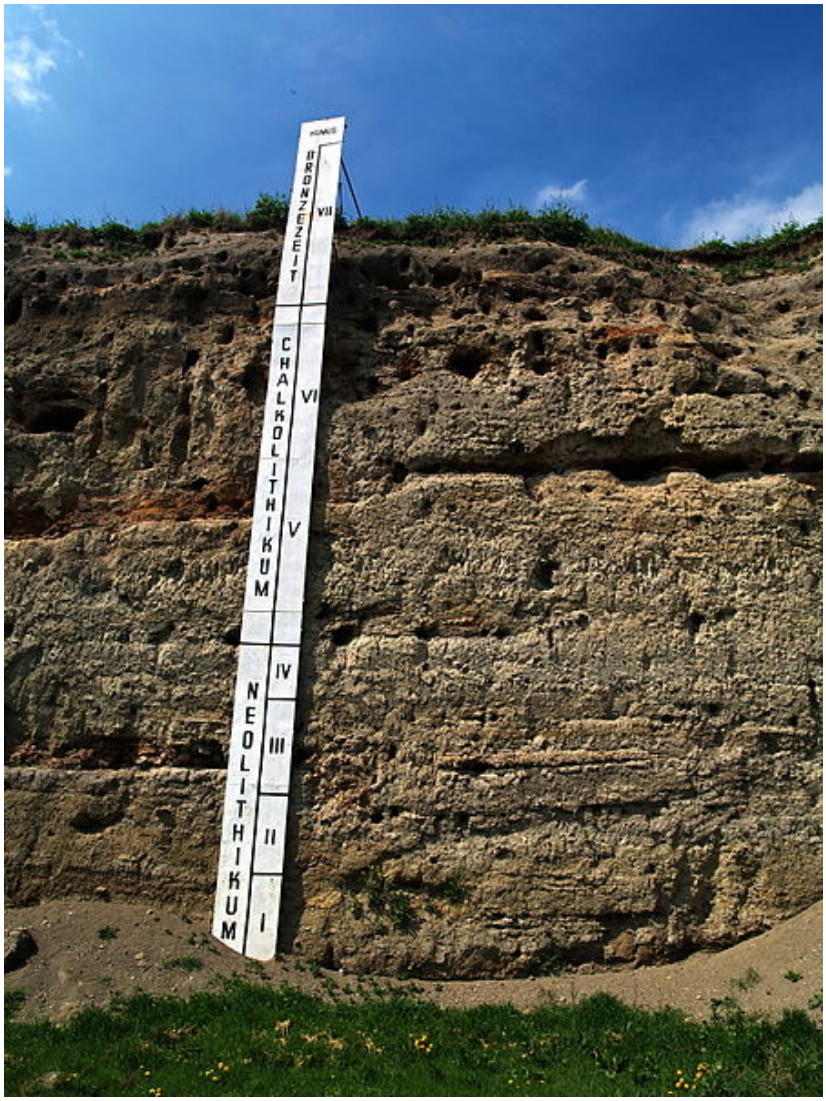

Can archaeology make a small contribution to Big History?

Via @williamjturkel comes news of the International Big History Association which is planning to hold its first conference in 2012 in Grand Valley, Michigan. *Big History* is a new term to me, though clearly it's been around a while (PDF). The IBHA site defines it as *"the attempt to understand, in a unified, nterdisciplinary way, the history of Cosmos, Earth, Life, and Humanity". This puzzles me. Humans occupy a fleeting small portion of the Cosmos's*

so how do you pull this all together. David Christian made a presentation at TED.

Sadly my first reaction is that Big History takes a complex and majestic story and abridges it to the point of triviality. My first reaction to Smail's Deep History wasn't complimentary either. It's not that there's nothing to talk about but rather that combining the story of human action in the past with the biological foundation of human physiology is not new to archaeologists, particularly to Palaeolithic archaeologists. What won me over to Smail's way of thinking is partly the reminder that Historians are not Archaeologists, and that this is novel to historians, and also Smail's book On Deep History and the Brain. While cognitive science and neuroscience have an input in Palaeolithic archaeology, this influence seems to diminish as we get closer to an archaeology of the modern-day. There are some exceptions. Lambros Malafouris is exploring the possibility of a Neuroarchaeology of the Bronze Age. I've had a go at combining Extelligence and TXM to the classical period, but not with any success that I'd want to publish yet. I'd be delighted to see other examples in the comments, but I think the development of cognition is seen as an evolutionary problem in the palaeolithic more often than it's seen as a continual learning problem in humans of all periods. It's possible that Big History could provide a framework to pull similar work into more recent periods.

As far as research goes, I'm not sure that Big History would contribute much to what I'm working on. The development of atoms or DNA are interesting problems, but when I'm researching colonisation processes in the Mediterranean I can take it for granted that atoms and DNA exist. Arguments over their precise formation are irrelevant for archaeology. The techniques used are also irrelevant to the social questions I'm asking. I'll confess it might be fun to accelerate a couple of archaeologists to near the speed of light and then collide them head on, but it probably wouldn't be as illuminating as it is for sub-atomic particles. It's not that people don't need to know these things, simply that research happens within such a narrow context that even inter-disciplinary researchers only use a small subset of necessary academic tools. The context of research is usually so tightly focussed that even similar periods in other places, or the same place in other periods can be irrelevant.

But that's not a knock-out blow against Big History as a discipline.

Before I started my thesis on ancient Sicily, I was reading round a lot on Andean archaeology. Andean archaeology really doesn't have a lot of relevance to ancient Sicily. Despite that no one

would have any trouble with modules on Mediterranean and Andean archaeology being part of the same course. That's not astounding, they have similar survey and excavation techniques. But we could also include modules on archaeobotany, archaeozoology or palaeopathology on a course with radically different methodologies. It wouldn't mean that an Archaeology course that pulled them together was incoherent; they're still allied by similar narrative concerns about the human past. Big History has even more diverse methodologies, but it still has an excellent narrative hook of getting from the origin of everything to here. It wouldn't really work in the UK as a degree course, but for the US with its much more diverse curriculum at undergraduate level this could be a bold idea. It's not simply everything, but also provides a context for why anything matters in a University. It emphasises the connections between various methods of investigation and why conclusions in one field aren't simply guesswork, but corroborated by findings in other fields.

From archaeology's point of view, the chemical and geological background in Big History provides a connection between dating techniques and the Physical Sciences. The tools that allow us to carbon-date artefacts to the medieval period are the same tools that allow us to date material back into the Mesolithic. The same carbon-dating allows us to date tree rings back to recreate palaeoenvironmental data. Geology and Geography are both disciplines that can help explain why some things have to happen here and not there and why we could expect this to survive and that to not. But Big History is not just a primer for archaeology, I think archaeology has some useful perspectives that it can bring to Big History.

Archaeology might be any study of human activity in the past through material remains, but it works best when humans have time to make a really good mess of the local environment. There are archaeologists who study camps with a lifespan comparable to mayflies, but it's a lot easier when someone builds a house in stone to last decades, or settle over the same spot building up detritus over centuries. This is human time, but it's not on a human timescale. Instead we see processes that last generations despite being the actions of people who were living within the confines of their own lifespans. I think this gives archaeology a mesochronology that can bridge the microchronologies of history with the macrocosmologies of geological and cosmic time. I realise that historians might object that they have the concept of the Long Durée, but in some periods archaeologists routinely work over periods of centuries, without necessarily striving for a Big Picture. At one end of the scale, particularly in prehistory, archaeology can place human action in the context of deep time.

At the other historical archaeologists tie long-term processes to fleeting moments, like the earthquake at Pompeii and its after effects in the short time before its burial under volcanic ash.

I'm not convinced that Big History is useful, but it's not fair to form a negative opinion about it from a brief presentation to a general audience. I'm not hostile to the idea either, so I'll be looking through Fred Spier's page to read more articles on the subject.

Stratigraphy at Karanovo. Photo Anton Lefterov BY-SA.

Photo Credit
Karanovo Stratigraphy photo by Anton Lefterov.
Licenced under a Creative Commons BY-SA licence.