

Code

The relationship of code to language is that of a subset constrained by the specificities of syntax (Cramer 2001). The digital computer is ruled by syntax, which could be considered the defining means of mediation between digital computers and human processes. These processes include both the actions of the users and the objects created, stored, distributed, and displayed on digital computers.

Florian Cramer identifies language as a “privileged symbolic form” within the context of digital information processing (2001: 2). This privilege results from the fact that the digital computer itself operates on an alphabet—the 0s and 1s feeding the processor in intervals measured in nanoseconds.

Galloway points to the entirely artificial differentiations between ASCII text on a web page and the ASCII text itself from which the web page is rendered (Galloway 2010). This is the point where distinctions between code, formats, and interfaces begin blur. Code is the mechanism which enables formats. Formats in turn mediate their contents, rendering (and often rendered by) different interfaces. The code is an interface to viewing formatted content, and the format is the interface through which the content is presented. The intersection of these elements displays the inherent slipperiness that undergirds our understanding of ‘media’ at a time when more and more media are being subsumed by and remediated onto digital devices.

Software Design

There are definite limits when it comes to constructing software. Beyond the obvious limitations imposed by computing capacities and architectures lie sticky issues of development. In his seminal *The Mythical Man-Month*, Frederick Brooks describes boundaries for software construction that seem to betray logic. Adding money and manpower, for instance, do not increase productivity. In fact, there is a real chance that these types of influx will accomplish the opposite effect (Brooks 1975).

The errors of managing software construction that Brooks describes appear to be endemic. In his book *Dreaming in Code*, Scott Rosenberg documents the impact of these boundaries of human process on the development of Chandler, an open-source personal information manager (PIM) backed by millionaire code celebrity Mitch Kapor (Rosenberg 2008). When announced in the fall of 2002, Kapor stated that “optimistically” the project would reach a 1.0 release by the end of 2003, while a pessimistic projection would place

such a release in 2004 (83). At the time of *Dreaming in Code*'s release in 2007, Chandler had yet to achieve that milestone. Only in 2009 did the software finally achieve this milestone.

Architectures of FLoSS Typesetting

WYSIWYG

Professional typesetting today is largely accomplished within the proprietary program InDesign from design software superpower Adobe, Inc. InDesign provides a WYSIWYG (What You See is What You Get)^[1] interface that allows direct visual manipulation of documents.

Semantic Systems

Formal Systems

[1] : The acronym is generally pronounced “wizzy-wig.”