Display Typography

Yesterday's tomorrow comes today

Keywords

Science Fiction, Digital Signage, Augmented Reality, Virtual Reality, Display Technology

Speculative fiction, in particular science fiction, has had a long tradition of inspiring people with incredible visions of the future. Limited only by one's imagination, writers stretch the boundaries of the conceivable. They create fictional worlds, and explore the possibilities of technology and design; giving shape to them in the minds of entire generations. Beginning with Jules Verne and H.G. Wells with their submarines and space ships, through the Golden Age with the robots of Isaac Asimov and first contact with Arthur C. Clarke, and into the New Age and beyond—science fiction has acted as a platform for innovative ideas in all areas of design and technology.

The presentation will begin by focussing on specific examples of unusual and thought-provoking display typography from speculative fiction. These examples will be accompanied by a discussion of the effectiveness and deficiencies of each design for its intended purpose. Some of the examples will be from popular media, whereas others will be from more esoteric media with particularly interesting ideas.

A discussion of pipe-dreams would, of course, not be very useful. The primary aim of this presentation is to demonstrate that we now have the means to give life to designs that were once out of reach. To this end, a review of our rapidly advancing technology in fields such as augmented reality (AR), virtual reality (VR), flexible displays, holographic displays, nanotechnology, et al will be done. To take a concrete example, there are very strong indications of a rush towards the development of virtual and augmented reality devices. Besides the obvious example of AR with Google Glass¹, the other people doing R&D are John Carmack², who has been working exclusively on VR, and Michael Abrash of Valve Software³—who has been exploring both AR and VR. Besides these heavyweights, there are numerous smaller parties⁴ that are working towards similar goals.

- 1. https://plus.google.com/+ projectglass/about 2. http://www.eurogamer.net/ articles/2012-07-09-john-carmack-on-virtual-reality-uncut 3. http://blogs.valvesoftware. com/abrash/
- 4. http://www.kickstarter.com /projects/1523379957/oculus-riftstep-into-the-game

Fig. 1

Shown here is a Heads-up display (HUD) showing mission-related information in the cockpit of the pilot in a holographic/projected system that can be interacted using either touch or traditional buttons. The still is from the science fiction movie "Minority Report".

Source: "Custom typeface for 'Minority Report'", by Jens Gehlhaar http://cr.jensgehlhaar.com/Minority-Report

Fig. 2

A virtual reality interface from the animated science fiction movie "Ghost in the Shell 2: Innocence" used for representing a computer system under attack from hackers trying to disrupt the system.





Fig. 3
This device has the form of a book, but the functionality of a modernday tablet. It is an interactive device where each flexible page out of hundreds can display arbitrary information and can take touchbased input. The concept is from the science fiction animated short "Pale Cocoon".



Finally, specific use-cases will be explored where display typography would play a crucial role in enhancing accessibility and usability within such products. A number of such possible applications will be shared, with mockups and other media showing how they could be used. The purpose of this would be to stimulate thought and ideas which would lead to the development of improved designs and technologies. The products are on the horizon—it is crucial that they be built in collaboration with typographers and designers.