Teaching Skyscapes: Keeping our Feet on the Ground

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It is impossible to teach prehistoric archaeology in Britain without reference to the rich, colourful and often controversial history of archaeoastronomy and the role that the sky must have played in the lives of those who lived in the distant past. But how might we shift the focus positively towards a more critically engaged skyscape archaeology as we work with the next generation of archaeologists?

Upon being asked to comment on the future of skyscapes in the academy I could not help but reflect on my own teaching practice across two decades at the University of Glasgow. The narrow field of archaeoastronomy features across my teaching because it has played such a recurrent role in my research. It seems likely, therefore, that skyscape archaeologies appear in university syllabuses in line with the whims and interests of individual academics. In my experience (both as student and teacher), archaeoastronomy tends to be taught as critical historiography, looking to the past much as one does when gazing upon the stars. Therefore, it is just as likely that archaeoastronomy crops up in a lecture on pseudo-archaeology as it is in a session looking at Neolithic and Bronze Age stone circles. Methodologies of archaeoastronomy are usually left unspoken – my understanding pausing at the barrier of jargon like “azimuth” and “declination”, the *how* subservient to the *why*. In other words, this is less about preparing the archaeologists of the future to correct the Thomist excesses of the past, but more about contextualising our current state of knowledge.

My personal research into prehistoric sites in Britain such as cursus monuments and multiple stone rows has given me a real reason to engage critically with archaeoastronomy and thus has informed my teaching. I know from experience that it is impossible to understand the interpretive history of such monuments without recourse to how they might have related to the sky. For instance, when trying to make sense of cursus monuments, long rectangular enclosures defined by oak posts or earthwork boundaries dating to the fourth millennium BC (Loveday 2006; Brophy 2015), one cannot help but focus

on interpretations that have looked to the sky to help make sense of these enigmatic monuments. Being extended linear features within the landscape, cursus monuments lend themselves to questions about what they might align on locally, on the horizon and beyond the horizon. When tested by analysis, this obvious area of enquiry often comes up with nothing. Ruggles' (1998, 52) detailed consideration of the Cleaven Dyke cursus, Perth and Kinross, led him to conclude that not only was there "no obvious astronomical orientation" but that a chance to orientate on a solstice event in association with a prominent hill to the northwest had not been taken up. But how many other cursus monuments (and there are over 100 in Britain) have been afforded such mature and detailed analysis? Has a skyscape archaeology of Britain's Neolithic cursus monuments been attempted?

To an extent, yes – although this is rooted in old-school archaeoastronomy. The Dorset Cursus, Cranborne Chase, some 10 km long and over 100 m wide, with ditch and bank boundary, has attracted such research. Lockyer (1909) argued that this monument was a processional routeway that allowed participants in rites to observe Pleiades rising. In a detailed study, Penny and Wood (1973) argued that the Dorset cursus and associated long barrows encoded six alignments, arranged around viewing points related to solar and lunar horizon events. North made claims of stellar alignments evident in the architecture of the Dorset Cursus (North 1996). These approaches, which depend on extreme accuracy of observation, suggest that a skyscape motivation almost wholly explains the form and location of the cursus; such work has made almost no impact on our study of this monument. Yet a simpler, and more general observation – that while standing within the cursus looking westwards, the mid-winter Sun would have set behind the Gussage North long barrow, which sits within the cursus – has routinely been incorporated into narratives about this monument (popularised by Barrett *et al.* 1991; Bradley 1993; Tilley 1994) and is a relatively uncontentious claim. Moving the skyscape from a primary to a secondary (perhaps even unintended) aspect of the cursus experience lends credence to the idea that this specific and perhaps stage-managed visual effect is likely to have been in use in the fourth millennium BC and would have been a powerful element (albeit only one of many) of the way that the cursus worked.

The study of the multiple stone rows of Caithness and Sutherland, in northern Scotland, is more deeply entangled with archaeoastronomy. These monuments consist of rows of relatively small standing stones, usually less than 1 m in height, with these rows either set into "fan" arrangements (radiating out from, sometimes, a Bronze Age cairn) or set parallel to one another. There are some 25 known examples, mostly on the coastline and river valleys (Burl 1993). The best-known example, the aptly named Hill o' Many Stanes, consists of over 200 standing stones set in 20 or so rows (Armit 1998, 70, fig. 1).

It is hardly surprising that Thom's attention turned to these monuments, with his thinking most clearly articulated in *Megalithic Lunar Observatories* (Thom 1971) and bravely summarised by Burl (1993, 124–125). Thom believed the stone rows were Bronze Age lunar observatories, laid out according to a complex series of observations over many years, perhaps decades. He argued that the stone rows served as lunar extrapolation sites, used to monitor extreme lunar standstills and predict eclipses (Thom 1967; Thom and Thom 1978): "Whether or not we accept the idea that the grid was a computer, the

[Hill o' Many Stanes] is certainly a lunar observatory" (Thom 1971, 95). A local amateur archaeologist, Leslie Myatt, took up Thom's ideas and methods from the 1970s onwards, identifying and surveying additional sites in much the same vein (Myatt 1988).

FIGURE 1. The Hill o' Many Stanes, Caithness (photograph by K. Brophy).

It is impossible to research these stone rows, or use them in teaching, without discussion of how they might relate to the broad open skylscapes of the north. There are few competing narratives: in effect, archaeoastronomy is almost all we have. My own excavations at one of these monuments, Battle Moss, in 2003, began to offer an alternative narrative and served to unpick some of Thom's wilder claims (Brophy *et al.* in prep. – Figure

2), but these are monuments which are still largely associated with the sky, not the land. Indeed, until recently, the Historic Environment Scotland noticeboard for this monument described it as a “device” that was “used to follow the solar and lunar cycles”, a statement that most visitors would not feel the need to dispute. A skyscape approach would help to re-address this balance, allowing the sky to be part of the story, but not the whole story.

FIGURE 2. A standing stone during excavation at the Battle Moss stone rows in 2003, representative of the typical scale of stones within such monuments (photograph by K. Brophy).

How should such tensions be related to students? There is a temptation to focus on a critique of the methods, jargon and improbability of the complicated and hyper-extreme theories of Penny and Wood, Thom and Myatt (Brophy 2017). This kind of anti-archaeo-astronomical thinking can have unintended and problematic consequences, however. In Richards’ archaeological account of the great stone circles of Scotland (Richards 2013), including Calanais, the Stones of Stenness and the Ring of Brodgar, there is no mention of the Sun, Moon or stars. It is suggested instead that such monuments showed a concern for communal labour, the fabric and form of the landscape and the wellbeing and maintenance of society. Yet surely none of this precludes a fascination with the sky? It is possible to see a role for the Sun, Moon and stars in the architecture and a role for monuments as one element of how such sites may have operated despite what Richards’ omission would suggest.

In the same way, we need not take an all-or-nothing approach in our teaching of skyscapes. Students can and should deal with nuance. The student experience is enriched

by a pragmatic approach that focuses both on the limitations but also benefits of archaeological work done in the past and the lessons to be learned. Skyscape archaeologies therefore cannot simply be taught as critical historiography, but as a clear theoretical framework for helping us to make sense about the past, or archaeologists will continue to ignore an important facet of past cultural traditions. However, just as the sky is only one part of the story where stone circles, cursus monuments and multiple stone rows are concerned, so skylscapes are only one part of the toolkit of the archaeologist. Rather like theoretical concepts such as phenomenology, an awareness of use, strength and limitations is vital, if taught with recourse to critical case studies. The deployment of the most appropriate methods and ideas at the right time is a key trait of a good archaeologist.

Universities aim to produce critical thinkers rather than fully formed archaeologists who can do it all. It is within this context that the skyscape archaeologists of tomorrow will emerge. As for the future? We should acknowledge that skyscape approaches offer a marked upgrade on the rather narrow field of archaeoastronomy, rather than perpetuate our fixation on the flaws of the past. We must keep our feet on the ground, but not forget to look to the sky.

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