research directions – augmented virtuality

Given an information space, there is a duality between information and presentation. For an audience or user to be able to digest a presentation, the amount of information must be limited. Effective presentation, moreover, requires the use of proper rethorics (which may be transcoded as *ways of presenting*) that belong to the medium. Using VR, which is (even in its desktop format) a powerful presentation vehicle, one should always beware of the question *what is it good for?* Generally one may ask, what is the added value of using VR? In an abstract fashion the answer should be, to bridge the gap between information content and presentation. Or, in other words, to resolve the duality between information and presentation!

Let's look at an example, a site about archeology, announced as a site offering *Virtual Archeology*. Perhaps it is good to bring to your attention that the *virtual*, in Computer Science, means nothing but another level of indirection to allow for a (more) flexible usage of entities or objects. See [OO], section 1.2.

virtual archeology

- variety of archeological sites
- various paths through individual site
- reconstruction of 'lost' elements
- 'discovery' of new material
- glossary general background knowledge

For a site about archeology, *virtual* means the ability to present the information in a number of ways, for example as paths through a particular site, with the possibility to explore the reconstruction of lost or perished material, and (for students) to discover new perspectives on the material. In addition, for didactic reasons there may also be a glossary to explain concepts from archeology.

Now, how would you construct such a site about virtual archeology? As a collection of HTML pages and links? It seems that we can do better, using VR and rich interaction mechanisms!

So, what is meant by *augmented virtuality*? Nothing that hasn't been expressed by the notion of *augmented virtual reality*, of which an example has been given in this section. The phrase *augmented virtuality* itself is just one of those potentially meaningless fancy phrases. It was introduced simply to draw your attention to the duality between information and presentation, and to invite you to think about possible ways to resolve this duality.