



DEAD PEOPLE, AUGMENTED REALITY, AND OTHER THINGS OF INTEREST

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Hiya. My name is Brenna, and I'm an archaeologist, with a PhD in dead people's teeth. You can normally find me on the twitter at [@brennawalks](#) or in tl;dr format on my blog [passim in passing](#) .

So, what gives today?

So many shiny things! Turns out archaeology really suits people with rather wide and varied interests; on any given day you might find yourself with a synchrotron smashing particles or a mattock smashing soil. In my case, I had planned to go in and look at some of my research material in the scanning electron microscope over at UCL. In my 'real' academic life, I study teeth, and I study them very, very close up. You could call what I do 'bioarchaeology' or 'dental anthropology' ... I'm not fussy. But I study the development of teeth from people who died in the past in order to look at the record of growth that is trapped in the structure of their dental enamel. Your teeth carry chemical and physical signatures of things that happened to you during childhood, while the teeth were growing. What I look at in particular are signs that growth shut down briefly during childhood, a condition called 'enamel hypoplasia'. These are (ish) grooves on your teeth that can be evidence of a childhood fever or other unhappy event. By looking at different patterns of these markers in teeth, we can compare aspects of health across different groups. Did rich kids have a better time of it than poor kids? Did sedentary agriculturalists do better as kids than more nomadic groups?

To study stuff like that, you get to do some cool science with machines that go 'ping' and or 'whop'. My favorite lab machine is the gold sputter coater; it turns my tooth casts into art:



the gold coated tooth of a child who died in 18th century London

You can see a big groove in the tooth above. That's from some sort of growth disruption episode while the kid was still a toddler. Go on, check your own teeth now. You know you want to.

Of course, I haven't ended up in the lab at all. One of my newer interests is something called augmented reality (for an example, check out the awesome new Museum of London roman app: [The Only Way is Londinium](#)). I'm really interested in applications for public outreach (particularly web-multimedia and smart-phone based stuff) and I'm totally enamoured of anything shiny and/or techie. So instead of being good (hey, it's Friday!) I went and made a 3d object hover over a piece of paper. It's a poor screen capture, but hey, I should be working on publications and actual research, right?

Check out the easy, totally free-ware possibilities though. This is brought to you by Google Sketchup running the ARmedia plugin; it's practically idiot proof and the results are pretty cool. Anything more involved and you're looking at developing some serious modelling skills, but who needs sleep...?

sorry about the video quality 😊

[Untitled](#) from [Brenna Hassett](#) on [Vimeo](#).