

Minitrack Summary: The Experience of Media — From Design to Use

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The traditional notions of document as "office memo" or "textbook chapter" have changed, and are likely to be electronic. These documents include images, pointers to web sites, audio annotations, video or even interactive content. We have to reconsider what it means to have "documents" in the workplace and education – and we have to reconsider how we create, design and use such diverse kinds of media. These rich media kinds of documents impact workflow, work customs and the workplace as a whole.

While there are a tools and idioms for creating different kinds of media, there are still a large number of issues in defining new media types, in content creation and designing and using media consisting of several media types integrated in one new medium.

In the 8 papers presented here, the topics of discussion range widely across this problem space.

Two of the papers focus on media in or for education. First, Forte and Guzdial describe experiences with a course on media computation, which attempts to teach programming and computing in the context of media creation and manipulation. They argue for an educational effort to increase media literacy, in particular for students of non-technical fields. Next, Barger and Grudin describe their experiences with an asynchronous distance learning tool, which was meant to be widely useful in educational settings with little modifications. However, they found that the tool had to be adapted significantly to the various users, because as users become aware of the possibilities and the flexibility of software (increase in media literacy), the higher their expectations and demands become.

Two papers are about media literacy in respect to video - both in the mobile space and as a medium authored by amateurs and delivered over the Internet – and both from Finland, which has proven itself to be a driving force in this field. Repo et al. describe a pilot study of delivering video on mobile phones and explore in what contexts mobile video might be useful and perceived as normal and acceptable. Isomurso et al. focus on video produced by amateurs and examine

how author's platform requirements for delivery over the Internet depends on skill level and author goals (motivation).

Watters and McKay examine the problem of accessing Web content on small screen devices, which poses formidable challenges for users. Their gateway model tries to minimize transformation volatility, a measure of the changes experienced by users when switching between devices. Takata et al. focus on issues of accessibility in the medium of the web. They describe an automatic guideline verification tool based on a guideline specification language. While built for verifying accessibility guidelines, this tool is essentially a platform for checking web pages against all kinds of guideline, such as a corporation's internal web guidelines.

Next, Hubona and Shirah focus on gender differences in certain spatial abilities and discuss implications and recommendations for designing gender-neutral user interfaces, in particular for 3D applications, such as CAD/CAM or spatial visualizations.

Finally, Russell, Trimble and Dieberger describe how media content on physically large interactive display surfaces can be used for collaboration purposes. The shift here is from classical small kinds of displays, as in the above papers, to large, shared displays that are designed for small group collaboration, and are designed to be simple enough to use as an information appliance. As always, the design of media depends significantly on the physical properties of the display system, and large displays offer new kinds of affordances.

Collectively these papers create an interesting look at evolving new media, and issues of design and use of new media. These problems are eternal, and this session illustrates the work going on to solve them.