

Title: Making sense of the data: some theoretical considerations

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Summary: The Highwoods project has elicited a high level of commitment and effort by staff, contractors and volunteers in following up the initial Lidar survey, extracting a range of imagery while assembling much complementary data through ground-truthing, archival research and oral histories. As a result there is now a great deal of new data, which can be expected to fuel a whole series of research studies in years to come. Why not just get on with it, and let the facts speak for themselves? The aim of this article has been to set the Highwoods project, conceived as an exploration of a well-preserved archaeological landscape, in the context of some salient theoretical approaches to the subject. Even the belief that Lidar can enhance our understanding of the past rests on theoretical assumptions which have been challenged. The use of digital imagery in archaeology has been critiqued as ‘reducing the past to a pattern of pixels’ (Thomas 2004: 201). A great deal more could be (and has been) said, not least in theorising the notion of landscape itself, ‘a singularly complex and difficult concept’ (Thomas 2012: 168). The three aspects of spatial scale, time, and lived experience may however help to set the scene, and signpost some of the relevant literature. Making the most of the evidence will require a larger perspective than dots on a map or points in time, if it is to promote insight into the human significance of landscape: not as a mere container for action, but as ‘the relational context of people’s engagement with the world’ (Ingold 1993: 514).

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Making sense of the data: some theoretical considerations

Tim Burr MA (social archaeology), project volunteer

Introduction

The Highwoods project has elicited a high level of commitment and effort by staff, contractors and volunteers in following up the initial Lidar survey, extracting a range of imagery while assembling much complementary data through ground-truthing, archival research and oral histories. These varied achievements are documented throughout the project book (Manley 2016). As a result there is now a great deal of new data, which can be expected to fuel a whole series of research studies in years to come. Why not just get on with it, and let the facts speak for themselves?

If facts can be said to speak, they do so in terms that require interpretation. Indeed 'facts' may already embed interpretation. A number of features on Graffham Down were mapped as 'extraction pits', which on inspection proved to be tree-throws, with prostrate trunks still in place. Chalk bedrock had been dislodged, and pits created; but a layer of interpretation had been added to these facts, wrongly attributing them to human intervention rather than natural processes. Facts may also be coloured by theory, consciously or unconsciously. Other pits, on West Harting Down, were shown by Lidar imagery to lie along the boundaries of prehistoric field systems. It was suggested that these were marlpits, dug to improve the clay-with-flints soil by extracting the underlying chalk and spreading it across the fields. So here was a theory that a known historic practice had prehistoric origins. Successful accounts of the past require such assumptions to be made explicit and adequately tested. Theory can then be of considerable assistance in piecing together the evidence, and guiding further work.

Even the belief that Lidar can enhance our understanding of the past rests on theoretical assumptions which have been challenged. The use of digital imagery in archaeology has been critiqued as 'reducing the past to a pattern of pixels' (Thomas 2004: 201). It is argued that we will not get any closer to people of another time through ortho-rectified, map-like representations, a 'view from nowhere' which was never how the world appeared to them. These are not trivial concerns. What we see in a Lidar image is not the past, but a representation in the present, showing the net result of accumulated traces of past human activity and their progressive erasure through time. The range of filtration techniques employed in the project reminds us that there is no 'right' way of presenting this data (though there may be wrong ones), and that we need to be clear about the kinds of question it can and cannot answer.

It is therefore worth reviewing some of the relevant theory that has informed archaeological practice and debate. For this purpose, the criterion for relevance will be restricted to landscape archaeology. It is of course accepted that many other approaches may find application in following up the Highwoods project, and that landscape itself is in some respects a problematic concept (Thomas 2012; Johnson

2007). The ascription of landscape value to the South Downs is, however, a principal reason for its designation as a National Park, one of whose Seven Special Qualities is stated to consist in 'diverse, inspirational landscapes and breathtaking views'. Lidar survey itself is a way of looking at landscape, though not in terms of a 'view' as it scans the terrain in transects, rather than from the 'viewpoint' of the eye or camera. So three aspects of landscape are briefly considered here: scale; temporality; and phenomenology (which explores how we become knowledgeable about the world around us).

Scale

The Lidar scan performed for the project has a continuous coverage amounting to some 300 square kilometres. It would be a mistake to see this survey as just an exercise in archaeological prospection, a way of finding hitherto unrecognised sites which might then be probed on the ground. A number of such sites have of course been found, while others previously identified can now be more fully mapped with the aid of the Lidar imaging. But:

'the debate surrounding the methods of evaluating areas of potential archaeological interest has focused almost entirely on finding "sites", by which we generally mean occupation areas or monuments. Human activity is, of course, much more wide ranging than this.' (Hey 2006: 114)

One conclusion of a Norwegian Lidar study, also covering 300 km² of mainly forested land, was that

'the goal ... is not just a matter of putting more dots on the map ... the opportunity to work on a landscape scale can generate different stories based on more knowledge about the human impact on the entire landscape in a region instead of giving priority to only some areas' (Risbøl 2013: 58-9).

One of the most striking results emerging from the Highwoods Project has been the extent and clarity of ancient field systems as revealed in Lidar imaging. These are not sites in the conventional sense, but they do trace the unremitting human activity whereby a living was wrung from the land. More than that, they pattern and appropriate the landscape in ways that would have helped constitute a sense of place, both spatially and within the social order. But while they may be sampled by targeted excavations, methodologically they do not reduce to a series of sites.

We may therefore be able to learn more by interpreting the data at landscape scales. It should now be possible to extend to the South Downs the kind of work on field systems which has already been done in the Salisbury Plain Training Area (McOmish *et al.* 2002), another chalk landscape; the Dartmoor Reaves (Fleming 2008); and the Thames valley (Yates 1999). Field morphology and lynchet accumulation might suggest plough agriculture (Harding 2000: 153), while droveways and watering sites would be consistent with animal husbandry (Yates

2007:120). Land boundaries can also inform on social change, like the Wessex Linear Ditches which may (McOmish *op. cit.*: 62) or may not (Bradley *et al.* 1994: 137-8) have superseded Bronze Age field systems. More recent boundaries may represent emparkment, also evidencing social change.

Temporality

Archaeological scale is not just a matter of spatial but of temporal dimensions (Holdaway and Wandsnider 2006). The surface features located by Lidar imaging, more comprehensively and consistently than by earlier survey methods, do not represent a synchronic landscape that ever existed in the past. They have widely differing time-depth. Earthworks of a railway used for timber extraction during the First World War, just a century ago, sit alongside cross-dykes that may be 3000 years old. For most archaeological purposes, it may well be useful to separate this time-span into chronological periods, and assign features to periods. Indeed one of the community excavations within the project (Whiteways) is being undertaken specifically to date and characterise the earthworks of a hilltop enclosure.

There is however a parallel between isolating periods in time, and (as already discussed) isolating sites in space. Both are no doubt valid in their own terms, but not necessarily the only way of approaching the data now available. In a seminal article, Ingold (1993: 530) argued that archaeology was the study of the temporality of the landscape. By temporality he meant neither chronology nor history (*ibid.*: 515). Following previous authors, he distinguished between time as a succession of isolated happenings, frame by frame; and the passage of time as a pattern that draws from the past while setting the scene for the future (discussion in Gell 1998: 235-241). Ingold argued that landscape exhibits this second quality, of temporality. For the landscape, or 'taskscape' (*ibid.*: 516), of the present is the congealed trace of all the activity that has previously taken place there, geological, biological and human. (For Holdaway and Wandsnider (*ibid.*: 193) this may also be true at the scale of an individual site.) We do not stand outside this 'process of becoming' (*ibid.*: 522), but are part of it. Such an understanding foregrounds the continuity as much as the historicity of landscape formation.

The range of timescales thus embedded in the landscape finds an echo in the methodology of the Highwoods project, with its archaeological, archival and oral history strands. These strands extend respectively to millennia, centuries, and decades. Oral histories and archives do however record the same 'process of becoming' as has been shaping the landscape for much longer. Their timescales may be of different orders of magnitude, but all are implicated in the 'taskscape'.

Phenomenology

To expand the thumbnail definition in the introduction above, phenomenology has been described as 'the investigation of how the world is given to us, and thus the conditions necessary for consciousness' (Barrett and Ko 2009: 276). It was the

starting point for an influential study (Tilley 1994), which argued that landscape has being and meaning, not as something looked at or thought about, but because it is lived in, worked on, and full of cultural symbolism (*ibid.*: 26). There is a resonance here with the notion of the 'taskscape' discussed above. For people of other times, the landscape was replete with memories and associations, and with places of significance. Arguably there can be a rapprochement between our experience of these same landscapes and theirs; not as if we could enter their minds, but through encountering the landscape as they might have encountered it (*ibid.*: 73-74). For Tilley, such encounters were a matter of taking paths through prehistoric landscapes, like the Dorset cursus, and attempting through experience of these places to give an account that might enlarge our understanding of the past. This pioneering, if rather impressionistic fieldwork was later followed up with carefully researched case studies of prehistoric settings in Brittany, Malta, and Sweden (Tilley 2004).

That people walking the Devil's Jumps, or the barrow cemetery of Graffham Down, might encounter such prehistoric landscapes in the way they were encountered in the past, has obvious potential to enrich their appreciation of the cultural heritage, in line with another of the Seven Special Qualities of the National Park. The ensuing theoretical debate has however been largely critical of Tilley's proposition. The philosophical thrust of phenomenology is that we grasp the wider world by using the things we find ready-to-hand. Only as we do so can we start to objectify the world. We do not start from a distanced view of it, and to suppose such a view can conjure up the world as experienced by people of the past is to misconstrue phenomenology (Barrett and Ko 2009: 282-287). At a more practical level, people will experience landscapes differently, both because they have different attributes, and because experience is shaped by culture (Brück 2005: 55). People of the past might have been more interested in their interactions and encounters with others than in the juxtaposition of features in the landscape (*ibid.*: 63).

That said, Tilley's innovative use of theory and method has proved inspirational (Thomas 2012: 180). For public archaeology such as the Highwoods project, it remains important to bring the past to life, an exercise in people learning about people, albeit of another time. The better to understand how closely we may, or may not, approach the worlds of our ancestors is a key element in this endeavour, and requires imagination as well as theoretical rigour.

Conclusion

The aim of this article has been to set the Highwoods project, conceived as an exploration of a well-preserved archaeological landscape, in the context of some salient theoretical approaches to the subject. A great deal more could be (and has been) said, not least in theorising the notion of landscape itself, 'a singularly complex and difficult concept' (Thomas 2012: 168). The three aspects of spatial scale, time, and lived experience may however help to set the scene, and signpost some of the relevant literature. Making the most of the evidence will require a larger perspective

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