



Abstract: **Kimberley rock art dating project.**

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*Prehistory potential of the Kimberley:*

The Kimberley rock art sequence is likely to be found to be one of the longest and most complex in the world, possibly rivalled only by that of west Arnhem Land, with which it shares an interesting range of trends.

Twenty years ago studies had established two loose groupings within Kimberley rock art; 'Wandjina' and 'Bradshaw'. Within the superimposed layers of 'pre-Wandjina' art identifiable groups of apparently stylistically similar images indicated far greater hierarchal complexity.

Even within individual panels the stylistic and artistic variation seemed incomprehensible, at times displaying the most extreme imaginable opposites. Their apparent 'transition' order within the superimposition seemed equally illogical.

Stage one of the Kimberley rock art study required two decades of fieldwork to establish a very detailed relative sequence, which is subject to ongoing fine-tuning of detail. This identified sequence represents an invaluable base for stage two projects, identifying specific targets which maximising dating and pigment analysis. Research findings from this multi-disciplinary approach are beginning to not only establish minimum dates for defined art periods, but provide an insight into the environments in which the seemingly diverse associated cultures existed.

Fortuitous combinations of environmental and geological factors appear responsible for the survival of possibly the oldest continuous pictorial record of anthropomorphic form, which during certain periods has arguably been the finest in the world.

*The Kimberley artistic sequence:*

Kimberley is fortunate in having a specific form present throughout its painted art sequence - the anthropomorphic form. Whether representing 'normal' mortals, 'idealised' mortals, mythic heroes or deities will probably remain an arguable point, although all options are probably correct during the span of varying cultural periods involved. A hallmark of the Erudite Epoch is the artists' obsessive attention to detail when depicting the elaborate recurring garb and paraphernalia which decorates these anthropomorphic depictions.

When looking beyond the undeniable beauty of form, composition, and artistic application, the scientific value of these images becomes immediately apparent. From a stylistic research viewpoint, the Kimberley artistic sequence differs from Arnhem Land in remaining largely uncluttered by depictions daily life, where family, camp, foraging and secular scenes are involved. Combined prohibitions of primarily depicting: (1) apparent 'adult male' forms, (2) static standing alignments, (3) detailed dress and accoutrements, provides innumerable 'elements and characteristics' for classifying definable 'groups'. This classification was systematically developed during the initial 12 years field work, where constant use and testing established a functional graphic element and terminology reference base involving over 800 defined individual elements.

Individual images now hold potential for locking into a stratified categorisation system, involving (1) Epoch, (2) Period, (3) Group, (4) Sub-Group, (5) Phase (colour), (6) Features, (7) application. Optimum analytic potential may now be extracted from even fragmentary motif remnants, mostly adequately identifiable from three or more classification levels. This greatly assisted superimposition studies, already involving tens of thousands of individual motifs.

This systematic process permits the Kimberley sequence to be constantly cross-checked and scrutinised on seven levels, where additional discoveries of detail permits reassessment of 'grey areas'. Most Kimberley motifs may now be studied by defined standards of form, dimensions, material composition and manufacturing technique; levels challenging analytic potential formerly reserved for the traditional 'old faithfuls' - stone artefacts. Hopefully this will facilitate elevating Kimberley art from the 'esoteric' classification which rock art has frequently (and often justly) been long relegated by traditional archaeologists.

The art's additional value, unequalled by traditionally recognised artefacts, is its permanent pictorial documentation presenting a 'window' into the otherwise intangible elements of perceptions, vision and mind of pre-historic cultures. Unfortunately its potential in establishing Kimberley archaeological 'big picture' still remains largely unrecognised. Progressive findings of the Kimberley Rock Art Dating Project will encourage involvement by a greater diversity of specialist disciplines to tie findings into levels of this art sequence as a primary reference point.

The sequence represents a sound basis for selecting specific defined images for targeting detailed studies by a range of dating technique. This effectively removes the undesirable ad hoc sampling of 'apparently old paintings'; a process which must unavoidably remain the case with researchers working on most global bodies of rock art.

#### *Archaeological excavations:*

Due to the type of art shelters selected by the different cultures associated with identifiable art periods, it appears extremely difficult to learn much about the people of the Erudite Epoch from conventional archaeological excavations. Bradshaw art galleries are almost invariably purely 'art' sites, and shelters rarely contain habitation evidence or deposits of any form. Searches continue for suitable Bradshaw sites containing deposits with excavation potential.

A number of excavations have been undertaken by Morwood in a sample of north Kimberley sites, from which dates will hopefully soon be available. One major Pecked Cupule gallery holds potential for establishing early Kimberley art habitation dates.

#### *AMS dating:*

Initial investigations into the potential of AMS dating have been undertaken by Alan Watchman. Work continuing on these samples, and publication of preliminary findings are forthcoming.

Possibly the greatest disadvantage to date of this studies potential involves the lack of experience by Walsh in identifying the type of surfaces required by Watchman to provide sufficient content for sampling. Watchman's preliminary sampling field trip was extremely limited in time and constrained by the tyranny of logistics in attempting to economically access potential sample sites. Watchman would be the first to agree that doubling on the rear of a quad motorbike over vast tractless stretches of basically inaccessible Kimberley terrain is far from ideal. Initial site selection by Walsh was primarily oriented towards attempting to identify art periods, ideally involving examples of multiple superimpositions, but most provided insufficient suitable sample material.

This technique has thus not experienced a fair testing, and Watchman has not been able to gain personal access to a sufficient range of sites to select a range with adequate dating material content. A more realistically organised return visit is thus essential, with time budgeting for at least basic helicopter transport for Watchman to reach a sufficient range of potential sample sites.

Work on more recent periods of art has included a specific study of beeswax art, involving a representative selection of images from the wide range of recorded motifs. Claudio Tuniz and ANSTO have progressively undertaken work on samples prepared by Watchman. Publication of preliminary findings will follow completion of the last suite of samples, thus providing the first dated chronology of thematic change within the little-known west Kimberley beeswax art.

Watchman's work continues on analysis of paint types and a search for possible organic binders. In '97 an additional project associated with specific PIXE/PIGME paint identification and sourcing will commence, working on base samples and complimenting existing projects.

#### *OSL dating:*

Dr Bert Roberts work on OSL dating of mud wasp nests associated with Kimberley art is becoming increasingly well known, and will be dealt with in a specific paper in this conference. The potential for utilising Kimberley fossil wasp nests to not only date specific art groups, but provide wider understandings of associated climatic and environmental conditions by analysis of trapped pollen, remains an exciting and much awaited contribution to the Kimberley prehistory 'big picture'.