Human Media Interaction – Cooperative Artefact Memory

interaction project(s) / tube(s)

Dhaval Vyas D.M.Vyas@ewi.utwente.nl prof. dr. A. Nijholt

Cooperative Artefact Memory – application(s)

"Space is a resource that must be managed, much like time, memory, and energy. When we use space well we can often bring the time and memory demands of our tasks down to workable levels. We can increase the reliability of execution, and the number of jobs we can handle at once...

David Kirsh [9]

Space and spatial arrangements play an important role in our everyday social interactions. The way we use and manage our surrounding space is not coincidental, on the contrary, it is the way we think, plan and act. Within collaborative contexts, its ability to support social activities makes space an important component of human cognition in the post-cognitive era.

I have developed a mobile phone based system called Cooperative Artefact Memory (CAM). CAM allows co-designers to store relevant information onto their physical objects in the form of messages, annotations and external web links. The main purpose of CAM is to support collaboration amongst a group of co-workers.

Here is a short video about how CAM work: www.youtube.com/watch?v=v_sUImLGsA0

We would like to invite student to develop new ideas to extent the existing work.

review First of all, I know the author(s), and have worked with him in projects before, and will in fact work with him in a next project, as part of a Creative Application (Have Fun and Play) which aims to extend the work on Cooperative Artefact Memory into the domain of (spatial) games. Having said that, I simply state that the paper provides a short but very well readible overview of the literature of the Internet of Things, in particular Augmented Objects, Physical Mobile Interaction and Instrumented Environments, as an introduction to the author(s)' solution(s) to support cooperative design using such (read ubiquotous) technologies. The CAM (Cooperative Artefact Memory) system is briefly described, after which rather extensive material from two field studies is reported, illustrating (a) that the system works and (b) that it has positive effects on the design process, in terms of serendipty, communication and supporting creativity by taking artefacts as a convergence point for a highly constrained format for aesthetic and critical reflections, that is annotations on both process and products. The paper is, apart from some minor typos, well written, and gives a nice and promisong example of bridging physical space and virtual information space in the domain of (cooperative) product design. As said before, my personal interest is to extend this approach in the domain of games involving both physical and virtual space, and the paper as is provides a good introduction to that. From a CHI perspective, the paper may be strongly recommended as illustrating a viable approach to support interaction and cooperation with physical objects as the main focus of attention, with virtual space as a potentially rich complementary repository of annotations and additional information.

A. Eliëns 11/1/10