



## Introduction

### BEHIND THE SCENES

#### Did Scenes in Rock Art Create New Ways of Seeing the World?

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### Introduction

One of the motivations for this collection of papers was articulated by one of us in an earlier publication that was an exploration of Paleolithic images of animals (Davidson 2017a, 22):

It seems likely that there is an argument to be developed here about the emergence of the ‘Western’ styles of scene representation (which is by no means confined to Western rock art traditions). Just as the emergence of naturalism through the application of perspective is said to have created new ways of representing and seeing the world during the European Renaissance, so changes in the ways images of animals were represented with other animals probably testify to changes in the ways people saw the world.

The initial intent was to explore the question of scenes in the Paleolithic broadly, but then the question was expanded to include rock and cave art from later periods. It has been traditional to state that there are few representations of scenes in the Upper Paleolithic Cave art of Western Europe. Davidson (Ch. 1) reviews some of the ways the absence of scenes in Paleolithic art has been represented in textbooks over the last sixty years or more. In general, it has persistently proved to be true that scenes do not appear to be common in the art on the cave walls. On the other hand, Davidson (Ch. 1), Culley (Ch. 12) and Villaverde (Ch. 15) demonstrate that the view is distorted by the concentration on cave art to the neglect of portable art that is contemporary with it. Van Gelder and Nowell (Ch. 13) show also that the distortion derives from emphasizing representations of animals at the expense of other markings on the cave walls. When attention is turned to images engraved on bones or on plaquettes of stone or to more nuanced understandings of what constitutes a scene, scenes are not so rare. This suggested that the presence or absence of scenes might help reveal how the image making was used by the societies of the artists. Importantly, recent work by Fritz, Tossello, and Lenssen-Erz (2013) has addressed the problem of the lack of conventional scenes in cave art, identifying some instances where animals seem to have been represented with the ground on which they would be seen.

The project, then, had its beginnings with one particular definition of how a scene might be recognized and has morphed, through the successive definitions by different authors in the book, into a broader discussion of scenes in rock art. The hope is that our broadening can contribute to correcting ideas about scenes that took hold early and have persisted despite general knowledge of exceptions that proved those ideas wrong. Kelly and David (Ch. 4) outline one history of the concept of scenes in rock art, and Lenssen-Erz and colleagues (Ch. 6) also address that history.

Rock art is often said to be universal among modern humans, though it is slightly more difficult to define “universal” and to document that. The book includes material from a period of sixty thousand years and from six continents (Figure 0.1). It includes contributions from Europe (Davidson, Ch. 1; Culley, Ch. 12; Villaverde, Ch. 15; Domingo Sanz, Ch. 16; Van Gelder and Nowell, Ch. 13; Alexander, et al. Ch. 17), Asia (Brusgaard and Akkermans, Ch. 9; Karimi, Ch. 7; Dubey-Pathak and Clottes, Ch. 8), Africa (McCall et al, Ch. 5; Lenssen-Erz et al, Ch. 6), Australia (Ross, Ch. 10; Domingo Sanz, Ch. 16; Kelly et al., Ch. 11),

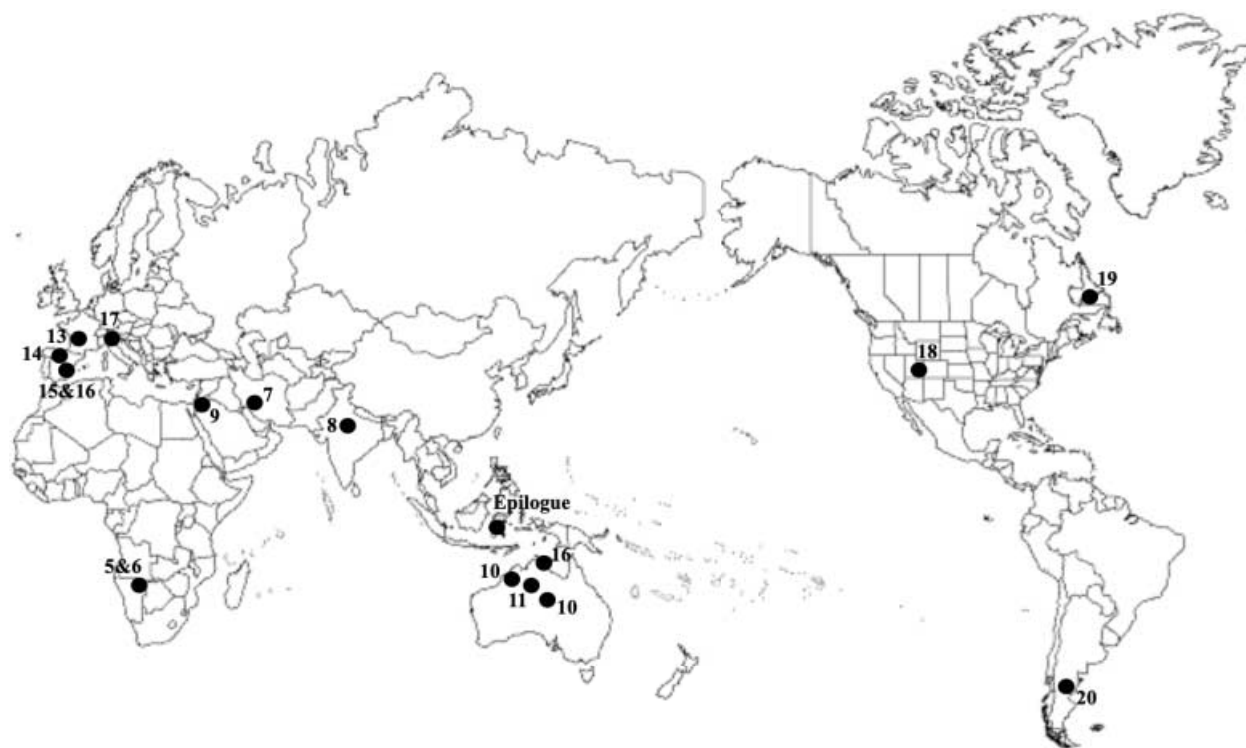


FIGURE 0.1. Map showing dots for the location of chapters (by number) that have a regional focus.

North America (Spangler and Davidson, Ch. 18; Tapper and Moro, Ch. 19) and South America (Aschero and Schneier, Ch. 20). If nothing else, this account emphasizes the gaps in the coverage (e.g., Europe [other than France and Iberia], East and Southeast Asia, Africa beyond the south, northern South America), which is a good thing. We sought to fill some of these gaps, but for a variety of reasons the authors we invited to achieve this were unable to contribute to this volume.

The necessary place to start is with considerations of the definitions of scenes in rock art. Most authors devote some space to this task, while some address it more explicitly. Once a definition has been established, there remains the question about how it is possible to interpret the significance of scenes in rock art in so many parts of the world, when the images were generated by so many people and so many cultures that have not survived. Rather than accepting that there are universal trends in the evolution of production of images, given the great diversity of location, culture and time, we must begin by trying to interpret particularities. Jean Clottes (2009) introduced a framework for looking at the meanings of rock and cave art, and Davidson (2012b) expanded it. This extended framework shapes this introduction to the volume. Finally, the question of whether the book contributes to an assessment of the role of scenes in people's perceptions of the world will be for others to judge, but we conclude this introductory essay with some consideration of that question.

## Definitions of Scenes

Davidson's (2017a) initial attempt to think about scenes produced a classification of different combinations of images that is reproduced to some degree in Chapter 1 and discussed again by Spangler and Davidson in Chapter 18. Others have used other definitions, and these are introduced in this section. Davidson (Ch. 1) introduced a definition that might be seen as a minimal one:

a scene can be identified from a set of images in spatial proximity to each other from which, without any knowledge other than the images themselves, an observer can infer actions taking place among the actors represented in the images.

This definition, in all its simplicity, may miss the point made by Livio Dobrez (Ch. 2) that there could be circumstances in which an individual image constitutes a scene, an argument well summarized by Karimi (Ch. 7). Similarly, Kelly et al. (Ch. 11) give examples of what they regard as individual images that constitute scenes. That claim is easier to accept when there are living informants, or cultural knowledge derived from them, to address the meaning of images, but for images beyond living memory or oral history of their production, such interpretations will always be difficult. The richness of the ethnography available to Kelly et al. can seduce the observer into thinking that all rock art everywhere involved similar relationships between images, sites and landscapes. That may be true, but one of the functions of archaeological analysis is to use the evidence of the material remains to understand how such relationships came about. Several authors define what they mean by scenes. We collect some of those definitions here, but rather than try to produce a synthesis of what a scene “is,” we recognize that a workable definition will depend on the cultural context within which a researcher is working and on the questions asked—which only means that it would be confusing for readers to allow the authors to proceed without specifying a definition.

Villaverde (Ch. 15) cites Delporte’s (1981) five-part scheme of what does and does not constitute a scene:

1. *chance or accidental association* (more common in cave art assemblages and on portable art pieces, and which entails an accumulation of different animal species within the same graphic space without obvious stylistic or thematic connection);
2. *repetitive superimposition* (where various animals of the same species share a graphic space, but cannot be interpreted with certainty as representing a herd or group, that is to say, they cannot be identified as a scene);
3. *narrative association*, or what could be termed as the configuration of a scene given that the individuals represented are taking part in a shared activity such as in scenes of hunting or mating;
4. *geometric association* (typically friezes where animals are often shown in line, or confrontations where the same or different species are shown opposed to each other. Both of these might be interpreted as scenes—the friezes as migrations of animals, and confrontations may be typical of fights between males of certain species during the rutting season); and
5. *thematic association* (rare examples in which the action cannot be specified, even when the intentionality of the artist is clear).

Villaverde concludes that scenes can only be identified if there is evidence of “discernible and identifiable action.”

Livio Dobrez (Ch. 2) discusses what he believes is “the most fundamental idea of a scene as a perceived event . . . [and] the necessity of tying [a] depicted event firmly to a real event.” Importantly, he documents the neurological evidence that brains react similarly to their perceptions of both an event and the depiction of it. He argues that there are universal characteristics through which scenes can be interpreted.

Patricia Dobrez (Ch. 3) tackles the thorny question of cross-cultural expectations by contrasting the unreflective judgments of Western-oriented anthropological observers Spencer and Gillen among the Aranda with an example, also from the Aranda, described by Basedow (this example is also discussed by Ross in Ch. 10). Where Spencer and Gillen had said that there were no scenes in Aranda art, Basedow found them in a plan view of the traces of an event—an emu hunt—defined by the footprints of the animals involved.

Kelly and David (Ch. 4) engage in a search for definitions of scenes in a number of art and archaeology works, finding a scarcity of such definitions, which should be considered surprising. The chapter discusses the definitions by Dobrez (2011) and Lenssen-Erz (1992), whose more recent considerations are contained in Chapters 2 and 6 of this book, respectively. Kelly and David point out that formal definitions of scenes and the ways in which they mediate narratives through imagery tend to be biased toward Western visual conventions. They argue that in many places, there is indigenous knowledge that interprets the local rock art in ways that differ from those of naïve Western observers. While recognizing that those indigenous cultures may have “changed considerably since the art was made,” Kelly and David argue that the art carries special meaning to local people who do not engage with the Western traditions of interpretation; hence, the indigenous knowledge should not be ignored. This stands in contrast to Livio Dobrez’s assertion of universalist characteristics. It may also undermine any criteria by which Davidson (Ch. 1) proposes to identify agency in the images.

Lenssen-Erz and his colleagues (Ch. 6) take a slightly different approach. Lenssen-Erz (1992), who has been working on the problem of scenes for more than a quarter of a century, has concluded that there is little agreement on the definition of a scene, but recognizes that narration is an important part of some defi-

nitions. Therefore the authors review another set of definitions in Chapter 6 to identify scenes, interaction of figures, and narratives, along pragmatic lines.

Ross (Ch. 10) makes a further point about the composition of scenes, observing that it is important to consider whether the scene was composed substantially in a single episode. She documents a panel in the Kimberley region where the unity of composition can be established through detailed chemical analysis of the ochres. That contrasts with an analysis by Villaverde (Ch. 15), who describes how he can document panels where an apparent scene was created by separate images produced at different times.

Alexander and colleagues (Ch. 17) approach the definition of scenes from first principles, beginning with definition of “figures” (rather than images) and going on to recognize clusters of figures, and then figures in array, in graphic designs and in scenes, and finally a narrative. In a further elaboration of the question about the reasons why images might be clustered on a panel, the authors suggest that the prior use of a panel to produce figures might itself have attracted the production of others.

## The Studies in This Volume, Considered within the Framework of Meanings

In what follows, we consider the framework used by Jean Clottes (2009) and Davidson (2012b) to organize our discussion of the chapters in the book. First, all rock art studies deal to greater or lesser degree with the question of the content of the art itself, and, second, in seeking to go beyond the empirical towards an understanding of meaning, many rely on knowledge of ethnography that is either local to the art sites (Vinnicombe 1976) or gleaned from some supposed association with ethnography from elsewhere (Clottes and Lewis-Williams 1998). There have been two extreme positions about rock art studies: (1) that it is the specialty of those who are interested only in the rock art and their views of how it was used; and (2) that rock art is primarily of interest as art. The studies in this volume avoid these extremes and, in the third part of the framework, attempt to relate the art and the sites where it occurs to the archaeology that was contemporary with its production. The fourth and fifth approaches, which are fundamental to this book, concern how the rock art relates to the evolution of behavior in a particular region and how rock art varies between regions in relation to evolving behavior.

### *Scenes as Products of “the Art Itself”*

It is fundamental to the approaches in this volume that the first element of the framework of analyzing rock and cave art is to look at the art itself. Lenssen-Erz and his colleagues (Ch. 6) exemplify this approach. It is formal and analytical, and has involved mining painstakingly documented data from more than seventeen thousand painted figures in Namibia. This empirically driven approach epitomizes the identification of scenes from “the art itself.” One point that emerges from their analysis is that most scenes show cooperative interactions among people, and that the scenes where humans and animals interact are not explicitly of hunting.

Scenes in rock and cave art may involve images of interactions between animals or between humans, between humans and animals, or more rarely, between animals and their environment. One approach has been to discuss the associations and juxtapositions of the individual images in a grouping (e.g., Davidson 2017a), an approach used by Spangler and Davidson (Ch. 18). Further examination of the issue in this volume renders this approach insufficient. Not only do scenes in rock and cave art involve different ways of considering combinations of animal images, but they also concern interactions or other connections between humans and other animals, as shown, for example, in Iran in the chapters by Karimi (Ch. 7), and by Brusgaard and Akkermans (Ch. 9) in Jordan.

One question that merits discussion is that of what is and what is not depicted. In general, rock art depicts little of the environment of its agents. In most of the imagery at issue here, especially that involving animals, there is very little attempt to portray the animals in a context of landscape or vegetation (see discussion of “Features of Landscapes” in Davidson 2017b). In most places there was little representation of plants, whether in landscapes or separately, except for one well-documented case in Australia (Veth et al. 2018). This observation can lead to somewhat false comparisons between post-Renaissance Western art and rock

and cave art, because surveys of the more recent art have not concentrated on the rather more fundamental issues that preoccupy scholars studying rock and cave art. Both landscape and vegetation have featured in European art for two thousand years, and with particular realism for six hundred years. This really is a distinctive difference from rock and cave art. Furthermore, there also exist images of people and animals that are not placed in a context of either landscape or vegetation, which might be considered a similarity with the subject matter of rock and cave art. Still, it may be better to point to the diversity of content of post-Renaissance art, rather than concentrate on the different approaches to the context of landscape or vegetation.

Identification of scenes is relatively simple in some rock art: some combination of animals and humans appear to be interacting with each other. This would apply to Karimi's (Ch. 7) discussion of hunting scene petroglyphs from Iran, leaning heavily on recognition criteria defined by Dobrez (e.g., 2011, 2012). Karimi also points out that some other group images do not qualify as scenes. Brusgard and Akkermans (Ch. 9) describe textual and pictorial petroglyphs, including scenes of hunting, conflict, combat, and interactions between animals such as mating and nursing. There are different categories of scenes, depending on whether or not humans are represented.

Villaverde (Ch. 15) considers art from two different contexts in eastern Iberia: the Paleolithic art on plaquettes (also referenced by Davidson, Ch. 1) and the later Levantine rock shelter art (also referenced by Domingo Sanz, Ch. 16). Villaverde (Ch. 15) presents evidence of scenes found on stone plaquettes from Parpalló, in eastern Iberia. He makes the important point that these scenes are limited, as if they were "snapshots of a well-known ethological reality" without any sense of the past or the future of the animals involved. A similar argument could be applied to the "swimming reindeer" scene from Lascaux (Aujoulat 2004, 177, 180-82) and may therefore be generalizable more widely to other European Paleolithic art. When Villaverde turns to Levantine art, he finds a much more episodic representation involving animals, people and tracks.

Alexander and colleagues (Ch. 17) consider very large sets of rock art in Europe at Valcamonica in Italy and produce a hierarchy of definitions from first principles, beginning with "figure" (rather than the more generally used "image") and leading to "group" (but not composition). For these authors, "contiguous figure scenes" are recognized when they allow the viewer to "reasonably think" they reflect a "real-world spatial order." In other scenes, called "adjacent figure scenes," figures are juxtaposed to appear to oppose each other, as in a fighting or hunting episode—again appearing to reflect a real-world spatial order.

Aschero and Schneier (Ch. 20) offer a detailed analysis of the "Black Series" of paintings from Cueva de las Manos in Argentina, a site better known for its hand stencils. The paintings show people hunting guanaco using a set of weapons: the dart and spear-thrower, and two types of throwing stone or bola. They also reveal different tactics of the hunt, interpreted as driving the animals and intercepting them in traps created by the local topography.

These panels all involve quite conventional understandings of what a scene is. Others depict scenes with rather more nuance. McCall and colleagues (Ch. 5) describe a painted rock shelter in which rain drips onto paintings that are images appearing to be associated with rainmaking in other contexts. This led the authors to a nuanced understanding of the variation of scenes and non-scenes as elements of southern African rock art. Scenes, they argue, may refer to supernatural phenomena or to real-world historical events, or they may have been part of rituals meant to influence real-world events, or they may have been part of the repetitive rituals in specialized places. In this way, the authors seek to shift the discussion away from meaning (especially the restrictions caused by suggesting that shamanism is an explanation for everything [McCall 2007]) and toward inferences about social and ritual contexts of the production of art.

Utrilla (Ch. 14) discusses several recent discoveries that can be interpreted as representations of the landscape around sites, as if on a map. Many chapters show that this art was made in a context of some other archaeology situated in time and space. There might also be some convergence between the possible representation of maps and the account by Aschero and Schneier (Ch. 20) of the use of topography to guide the movements of prey.

Ross (Ch. 10) shows that even without appeal to ethnography, the art of the Kimberley in northwestern Australia has enough detail to show aspects of interactions between participants in ceremonies that would be unknown without the evidence of the art. The imagery can likewise be interpreted in terms of gender roles in social and economic activity. Significantly, this is a result of associations between the individual images, going beyond anything that could be inferred from individual motifs. The nuance appears when

Ross compares this art with art in Central Australia that is composed almost entirely of geometric and other non-representational images. As discussed below, when informed by the relevant ethnography, even these can be interpreted as scenes despite their minimal representational content.

Kelly et al. (Ch. 11), also discussing Australia, show that the mythology associated with rock art in the Wardaman region promises a much richer narrative than could possibly be derived from a study limited to the images themselves, whatever their interpretation as scenes. One of the reasons for this is that the associations among the images extend beyond individual sites to provide a mythological narrative about the whole landscape. It would be very difficult to create such an account based on the images alone, once the link between the images and the culture of the painters and storytellers has been broken.

In similar vein, Tapper and Moro (Ch. 19) describe the petroglyph tradition of eastern Canada and show how the choice of places and content relates to an ontology of shamanism and vision quests. In their view, much as with the Australian cases described by Kelly and colleagues, the scene does not consist of the images on the rocks alone but was included in the whole complex of places and social networks across the landscape.

Finally, on this topic, Van Gelder and Nowell (Ch. 13) introduce another element in the repertoire of scenes by looking at the finger flutings of Rouffignac Cave in France. These authors, who argued that these finger flutings were a common practice in the representation of scenes, discovered that there was repetition between fluted motifs, interaction between others, and a common practice of fluting production by different individuals in yet others. The flutings, therefore, represent by proxy the interactions between the individuals who made the marks on the cave walls.

### *Interpretation of Rock Art: How Can We Use Ethnography of Modern People, and Does the Presence of Scenes Make a Difference?*

Many years ago, Wobst (1978) argued that it is erroneous to assume that ethnographers are able to understand everything about a culture because they can ask questions of their informants. Wobst (1978) warned of what he called an informant's "worm's eye view." In other words, he argued that it is impossible for people to know everything about the culture in which they live. Some knowledge will remain inaccessible for social, religious, economic, or age- and sex-related reasons. All people, he continued, bring with them a particular agenda or bias or understanding of the world, which colors the information they share with anthropologists and archaeologists. The further away someone is (literally or metaphorically) from the behavior under study, the more stereotyped the response will be. Wobst makes a valid point. Nonetheless, contemporary or descendant communities remain an important source of information for archaeologists. Rock and cave art are seductive in that they seem to provide material for a narrative about the past that includes the representation of people interacting with animals, sometimes using the artefacts that can be found in the archaeology—but it can be a dangerous seduction. As the chapters here show, there is still plenty of room for selectivity in the subject matter of the art, exemplified by the attribution of scenes of hunting in eastern Iberian Levantine Art to the pastoral and agricultural Neolithic (Domingo Sanz Ch. 16). Thus it is difficult to understand the relationship between what was culturally salient generally and what was represented in the art. What was the cultural salience of rock art within the whole set of relationships of any particular culture? In the absence of consistency in such relationships, it can be adventurous to move from the modern ethnography back to the interpretation of the selected representations of the past.

Moreover, ethnographic accounts of artistic systems have revealed many layers of interpretation in some societies that use art as a means of introducing young people to important cultural knowledge (see, e.g., an Australian case [Morphy 1991] and the review of it in Davidson [1995]). Art is ultimately a system of symbols in which the meanings are not plainly matched one-to-one to the images, so attempts to use modern knowledge to interpret ancient art may be quite prone to fallacy. Moreover, as Davidson (2012c) has shown, long sequences of art production, where they can be matched with the archaeology from the same time periods, can, within a system of iconography that has not changed much, show significant changes of meaning—even if we cannot tell what those meanings were. That is, within the one system there can be cultural continuity and cultural differences through time.

Villaverde (Ch. 15) discusses the uses of ethnography, starting from the difficulty of translating from a known cultural context to another that is not known. In doing so, he recognizes the problems arising from

the occurrence of “scenes from different time periods, and social and economic contexts,” not just in the transfer from the modern ethnography to the past. Rather, as he deals both with Paleolithic art and with the post-Pleistocene Levantine art from more or less the same region, this is particularly important because the modern comparisons could apply to either of the non-modern contexts. Domingo Sanz (Ch. 16) has a different take on the same issue when considering those changes in the art from the same region: she appeals to her knowledge of the art and history of the Arnhem Land region of Northern Australia. The Aboriginal people of that region were invaded (at least) twice by outsiders, once from Sulawesi and once from Europe. Domingo Sanz points to changes in the art of both regions from an earlier predominant focus on the animal world to a later one where scenes of human interactions were more important. She suggests that the ethnographic evidence is valuable as a guide to the historical changes in the Iberian case, where the original fisher-hunter-gatherers of Paleolithic Iberia confronted invading farmers and agriculturalists.

Dubey-Pathak and Clottes (Ch. 8) document several sites in India with undoubted representations of scenes, often with images of musical performance. Such performances are well documented in the region. As musical instruments are known to have been in use since the early appearance of modern humans in Europe (Conard, Malina, and Münzel 2009), and given that cave art occurs at similar dates (Quiles et al. 2016), we might expect there would be scenes of people dancing or playing musical instruments in that earliest cave art. But there are not. The flute player engraved at Les Trois Frères in the Pyrenees has often been interpreted as an image of a person playing music, but such images are rare and do not appear to be part of scenes of people affected by (i.e., dancing to) music. However unsurprising it is that there are scenes of people dancing and playing music in this body of art, the big lesson from the Indian examples is that depiction of music playing is not a universal phenomenon. What stimulates and what constitutes a scene are still culturally determined in different ways in different contexts, temporally and spatially—an observation that tends to undermine the use of ethnographic analogies from culturally different societies. In similar fashion, Brusgaard and Akkermans (Ch. 9) state that while there are no scenes of music making in their study of rock art from the Jebel Qurma in Jordan east of Azraq, there are such scenes in other parts of the Black Desert. At Wadi Salmā northeast of Azraq, for example, there are images of people playing flutes, drums, and lyres (al-Manaser 2018). The lesson of these two examples may be that care is warranted when applying generalizations about rock art beyond the immediate context of production.

In support of the appeal to take indigenous approaches to rock art seriously, we recognize that there are many differences between scenes in Western art and almost all rock and cave art. We feel more comfortable appealing to a local ethnography than we would using assumptions deriving from more unexamined intuitions from our own cultural values. Clottes’s original list placed great emphasis on the ethnographic analysis of “hunter-gatherers elsewhere in the world,” an approach we have suggested needs to be treated with extreme caution because of the unstated assumptions about the applicability of remote ethnographies. Some authors, both in this volume and elsewhere, have leaned on ethnographic information more than others.

By the same token, while most authors have a background in archaeological research and acknowledge its problems with the weight of the history of investigation of art, it is always possible that the study of archaeological art may be undertaken by scholars with a background in art historical studies. This approach is represented here by separate studies by Livio Dobrez (Ch. 2) and Patricia Dobrez (Ch. 3). Art historical studies can have problematic intuitions of their own. The issue is always about the cultural difference between the producers of the art, with their conventions for selecting themes and styles of representation, and the modern observer, whose conventions differ from the artists’ own traditions, whether in archaeology or art history. Whether these different conventions are those of archaeological classification or those of a viewer imbued with the sophistication of interpreting modern art, both sensitivities are different from the cultural conventions of the original producers. The trap here is to think that the cultural conventions of modern people from the same region may have more in common with those of the producers of very old art. As one of us pointed out previously, being French had nothing to do with the reasons the Abbé Breuil had any particular insight into the twenty thousand-year-old cave art he studied in France (Davidson 1994). One of the objectives of archaeology is to document the cultural changes that have occurred between such remote pasts and the present.

Much rock art around the world has survived beyond the memories of the people who made it and the cultures they lived in, but some is still remembered in the oral traditions of ongoing cultural practice. Kelly,

David, and Flood (Ch. 11) discussed an example from Australia that involved multiple records of oral history collected over more than sixty years by multiple non-Aboriginal people. The indigenous perspective is that images from different sites made up a narrative scene about relationships across the landscape. This would be difficult to interpret without the intimate association between the Aboriginal ethnography and those particular sites and images.

Karimi (Ch. 7) states that there is no ethnographic context for the rock art from Iran that he discusses, but he does try to connect the later phases to scenes in Islamic art and notes that some panels have Islamic inscriptions. He also points out that there are some accounts of relatively recent hunters engraving hunting scenes on their own tombstones before their deaths. He furthermore notes that among nomadic pastoralists in Iran, art is also produced by painting tents. This is a crucial reminder of the significance of all the art that has not survived because it was produced on perishable materials. Importantly, Karimi mentions several interpretations of imagery in Iranian rock art that have been said to be shamanistic. In the absence of ethnographic context, he suggests that this is not a strong argument.

The conclusion, therefore, is that ethnographic information is fundamental to intuitive interpretations of rock art. It is commonplace for observers to interpret images from their own experience of similar images, and if that experience included ethnographic knowledge, we include that. At some level that is only to be expected, but when trying to understand the historical or archaeohistorical meaning, that interpretation must be accompanied by an analysis of the nature of the assumptions about the links between the particular ethnography and that particular body of art. Without that analysis, there is a strong risk that the account of the rock art will be a statement about the preconceptions of the art rather than a contribution to a study of the past.

Art that includes scenes is less difficult understand, but at the same time it remains problematic. The main point is that, depending on the definition of scenes—and here we adopt Davidson's (Ch. 1) definition of the inference of actions through the agency of the individual participants—it is easy to describe the interactions between individual representations of animals. Several independent observers agree about the mating scene of the lions in Chauvet Cave discussed by Davidson (Ch. 1). That much is easy and allows some understanding without ethnographic knowledge. It still requires modern knowledge of the behavior of lions. But that clarity does not lead to greater understanding of why those images and that scene were painted in the cave.

### *Extracting Meaning of Rock Art Scenes from Comparisons with the Other Archaeology*

One of the frustrations of the archaeology associated with rock art is that there is often a divide in interests between rock art specialists and other archaeologists. The reasons for this are various and often relate to the coarseness of the chronology of rock art and the relative refinement of the chronology of other aspects of archaeology. Yet it is also highly probable that the people who were responsible for the other archaeology lived in societies that produced and used the rock art. Thus, relating the rock art aspect of those past societies to the other aspects should be an important goal.

Sometimes the art can be dated by the presence of distinctive images from a particular period. Distinctive artifacts place the production of the art of Valcamonica in the Iron Age (Alexander et al. Ch. 17). Karimi (Ch. 7) says that the Iranian rock art he studies can be fixed in broad chronological terms because images of hunting dogs and horse-riding characteristic of the Bronze Age are also depicted on ceramics of the period. On the other hand, the connection between the rock art and other archaeology of the region is unpredictable, particularly because of the hunting scenes. The Bronze Age was also a period of agriculture and pastoralism—to say nothing of metalworking. Similarly, Domingo Sanz (Ch. 16) points out that the rock art of the eastern part of Iberia, known as Levantine Rock Art (LRA) represents, for the most part, wild animals and hunting scenes. Yet for a variety of reasons, the art is dated to the Neolithic period or later, during which time the economy was based principally on agriculture and pastoralism. As with the Iranian example, the social context of the rock art is not straightforwardly a representation of the daily activities of the people who made it. Brusgaard and Akkermans (Ch. 9) point out that the prevalence of hunting scenes “challenges preconceived notions” of activities in societies dependent on pastoralism rather than hunting for food. In addition, the types of weapons represented provide opportunities for comparison with artifacts known and dated in the archaeological record. By extension, what is represented in the rock art can provide insight into



the material culture that does not survive in the regional archaeological record. In all three of these cases, the art emphasized behavior that was not necessarily mainstream in the society, but that is not all: it also implies that the role of art in the society was not just to represent mundane daily activities—rather, at some level it was selective about what was important.

The rock art of Nine Mile Canyon (Spangler and Davidson, Ch. 18) includes many varied panels, some featuring scenes with animals only, others with animals interacting with humans, sometimes in the hunt, and some scenes in which animals are interacting with humans who are dressed in animal headdresses. The authors considered the location of different categories of art sites, and the presence or absence of scenes, in relation to other types of archaeological sites and the topography of the canyon. This is a study of the art of a particular narrow period, but in other places it has been possible to consider the representation of animals in rock art in the context of environments transformed by the climatic changes after the Last Maximum Low Sea Level and peak aridity (David 2004). It seems to be universally the case that the representation of animals and the contexts in which they are shown is not a straightforward sampling of animals in any specific aspect of the artists' lives (Vinnicombe 1972).

### Scenes in the Context of Changes through Time and the Evolution of Behavior in a Region

If the early art in the caves of Western Europe appears to lack scenes although scenes are present in later art in that region (broadly speaking), there might presumably be a change through time. The only chapters to address such changes explicitly are those by Villaverde (Ch. 15) and by Domingo Sanz (Ch. 16), both of whom deal in one way or another with Levantine Art of Eastern Iberia. There are studies in the book that involve the earliest rock art (Van Gelder and Nowell, Ch. 13) and Culley (Ch. 12), other art that was produced within the last millennium (Spangler and Davidson, Ch. 18, Moro and Tapper, Ch. 19); and still other art perhaps produced within living memory (Ross, Ch. 10; Domingo Sanz, Ch. 16).

The art of eastern Iberia demonstrates within a restricted region both a change through archaeological time, and a change from an instantaneous vision of the world to a vision that incorporated the passage of time within the lifetime of the artists. Villaverde (Ch. 15) shows that for at least 5000 years after 20 thousand years ago, scenes represented moments in time—a freeze frame of an instantaneous interaction between the agents in the scene. About 5000-10000 years later, several panels in the stylistically different, and chronologically later Levantine art tell the story of the successive stages of a hunt. Rather like a graphic novel or a photo composite by David Hockney (e.g., Jerry Diving Sunday Feb. 28<sup>th</sup> 1982 <http://www.dailyartmagazine.com/david-hockney-photographs/>), the juxtaposition of successive individual images has the capacity to create a unified whole. What Villaverde demonstrates here is that in a quite restricted region of eastern Iberia, there was a change from an approach to scenes involving freezing a moment in time to one showing the unfolding of a succession of events within a connected sequence.

Domingo Sanz (Ch. 16) showed how there might be a parallel in the process of change in representation between the art exemplified by Villaverde's account and completely unconnected art in Arnhem Land, Australia where it has been possible to document the changes in the art in the context of the historical social circumstances of the people who made it. The extension of the analogy from one continent to another and from one time period to another with no connection in time or space may seem adventurous, but the comparison is worth making because it highlights the sorts of social pressures that can lead to changes in rock art style—and in both examples can be easily documented to have suffered social changes.

In Chapter 7, Karimi uses his model of identification of scenes, derived from the work of Livio Dobrez, to consider the art from different periods in Iran. As he points out, even though it is clear that there are panels produced at different times, identified through the differential weathering of petroglyphs, it is less certain which particular time periods were represented, except when there are clear links to Islamic art or inscriptions. Brusgaard and Akkermans (Ch. 9) point out that the themes of the rock art are often repetitive, formulaic and non-random. By implication the rock art is not a reflection of all of the society that produced it, but a deliberately selective representation of life in the region.

Kelly, David and Flood (Ch. 11) show that the images and scenes in the rock art of Wardaman country in Northern Australia should not be considered in isolation, but instead are connected to each other in

the spiritual framework of the Dreaming cosmology of the region marked by Songlines that described the travels of the Lightning Brothers across the landscape between these sites (Merlan 1989). A fundamental issue, therefore, would be consideration of when the cosmology of the Dreaming came into existence in a recognizably modern form (David 2002, 2006). This issue is made much more difficult as the mythology that connects images with landscapes incorporates images that, on archaeological evidence, were created at different times. Archaeologists concentrating only on images from later periods may miss an important point about the persistence of the images at places. The persisting importance of places can produce a narrative associated with an image from an earlier time period because the makers of later art could see those earlier images just as archaeologists can.

Tapper and Moro (Ch. 19) discuss changes in the petroglyphs of eastern Canada over the period of the appearance of colonialists. They emphasize the importance of ritual performance to the pre-contact rock art ultimately with the goal of social benefit. By contrast, post-contact rock art emphasizes individual and communal biographies, and blended narratives of the changes occurring with fragmenting cultural memory and tradition. There is a more widespread tradition of rock art being used to record the otherness of strange people colonizing new lands as in the maritime representations in rock art of Australia and elsewhere (Kolkov and Shumkin 2012, O'Connor and Arrow 2008) as well as the appearance of foreign animals such as bulls (Clegg 1984) and horses with riders (Chaloupka 1979), in which the earliest animals represented have similarities with representations of the best approximation to those animals in the endemic fauna. Whatever else this signifies, it shows that the producers of the rock art were not programmed to produce a limited range of images.

Aschero and Schneier (Ch. 20) show that the long panel they analyze contains images that must be construed to have been produced at different times. This demonstrates that once a site was chosen as a place to produce art, it may have been revisited to add other images. This may be one of the game-changing aspects of rock art. Rock art images once produced had a permanence or persistence that was not likely with drawings in the ground or on many other media, such that they survived to be seen by people who may have had no connection to the narrative that was originally connected to the images. The site may, therefore, have attracted the production of more images on a subsequent occasion.

In the history of art, one of the major developments in graphic representation of animals and humans was to place them in the context of their environment. This is not the place to chronicle the history of representations of invented and, later, naturalistic landscapes as either the image itself or the context for representing humans or other animals (see, for example Gombrich 1995, 113–14, 143–47, 153, 239). In Europe, realistic representations of landscape appear to be part of the Renaissance revolution due to Durer or to Altdorfer (Gombrich 1995, 345, 355–6) four or five hundred years ago. Whatever one's views about scenes in rock art, it is a dominant feature of all rock art everywhere in the world that physical features of the environment, inanimate rocks and mountains or animate plants, are almost never represented. That might be a suitable topic for further research. Nevertheless, it has recently been suggested that, a change through time, an innovation, occurred during the last five thousand years of Upper Paleolithic cave art in a tiny area of central France. At three sites less than 150 km apart there were images that can be interpreted as representing the “ground-line” on which animals walked (Fritz, Tosello, and Conkey 2016). As with so much of the inventiveness and sophistication of Upper Paleolithic art, this innovation did not apparently contribute to later artistic traditions. Nevertheless, it might be taken as an indication of the cultural processes that led from using images of people and animals to material representations of them in context. That does not mean that there was no spoken narrative about the environmental context, but that such narratives did not have material form or persist after the death of the cultural tradition. We note that in two books about landscape and archaeology, both of them concentrating to greater or lesser degree on rock art, the discussion of landscape concerns the situation of sites in the landscape (Chippindale and Nash 2004; David 2002). There is an exception, in which Arcà (2004) discussed possible images of landscape elements in the art of Mont Bego in France (described by Alexander et al., Ch. 17, as the “twin” of their subject, Valcamonica). In that example, the supposed landscape elements seem to have been objects of interest to the artists rather than features of landscapes within which other agents carried out their actions.

Having said that, it is important to ask how people perceived their environments at any time, even if it will be difficult to provide an answer. One avenue to explore this is offered by Utrilla and her colleagues (Ch. 14)

who describe engravings on rocks that appear to be interpretable as maps of the immediate environment of the site. In her survey of other examples, it turns out that images that can be interpreted as maps are rare throughout early art, and some are probably overinterpreted. The simple reason for this is that maps are conventionalized ways of representing the three dimensions of space in two dimensions. Once the cultural conventions of mapping are lost, it becomes quite difficult to interpret the two-dimensional image as a representation of that three-dimensional model. As with the cultural processes that led to some representation of the ground surface, it is possible that images such as these contributed to an awareness of the possibility of talking about environmental features spatially.

### *Comparing Rock Art Scenes on Broad Spatial Scales*

When treating a subject such as rock art, it is an inevitable tendency to concentrate on what is there and ignore the questions raised by what is not there. As discussed earlier, we tend to concentrate on the images of animals, people, or artifacts and pay less attention to the absence of landscapes. We also tend to concentrate on the art in the places where it has been found and pay less attention to the places where it has not been found. In the back of our minds, we suspect, most people have an idea that art may have been produced on perishable media such as wood or skins and that the absence was not real in the past. We also know that there is variation in a single time period between different places. With the benefit of archaeological knowledge, we can compare the presence of geometric markings at Blombos with their absence outside southern Africa 75,000 years ago (Henshilwood, d’Errico, and Watts 2009), we can note the similarities between the wall paintings of Chauvet Cave in France and the carved bones of the Swabian Jura sites while also noting differences in detail, and we can routinely note the absence of similar images in other parts of the world from that time period. We understand that people at the Apollo XI site in Namibia produced paintings of animals on stone plaquettes (Rifkin, Henshilwood, and Haaland 2015) a few thousand years earlier than those in Les Mallaetes and Parpalló in eastern Iberia (Villaverde Bonilla 1994), but surely without any connection. All of these examples contrast with the absence of similar practices elsewhere at the same time.

The classic case of comparisons across broad spatial scales (other than that between different ends of the Mediterranean) is that by Ross (2013), who discussed the regional variations in rock art across northern Australia and the multiple factors that account for differences. Ingold (2000) has sought to explain some of the differences between art styles in different regions by appealing to the ways in which the ontologies of different peoples are represented through the different forms of art. Ross (Ch. 10) returns to this comparative approach across Australia, contrasting the art of the Kimberley, which includes many anthropomorphic and other iconic images, with the art of Central Australia, in which the dominant motifs are often called geometric, consisting of “circles and circle variants, arcs, sinuous lines, linear motifs and tracks.” Even without ethnographic guidance, compositional analysis readily leads to the identification of scenes, such as gendered activities of ceremony or food-getting among the iconic representations in the Kimberley. Ross goes on to apply compositional analysis to identify scenes among the geometric images of Central Australia, but, she warns, “without the addition of ethnographic documentation, scenes would remain unrecognized” (p. 155). The ethnography recorded by Spencer and Gillen (1899) shows that even the most stylized quasi-geometric signs can be interpreted as involving human and ancestral agency, which would be unknowable without the ethnography. From the point of view of comparison across broad spatial scales, these very different sets of imagery are found on opposite sides of one of the most remarked-upon cultural boundaries in Aboriginal Australia: that between the diverse language groupings in the Kimberley and the relatively homogenous widespread Pama-Ngyungan languages of most of the rest of Australia (Bouckaert, Bownern, and Atkinson 2018). There has been a tendency to concentrate on the art of particular regions that show a consistent style. There has been less attention to the variation between regions at any particular time and the reasons for the sorts of boundedness that they imply.

The question of boundedness of rock art regions arises also on smaller scales. Brusgaard and Akkermans (Ch. 9) point out that there is variation in the subject matter within quite small distances in eastern Jordan. Spangler and Davidson (Ch. 18) find something similar within Nine Mile Canyon. The question of variation across space is, therefore, complicated. One of the most common generalizations about Paleolithic art, after noting the absence of scenes, is that the animals depicted do not correspond straightforwardly to the animals

in the diet or in the environment. Yet, through Rice and Paterson's (1985, 1986) region-by-region surveys it is possible to show that even that generalization is an oversimplification (Davidson 1999) and regional variation is the norm. We should expect that there is/was regional variation at different scales within and between regions in the presence or absence of scenes and of the role of those presences and absences in the societies that made them.

## Scenes and Ways of Seeing the World

The chapters in this volume have canvassed many different ways of seeing scenes. For Davidson (Ch. 1), any combination of images in which the subjects appear to be exercising agency constitutes a scene. Van Gelder and Nowell (Ch. 13) show that the predominantly non-figurative finger flutings of the Upper Paleolithic cave of Rouffignac allow identification of agency through analysis of the "intimate" acts of individuals and their interactions—a freezing of the relationships between the people making the marks. At some stage and in some places, such marks came to show a resemblance with real objects in the world and became pictures with iconic resemblance (Davidson 2013), yet, as Spangler and Davidson (Ch. 18) show, art that has representations of individual animals seems to have been rare. As Villaverde (Ch. 15) pointed out, discussing a site with abundant images of individual animals engraved or painted on stone plaquettes (Villaverde Bonilla 1994), some scenes may be no more than snapshots of moments of interaction—freezing actions external to the artists. Later in the same region of Iberia, some of the Levantine Art went beyond such snapshots to create an ongoing narrative by showing a succession of moments in a longer event—a freeze-frame representation that we can interpret as a narrative. Scenes, therefore, take the creation of art from individual marks, through the interaction of marks made by different individuals, to the production of pictures of objects "out there" and on to the representation of interactions between those individuals.

This progression suggests the way in which the representation of scenes breaks the nexus between the artist and the observer and creates the possibility of the art communicating aspects of narratives through time without the need for a commentary informed by the producers' intentions. An image of an individual animal may have been readily identifiable as an image of such an animal, just as it is to observers in the modern world, though for some images context was nevertheless necessary for identification (Morphy 1991: 158). Any meaning or interpretation depends and depended on the statements of the producer of the art, and the cultural context that linked the producer and the observer. But in scenes involving interactions between the represented individuals (animals and/or humans), whatever the complexities of meaning imparted between producers and observers, there was always a simple interpretation of the interactions.

One of us pointed out that the creation of rock art alters the way people relate to their landscape, thus affecting other aspects of their behavior, including the nature of decisions about foraging (Davidson 2012a). The proposition was that simply marking a place in the landscape changed the values associated with that place because of the persistence of the images. Here we might go further and suggest that rock art with scenes affects the nature of the values because of the greater transparency of the narrative at the place. Kelly, David, and Flood (Ch. 11) describe a further stage of this value creation, in which sites in different parts of the landscape create or define links between those different places to allow a narrative about behavior on a wider scale. At each stage of this process, the rock art becomes a deeper part of the engagement with the environment and with the other people using it. Through this engagement, the mythology allows the rock art images to be agents in the landscape and not just in the rock art site. And through that agency in the landscape, elements of the landscape themselves become agents in the creation story. Much of this is derived from, and hence possibly specific to, the cosmologies of Australian Songlines and different accounts of the creation of the landscape in different regions. Nevertheless, reduced to these elements, it is conceivable that there is a process which might be more broadly applicable.

What this collection hints at is a set of broader contexts of importance for rock art in the relations between people and their environments. These do not necessarily arise from the traditional preoccupations with identification of image content and the definition of image style boundaries in space and time. Also, they do not arise from speculations about the "meaning" of art in terms of the quasi-ethnographic categories of structuralism, shamanism, or other fashionable -isms in the study of people without history. Instead,

we suggest that the production of art consisting of scenes in which individual images could be seen to have agency allowed them to be seen as such after the times of production. Independent of the original storytelling and ritual with which they were produced, observers unversed in the stories or rituals could interpret the agency and tell a story, just as the authors in this book have done. As one of us argued elsewhere (Davidson, 2020) this is a major step toward art being intrinsic to the images, and not just a feature of the cultural context of their production.

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