

## Beyond Morphology and Resemblance in Early Graphical Culture

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In assessing the function and meaning of early graphical marks which precede the emergence of 'writing', prevailing approaches tend to prioritise image morphology and resemblance. In addressing the three areas outlined for consideration during this roundtable (the criteria by which we distinguish art from non-art in prehistoric iconography; heuristic assessment of graphic clusters; methods for systematic documentation of marks and their contexts) I will seek to de-emphasise morphology and resemblance in favour of a more contextualising method. Because shape and similarity exist only through embodied acts of material production and perception in social space and time, I argue that these need to be understood as a subset alongside other principles by which graphical expression is distinguished and assessed. I will outline the criteria I see as essential for a more holistic and systematic method and consider their implications in two areas: data documentation, and collation and analysis.

With regard to the first and from an imaging standpoint, I discuss a project I am involved with at the University of Oxford (in collaboration with the University of Southampton) for the development of a reflectance transformation imaging (RTI) system for ancient documentary artefacts (RTISAD; [http://www.southampton.ac.uk/archaeology/acrg/acrg\\_research\\_DEDEFI.html](http://www.southampton.ac.uk/archaeology/acrg/acrg_research_DEDEFI.html)). RTI is based on traditional raking light photography, and uses multiple input images, captured from a fixed camera position with a moving light source to construct a digital model of the surface form and reflectance of the object studied. The resulting amalgamated files enable interactive lighting, image enhancements and automated identification of visual and morphological attributes, making ephemeral, difficult-to-read features visible. Given the ever increasing amounts of archaeological iconographic data coming to light and the possibility of extracting new information from previously studied data, RTI presents exciting possibilities for the roundtable question of systematising marks' documentation.

With regard to collation and analysis, for an emphatically contextual approach the data variables requiring organisation, measurement and analysis are numerous. I will present a case study using the software programme ATLAS.ti, a workbench for qualitative (and some quantitative) analysis. This tool enables the systematic encoding and study of multivariate data in direct relation to digital images of the artefacts. Graphical criteria may be distinguished and heuristically assessed for building context-sensitive interpretations concerning function and meaning.

I hope to demonstrate that these tools for data documentation, and collation and analysis, together with a contextual and practice-centred approach, provide greater leverage for exploring 'pre- and proto-historic writing'. However, where datasets are highly fragmentary and rarely found in secure archaeological contexts, an important additional question for discussion is how we determine the suitability of theoretically informed explanation compared with scientific method when falsehood may not be demonstrable.