in mediarich screen environments and the unrelenting competition for the user's attention, words must also be able to attract, inform and seduce quickly. Helfand (2001) contends that technological advances pose new creative challenges for digital typography so it "must be reconsidered as a new language with its own grammar, its own syntax, and its own rules" (¶ 1).

To operate in this increasingly image-driven world, type has evolved as its own visual entity. The distinctiveness of typefaces, how they function on-screen, how they have evolved for the computer and how they affect legibility and readability are vital topics influencing digital type designs today. Finally a move toward kinetic type also poses considerations for digital typography practice and digital realms as spaces for reading and writing.

Defining Type

"Typography is what language looks like."

- Ellen Lupton (Lupton, 2004, inside cover)

Defining Type

Typography is a method of delivering the message to the viewer. Historically, typography has been defined as the art of designing letters. However more recently typography has come to mean the "the visual appearance of any written text, particularly as to how various visual elements might be arranged to create a written document and how arrangement might include readers' perceptions, attitudes and understandings" (Reinking, McKenna, Labbo and Kieffer, 1998, p. xx). In essence, this definition basically assumes that all text, regardless of medium, has a typographic dimension.

Reinking, McKenna, Labbo and Kieffer (1998) believe we are now heading into a post-typographic world – a world where printed texts are no longer dominant. They see typographic as referring to text displayed on a sheet of paper or other static material surface. Post-typographic texts on the other hand are displayed in digital form on 'dynamically alterable surfaces' such as a computer screen (Reinking et al., 1998, p. xx-xxi). Our experiences with print have shaped our expectations for the screen. For type on screen to look acceptable to our physical requirements and cultural expectations, type has to transform to the requirements of the digital space (Spiekerman & Ginger, 2003).

Defining Type

Activity 1.1

View the video: A Lesson on Typography.

ABCDEFGHIJKI

The Character of Type

Typography is letters (and numbers) and why they look the way they do. Sometimes letter are **BIG AND LOUD** and sometimes letters are small and quiet. Typography can make words look good. It can also make words look bad. But the way they look—whether they're **pink** or **purple** or **big** or small or quiet or **NOiSY** or happy or **Stary** or funny or **WEIRD**, well, that's something that comes from typography.

- Jessica Helfand (Helfand, 2001, p. 165)

The Character of Type

Typography brings distinctiveness to our written communications. Helfand (2001) asserts that "we all 'sound' alike" as everyone writes in system fonts (\P 14). Thus the materiality of language is not a neutral vehicle to convey meaning. Visual effects such as bolding, sizing and typeface choice make writing and letterforms into visual entities, "adding meanings of the visual modes to those writing" (Kress, 2003, p. 65).

Typefaces can position the reader in a text and give a certain kind of status to the information displayed on a screen (Jewitt, 2006). Fonts can be a visual clue into a writer's intention, signal the mood or personality of a character, indicate the type of information – fictional or factual, that the reader has encountered, or even mimic handwriting. For instance, Courier is a font that is often used to visualize factual information, while Vivaldi is commonly used for wedding invitations. Though typefaces can be an indicator of personality, we are taught to look for the personality of the author in the choice of words used and not in their visual appearance (Bolter and Gromala, 2003). In this sense, readers become more like word processors - trained to ignore the texture and appearance of texts (Bolter and Gromala, 2003). Unconsciously we are aware of the emotive qualities of type though. The physical characteristics of a typeface (e.g. light or heavy) can contribute to our reading of particular words or sentences (See Figure 1). Furthermore, new readings can be created by changing letter spacing, kerning, font size and colour.

Surprise

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SURPRISE

Due Date

Surprise

Bradley Hand ITC

Croobie

Figure 1: Emotive Qualities of Type

The Chanacter of Type

Activity 1.2

View the video: <u>Neville Brody / Rick Poynor Clip, from Helvetica – The Movie.</u>

Activity 1.3

Learn more about the characteristics of different fonts – <u>Play The Personals: A Typographic Dating Game.</u>

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The Screen

Unlike book typography, the new screen typography dances; it sings; it shouts; it does somersaults and cartwheels, and then, when it settles down, just as you think you have got a hold on it, you mouse over a word and it transforms instantly into something completely different.

- Jessica Helfand (Helfand, 2001, p. 115)

The Screen

The screen, as a socio-cultural construction, is for watching and consequently distances us from writing. The screen moves us into a world of optical illusion, where words become images — a 'representation' of printed text. As there are no physical letterforms but a collection of computer coding consisting of pluses and minuses; the text is in fact simultaneously visible and invisible (Purves, 1998). What we see on screen are "little unconnected dots that trick our eyes into recognizing pleasant shapes" (Spiekerman & Ginger, 2003, p. 21). Screen colours are not created from CMYK (Cyan, Magenta, Yellow and black or 'key') but broken down in to course lines or dots in RGB (Red, Green and Blue), where black is not a colour but the absence of light. In this environment type struggles to be seen. Script or trendy fonts in particular have no place on-screen as they "hide more than they reveal" (Spiekerman & Ginger, 2003, p. 73).

Written texts can provide the reader essential visual information which becomes part of the process of reading. On-screen, long texts are typically broken up into chunks so they can be readily accessed by search engines or hypertext links. Designers use typography to assist readers to navigate through masses of text by providing visual cues, such as paragraph indents, to indicate a new idea or highlighted links, to signal a pathway to further information (Lupton, 2004). Typography has often been touted as a tool to assist with readability; however, Lupton (2004) argues that the design of type actually assists readers to 'avoid reading' (p. 63).

The Scheen

The screen emphasizes the visual character of writing. Loxley (2004) speculates that in the future written language might be replaced by a system of symbols, ideograms such as dingbats. A single system of symbols could mean a universal language – read by anyone. The '@' symbol is an example of how the status of a typographic symbol can become ubiquitous. Dingbats as a typographic mark, act as signs that express an idea that would often take up too many words to explain. These kinds of symbols act as type; understood by a broad cultural audience.

Activity 1.4

View the video: <u>Typolution</u>.

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Computer Fonts

"People were going to learn more about fonts and typography using the Macintosh than they had since Gutenberg first got this hands inky."

- Steven Levy (Levy, 1994 as cited in Loxley, 2004, p. 228)

Computer Fonts

Many computer typefaces are adaptations of type made for print. Loxley (2004) contends that typefaces are most effective when they have been designed specifically for the medium in which they are used. Type designer Zuzana Licko of <u>Émigré</u> Graphics created the first bitmap type designs for the first-generation of <u>Macintosh</u> computers and in turn put the materiality of words into question. Words stored as <u>ASCII (American Standard Code for Information Interchange)</u> text can be indexed and retrieved by search engines; however, with bitmaps, words were turned into images that appear invisible to search mechanisms.

Early computers had low resolution displays which affected the aesthetic components of type. VanderLans and Licko (1993) state "it is impossible to transfer typefaces between technologies without alteration because each medium has its peculiar qualities and thus requires unique designs" (p. 223). Early digital letterforms had jagged edges which became the aesthetic identity of the medium. However with the advent of <u>PostScript</u> type became vectors or letter forms described mathematically to the computer. Fonts could be scaled freely with their edges remaining smooth in print or on screen (Loxley, 2004).

<u>Cascading Style Sheets (CSS)</u> allow designers to embed fonts in their designs using '<u>@-font-face</u>' coding (Lupton, n.d.). However, many font foundries are steering clear of <u>@-font-face</u> embedding for fear of piracy. <u>Embedded Open Type (.EOT)</u> supported by Internet Explorer obscures copying; however, .EOT

Computer Fonts

has not become a standard across the web (Lupton, n.d.). Web Open Font Format (WOFF) is being taken up by several foundries now as it attempts to meet the needs of both the users and copyright holders. These changes signal that we are on the verge of a new typographic diversity which will affect typographers, web page behaviour and design in general, in the future.

Activity 1.5

Use the <u>ASCII Generator</u> to create your own fonts.

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Legibility and Readability

The essence of the New Typography is clarity. This put into the deliberate opposition to the old typography whose aim was 'beauty' and whose clarity did not attain the high level we require today.

- Jan Tschichold (Tschichold, 1928 as cited in Barth, 2008)

Legibility and Readability

One of the main ongoing debates in text legibility and readability is font choice. Barth (2008) claims that in a world of unstructured and structured data, the visual language of typography is a key component of readability. Today, the ability to turn data and information into knowledge that supports learning, innovation and decision-making relies on comprehension. As well, being able to sort through information and data quickly considers reading speed – a component of productivity (Barth, 2008).

It is generally believed fonts that use serifs are considered more legible that those that do not, and that serif fonts accelerate word recognition. Typefaces such as Caslon, Baskerville and Garamond are often preferred because the "letters fit together in such a way that the reader is never conscious of each letter, but only of word and sentence" (Orton, 1977, p. 30). However on-screen, serifs tend to disappear due to the bitmapped resolution of computer monitors. Schaible (2007) observes that many websites make use of sans serif fonts such as Arial and Helvetica; although these fonts are not necessarily the most legible online as they were designed for a different medium.

Type designer <u>Matthew Carter</u> created two typefaces specifically for online contexts: Verdana, a sans serif typeface recommended for body text and Georgia, a serif typeface, recommended for headlines (Schaible, 2007). Verdana works well online as it is extended; there is extra space between characters so they don't touch and it has a large "X" height which makes characters appear larger on screen (Schaible, 2007). In 2006 Microsoft

BASKERVILLE

Designed by John Baskerville, 1757

HELVETICA

Designed by Max Miedinger, 1957

BODINI

Designed by Giambattista Bondi, 1790s

GILLS SANS

Designed by Eric Gill, 1928

Adobe Jenson

Designed by Robert Slimbach, 1995

DIDOT

Designed by François Ambroise Didot, 1784

Legibility and Readability

extended its web fonts, with the <u>ClearType Font Collection</u>, including such typefaces as Cambria and Calibri. Using fonts designed for the web, instead of using pictures of fonts, like the early bitmaps, affords quicker reading speed and accessibility advantages.

As each design situation calls for varying typographic strategies, a 'best' or 'easiest-to-read' typeface is impossible to determine. Thus the results of legibility and readability research can only provide broad guidelines. In fact in online environments, designers lack control over the visual representation of the final product, as web browsers and user preferences can often override design decisions. Type designer, Eric Gill asserts that ultimately "legibility, in practice, amounts simply to what one is accustomed to" (Spencer, 1969, p. 11).

Activity 1.6

Complete the Font Readability Experiment.

Kinetic Type

Typography can now be endowed with dramatic qualities, among them, subtext (what is really happening beneath the surface?) and context (how might the surface be extrapolated and extended across a situation or story?).

- Jessica Helfand (Helfand, 2001, p. 117)

Kinetic Type

In interactive environments, type is often silent and static and in constant competition with sound and image. With new technologies type is no longer confined as it can talk – in any language, with music and at any volume (Helfand, 2001). With motion pictures, animation and web spaces, type can move through space and time. In these environments, letterforms become "agents in an increasingly complex layering of information" (Miller, 1996, p. 1). This shift takes the traditional printed page, that relies on hierarchies of small to large, to represent depth to an environment of spatial and temporal dynamic – near-to-far (Miller, 1996). The reader navigates textual displays with a sense of moving deeper and deeper into a document (Miller, 1996). Type then becomes dimensional or sculptural.

Digital texts are infinitely fluid and malleable. In virtual spaces, typefaces can rotate, twist, extrude, slide, dance, dissolve, crumble, explode, etc. In this sense, Bolter and Gromala (2003) argue that digital writing can empower writing as an art of visual expression. For example, Excretia is a typeface that Diane Gromala made and used in her publication with Jay Bolter entitled Windows and Mirrors: Interaction Design, Digital Art, and the Myth of Transparency. With Excretia the digital letters change and morph as the writer engages with the text. The look of the 'biomorphic type' is dependent upon the heart rate, respiration and galvanic skin response of the writer. Using a biofeedback device, data continuously streams affecting the visual character of the typeface in real-time; making type not just a productivity tool but a reflective and interactive experience that bridges text and image (Bolter and Gromala, 2003).

Kinetic Type

Activity 1.7

Visit <u>Book of Typo-Beat</u>, an interactive typing tool that generates kinetic type.

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Conclusion

To think with type is to be in a partnership with the medium—with its history, its discourse, its systematic nature as a common cultural artifact.

- Ellen Lupton (Hunter, 2006, ¶4)

Conclusion

Type is ubiquitous. With the digital realm extending our abilities to reach diverse audiences, the way in which we communicate becomes just as important as what we communicate. It is much easier for others to understand our message if we put in the right voice – the voice of type – the visual language that links writer and reader (Spiekerman & Ginger, 2003). Typefaces can position the reader in a text and bring emotion and character to writing, beyond the words and intentions of the author.

The post-typographic world has seen an evolution in typeface design. With technical advances type now lives and breathes in digital spaces. As the space of the screen renders fonts different than that of print, legibility and readability influences type designs. As we are increasingly bombarded with images, sounds and videos, the visualization of language remains essential to capturing limited attention spans.



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Resources

Articles

New Faces: Type Design in the First Decade of Device-Independent Digital Typesetting (1987-1997)

The History of Linear, Sans Serif Typefaces

Typography on the Web: Questions for Jeffrey Zeldman – Part 1

Typography on the Web: Questions for Jeffrey Zeldman – Part 2:

Audio

Young, N.(Speakers). (2008). Words: CBC Radio. (Episode 34, April 26, 2009). Retrieved November 20, 2009

Free Fonts

dafont.com

Font Space

Resources

Interactive

Book of Typo-Beat (Game)

Font Readability Experiment

Helvetica vs. Arial (Game)

Love Typography (Font Game)

Nervous Matrix on Mona Lisa (Game)

Reactive Typo-Writer (Game)

Video

A Lesson on Typography

<u>Hermann Zapf on his work: Univers, Helvetica, and</u> Coffee

<u>I am Helvetica (Video)</u>

Love Typography (Video Resources)

Neville Brody / Rick Poynor: Helvetica Film Clip

Typolution

Resources

Websites

abc Typography: A Virtual Museum of Typography

comp.fonts.com: A Brief History of Type

Ellen Lupton

Ellen Lupton: Design Writing Research

fonts.com: A Brief History of Digital Type

<u>Helvetica – The Movie</u>

House Industries

I Love Typography (Blog)

Print Magazine

Thinking with Type

Typeface for Font Readability

Typophile

Typotheque

<u>Villatype</u>