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directed by
Jean CLOTTE

PLEISTOCENE ART OF THE WORLD

Short articles



ROCK ART DATING IN AUSTRALIA AND BEYOND:

What Does it Tell us?

Paul S.C. TAÇON, Michelle C. LANGLEY

One of the biggest challenges in rock art research is accurate and reliable dating. A related issue is that of interpretation – what do the numbers obtained really mean? In our paper we briefly reviewed the results of rock art dating programs in Australia with those undertaken in other parts of the world, summarizing and analyzing over 700 rock art direct dating results. We identified a number of common problems arising from the results as well as patterning related to taphonomy and cultural difference. We also observed some common trends, both in terms of temporal and spatial rock art change and in terms of how dating results are (mis)interpreted. A particular question that focused discussion is whether there is a case for Pleistocene figurative art outside Europe and, if not, why it developed to such a great extent elsewhere during the Holocene.

This was a preliminary analysis that, although comprehensive and representative, does not yet include every dating result in the dataset. Furthermore, many new results were announced at the 2010 IFRAO Congress and are in press, as are others from various parts of the world. Indeed, the direct dating of rock art is increasing at a rapid pace so that databases need to be continually updated. Thus we provided only a snapshot at the Congress and do not include a full paper in the Proceedings. It is planned that a more comprehensive database and analysis be published later. However, an interesting result to date is that only paintings from 11 cave sites (7 in France and 4 in Spain) have been reliably dated to the Pleistocene.

We conclude that the direct dating of rock art is still in its early stages, that results to date have produced a skewed picture of the past and that we are still not in a position to reliably construct let alone compare accurate chronologies from different parts of the globe. This is not to suggest that such comparisons are futile or that they will not be possible in the future. On the contrary, the construction of robust chronologies is a priority for global rock art research. However, current dating methods need to be challenged, refined and cross-checked against each other whenever and wherever possible. New techniques need to be invented and new forms of technology employed.

New ways of comparing rock art from one region to another also need to be developed in order to bring rigor and validity to such exercises. In this regard new insights from neuroscience research into rock art could be used as a control in such comparative studies, especially for naturalistic figurative imagery.

For decades the majority of researchers have argued that naturalistic figurative imagery first arose in Europe, over 30 000 years ago, and then somehow spread to other parts of the globe. Others contend it arose at different times in different places. Our research suggests that although ancient naturalistic figurative rock art certainly has survived longer in Europe, there are good taphonomic reasons why this is the case. Furthermore, direct and indirect dating from various



Patrick Lamilami and Paul S. C. Taçon sampling beeswax design for dating (Wellington Range, Arnhem Land, 2009).

parts of the world suggests there is some Pleistocene naturalistic figurative rock art in isolated areas (e.g. parts of northern Australia, Timor, possibly northwest Yunnan, China, some parts of India and Africa) but that our knowledge of its age is obscured by our current state of dating technology.

Despite taphonomic processes having a greater impact the further we go back in time, the use of naturalistic figurative imagery increased substantially during the Holocene across the world. Some of this is a reflection of population growth but with great environmental change the usefulness of such imagery as a communication device would certainly be important, if not essential, for survival. Aspects of economy, identity, spirituality, relationships to land, relationships to other creatures and relationships to other human groups would have all changed in extreme ways during the Pleistocene-Holocene transition and beyond. Naturalistic figurative images would have played many roles, mediating and expressing change as well as reaffirming the past in order to assist with decisions about the future.

Thus the picture that is emerging is not a simple one. Old naturalistic art has survived best in Europe. Neuroscience tells us all modern human groups had the capacity to produce naturalistic figurative imagery. Taphonomy has affected the survival of old art in detrimental ways outside limestone caves and outside Europe. The state of rock art dating technology in many ways is still experimental and limited. Much interpretation remains speculative. The true picture is likely much more complex than we envision.





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