

Drawing Archaeology

Helen Wickstead

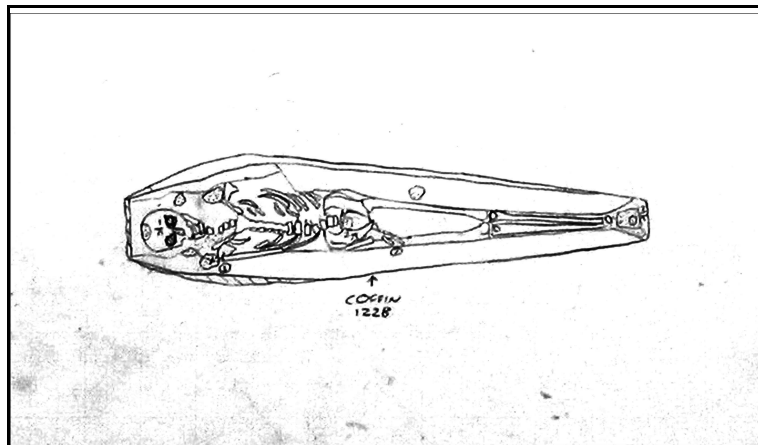


Figure 1: Skeleton (Giles Dawkes, AOC Archaeology Group)

'Fred' died several millennia ago. I carefully picked out his eye sockets this morning. We met in the bottom of a muddy ditch five kilometres from Prague, in the land once known as Bohemia. (In the truest sense, 'Fred' is a Bohemian). On our first meeting I mistook his skull for a stone, and cracked it with my shovel.

I raise my head up out of the ditch; 'what scale are we planning skellies?'

'One to ten.'

Wedging the planning frame against the ditch sides, and using a spirit level to keep it horizontal, I can get it so that the frame lies directly over most of 'Fred's' body. The string bisects his left eye socket at 51.7m east / 49.8m north precisely. I measure from the string to the nasal cavity, from the edge of the eye socket to where the skull curves away from sight. I mark each measurement with a small dot, using the gridlines under my pematrace to scale. Putting my 4H to the film I begin to draw.

Becoming a Field Archaeologist means learning to draw in a specialised way. Archaeologists speak of this process as 'getting your eye in'. 'I can still remember the site where I got my eye' says Jo, an archaeologist friend of mine, 'I was so proud of those drawings, and I took ages over them'. Despite working in a profession dominated by drawing, most diggers do not consider their work 'artistic', and when people speak of the 'creative arts' they rarely mention Archaeology. But I believe Archaeology creates in an important and interesting way. The creativity of Archaeology works though an established set of practices; practices that combine digging and drawing so that they can hardly be separated; practices that allow us to imagine past worlds. What kind of 'eye' is it that we archaeologists 'get in'? How are we 'creative'? Take a closer look at how we draw.

Drawing the Line – ‘Contexts’



Figure II: Becky Forrest drawing

Staring at the dirt I have scraped ‘clean’ I see a chaotic jumble of colours and a scatter of stones. Reuben slaps a hand on my shoulder.

‘You’ve found it’ he announces, ‘It’s the Norman Tower.’

I can just barely make out a patch with more green-grey mottles than everywhere else. It makes a squarish shape disappearing under the walls of the abbey. Perhaps there are more stones embedded in the shadow, but there are stones everywhere else as well. I look doubtfully at Reuben.

‘I can’t see an edge.’ (I want to make sure that what I see is the same as what he sees).

‘Yeah you can’ he offers ‘It’s here’. He draws a line on the ground with his trowel, excluding some of the stones that I might have included.

‘But wouldn’t you say here?’ I draw a rival line just outside his including the stones, which *right* be tipping down into something.

Noticing us having a ‘conflab’ Johnny takes a break from shovelling and ambles over. A short distance away he stops, considers the ground. He advances again and begins frantically scraping the soil a metre or so to my right. ‘I’d take it back to here myself.’

Reuben scrutinises, beginning to scrape, ‘I’m not *convinced*...’

Trainees often find it difficult to ‘see’ edges. The act of drawing a definite line around something rests on reserves of professional confidence and interpretative skill. I have found myself literally inscribing a line on the earth for a perplexed trainee and instructing them; ‘draw that’. What the archaeological apprentice finds difficult is the extent to which archaeological drawing differs from representative drawing. Archaeologists do not try to draw what they see with the normal eye. We do not draw the earth with all its mottles and flecks, its many different textures and patterns. Instead, we draw ‘contexts’.

Seeing means, above all, the ability to see ‘contexts’; Contexts are units of space and time - distinct events in the life of the site. In this instance, the ‘context’ might turn out to be the foundation trench for a Norman Tower. It is difficult to make out because the stone of the tower was carted away long ago, leaving only what we call a ‘robber trench’. What archaeologists prize about contexts is not only what they *are* – ancient buildings, rubbish tips, graves – but also their relationships with all the other contexts we have found. When we know these relationships we can separate the older from the younger, building up a picture of what happened over time. Edges are important because they locate relationships. The edge delimits where one ‘context’ ends and another begins. For this reason archaeological drawings show great attention to outlines. Drawing a line forces us to ‘make’ an edge, even where the real edge is indistinct.

‘Drawing something makes you have a different interpretation of it’ says another friend. ‘About 50 percent of drawing is interpretation.’ Seeing and drawing a context generates interpretation. Discussions about what you can see in the ground involve proposing a story that accounts for what you think you see. Because every context relates to every other context on the site, what you think and draw affects what your co-workers will think and draw. An archaeologist’s professional opinion must be reached through collaborative consultations, debates - and sometimes fierce disputes.

Digging and drawing work together. Drawing occurs before, during and after the digging of any single context. While digging and drawing continue, opinions may change: ‘A pre-ex plan is a pre-ex plan’ says my friend. ‘Once you start excavating you’re finding real edges and you haven’t got the blurring of boundaries.’ Discussions like the one I remember about the Norman Tower usually end as this one did; ‘We won’t know for sure until we dig it’, or, as archaeologists sometimes express it - ‘just hack it out’.

Figure III: Detail of Pre-ex Plan (Author, Adrian Pigeon and Kat Dardis)



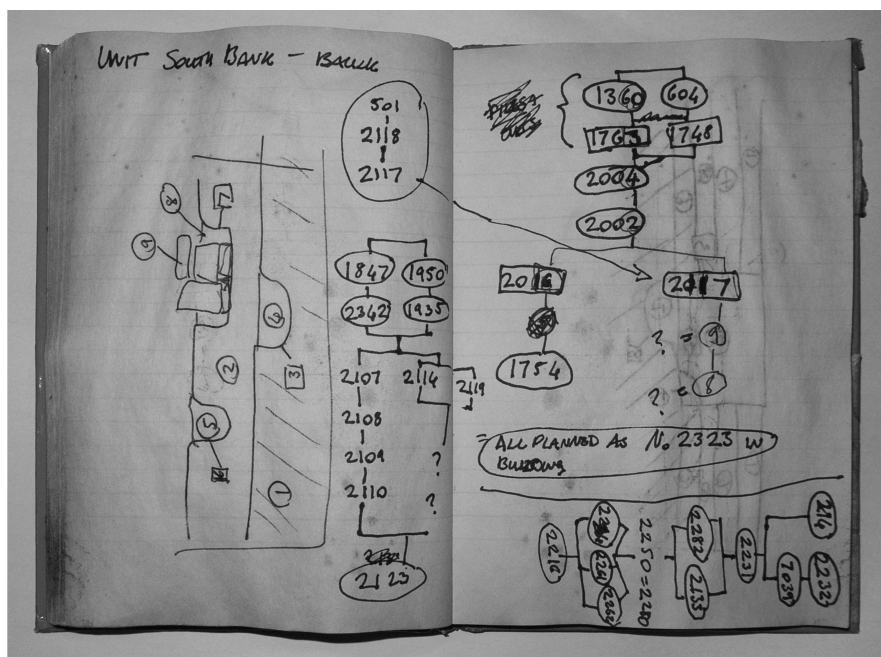
Discovery through Drawing - Stratigraphy

The word 'stratigraphy' comes from the Latin 'stratum' (layer) and the Greek 'graphos' (the drawn). Stratigraphy means the drawing of layers. A Field Archaeologist must master stratigraphy. To do our job we need to figure out the stratigraphic relationships between everything they see. We must peel off each context in the exact reverse order to that in which it appeared. Looking at any piece of ground we face a mass of contexts all jumbled up together. A Roman wall may sit directly next to the turf that grew yesterday, which may grow over an Elizabethan rubbish pit. We begin by identifying the most recent and working down towards the oldest. Drawing is part of how we do this. It disentangles contexts from their physical relationships in the earth. Transformed into a drawing, the mixed-up contexts in the earth can be ordered stratigraphically. Drawing co-ordinates digging, producing digging that is stratigraphic.

The purest method for drawing stratigraphically is 'single context planning', this drawing / digging system breaks up all the drawings, so that each shows a single context. Drawings are made on semi-transparent drawing film (permatrace) that allows drawings to be layered one on top of the next. Layering drawings allows us to see how what we dig right now, relates to what we dug away a few days ago. Looking back through drawings and layering them in different ways can produce startling new discoveries. For example you may find that a half-circle of postholes you dug last week matches up with the other half of the circle, only visible further down. Suddenly you realise that you have been digging an Iron Age roundhouse. Discoveries like these can change our understanding of the site completely.

Hieroglyphs called matrices depict stratigraphy directly. They order contexts in a highly abstract way, emphasising a concept of time over everything else. Matrices work out stratigraphic conundrums. Wherever we congregate and converse, matrices appear. We inscribe them in the margins of other drawings, and on written proforma, we scrawl them on scrap paper, we graffiti them on desks and walls, we incise them into the surface of the soil. They emerge almost unbidden as a by-product of how stratigraphy works our minds.

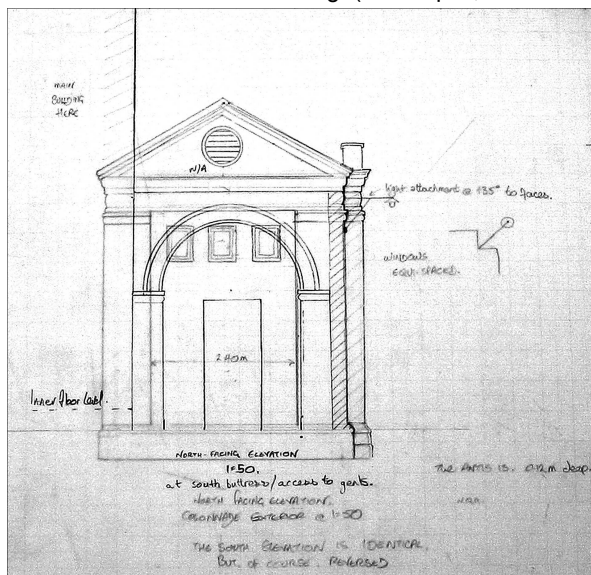
Figure IV: Author's notebook with matrices



Collective Drawing - Conventions

Every archaeological drawing expresses the same visual language, the same standard conventions. A hard line means one thing, a dashed line means another, and a dot-dashed line means another thing again. We also have a special way of showing 'negative' contexts – events that resulted in holes and hollows. Drawings made in the field comprise 'plans', 'sections' and 'elevations'. Plans show the context from above like a map, sections illustrate cuts made vertically through deposits, and elevations depict the vertical faces of buildings. Archaeologists value accuracy and precision in drawing. Someone who has 'got their eye in' has internalised an ability to draw to scale. While the new recruit stops all the time to take measurements, the drawing of someone with 'their eye in' flows. They pause and measure only rarely. They know all the established conventions. Ideally, they become an instrument, calibrating their eye to scale.

Figure V: Layering of two elevation drawings showing inside and outside of a building (Les Kapon, AOC Archaeology Group)



Archaeologists collaborate when they draw. Trainees prefer to draw with one person taking measurements and the other joining the dots ('Ah', sighs the old lag, 'they haven't got their eye in yet'). Complicated contexts (like that in Figure III) may be drawn by a team working in different areas then retracing their drawings into one. One person may begin a drawing and someone else may complete it. Archaeologists are proud of their drawing skills and are prompted to initial their drawings. Within the community of excavators a technically accomplished drawing is admired. However, the people who draw on site are seldom recognised outside the trench. Individual drawings are only fragments, part of a much larger collective drawing.

Figure VI: Collaborative drawing (Declan Kelly and Brian Feeney)



Drawings about Drawings - Narrative

Every drawing made on an excavation comprises a tiny component part of one huge drawing. This vastly complex drawing will only be complete when the digging finishes. Visiting an excavation you will see archaeologists working from day-to-day; trying to recognise contexts; drawing; discovering things; drawing again. What you might not see is the enormous amount of work taking place behind-the-scenes which also continues long after the dig has been sealed up. This is the work of ordering and indexing drawings, checking their numbers, checking their horizontal and vertical coordinates, locating them in relation to everything else. Every single context plan is redrawn using the computer mouse. Inside the computer all these tiny component drawings accumulate. Hundreds of little drawings integrate, making a single vast drawing; an enormously complicated, three-dimensional map.

Figure VII: Fragment from digital drawing of All Hallows Tower, showing layers and layers of contexts, many of them graves (AOC Archaeology Group).



Phil directs large excavation projects. He oversees the whole process of making archaeological knowledge from digging to publication of reports and monographs. After the site closes, Phil is left with sheaves and sheaves of pematrace, and a huge digital drawing. The quantity of information amassed in these drawings - their complexity - overwhelm the capacity of a single mind. To understand the drawings Phil and his post-ex team need to draw even more.

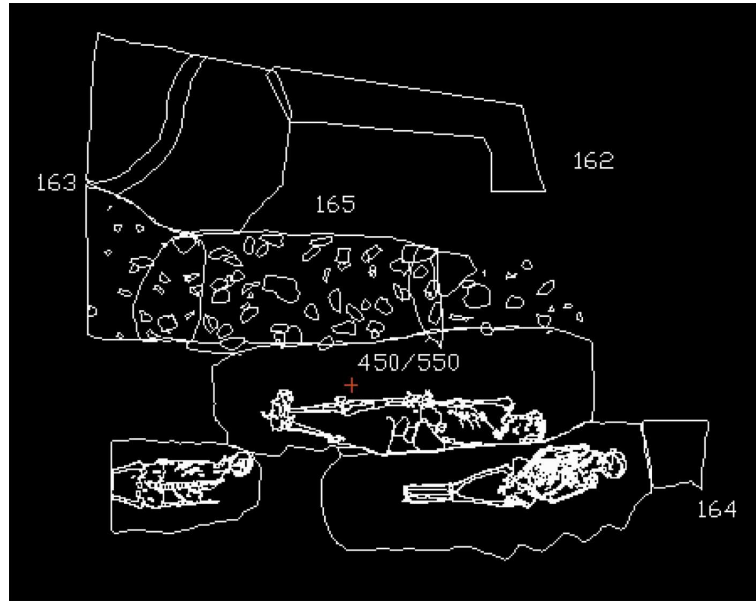
Right up until the final deadline Phil and his colleagues will draw and redraw as their thinking changes. 'One is constantly experimenting with alignments, groupings, boundaries between land use areas, finds-clusters or spreads, whatever, in a search for meaningful pattern within each phase'. 'I rely on drawings' he states 'as the fundamental vehicle for developing a site narrative'. He has to develop a story of the site. But most sites Phil excavates are very complicated. To tell a coherent narrative, he needs to generalise and select. He needs to excavate the drawings. Where are the beginnings, the turning points, the showdowns, the births and deaths? Where is the drama in the story of the site? To find out, Phil and his team make drawings that help them to investigate the drawings they already have.

Post-excavation, drawings depict and comment on other drawings. An overall matrix that integrates everything on the site must now be produced from all the fragmentary matrices that have accumulated. Where a site is large and complex, matrices will be giant drawings, covering entire walls. They produce chronological order but do little to reduce the complexity Phil faces. Drawings that generalise and explain are also needed. Two such genres of drawing are 'land use diagrams' and 'phase plans'.

'Land use diagrams' group contexts into 'land uses' - functional blocks of time/space. On a single page they summarise how each group occupies space and time. Time is arraigned on one axis and space on another. This forces the analyst to account for the use of the entire site throughout history' as Phil puts it. It is a way of finding the continuities and discontinuities of an emerging narrative; locating the dramatic content of the story. Few of these diagrammatic drawings are ever seen in the published record. They are behind-the-scenes drawings; processes of working out rather than 'finished' productions. 'You dispense with the land use diagram quite early in the analysis' reports Phil. 'At some point you concede that you're not trying to account for the use of land throughout the whole of time and space, you're trying to write a narrative of what went on'.

The 'multi-phase plan' slices through the mass of drawings that represent the site in plan. Groups of contexts are summarised into (for example) the Late Saxon phase, the Norman phase, the 13th to 15th centuries, etc. For the first time in the drawing process, colour becomes an important tool. Phases are colour coded and superimposed, producing layered chronological images.

Figure IX: Phase plan; component of Multi-phase plan (Reuben Thorpe)



Drawings remain 'in a dynamic state' until Phil completes his report. But publication is never the final word in archaeology. Transformed into drawings, the site does not disappear. Drawings are curated in an archive, preserved for those who might revisit them in future. Archaeological ideas - our stories and what we find important in them - are always changing. We are always going back to drawings, to find what others have missed, in the hope of new discoveries.

Creativity in the Bones

'Fred' and I would never have met if some ancient Bohemians had not decided to leave his body in a ditch. It was a peaceful afternoon and drawing him I felt I got to know his old bones. As I drew him I wondered - what he had seen in his lifetime? How did he end up in this ditch? Encounters that bring us face-to-face with the dead have a habit of interrupting our everyday world, sounding a gap between us and them. Producing these encounters, Archaeology creates both the gap and a means of bridging it. It creates knowledge that enriches the encounter, refining our questioning, supplying grist to the imagination. By drawing and drawing and drawing again we let something material from another time act upon us, drawing us into the past.

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