PLAYING WITH TIME #BUILDYOUROWNPORTUS
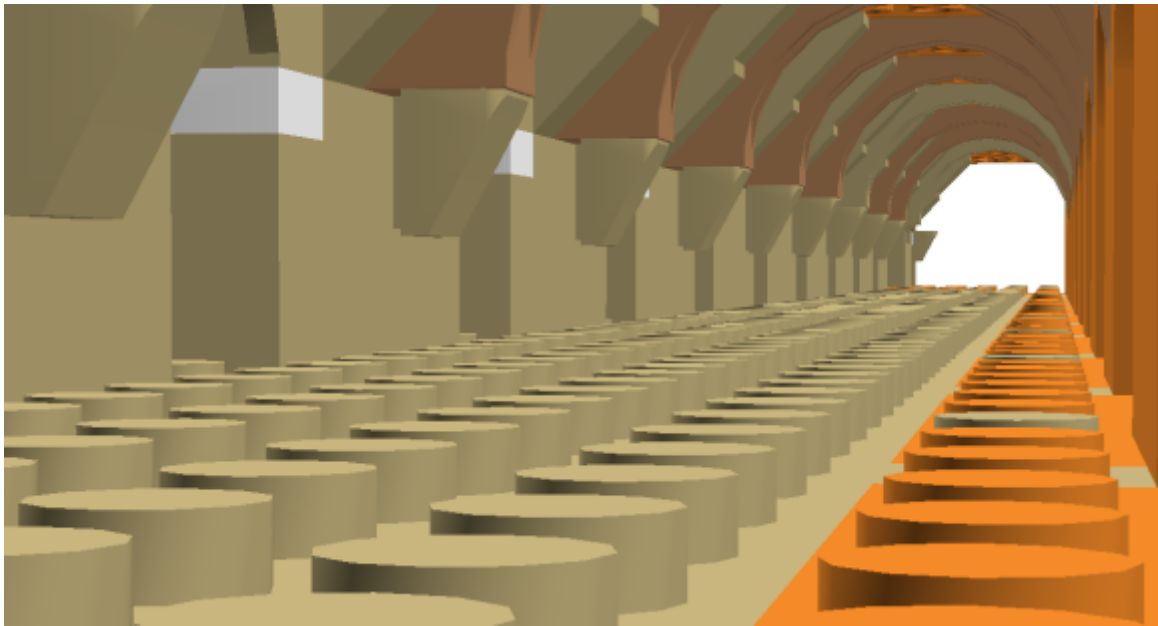
July 11, 2014   memetech   Augmented Reality,Buildings, Day of Archaeology 2014, Italy, Public Archaeology,Roman   FutureLearn, Lego, Massive open online course,University of Southampton

Inside the Grandi Magazzini di Settimio Severo, Portus

I've just finished the excellent Massively Open Online Course (MOOC) *Archaeology of Portus,* run by the University of Southampton's archaeology department. The six week course was an introduction both to the Portus Project in Italy, and to the skills and techniques of modern archaeology. It was a great success, with a real sense of community among the students on the comments forum, and an amazing amount in interaction from the the course creators (which included both University faculty and post and undergraduate students). The last week was live, with videos filmed on site responding to questions the MOOC students raised.

If, having read this brief summary, you feel you've missed out on something special, fear not! The course was such a success that the University and FutureLearn have agreed to run the course again in the new year. Sign up for it here!

One of the challenges students raised was that there wasn't enough time allowed to do everything. The course designers had allowed two hours of study a week, but their optional activities were so compelling that people could spend twenty hours exploring everything, and that was without being inspired to explore Portus in ways neither the core materials nor the optional activities suggested. More than one of us, inspired by the computed models that showed how the buildings might have looked, wanted to have a go at modelling ourselves.

More than one of us indeed took a similar route to our own visualisations: Lego system bricks. I started by raiding my son's Lego stash. Which I had thought was pretty extensive. I realised pretty soon that it wasn't big enough to build even the one building I'd chosen in real, plastic Lego, so I turned to Lego Digital Designer (LDD), a free program that allows you to experiment with infinite availability of bricks of

all types. Even so, at the minifigure scale I was attempting, I only managed to recreate a corner of the building.

Other MOOC students quickly whipped up Lego models of their own, and smaller scales. So I had another attempt. This time using an arbitrary one stud =~one meter scale, and working in real Lego to experiment with building from the inside out. Having built one singe warehouse "storage unit", I returned to LDD to replicate that the forty-odd times that the archaeological evidence suggests the central range of the buildings consisted of. That's only a third of the the building done. But I was pretty pleased with the results so far.
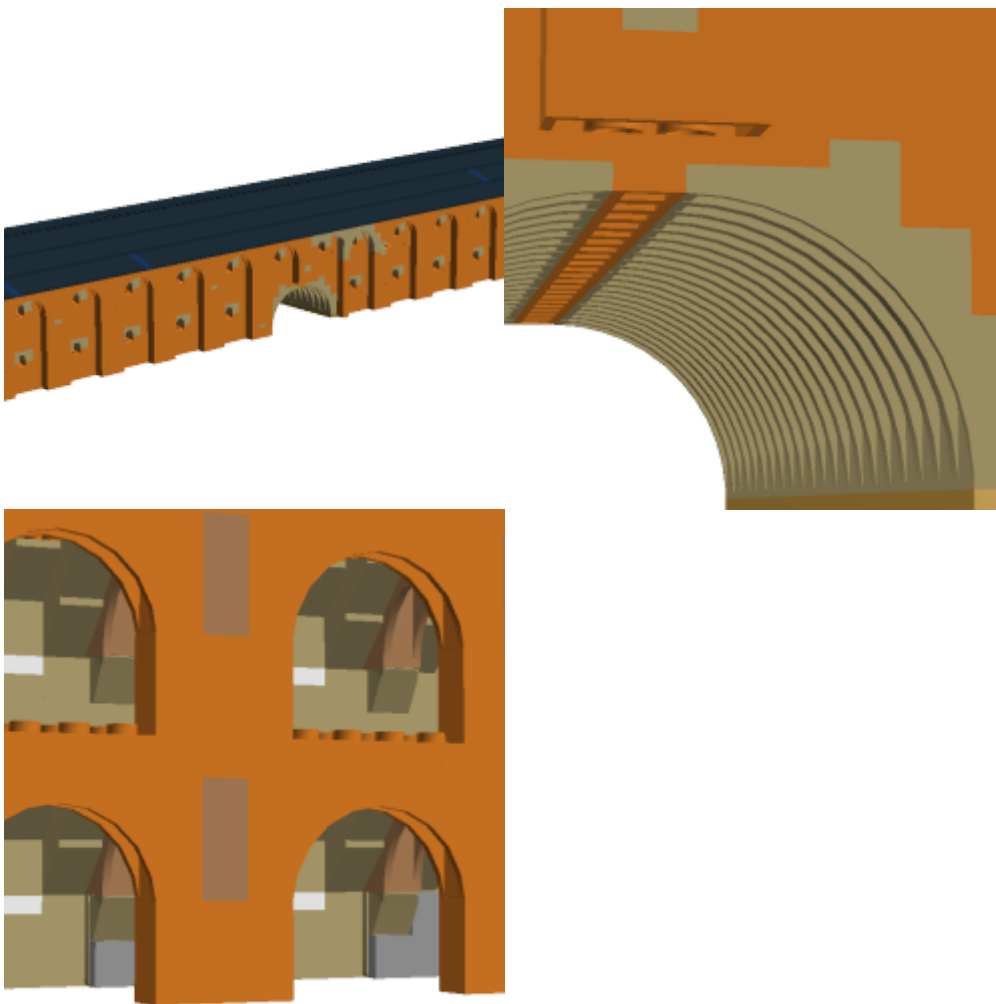
In a moment of madness, I wondered whether I should order the relevant bricks and have a go building it for real. I stopped thinking when I got to a particular 1×6 arch brick that is no longer available, and already the price of the bricks I'd ordered so far was about £470. Playtime was over.

But then I went to work. I work for the National Trust in my day-job, and had to make a visit to the Vyne a week or two ago, and they currently have on display a large Lego model, based on all the archaeological evidence of what that place looked like in its Tudor prime.
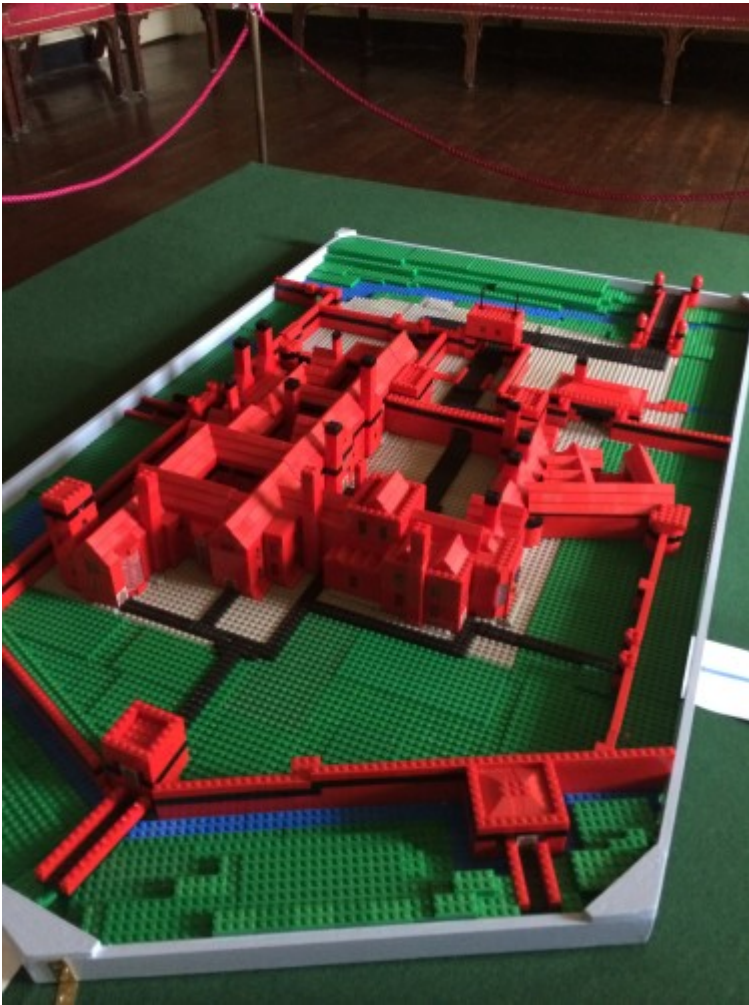
Looking at this model. It dawned on me that there's something very important archaeologically about using Lego (or any other construction toy, I'm not a Lego shill!) to visualise the past. Every model a archaeologist produces is an experiment, a theory. It follows that every model an archaeologist produces is *wrong*. Of course the idea is that the more evidence an archaeologist applies to their model, the less wrong it is. But there is *always* missing evidence, always an element of conjecture.

But models can be very seductive, especially when they are presented by institutions like museums, the National Trust, or media like the BBC and National Geographic. Then they become authoritative, they are imbued with an illusion of *rightness,* of "that's exactly how it was", that would embarrass the archaeologist who produced it. Archaeologists would prefer to show a model in constant flux, shifting through all the "might have beens", all the theories and conjecture that hasn't yet been discounted.

Computer modelling is a double-edged blade (modelling knife?) in this regard. On the one hand, computer models allow archaeologists to efficiently try different versions of the model, but on the other hand, with ever more sophisticated textures and lighting effects, computer models can appear even more real.

But Lego comes with an inbuilt sense of "unrealness." Inherent in a Lego model is the idea that you can break it to bits and rebuild it as your ideas change. There's also a sense that everyone can do this. You

don't need to have a high-powered computer with multiple GPUs and expensive CAD software. You don't even need the Lego. All you need is your imagination.

So on this Day of Archaeology, bring your own imagination to the table. Play around with ideas. If you can't get to a dig, or help out with finds recording you can still contribute to our ever growing understanding of the past. Share your "might have beens" with each other, because the more might-have-beens we share, the closer we get "that's how it was."