

Digital writing ductus: A visual representation of individual writing styles

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Abstract

I present a custom software for typing experiences that opposed to linear word processing renders visible individual writing styles on a personal computer using responsive typography in order to achieve a unique and personal representation of text analogous to handwriting.

CR Categories: H.5.2 [User Interfaces]: Interaction styles—;

Keywords: Design, Interaction design, Human computer interface, Dynamic typography, Digital ductus, writing styles

1 Introduction

Any common computer keyboard is modeled after the typewriter keyboard. All key presses are reported to the controlling software, for example a word processor. However coinciding advantages are rarely used for design/artistic purposes. The automated typesetting process on the personal computer is still based on traditional (static) conventions of typewriting.

I created a custom software for typing experiences, that opposed to linear word processing, explores the unique capabilities of digitality for aesthetic explorations [Maeda 2004]. I designed a system that is subject to individual user input, hence creating an unique piece of text that is inspired by the qualities of handwriting. A text written by hand contains along the linguistic semantic level a second level of meta information including traces of personality, the individual style of writing and even the persons moods. In the past years text is written in large part using a keyboard on a personal computer producing linear, optimized and standardized text. In the modern digital world opportunities to experiment and play with type informally as one would in other contexts are lacking.

2 My Approach

Common changes to the appearance of text are of user generated nature and conventional manner. These are basically the typeface used and font size plus a selected font weight. These are static, pre-selected by the user. An exception is the typeface Beowolf by Just von Rossum and Erik van Blokland. Beowolf is created with a randomization routine. Using postscript each letter is printed unique. The random nature of the process however does not take individual input into account. [Reas and Fry 2007] My project applies direct and real-time feedback through interactive typography software. New writing and reading experiences are created while every single letter is subject to change.

Visual premises important for my ambition where: to preserve legibility to an acceptable degree. To obtain a clear visual impact and to use familiar metaphors for the modifications. I selected base categories for activities and operations that are unique to digital writing. These are Deleting, Rhythm and Keystroke.

Deleting means the ability to erase what has been written. Deleted letters change to grey but stay visible in the background.

Rhythm is the typing sequence and progression rate produced by all key presses including pauses. Rhythm is shown through modification of tracking, leading and spacing between letters, words and sentences.

Keystroke is defined as an approximated force applied by the user to press a singular key. Implementations for Keystroke where: text-size, a shift of the baseline, a second shadow offset and a change in fontweight regulated by the force applied.

Technical assumptions defined for my project are: to use a common keyboard and personal computer (In the test scenarios a Apple Mac-Book Pro was deployed). The software has to run operating system independent to achieve maximum distribution. Possibility to export vector output to use for scale independent typographic design. The conceptual brainchild for this project was to render design more human. That means including space for imperfections and rough edges [Hugh Aldersey-Williams 2008]. Technological possibilities are to often just seen from a functionalist human-centered design perspective. [2008]

3 Conclusion and Future Work

I have introduced a new system of individual and personal representation of text using responsive typography. My project investigates the possibilities of a digital produced one-time existence test. It seems suitable for a variety of applications, longing from type writing training to a toolkit for sociological surveys and artistic typographic design. It draws on an individual and personal representation of text that has rarely explored as a means of responsive typography before. In future work i will study in depth how different factors and modifications influence the perception of text and conduct user study.

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