

In Search of the Middle Ground: Quantitative Spatial Techniques and Experiential Theory in Archaeology

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Abstract In March 2011, a conference was held at the University of Aberdeen, Scotland, focusing on the possibilities and potentials of combining quantitative spatial studies with more human-centred and theoretically explicit approaches to past landscapes. This short introduction outlines the main themes and goals of the conference and the resultant papers, published here as a special issue.

Keywords GIS · Spatial analysis · Landscape archaeology · Phenomenology · Middle ground

Over the past two decades (Thomas 2008; Tilley 1994, 2004), two distinct strands of archaeological subdisciplines have emerged in landscape archaeology: that of predominantly geographical information systems (GIS)-based, quantitative spatial analysis (Lock 2000; Wheatley and Gillings 2002), and experiential or phenomenological approaches (see Brück 2005 for a comprehensive review). Although each side has much to offer the other, the directions taken by some archaeologists in recent years have signalled the growth of the gap between these approaches (Fleming 2006; Thomas 2008). The fact that the different practitioners typically attend different conferences and often publish in different journals serves to further emphasise this apparent divide. Consequently, the opportunities for explicit and open discussion are relatively rare.

We—Kirsty Millican and Dorothy Graves McEwan—were interested in combining our distinct approaches in archaeological research (experiential landscape archaeology and traditional GIS-based predictive modelling) knowing that no such collaborative

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research of this kind had been published. Though our techniques appeared on the surface to be incompatible, it was natural for us to look for a more holistic, less insulating approach to landscape archaeology. We had both been influenced by the work of Marcos Llobera and Mark Gillings, particularly the latter who had been calling for such collaborative research very recently (Gillings 2009, 339). Emboldened, we felt the time was ripe to create an opportunity for other researchers to voice their opinions on the subject. We were particularly keen to hear from those who had recently completed new research combining techniques from the quantitative and qualitative toolboxes, successfully or otherwise.

We invited participants and were fortunate to obtain early support for the conference from the Archaeology Department at the University of Aberdeen. The participants and venue ensured lively debate and discussions. We were gratified that the participants and attendees seemed to agree on our main conjecture: that a fertile middle ground does exist between quantitative and qualitative researchers in archaeology and that when these techniques are successfully combined, innovative and dynamic new research occurs.

Before introducing the papers, it is important to discuss what we mean by the ‘middle ground’. We define middle ground approaches in landscape archaeology as those explicitly seeking to combine quantitative and qualitative techniques. As examples of such work are rare, we deliberately avoided advocating a strict set of rules or guidelines about what a middle ground approach should entail or the particular techniques that it could encompass. Instead, we encouraged presenters to explain why they were attracted to combining particular techniques, detail the chosen methodology, and present the results. By inviting and encouraging an open dialogue in this way, we were able to attract researchers from a wide variety of research interests.

Immediately following the conference, we reached out to Marcos Llobera and Mark Gillings and invited them to contribute to this special edition. We felt this only fitting given that their work had encouraged our collaboration, and had enabled us to set the tone of the conference—open-minded, exploratory, friendly, and welcoming—from the very beginning. The resulting papers, presented here, outline a range of approaches to and interpretations of the ‘middle ground’, drawn from a variety of theoretical and methodological research strands.

Marcos Llobera’s contribution opens this special issue and provides a thoughtful introduction to the subject by considering the challenges of reconciling digital methods within the experiential/interpretative framework. Although this is developed with a specific focus on GIS, the discussion is equally relevant to other digital or quantitative methods of landscape research. It provides an insightful discussion of the relevant issues and challenges facing researchers developing ‘middle ground’ approaches, as well as suggesting how some of these may be addressed in the future. Two researchers who have tackled some of these challenges are Rebecca Rennell and Dorothy Graves McEwan, both of whom present the results of research combining GIS methods with experiential approaches. Rennell’s paper discusses the development of a methodology combining viewshed analyses and subject-centred approaches, which is used to interpret Iron Age sites and landscapes in the Outer Hebrides. Graves McEwan’s approach is distinctly different, employing experiential analysis at a lowland, cropmark site of Neolithic date, to test, analyse and re-interpret the output of GIS-based predictive models. Although approaching the question of the ‘middle ground’ from

distinctly different angles, both these papers demonstrate the utility and potential of combined GIS-experiential methodologies, both to provide new interpretations of archaeological sites and to refine and further develop established quantitative and qualitative methods.

The scope of the ‘middle ground’ is widened further in the papers by Kirsty Millican, Toby Pillatt and Stuart Eve, all of which largely move away from GIS to consider approaches that combine cropmark analysis and experiential archaeology, weather and climate, and augmented reality and phenomenology, respectively. Each approaches the ‘middle ground’ from a very different methodological direction and, in so doing, demonstrates the vast potential for such combined qualitative–quantitative research. It is gratifying to see researchers from such different backgrounds engaging with the issues so readily and the innovative interpretations that can arise from such different combinations of quantitative and qualitative aspects of landscape research. Clearly, there is scope for further developments, and it will be exciting to see where these research avenues eventually reach.

The final paper in this special issue (by Mark Gillings) provides an alternative view of the ‘middle ground’, suggesting the need for GIS-based researchers to build their own theoretical frameworks. The role of affordance illustrates how this might be put into practice. Although seemingly at odds with a special issue concerned with exploring connections between quantitative and qualitative elements of landscape research, this is an important addition to the debate and a viewpoint that may well be attractive to many GIS-based researchers. When the debate between GIS and experiential theory has apparently reached an impasse, should GIS-based researchers focus instead upon developing their own theoretical frameworks, especially those that may arguably be better suited to spatial technologies? We anticipate that there will be different points of view on this, yet it is a suggestion that should be taken seriously, as it expands the debate surrounding the use and potential connections between GIS and experiential archaeologies, as well as between quantitative and qualitative landscape research more widely.

The success of our conference and its resulting papers convince us that the combination of quantitative and qualitative archaeologies, in the widest possible sense, is not only possible, but also opens up a rich, fertile ground for innovative new research and lively discussion. Whether that involves the combination of established methodologies or the development of new theoretical frameworks remains a matter of debate. Nevertheless, it is our hope that all of the papers presented here will galvanise researchers interested in collaborating across the spectrum of theories in landscape archaeology.

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