



KEYWORDS: *Rock art – Arnhem Land – Ethnoarchaeology – Social practice – Scene*

## MAKING SENSE OF SCENES

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**Abstract.** Social behaviour and structures are often invisible in the archaeological record. However, rock art sometimes provides unique visual examples of social and cultural practices as perceived by the authors. Through a specific case study, a rock art scene from Injalak Hill (western Arnhem Land, Australia), this paper explores how the social information encoded in rock art scenes can be understood on the basis of three categories of analysis: the rock paintings, the archaeological/spatial context and the ethnographic context. This study demonstrates that patterns of composition are not at random in rock art scenes, but used to replicate social patterns of behaviour more than a simple action.

### Introduction

Aside from the occasional brazen theft of rock paintings and petroglyphs from their place of origin, or its removal by archaeologists (e.g. in the Dampier Archipelago), rock art is one of the only archaeological remains that is nearly always found in situ – it was made and meant for the place it is found. It is, therefore, some of the best contextualised evidence of the past, either archaeological, spatial (place and landscape) and/or ethnographic. Furthermore, rock art narrative scenes and compositions may reflect facets of human behaviour often invisible in most other aspects of the archaeological record, such as social organisation and a wide range of socio-cultural activities and practices, even when the chronology of the art is uncertain (Domingo et al. 2008). Nevertheless, rock art research in Australia has long been focused on the question of chronology and sequence, paying less attention to the socio-cultural information embedded in rock art.

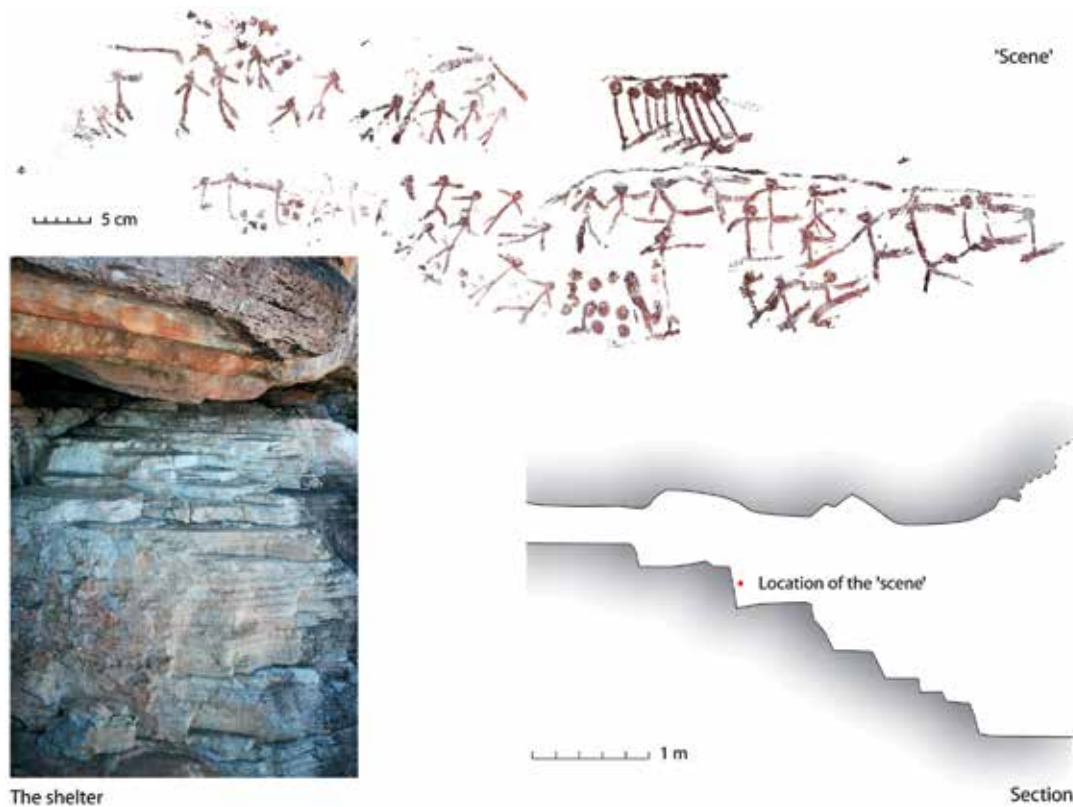
This paper goes beyond the question of chronology and sequence to explore social information encoded in scenes painted on rock. We analyse how public (as opposed to private or secret information) elements of this social information can be understood on the basis of three categories: (a) the rock paintings (motifs, presumed subject matter and composition), (b) the archaeological/spatial context, and (c) the ethnographic context. The two latter categories are primarily based on the descriptive analysis of the archaeological evidence (rock art and its spatial context) using archaeological methodology and data, whereas the ethnographic context is approached both through a literature review and through discussions with local Indigenous artists and/or elders. The ethnographic information has been

key to understanding the activities depicted in the rock paintings and demonstrating that patterns of composition are not at random, but used to replicate social patterns of behaviour. At the same time, it allows us to test the validity and limitations of our archaeological interpretations.

The case study presented in this paper is a painting from Injalak, a large outlier near the Gunbalanya (Oenpelli) community in western Arnhem Land. Injalak is home to one of the most concentrated areas of rock paintings in western Arnhem Land. The diversity and density of rock paintings is still to be thoroughly documented but includes paintings from the pre-estuarine, estuarine, freshwater, and contact periods, as defined by Chaloupka (1993: 89, see also Chaloupka 1977, 1984; Chippindale and Taçon 1993, 1998; Lewis 1988). While the exact age of the paintings remains unresolved, it is important to highlight that they are part of an ongoing artistic tradition with the most recent Injalak paintings being added by elders Bobby Nganjmirra (in 1984) and Thompson Yulidjirri (in 2003). Local Indigenous cultural connections to Injalak remain strong, as they have been throughout the contact period, particularly as a place for general living and sleeping, for the interment of human skeletal remains, as a place for the education of youths, and as a place of artistic creativity.

### Background

With this background in mind one apparent rock painting scene from Injalak was selected as a case study. The panel is located in a passageway between two dominant and densely painted rockshelters, which is today rarely visited due to difficult access (i.e. low



**Figure 1.** General view of the site located within the Injalak complex of sites. A dot indicates the exact location of the rock painting 'scene'. The digital 'tracing' is a to-scale and colour-correct reproduction of the original painting and is produced using Adobe Photoshop.

height of shelter and irregular and echeloned ground) (Fig. 1). One of these wall echelons, measuring  $1.0 \times 0.5$  metres, was used by the artist to frame a narrative and dynamic scene. Although it has proven to be an excellent case study for gaining information about social activities and behaviour, the small size and the difficult location may explain why it has been long ignored by researchers working on Injalak (such as Mountford 1956). Further to this, such scenes, while acknowledged as providing valuable information on the ceremonial life of Indigenous people in these regions, are not elaborated on when discussing the stylistic chronologies of western Arnhem Land (for example, Brandl 1973; Chaloupka 1993; Lewis 1988; Taçon 1989a). This is partly due to the fact that the scenes usually do not occur superimposed over or under other paintings, rather they stand alone; and to the reluctance of researchers to pronounce motif groupings as scenes.

Importantly, Taçon (1994: 123; see also Taçon 1989b: 320) discusses the rock art of the past few thousand years in western Arnhem Land and outlines some of the possible purposes for producing this art. He includes 'stick figures' which were 'used to record aspects of daily life, including domestic and hunting activities; ceremonial pursuits, including secondary burials, dancing and didjeridu playing; fights over land and women, including large battle scenes that record actual events; contact with outsiders, such as Europeans' (Taçon 1994: 123). Such stick figures

are described as varying from static straightforward poses to energetic elaborate postures suggestive of movement and action (Taçon 1989b: 320; see also Taçon and Chippindale 1994).

Such apparent scenes form a large part of the artistic heritage of Injalak and western Arnhem Land and deserve greater attention. For us, the differences in style, the patterns of composition and the ethno-archaeological context of this particular 'scene' show great potential to provide important information on the socio-cultural context and/or cultural practices of the artist/s. This presumption needs further explanation.

First, contrary to most of the paintings at Injalak, the selected panel included a narrative 'scene' in which a minimum of fifty-two human-like figures perform a common and dynamic action. This kind of social scene, in which only human-like figures take part, seemed to be more likely to provide information about social and cultural practices, which was the main scope of our research. These kinds of 'scenes' are not rare for Injalak and the surrounding region, but each is vastly different and has the potential to provide detailed information on different activities.

Second, the 'scene' was attractive due to the particular style of the motifs, significantly different to the majority of the rock paintings depicted at Injalak. The motifs are small individuals, no bigger than 9 cm, with few body details (only round heads and linear bodies produced by a thick brush) and no evident adornments, clothing or

weapons. This is as opposed to the so-called 'Mountford figures' featuring elongated bodies and exaggerated movements, often with adornments such as 'headdresses' or 'weapons' (Fig. 2).

Finally, the homogeneity of the motifs in this 'scene' (including form, size and technique) suggested that the 'scene' was the result of a single artistic episode. In our opinion, in order to determine if the patterns of composition reflect specific socio-cultural patterns or behaviour, it is important to look at compositions of unitary execution, since later additions may transform the original message.



*Figure 2. Rock paintings from Injalak, western Arnhem Land. At the top of the photograph are four female figures in the so-called 'Mountford' style.*

### Methodology

The starting point for this study was the archaeological recording of the rock painting 'scene' and the site. A site plan and section drawings were produced for the site, and the systematic digital photography of the paintings and the measuring of the motifs constituted the baseline data to produce a digital 'tracing' using the *Adobe Photoshop* program (Fig. 1) (for more information about this recording technique see Domingo and Montalvo 2002).

Several visual and descriptive aspects of the 'scene' were of particular importance. First was the formal analysis of the motifs and consideration of the form: modelling (the visible shape or configuration of the motif and/or the different anatomical parts) and proportions (the relationship in size or shape between the different parts of the body), size and mode of manufacture (technique and medium) (Domingo 2008). Changes in these patterns can indicate if it is a unitary scene or resulting from several additions. They can also be thoughtfully and purposefully introduced as indicators of socio-cultural differences or even hierarchy between the individuals depicted, playing with sizes, adornments, actions, and more.

Second, the relationship/s between motifs, as shown in patterns of composition, is important. Since 'art' is a means of communication, it is unlikely the compositional patterns are at random, but regulated by cultural and behavioural constraints and the nature of the message being communicated. Therefore, patterns of composition (animation, distribution, additions and superimpositions) can also be culturally meaningful (see Domingo 2008). The first step was to determine if it is a non-scenic composition or a narrative scene (i.e. two or more motifs performing a common action, with certain internal coherence). A scene reflects an action,

usually with a defined time, that can be described even if the meaning and theme are unknown. It does not necessarily have to be produced in a single event, but could result from several visits to the site, so the degree of stylistic homogeneity of the motifs will reveal if the scene was of unitary or diachronic execution. Our aim was to determine if the patterns of composition observed in the selected 'scene' provide any information to deduce the subject matter and certain socio-cultural practices.

Third, we explored the relationship between the site, context, and the paintings. Part of this study focused on the question of whether the site was selected on the basis of its shape, location, dimension and/or embossing, and whether the wall acts as a frame or its morphology is used to reproduce the scenery. It is essential, therefore, to analyse the surroundings to determine if the scenery depicted is imaginary or if it reflects any of the features of the surrounding landscape.

Finally, the relationship between the paintings and the archaeological remains located in the surroundings was important for this study. Rock art in western Arnhem Land has been created and used for different purposes and contexts: public and private, sacred or profane etc., and the archaeological context can provide insights into meaning and function of the images depicted. However, even if motifs, scenes and compositions can provide insights into socio-cultural practices, sometimes compositions are known to have metaphorical dimensions (Lewis-Williams 1981). Consequently the study of place and context will be key to the interpretation of the subject matter and any other possible interpretations of the action depicted.

Ethnographic research was another important



Figure 3. Close-up of the rock painting 'scene'.

element in this study and was largely undertaken after the aforementioned archaeological research. Our aim was to contrast the results of a merely archaeological analysis with the information provided by local Indigenous people. This ethnographic research combined a review of previous anthropological research in the region and discussions with local Indigenous artists and/or elders including Wilfred Nawirridj, Thompson Yulidjirri and Garry Djorlom. The digital tracings previously produced were important for these discussions primarily because (a) it allowed groups to discuss the 'scene' away from the site, particularly elders who were unable to access the site; and (b) it provided a clear and accurate representation of the 'scene' making it easier for a wide-range of people to see and discuss.

Our method for obtaining interpretations for rock art is based on ten years' experience working in western Arnhem Land and includes no prompting on the part of the researchers as this may influence the participant's interpretation. Participants are not told of any alternative interpretations if we have previously recorded them. While we acknowledge that there could be other interpretations for these painted dots and the 'scene' in general, we are confident we have spoken with one of only two people in western Arnhem Land (Lofty Bardayal Nadjamerrek being the other) who spent time with rock painters during their youth. In particular, Thompson was raised and travelled the country, participating in rock painting and associated activities with famous artist Paddy Namatbara Compass (see May 2006: 205).

### The archaeological interpretation of rock art

The first step in our study was the interpretation of the rock paintings by visually describing the motifs and patterns of composition in order to deduce the subject matter and any sort of social information that can be

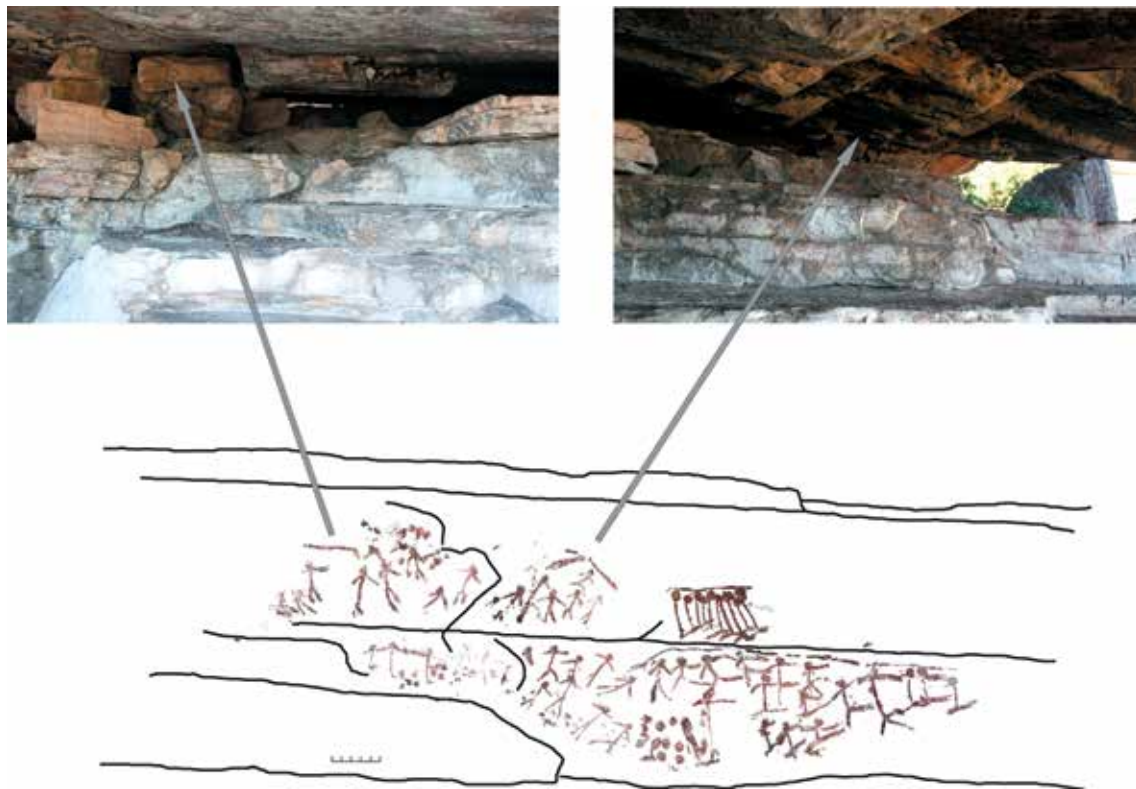
read from those patterns. In total fifty-two anthropomorphs are represented, a series of dots grouped together in specific parts of the panel are depicted, an elongated object in the centre that is associated with the painted dots, and finally, several lines surrounding the different groups of people integrate the 'scene' (see Figs 1 and 3).

Considering their size and formal features (anatomical modelling and proportions), there is no evidence of hierarchy or any other form of social differences (status, age or gender) among the anthropomorphs, since they are quite homogeneous and lack

any kind of anatomical detail or adornment that could point to specific social groups or individuals. Differences are only evident in the degree of individual animation (the analysis of the movement as it is suggested by the postures of the different anatomical parts, in themselves and in relation with each other – see Leroi-Gourhan 1983) and their location in the panel, which is directly related to the role they play in the action. Therefore, in this specific 'scene', the patterns of composition are the more likely to give us insights into social and cultural activities.

The action apparently depicted takes place over two parallel levels combining horizontal and oblique planes, perhaps to create some sense of perspective. At the same time the human-like figures are split into several smaller groups performing different activities. To create visual division of groups the artist resorted to the narrow juxtaposition of groups of individuals. Only in one case, in the group located on the right top, partial superimposition is used as a formula to show some sort of group perspective and cohesion. The division of groups is also emphasised by using the natural fissures of the rock, and by painting several lines surrounding or framing some of the groups. As will be discussed later, these lines may be reproducing the landscape where the action develops (Fig. 4). These different groups, which are arranged together in a 'convergent composition', seem to direct the attention of the viewer to a central focus, hence providing an important clue as to the interpretation of the scene and depicted activities. One individual appears to be lying down in the centre of the groups or, alternatively, the figure could be part of a circle of people in the centre of the scene.

The postures or animation of the individuals are clearly related to their role in the action. There is an apparent difference between the groups on the right, with very dynamic postures (perhaps suggesting some



*Figure 4. The landscape surrounding the rock painting 'scene', as seen by the original artist/s.*

sort of dance), and the groups on the left, with a less active role in the scene. Further to this, the three groups on the top left remain standing as apparently passive observers, overlooking the activities performed on the bottom. The different groups on the bottom left seem to walk on a descendent plane towards an individual who could be lying down or could be part of a circle of people. Finally, the groups on the right are depicted in dynamic positions suggesting some sort of dance.

This spatial distribution appears to be planned by the artist in order to reflect a specific social-cultural event, and perhaps certain social behaviour regulating the role of individuals in an important gathering. At this stage, and taking into account the action developed and the presence of an individual who appears to be lying down, we considered that the scene might be depicting activities relating to death. The painted dots located in the central and left sides of the scene baffled us, but due to the nature of the 'scene' we considered them likely to be representing some type of object or food used in the context of this kind of gathering. The next step in our research was contrasting this initial reading, with the data provided by the archaeological context and ethnographic information.

#### **Rock art in context: the archaeological and spatial surroundings**

The analysis of the spatial and archaeological context provided further information for the interpretation of the scene. First, the visual examination of the physical features of the rockshelter from the point of view of the artist (the point where the artist stands or is seated to

produce the painting), suggests that the artist depicted the landscape visible from that position (Fig. 4). The individuals represented in the scene are standing on different baselines that may indicate that, if depicting an actual event, the scene was taking place on an irregular or echeloned platform similar to the one of the shelter (Fig. 1). The shape of the lines over the groups on the left top evoke the form of the ceiling as viewed from the point of view of the artist (Fig. 4). Similarly, the horizontal line dividing the groups on the right could also be reproducing some features of the landscape. However, whether the artist was just inspired by the features of the shelter to create an imaginary scene or the scene was actually performed in this specific shelter, before or during the creation of the scene, is something difficult to know.

The archaeological context adds new data to the interpretation, since immediately behind the painted panel, no more than 10 metres away, several secondary burials are still in situ, pointing again to activities relating to death. At least one of these individuals is associated with World War Two Australian Army fabric. The identity of these individuals is today unknown. These skeletal remains represent typical rockshelter secondary interments in western Arnhem Land, with red-ochred bones having been wrapped in paperbark, or more recently fabric, and deposited at the back of rockshelters.

It is important to note, however, that there is no material evidence to prove that the 'scene' of interest in this study is related to these human skeletal remains. It does raise some interesting questions though: was

the 'scene' depicted in the context of cultural activities related to death? Or was the artist simply inspired by the presence of burials in the surroundings? Our hope was that the discussions with local Indigenous people would help to answer these, and other, questions relating to the paintings. It is important to note that Indigenous people living in western Arnhem Land maintain strong cultural traditions that have been in existence for thousands of years. Ceremonies relating to death, initiation, trade and other concerns continue today. This is important when considering archaeological evidence dating from earlier time periods and when using modern-day discussions with Indigenous groups to interpret these aged paintings.

### The ethnographic information

Ethnographic information confirmed that the patterns of composition were embedded with meaning relating to the social and cultural behaviour of the people depicted in the scene. Local Indigenous cultural practices, social structure and rules of behaviour are regulated by cultural laws governing the role of the individual in the society and can change during the different stages of a person's life. Depending on age, status, gender and kinship, individuals have different roles in the cultural activities. These rules regulate who can assist with the ceremony and the role that each individual plays in the activities (see May 2008). As a result, local Indigenous people today can interpret the socio-cultural activities taking place in rock art scenes or, in other words, can give us a greater insight into the nature of the events taking place (see also Domingo and May 2008).

Together with the interpretations of the 'scene' as an activity relating to death, another possible interpretation arose based largely on the presence of a person seemingly lying down in the context of a gathering. The ethnographic record provides considerable public information about ceremonial activity relating to death and other ceremonial activities and the role of individuals in them and we will now turn to a discussion of this available information. It is important to note that many aspects of ceremonial life in western Arnhem Land remain private or secret and only 'public' aspects of ceremony are discussed in this paper.

Kunwinjku-speaker Wilfred Nawirridj was the first person involved in the discussions about this painted 'scene'. Although the discussions took place at the site, the digital tracings were used to facilitate the visualisation of the scene, since the dark background makes it difficult to recognise the motifs and the actions performed (see Fig. 3). Again, the individual in the centre of the action, but also the dancers around, were key for him interpreting the 'scene' as a ceremony possibly related to death. Wilfred also pointed to the lines depicted on the top of some motifs as representations of shelters (and therefore a representation of the landscape where the action took

place), and the possible connection with some of the actual burials located within metres of this painting.

A discussion with elder Thompson Yulidjirri was conducted in his camp, since the sites are too difficult for him to access anymore. The digital tracing (in actual size) was the main tool used during this discussion. Thompson immediately recognised the 'scene' and knew the exact location of the site. Injalak has, in the past, been a home for Thompson and his relatives. His family would camp at two of the larger shelters on the hill during the wet season. The use of Injalak during the wet season has also been noted by other community elders such as Jimmy Galareya Namarnyilk and Esther Manakgu. In the recent past each of these people camped with their families rather than directly participating in the Oenpelli Anglican Mission located near to the base of the hill. They were not alone and often large numbers of people with their families were living on Injalak at the same time. The rock paintings must have been as familiar as framed pictures on a bedroom wall. As Indigenous elder (now deceased) Bobby Nganjmirra stated (in Taylor 1996: 18-19):

My grandfather and grandmother see rock painting in a big cave, they see that rock painting and then teach me same way. See those pictures now, the proper way. Father said 'you try paint plain Kangaroo, just practice'. Father watched me do it. It's a bit rubbish. I was a young boy like Alexander [his son aged eighteen]. It's the first time I painted. I painted some more on rock back home. Then I paint on bark ... Old time law is to paint cave where living to make people happy. All painting around here belong to this country to make happy. When I first living at Inyaluk [Injalak], just wearing cockrag [pubic covering] then. Lots of families from this country up here living in different caves. I didn't belong here, just living with my uncle Frank [Frank Nalorman]. He used to be a shepherd for goats and didn't want to see Paddy Cahill [a white buffalo shooter who settled on the plains below the rockshelter and began a dairy]. We came for tobacco and other things and always stayed with my uncle when we did.

Just as access to knowledge relating to ceremony is restricted, access to knowledge of rock paintings was/is also strictly regulated. Luke Taylor (1996) has shown that paintings are often imbued with 'inside' knowledge that artists rarely desire to communicate with non-initiated individuals. For example, Taylor (1996: 89) describes the situation for paintings of 'Mimih'.

A common way of disguising the fact that a painting relates to an inside story is by saying the characters are 'just *mimih* and not *djang*'. However, another level of consistent narrative can be read from such paintings by those familiar with the stories of ceremony. *Mimih* stories are freely told to children, yet the correspondence between such outside stories and more inside stories is a means of structuring the transmission of knowledge.

Our discussions with elder Thompson Yulidjirri

were extremely valuable in terms of understanding this rock painting 'scene'. Thompson believes that the painting may represent part of an initiation ceremony, which still takes place in western Arnhem Land. He also suggested that the knowledge relating to the actual events taking place in the 'scene' was restricted or, in other words, only initiated people would understand the meaning, as per Taylor's explanation above. The 'public' or 'outside' information for this 'scene' includes the fact that it is an initiation ceremony for a young man, often referred to as *Kunabibi*.

According to Taylor (1996: 114-5), *Kunabibi* and *Yabbadurruwa* are conceived as paired ceremonies in western Arnhem Land. These two ceremonies 'stress the reciprocal social role of patri-moiety groups, since the Yirridja patri-moiety is said to own the *Yabbadurruwa* and the *Duwa* the *Kunabibi*'. This information has a major implication for the interpretation of this 'scene', since according to Thompson Yulidjirri it may represent the *Kunabibi* ceremony, which means a *Duwa* ceremony, that can only be performed on Yirridja land.

According to the public information available about current Indigenous ceremonies, the role of the individuals in a ceremony depends on their semi-moiety (*Duwa* or *Yirridja*). Both groups are vital to the performance of any ceremony, and a single group alternates between owning and managing roles according to the ceremony which is performed (Taylor 1996). This may account for the fact that half of the people involved in the action depicted in this scene appear as observers, while the other half play a more active role. Taylor (1996: 114-5) adds '[w]hile the owning group provides the principal dancers, the other patri-moiety group performs the essential managerial tasks of preparing the ceremonial grounds and sacred objects'. He also mentions that during the ceremonies the initiates are taught the songs and shown the dances for a great variety of Ancestral Beings according to their semi-moiety, which would explain the importance placed on the dance (and implicitly songs and music) on the right side of the 'scene'. Finally, these ceremonies are attended by a large number of individuals from widely dispersed areas. Therefore, the different degree of involvement and participation of the groups of individuals may reflect the association in two parts of the panel of groups with the same semi-moiety, divided into smaller groups according to their origin or the rules regulating the kinship system.

Thompson Yulidjirri highlighted the presence of food in the scene and, specifically, stated that the painted dots represented yams. Such food plays an important role in the context of ritual ceremonies that can run for weeks and months. There are at least eight types of yam found and used in western Arnhem Land, including the round yam, *anginjdek* (*Dioscorea bulbifera*), and the long yam *garrbarda* (*D. traversa*). The plant is dormant during the dry season, commencing an intensively active growth cycle at the beginning of the 'wet season' (a period of intense rain). Given their

importance as a food source during parts of the year, it is little wonder they also fulfil a ceremonial role and feature in songs and dances from the western Arnhem Land region. The elongated object in the centre of the scene was also highlighted by Thompson as part of the ceremony but no further details can be discussed.

### Conclusion: the social context of rock art

Furthermore, a common feature of recent rock art in areas where informed Aboriginal knowledge is obtainable, indeed, a common message, is that it in some way reflects the group identity of the markers, whether it be clan, linguist or some other (Taçon 1994: 118).

As for any component of material culture, rock art is more than a material object, since during the process of production and consumption it is embedded with a wide range of socio-cultural practices. As archaeologists we are rarely interested in the paintings themselves as objects of the past, but in the socio-cultural information that these images can provide. Our aim in this paper has been to explore the extent to which social information can be encoded in rock paintings through one case study, and to question how this information can be understood (where culturally appropriate), through combining the archaeological study of the painting with the analysis of the archaeological and ethnographic context. The debates about the use of ethnographic information to interpret ancient rock art have been discussed elsewhere (Rosenfeld 1997; Layton 1992 and 1996, among others) and are not central to this paper. However, this case study provides a good example of how ethnographic information can be used as a medium to test archaeological methods for studying rock art. While the archaeological analysis of the rock paintings has been useful for assisting with the interpretation of this particular 'scene', the ethnographic information has also allowed us to begin to understand the complex social rules and regulations apparently depicted within the 'scene' as well as surrounding the interpretation of these types of paintings in western Arnhem Land. It has been argued that scenes, such as the painted 'scene' discussed in this paper, play a more commemorative and historic role in the visual cultures of western Arnhem Land (Taçon 1989b: 322). With this in mind, our aim is to continue to explore the emergence and development of this specific type of painting in western Arnhem Land.

### Acknowledgments

We would like to thank the Gunbalanya (Oenpelli) community and especially Injalak Arts and Crafts Association for their support of our rock art research over the years. Thompson Yulidjirri, Jimmy Galareya Namarnyilk, Esther Manakgu, Wilfred Nawirridj, Garry Djorlom and Gabriel Maralngurra provided extra assistance with this study and we thank them for their generosity and patience. We would also like to thank our two RAR referees for their feedback on this article and their encouragement to further expand on this research area in the future. Finally, we would like to

acknowledge our own institutions, the Australian National University and University of Valencia as well as Flinders University, for their support of our rock art research.

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Final MS received 21 September 2009.

## REFERENCES

- BRANDL, E. J. 1973. *Australian Aboriginal paintings in western and central Arnhem Land: temporal sequences and elements of style in Cadell River and Deaf Adder Creek art*. Australian Aboriginal Studies 52, Prehistory and Material Culture Series 9, Australian Institute of Aboriginal Studies, Canberra.
- CHALOUKKA, G. 1977. Aspects of the chronology and schematisation of two prehistoric sites on the Arnhem Land Plateau. In P. S. Ucko (ed.), *Form in indigenous art: schematisation the art of Aboriginal Australia and prehistoric Europe*, pp. 243–259. Australian Institute of Aboriginal Studies, Canberra.
- CHALOUKKA, G. 1984. *From palaeoart to casual paintings*. Monograph 1, Northern Territory Museum of Arts and Sciences, Darwin.
- CHALOUKKA, G. 1993. *Journey in time: the world's longest continuing art tradition*. Reed, Chatswood.
- CHIPPINDALE, C. and P. S. C. TAÇON 1993. Two old painted panels from Kakadu: variation and sequence in Arnhem Land rock art. In J. Steinbring, A. Watchman, P. Faulstich and P. S. C. Taçon (eds), *Time and space: dating and spatial considerations in rock art research*, pp. 32–56. Occasional AURA Publication 8, Archaeological Publications, Melbourne.
- CHIPPINDALE, C. and P. S. C. TAÇON 1998. The many ways of dating Arnhem Land rock-art, north Australia. In C. Chippindale and P. S. C. Taçon (eds), *The archaeology of rock-art*, pp. 90–111. Cambridge University Press, Cambridge.
- DOMINGO SANZ, I. 2008. From the form to the artists: changing identities in Levantine rock art (Spain). In I. Domingo Sanz, D. Fiore, and S. K. May (eds), *Archaeologies of art: time, place and identity*, pp. 99–129. Left Coast Press, Walnut Creek, CA.
- DOMINGO SANZ, I. and E. LÓPEZ MONTALVO 2002. Metodología: el proceso de obtención de calcos o reproducciones. In R. Martínez and V. Villaverde (co-ord.), (in collaboration with P. M. Guillem et al.): *La Cova dels Cavalls en el Barranc de la Valltorta*. Monografías del Instituto de Arte Rupestre 1, pp. 75–81, Generalitat Valenciana, Tírig.
- DOMINGO SANZ, I. and S. K. MAY 2008. La pintura y su simbología en las comunidades de caza-recolectores de la Tierra de Arnhem (Territorio del Norte, Australia). In J. Salazar, I. Domingo, J. Azkarraga and H. Bonet (co-ord.), *Mundos tribales. Una visión etnoarqueológica*, pp. 78–91. Museu de Prehistoria, Valencia.
- DOMINGO SANZ, I., D. FIORE and S. K. MAY 2008. Archaeologies of art: time, place, and identity in rock art, portable art, and body art. In I. Domingo Sanz, D. Fiore, and S. K. May (eds), *Archaeologies of art: time, place and identity*, pp. 15–28, Left Coast Press, Walnut Creek, CA.
- LAYTON, R. 1992. *Australian rock art: a new synthesis*. Cambridge University Press, Cambridge.
- LAYTON, R. 2006. Habitus and narratives of rock art. In J. Keyser, G. Poetschat and M. W. Taylor (eds), *Talking with the past. The ethnography of rock art*, pp. 73–99. The Oregon Archaeological Society, Portland, OR.
- LEROI-GOURHAN, A. 1983. *Los primeros artistas de Europa*. Ediciones Encuentro, Madrid.
- LEWIS, D. J. 1988. *The rock paintings of Arnhem Land, Australia: social, ecological and material culture change in the post-glacial period*. British Archaeological Reports, International Series S415, Oxford.
- LEWIS-WILLIAMS, D. 1981. *Believing and seeing: symbolic meanings in southern San rock paintings*. Academic Press, London / New York.
- MAY, S. K. 2006. *Karrikadjurren — creating community with an art centre in indigenous Australia*. Unpubl. PhD thesis, Centre for Cross-Cultural Research, Australian National University.
- MAY, S. K. 2008. Learning art, learning culture: art, education, and the formation of new artistic identities in Arnhem Land, Australia. In I. Domingo Sanz, D. Fiore, and S. K. May (eds), *Archaeologies of art: time, place and identity*, pp. 171–194. Left Coast Press, Walnut Creek, CA.
- MOUNTFORD, C. P. 1956. *Records of the American-Australian scientific expedition to Arnhem Land 1: Art, myth and symbolism*. Melbourne University Press, Melbourne.
- ROSENFELD, A. 1997. Archaeological signatures of the social context of rock art production. In M. Conkey, O. Soffer, D. Stratmann and N. G. Jablonski (eds), *Beyond art: Pleistocene image and symbol*, pp. 289–300. Memoirs of the California Academy of Science 23, University of California Press, San Francisco, CA.
- TAÇON, P. S. C. 1989a. From Rainbow Snakes to 'x-ray' fish: the nature of the recent rock painting tradition in western Arnhem Land, Australia. Unpubl PhD thesis, Australian National University.
- TAÇON, P. S. C. 1989b. From the 'Dreamtime' to the present: the changing role of Aboriginal rock paintings in western Arnhem Land, Australia. *The Canadian Journal of Native Studies* 9(2): 317–339.
- TAÇON, P. S. C. 1994. Socialising landscapes: the long-term implications of signs, symbols and marks on the land. *Archaeology in Oceania* 29: 117–129.
- TAÇON, P. S. C. and C. CHIPPINDALE 1994. Australia's ancient warriors: changing depictions of fighting in the rock art of Arnhem Land, N.T. *Cambridge Archaeological Journal* 4(2): 211–248.
- TAYLOR, L. 1996. *Seeing the inside: bark painting in western Arnhem Land*. Clarendon Press, Oxford.