THE ILLUSIONS OF VR

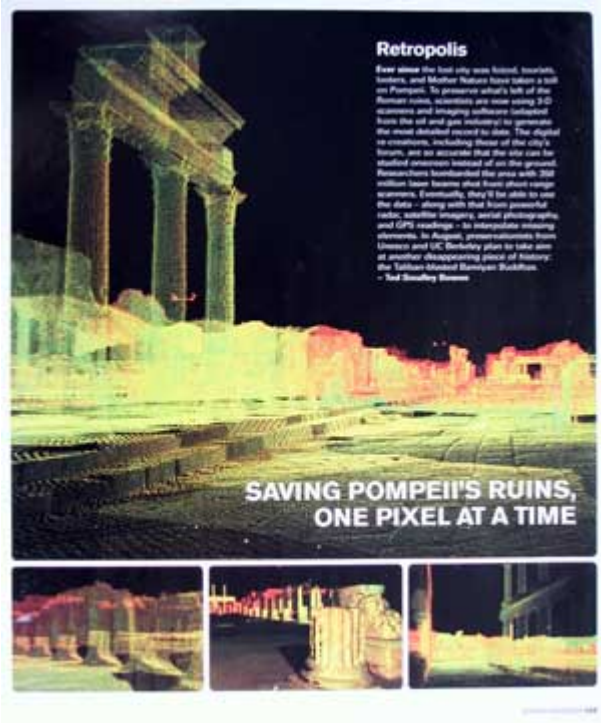


Lynn Meskell at Stanford telling us about her new technology project with Columbia computer scientists. High resolution laser survey/scanning produces 3D models of archaeological sites. They tried it at Monte Polizzo over the summer.

The result – a textured wireframe model of one of the architectural features of this hill top settlement. As excavated by the archaeologists. Gigabytes of information. And you can spin the circular structure, look at it from any direction, zoom in, zoom out. Maybe at some point you might be able to put smart gloves on and touch the model.

Point – you can explore the site off-site, with colleagues who may never have been there. And preserve the past for ever as a data matrix, albeit a big one (but consider Quine's Democritean universes – this will never work).

Wired magazine (September 2003) have just run an article claiming this technology as a way of preserving the past. They have scanned in the forum at Pompeii.



But what is being represented here in such photographic reality that surpasses photography?

This modeling and imaging is based on the notion that archaeologists dig up the past and the end result is a product – the site, the artifact – and this product is the past, what we are after, what we desire, want to hold on to.

But it isn't. These are gigabyte-big models of things made by the team of archaeologists who decided that some stones belonged together as a building of a certain date and cleared away the stones thought secondary to the structure. The end result comes at the end of a long and often contentious process of interpretation – this is the detective work that is archaeology.

And why do I want all this information about the undulations across the surface of an ashlar block, or the stratigraphic surface left irregular by the archaeologist? Photography can be highly naturalistic and look real, but often tells us mostly about superficial details that don't matter to our attempts to make sense and understand.

This is the old illusion – that perspective and a faithfulness to the external appearance of things gives us a hold on reality.

The dream – eventually with so much data at hand you will be able to fill in the

gaps. This is the usual and impossible desire to bring back the dead. I say – look! – the past is over and done, decayed, ruined, lost. We only have a few bits to work on. This is what is fascinating.

What about the things that are going on underneath, that produced the remains of the past that we work on?

So I said that this kind of project is like that in the movie the Matrix – to create a world that actually doesn't or didn't exist, though it appears real. It is an illusion.

Instead of VR why not develop AR – augmented reality – like in Terminator or Robocop – where our cyborg hero/antiheroes can access and pull up all kinds of information in their field of vision that helps them make sense of what is going on and decide on a course of action. And it may simply be a text entry in a simple database – not a gigabyte of graphics.

And on reconstruction – see what we are doing with deep mapping.