

# FROM “DOODLES” TO WORLD HERITAGE: ASSESING THE IMPACT OF THE INSCRIPTION OF THE ROCK ART OF THE MEDITERRANEAN BASIN ON THE IBERIAN PENINSULA (ARAMPI) ON THE WORLD HERITAGE LIST

*De “garabatos” a Patrimonio Mundial: evaluando el impacto de la inscripción  
del Arte Rupestre del Arco Mediterráneo de la Península Ibérica (ARAMPI)  
como Patrimonio Mundial*

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## ABSTRACT

On December 2<sup>nd</sup> 1998 the Rock Art of the Mediterranean Basin (ARAMPI) was added to the list of World Heritage Sites. In this article we analyse the effect the World Heritage inscription has had on the development of this cultural property/ archaeological site. Several issues will be discussed: we will first analyse the effect the inclusion has had on research in rock art. Then, we discuss how some sites included in the ARAMPI have been enhanced as a cultural resource through the creation of various institutions and the establishment of several initiatives to give visibility to rock art. Finally, we will assess whether the inscription has helped the preservation of these rock art sites, especially in the light of the conservation procedures undertaken to enhance the visitor experience.

**Keywords:** Rock art, interpretation centre, tourism, UNESCO, World Heritage List

## RESUMEN

*El 2 de Diciembre de 1998 el Arte Rupestre del Arco Mediterráneo de la Península Ibérica (ARAMPI) fue declarado Patrimonio Mundial. En este artículo analizamos el efecto que su inclusión como Patrimonio Mundial ha tenido sobre el desarrollo de este tipo de bienes culturales/yacimientos arqueológicos. Se abordan diversas cuestiones: en primer lugar se analiza el efecto que esta inclusión ha tenido sobre la investigación del arte rupestre. Asimismo, se discute acerca de cómo los yacimientos incluidos en el ARAMPI han sido mejorados como recursos culturales a través de la creación de diferentes instituciones y del establecimiento de diversas iniciativas para*

*hacerlo más visible. Finalmente, se evalúa si la inscripción ha ayudado de forma efectiva a la conservación de estos conjuntos arqueológicos, especialmente a la luz de los procedimientos de conservación emprendidos para mejorar la experiencia del visitante.*

**Palabras clave:** Arte rupestre, centro de interpretación, turismo, UNESCO, Patrimonio Mundial

## 1 INTRODUCTION

It is often claimed that there is a direct relationship between the nomination of a place as a World Heritage Site and its transformation into a major tourist attraction (Huang 2012, Shackley 1998, Yang et al. 2010). Thus the substantial increase in economic benefits that usually comes with tourism may be behind an increasing interest shown by countries in having new sites nominated for the World Heritage List. However, in this article we argue that the connection between the nomination of a site as World Heritage and its transformation into a major tourist attraction needs to be nuanced. Whereas it may be the case for some World Heritage Sites, the majority World Heritage Sites have failed to entice masses of tourists to visit them (e.g. Rodwell 2002; Buckley 2004; Rebanks 2009). While this contention is not entirely new (Buckley 2004; Rodwell 2002), we wish to explore the lack of a constant positive relationship between the inscription in the WH list and the transformation of a site into a major touristic attraction in relation to the Rock Art of the Mediterranean Basin of the Iberian Peninsula (ARAMPI). Far from being seen as necessarily a bad thing, we would like to suggest that limited success in terms of a dramatic increase in visitor numbers may be the best way of protecting the fragile rock art sites. This is not only important in the case of the ARAMPI, but for all rock art sites worldwide.

The aim of this article is to briefly analyse the impact that the inclusion of the Rock Art of the Mediterranean Basin (ARAMPI) on the World Heritage List has had on the sites included in the inscription in 1998. After a brief history of the inscription of rock art areas in the World Heritage List, several issues related to the ARAMPI will be discussed. We will first analyse the effect that this inscription has had on research on the site. Secondly, we will examine how it has been enhanced as a touristic and educational product through the creation of various institutions and the establishment of several initiatives to give it visibility. Finally, we will assess whether the World Heritage status has helped preserve these rock art sites, especially in the light of the conservation procedures undertaken to enhance the visitor experience.

## 2 ROCK ART AND THE WORLD HERITAGE LIST

Some commentators have mentioned that there is a bias on the World Heritage List towards monumental sites mainly placed in Europe. Rock art sites, however, do not comply with that definition and they may have represented from the early days a way of balancing out the list. The Rock Art of the Mediterranean Basin, added to the World Heritage List in 1998, was not the first rock art to be included, as it had been preceded by sixteen other sites. When the Mesa Verde National Park was designated World Heritage in 1978 (the very first year in which properties were placed on the WH list), the petroglyphs in the park were automatically included. In 1979 prehistoric art was a key element behind two further inscriptions, the Decorated Caves of the Vézère Valley, including the Palaeolithic cave art of Lascaux, and the post-Palaeolithic rock carvings of Valcamonica. These additions to the list made rock art visible to the heritage authorities. Thus, the following year, 1980, a group of experts – François Leblanc (ICOMOS secretary), Raj Isar (UNESCO), Luis Monreal (ICOM) and Emmanuel Anati (Valcamonica) – agreed at an ICOMOS meeting in Warsaw to set up CAR, the Conseil pour l'Art Rupestre (CAR, Committee on Rock Art). It was chaired by Emmanuel Anati (1980-90), Jean Clottes (1990-99) and Ulf Bertilsson (since 2000), while the Spaniard, Antonio Beltrán, served as vice-president for many years (Anati, pers. comm. 20 Dec 2013).

Nuria Sanz Gallego, the rock art specialist in UNESCO, has claimed that properties with rock art have been encouraged to be in the list by three important decisions taken by the UNESCO authorities. The first one was the inclusion in the Convention of the 'cultural landscapes' category in 1992, which made it easier to nominate this type of site for the WH

list (Sanz Gallego 2008:53). The second dates in 1994, when the WH Committee launched its Global Strategy for a Representative, Balanced and Credible World Heritage List. The final decision came two years later, in 1996, when UNESCO General Assembly included among its priorities the protection of rock art in the world, fostering in particular its inventory and conservation, the technical training of experts, the exchange of information and the creation of information centers for the public (Clottes 1999:9; Thiel 1998). However, looking at the pattern of inclusion of properties with rock art (Fig. 1), the effect of these decisions on the increase in rock art sites in the list is not immediately obvious. Rather, we observe that from the late 1970s new inscriptions have been added at an average rate of one rock art site or landscape per year, following a relatively constant pattern. However, the rock art sites on the list demonstrate that, in contrast to other types of property (Rodwell 2012:73), rock art has shown its potential to bring a more inclusive approach to World Heritage. Today, a quick count from the WH list published on the web indicates that there are 39 rock art sites and landscapes

(3.8% of the 981 WH sites) located on all five continents. Almost a third of the sites are in Africa (12 – 30.77%), a quarter in Asia (9 – 23.08%), a fifth in Europe (8 – 20.51%) and America (7 – 17.95%) and a smaller percentage in Australia (3 – 7.69%). Of the total number of sites, 29 (74.36%) are cultural properties, whereas only one (2.56%) is a natural property, with the remaining nine (23.08%) being mixed sites.

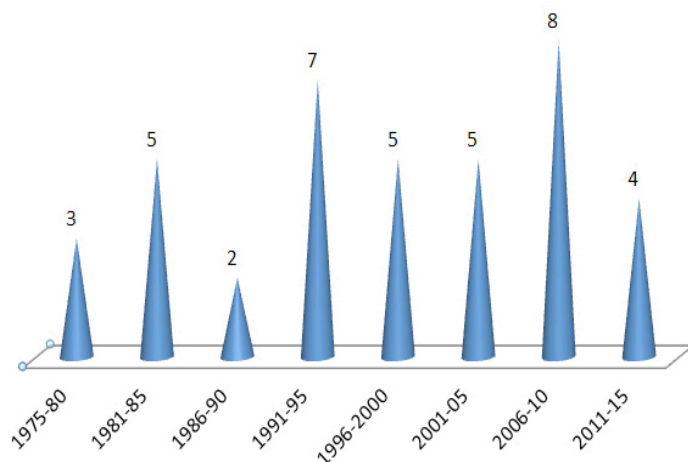


Fig. 1. Pattern of inscriptions of World Heritage properties with rock art. The numbers refer to the number of rock art sites inscribed.

### 3 THE INSCRIPTION OF THE ROCK ART OF THE MEDITERRANEAN BASIN OF THE IBERIAN PENINSULA (ARAMPI) AND THE ACADEMIC RESPONSE

Prehistoric rock art has been known in Spain for about a hundred years (Díaz-Andreu 2012). Before this, and ever since then, local communities considered the rock art to be little more than doodles, or perhaps some sort of old, but unimportant writing. Many of the site names reflect that view (for example Cova Pintada, Letreros, Penya Escrita and so on). Despite this view, a large selection of these sites (currently 758) in the Mediterranean Basin of the Iberian Peninsula has been added to the World Heritage List. This took place on December 2<sup>nd</sup> 1998, at the twenty-second session of the UNESCO World Heritage Committee held in Kyoto (Japan). The area was listed under Criterion (iii):

The corpus of late prehistoric mural paintings in the Mediterranean basin of eastern Spain is the largest group of rock-art sites anywhere in Europe and provides an exceptional picture of human life in a seminal period of human cultural evolution (UNESCO 1998: Annex 1, Page 31).

The nomination consisted of a large number of sites located in six autonomous regions (Andalusia, Aragon, Castile-La Mancha, Catalonia, the Region of Murcia and the Valencian Community) (out of the seventeen existing in Spain). An advisory board with representatives from all these six autonomous regions was formed to coordinate initiatives (Beltrán Martínez 1999:12; Hernández Pérez 2009:60). So, this coordination among different Autonomous Regions should be mentioned as the first impact the nomination had on the management of rock art in the ARAMPI area.

In academic terms, the inclusion of the ARAMPI on the World Heritage List has made an impact, although the long-term results have been mixed. The growing status of rock art sites has resulted in an increased research interest. Results have been positive regarding publications resulting from conferences and PhDs. Key congresses have been organised (Hernández Pérez & Soler Díaz 2005; López Mira et al. 2009; Martínez García & Hernández Pérez 2013; Martínez García & Hernández Pérez 2006) and some conferences that began in 1999 are still held annually (e.g. Aparicio Pérez 2011; 2012; 2013). At least eleven dissertations have been written on the subject (Hernández Pérez 2009:62). Less fortunate were the two journals on rock art that appeared after 1998: the *Boletín de Arte Rupestre de Aragón* (BARA) and *Cuadernos de Arte Rupestre* (CAR). BARA has been discontinued, perhaps because of the death in 2006 of its main instigator, Antonio Beltrán, and unfortunately this has come together with the closure of the rock art centre in Zaragoza that had been established to house Beltrán's library and support his research. Meanwhile, *Cuadernos de Arte Rupestre* (title that can be translated as *Journal of Rock Art*), published by the now defunct Casa de Cristo, ceased publication in 2007 for a few years, but has now moved to a digital format as a cost saving measure. Similarly, the journal *Panel*, planned as a joint venture between all six autonomous regional communities, only managed to publish a single issue.

#### 4 THE ESTABLISHMENT OF CULTURAL PARKS AND INTERPRETATION CENTRES

One of the immediate effects of the ARAMPI inscription was the establishment of cultural parks in the ARAMPI area and the opening of a series of interpretation centres. The cultural park concept was created by UNESCO (Collado Villalba 1998:45) in order to encourage the protection of large areas usually belonging to a variety of owners. Despite the fact that the ways this idea has been put in practice vary (Alonso González 2013), in Spain cultural parks have become an effective tool for the holistic management of heritage and spaces while promoting sustainable development. In 1987, eleven years before the ARAMPI inscription, Prof. Antonio Beltrán talked to several cultural parks with rock art already functioning in Italy

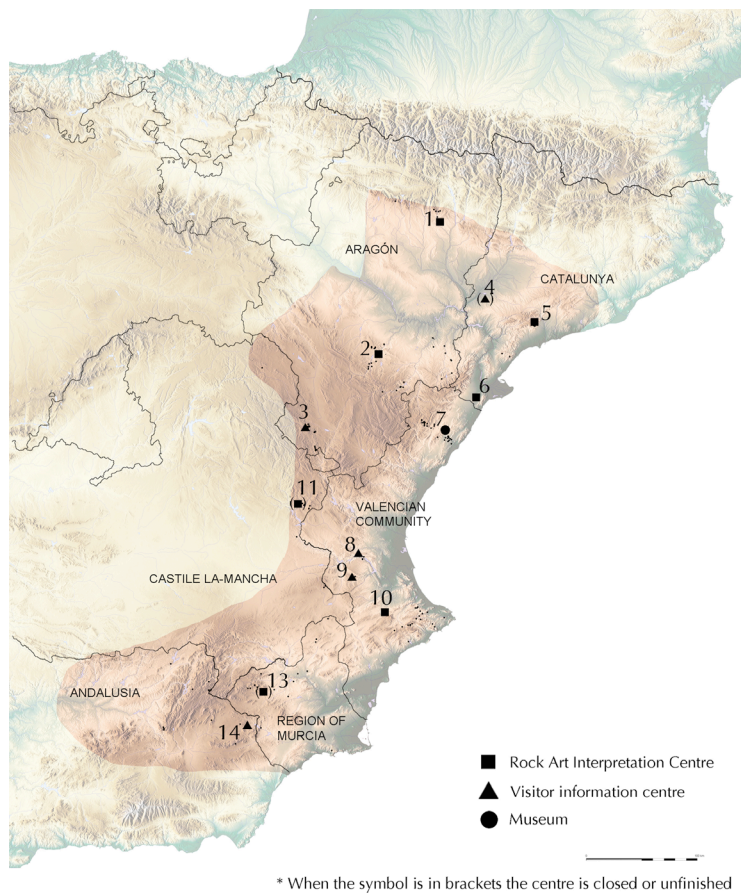
(Naquane, Sondrio, Sellero, etc.), Mexico (Guerrero Negro in Baja California), the US (Utah) and Australia and explained that others were being set up in Lesotho and Tanzania (Beltrán Martínez 1987:73; Beltrán Martínez 1989:5). This was the context in which he mentioned plans for three in Spain – Valltorta, Vero and Albarracín – and argued that there should also be one in the Río Martín area (Beltrán Martínez 1987:74, 76). In 1989, at a meeting specifically focusing on 'Cultural Parks with Rock Art' in Spain, key papers were given on the second and third of these (Jornadas 1990). However, all these plans only became true after the legal definition of cultural park had been established in each of the autonomous regions and also until the ARAMPI area was being proposed for inscription and especially when it was inscribed. In the case of Aragon the parks were inscribed in December 1997 (Guíu 2004:254). Funds, however, were not made available until the ARAMPI was added to the WH list. The cultural parks of Albarracín and Río Martín were made possible and in each of them an interpretation centre opened (Información 1999:95) (see, for a recent overview, Juste Arruga 2012). In Valencia, legislation governing cultural parks was passed in 1998 and led to the opening of the Valltorta-Gasulla Cultural Park in 2000 (Martínez Valle 2000).

There is a lack of research on when the first interpretation centres became a reality worldwide, but, as explained, in Spain most of them only appeared after the creation of cultural parks. The only similar centre opened before 1998 was the Altamira Research Centre (Centro de Investigación de Altamira) established in 1979 (Moure Romanillo 2006:101). Although cultural parks and interpretation centres usually go hand-in-hand, there are some parks without them, such as those of Maestrazgo in Aragon and Nerpio in Castile-La Mancha. In the ARAMPI area, closely connected with the inscription of the ARAMPI into the WH list, there are eleven rock art interpretation centres – three of them currently closed – and two rock art museums (Fig. 2). Interpretation centres aim to enhance the value (*mise en valeur*) of rock art among the local community, as well as to encourage research and preservation. In these eleven cases rock art is the main focus of the centre, although it is usually combined with other aspects such as landscape, fauna, flora and/or local customs – what about World Heritage? For example, in Andalusia the planned rock art interpretation centre of Vélez Blanco (Pérez Plaza 2009:181) has been opened as a visitor centre dealing with all the cultural and natural sites that can be visited in the local mountain range. In Aragon three of the four existing interpretation centres in rock art areas deal with rock art, although that of Maestrazgo does not (Table 1).

As explained, a quarter of the interpretation centres related to rock art are currently closed. The economic crisis has had a detrimental effect on the political willingness to make them a reality: planned centres that in 2008 were about to be opened, such as those of La Roca dels Moros in Cogul and Villar del Humo, have



still to see the light of day (Castells Camp & Hernández Herrero 2009:2020; Viñas et al. 2012). What is worse is that the economic crisis has even led to the closure of some institutions. This is the case of the Casa de Cristo in Murcia, opened in 2007 and closed in 2013 (Mateo Saura 2013). In fact, this is happening all over Spain, regardless of whether the centres are related to rock art in the WH list or not. Thus, despite initial hopes, the lack of spectacular results in numbers of visitors seem to have made the authorities realise that the WH listing is not going to have the expected impact.



1. Río Vero Cultural Park (Colungo, Huesca); 2. Río Martín Cultural Park (Ariño, Teruel); 3. Dornaque, Albarracín Cultural Park (Albarracín, Teruel); 4. Roca dels Moros (Cogull, Lérida); 5. Muntanyes de Prades (Montblanc, Tarragona); 6. Abrics de l'Ermita (Ulldecona, Tarragona); 7. Valltorta-Gasulla Cultural Park (Tírig, Castellón); 8. Millares Cultural Park (Millares, Valencia); 9. Bicorp Cultural Park (Bicorp, Valencia); 10. Petracos Cultural Park (Castell de Castells, Alicante); 11. Villar del Humo Rock Art shelters (Villar del Humo, Cuenca); 12. Casa de Cristo (Moratalla, Murcia); 13. Cueva de Los Letreros (Vélez Blanco, Almería)

Fig. 2. Map of the ARAMPI area with the locations of museums and visitor and interpretation centres.

Going against the trend, however, some centres in Aragon have recently been renovated (Fig. 3, Fig. 4). Moreover, in this autonomous community there are alternative centres in which new rock art routes are being set up, as is the case of the Matarraña/Matarranya district (comarca), where a non-guided hiking tour to the rock art sites of Roca dels Moros de Calapatá, Els Gascons and La Fenellosa is facilitated by signposts and a guidebook (Bea 2012). In the Valencian Autonomous Community, the opening of the Museum of Valltorta has been followed more recently by the three other institutions dealing with rock art. These are the two autonomous regions that were investing more decisively in rock art even before the WH inscription.

	Cultural Park	Cultural Park	Centre	Opened in	Location	Signposted routes	Guided tour	Guide book
Aragon	Albarracín	2001	yes	1998 (renovated in 2008)	Bezas	yes	No	Martínez 2012
	Maestrazgo	2005	no	-	-	yes	no	Bea 2012
	Río Martín	1998	yes	1998 (renovated in 2012)	Ariño	yes	yes	Fernández et al. 2012
	Río Vero	1998	yes	1999 (renovated in 2008)	Colungo	yes	yes	Baldellou et al. 2009
Catalonia	Abrics de l'Ermita	no	yes	2005	Ulldecona	yes	yes	García Rubert 2005
	Muntanyes de Prades	no	yes	2005	Montblanc	no	no	Viñas 2005

Fig. 3. Interpretation centres in Aragon and Catalonia



Fig. 4. Antonio Beltrán Martínez Interpretation centre, Ariño (Teruel, Aragon)



It is difficult to compare the effect the opening of interpretation centres has had on public awareness of these rock art sites, and in particular on local appreciation of it, as there is no information related to the period prior to their creation in either user-group. This is not uncommon (e.g. Buckley 2004). Some data are, however, available regarding number of visitors, which, according to unofficial accounts, are more likely to include people from outside the local community. In 2006, 21,000 people visited the Valltorta Museum, whereas the Casa de Cristo Interpretation Centre had only 8,814 visitors the following year (Mínguez García & San Nicolás del Toro 2008:147). For the years 2010-2012 we have further data relating to the L'Ermita Rock Art Interpretation Centre (CIAR) in Ulldescon (Fig. 5). They show that it attracts more visitors to the village than any of the other sites on offer in the area, despite it being a few kilometres from the urban centre. All comments made in publications, however, insist on the value of these centres as a way of boosting local economies and improving cultural life and pride in the area (Juste Arruga 2012:245-6). Nevertheless, we have found no data that indicates increased local appreciation of the rock art sites, although local children are a “captive” audience (Black 2012: 200) on school trips. Perhaps the lack of local interest is related to the few jobs involved in these interpretation centres – usually one or two. We should also mention the absence of strategies to encourage local communities to take pride in it, and to have a sense of ownership of the rock art sites in their municipality.

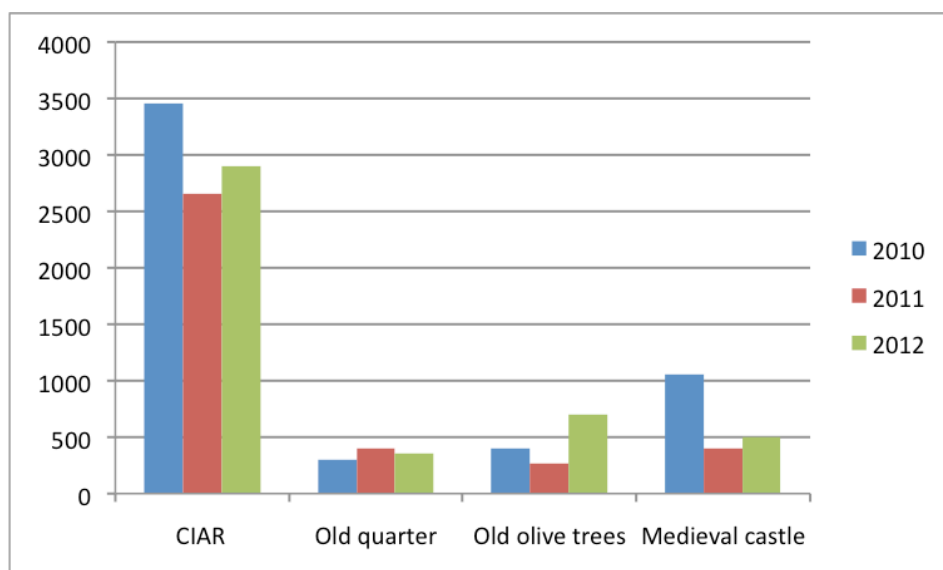
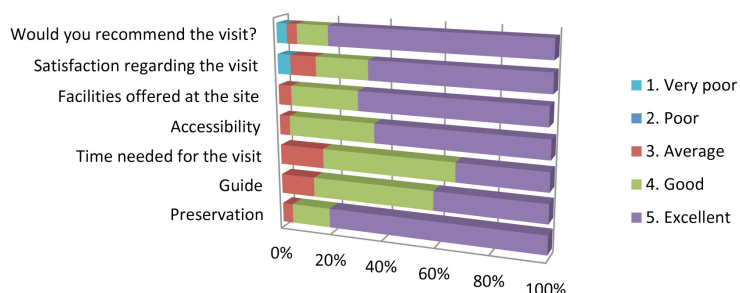


Fig. 5. Data on annual tourist visits to the four major attractions in Ulldescon. Data provided by the Ulldescon Tourist Information Office.

An easy way to compare the effect of the interpretation centres on the attractiveness of rock art as a tourist resource is to compare the reaction of the public in cases with and without them. This was the basis of the study undertaken by one of us (AV) in March 2013, when the rock art areas of Montblanc and Cogul were visited by the Friends of UNESCO group. Whereas in Montblanc, given the difficult access to the actual rock art sites, the visit only included the reproductions available in the Interpretation Centre, at Cogul visitors were able to see the rock art imagery in situ (Latin term that means in the place, i.e. the rock art site itself). In fact, at the latter site they could not have chosen otherwise, as although the interpretation centre has been built, the exhibition remains to be set up, leaving visitors without the basic facilities. Interviews after the visit revealed that whereas there was a high level of satisfaction with Montblanc (more than 80% would definitely recommend others to visit it), only 14% of visitors to Cogul said they would recommend it. The answers to the remaining questions confirmed that the group was happier with the experience at Montblanc and showed their dismay at the experience provided by Cogul (Fig. 6). Perhaps the results are not surprising, but show that visitors are more concerned with comfort and convenience than with experiencing ‘authentic’ heritage.

**A/ Muntanyes de Prades Rock Art Interpretation Centre at Montblanc**



**B/ La Roca dels Moros at El Cogul**

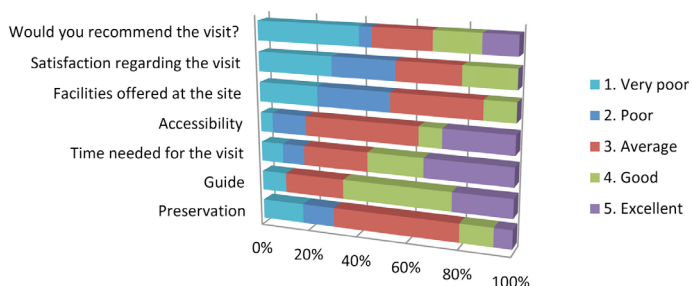


Fig. 6. Catalan Rock Art Sites Visitor Experience Evaluation Charts. Number of interviewees in both cases 28. A/ Montblanc. B/ La Roca dels Moros, Cogul

## 5 THE PREHISTORIC ROCK ART TRAIL AND OTHER INITIATIVES

Since 1998, the year in which the ARAMPI was inscribed in the WH list, the establishment of interpretation centres has been accompanied by other initiatives designed to advertise rock art as a cultural product. One of the most important has been the creation of the Caminos de Arte Rupestre Prehistórico (CARP, Prehistoric Rock Art Trails). For a few years the project was supported by the *European Network of First Inhabitants and Prehistoric Rock Art (Red Europea Primeros Pobladores y Arte Rupestre Prehistórico, REPPARP* (Montes Barquín 2007)). REPPARP consisted of forming a network of eight European regions in Spain and France to organise a rock art itinerary. It was funded by the ERDF (European Regional Development Fund) in 2005 and 2006 (Cantabria Rural ry). It has since been expanded (see, for example, in Catalonia (MAC na)) and was incorporated into the “The Council of Europe Cultural Routes” programme in 2010 (Council of Europe ny). The CARP website is hosted by Arqueotur (CARP ny).

Finally, it is necessary to mention other minor initiatives that have been funded thanks to sponsorship from the Ministry of Education, Culture and Sport for the conservation, protection and dissemination of World Heritage. For example, in 2012 a few rock art projects were funded under this call, including one by the municipalities of Alpera, Almansa and Ayora ([www.arampi.es](http://www.arampi.es)) and another by those of Jumilla, Moratalla, Yecla, Hellín and Nerpio ([www.4darterupestre.com](http://www.4darterupestre.com)). This sponsorship has also paid for some rock art research in Aragon, including the geometric recording of some sites ([proyectoaram.tecnitop.com](http://proyectoaram.tecnitop.com)).

## 6 THE TENSION BETWEEN ENHANCING THE VISITOR EXPERIENCE AND PROTECTING THE ARAMPI ROCK ART

As we have seen from the figures, the number of visitors to the ARAMPI rock art sites comes nowhere near those seen at other World Heritage sites (Cleere 2012; Comer 2012) and therefore we are not dealing with problems of overcrowding. However, the ARAMPI area rock art has been affected by physical, chemical and biological agents, as well as by human action (Alloza Izquierdo et al. 2012; Viñas 2011). Vandalism problems started almost immediately after the art was discovered (Cabré 1923:110) and from early on (1942 in the case of Valltorta) many sites were protected with fences with some having a designated person responsible for supervising visitors (Montes Barquín 2012). The new value given to rock art after the ARAMPI's inclusion on the World Heritage List led to rethinking how to protect these sites. This is particularly evident in the renovation of the fences that safeguard the sites (Giménez Belló & San Nicolás del Toro 2009; Millán Pascual 2012), although some voices have also been raised against them (Fernández Moreno et al. 2012:163-4). The new appearance is also seen as having

had the effect of attracting larger numbers of tourists (Gázquez Milanés 2009:264) (but see comments on visitor numbers above).

One of the actions taken to make the rock art more attractive to visitors has been to clean the paintings (Guillamet 2000; Guillamet 2012). Thanks to this, many of the motifs that had been obscured by layers of both a natural and an anthropic nature are now visible. Reports on the interventions are always submitted to the autonomous regional authorities (Guillamet 2012:124), but they remain unpublished and, as they have all been undertaken by the same team, there has been no discussion on the practices followed. This has caused alarm in some quarters (Viñas 2011:37) and some have expressed concern at the fact that some (but not all, as this effect has not been noticed in Aragon) of the cleaned surfaces seem to be reacting by taking on a darker colour and a new shiny layer. There is also concern regarding the future effects this may have on the AMS dating of the oxalate crust, which is impossible after cleaning has taken place (Viñas 2011:37). Concerns about rock art preservation are present worldwide (Loubser 2001; Mandt et al. 1992; Thorn & Brunet 1995), but perhaps the most important guideline in this respect is that we should not “perform pioneering and irreversible experiments directly on the rock art panels” (Bakkevig in Goldhahn 2005:59). As also appears to be the case in other countries (Gustafsson & Karlsson 2004:35), self-critical discussion regarding conservation practices in the ARAMPI context seems to be absent. One of UNESCO’s roles is “to encourage the identification, protection and preservation of cultural and natural heritage around the world” (UNESCO 1972), perhaps it would be ideal if UNESCO was more proactive in encouraging discussions about rock art conservation practices in rock art areas inscribed on the WH list (see also Rebanks 2009:9).

## 7 CONCLUSION

The rock art of the eastern Iberian Peninsula has been known for more than a century and from very early on, issues of protection and presentation to the public have been part of the agenda. Its inscription on the World Heritage List in 1998, however, helped local authorities (i.e. the autonomous regional communities and provincial and municipal administrations) recognise the value of this heritage and invest in it to levels never seen before. Thus, as explained in this article, the long-vandalised rock art panels were finally cleaned (although not to everyone’s taste), while cultural parks and new interpretation centres were opened, and new initiatives such as the Prehistoric Rock Art Trail were started. At the same time, rock art sites were protected with new state-of-the-art fences and studies of them became available in up-to-date guidebooks.

Behind this investment there may have been a belief in the immediate effect that a World Heritage site recognition usually has on turning a cultural product into a phenomenally successful asset. As explained at the start of this article, this is a common occurrence at WH sites, much to the regret of those who really care about preserving the spirit of place. A quick look at the list of massively successful WH sites immediately shows that they are normally monumental in nature. This is obviously not the case of rock art, which is not only *not* monumental, but it is also usually located in very isolated areas. This is precisely why heritage authorities are interested in promoting it, because such locations are normally in need of economic incentives. In Spain, it seems that authorities' expectation that rock art would boost the local economies may explain the large amounts of funding provided in the years immediately following the inscription. Later, however, the absence of obvious economic results in the middle of the economic crisis brought an end to some of these initiatives. This has been particularly true in autonomous regions without a tradition of appreciating their rock art and may also explain why Aragon and the Valencian Community are still financing new projects. How much of a success or a failure the conversion of rock art into a cultural asset has been is, however, uncertain, as we are still lacking actual statistics and an economic analysis. The ARAMPI does not appear to be unique in this situation (Cellini 2011; Rebanks 2009:7, although see Hall & Piggin 2002; Morere Molinero & Jiménez Guijarro 2007). We would like to argue that it would be helpful to undertake a study of how rock art centres and all the other initiatives taken since 1998 have contributed financially to enhancing local economies. In this study it would be useful to compare the six autonomous regional communities involved in the ARAMPI inscription, as well as the whole area and other WH rock art locations in the world, such as Tanum in Sweden or Alta in Norway. It may also be valuable to assess how aware the local populations are of the ARAMPI inclusion in the World Heritage List and why (for an example of this see Hølleland 2013).

Many have pointed out the bias of the World Heritage List towards architectural heritage (for example Rodwell 2012: 72). Perhaps we finally have to accept that this is the type of heritage tourists are attracted to. In the new world of culture commercialisation, we should acknowledge that rock art has a lesser value to the eyes of the public than monumental heritage. This may not necessarily be damaging. Masses of tourists would certainly threaten fragile rock art landscapes and would detract from experiencing the place and trying to understand how prehistoric peoples made use of it. Perhaps the success of rock art as a cultural product has been the best we could have hoped, for its own sake. We cannot avoid the commercialisation of culture, including rock art, but we can perhaps be thankful that it has only been mildly economically sustainable.

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## REFERENCES

- Alonso González, P. 2013, *Cultural Parks and National Heritage Areas: Assembling Cultural Heritage, Development and Spatial Planning*, Cambridge Scholars, Newcastle.
- Alloza Izquierdo, R., J.I. Royo Guillén, J.L. Recuenco Caraballo, M. Lecina Enciso, R. Pérez Bellido and M.P. Iglesias García 2012, La conservación del arte rupestre al aire libre: un desafío formidable. In *Jornadas técnicas para la gestión del arte rupestre, Patrimonio Mundial*, M.N. Juste, M.A. Hernández, A. Pereta, J.I. Royo and J.A. Andrés (eds.). Comarca del Somontano, Huesca, pp. 89-106.
- Aparicio Pérez, J. 2011 Ponencias de los seminarios de Arte Prehistórico y Varia de Arqueología, Sección de Estudios Arqueológicos V. Diputación Provincial de Valencia, Valencia.
- Aparicio Pérez, J. (ed.) 2012 *Ponencias de los seminarios de Arte Prehistórico y Varia de Arqueología* (Sección de Estudios Arqueológicos V. Serie Arqueológica. Varia X. Diputación Provincial de Valencia, Valencia.
- Aparicio Pérez, J. (ed.) 2013 *Ponencias de los seminarios de Arte Prehistórico y Varia de Arqueología* (Sección de Estudios Arqueológicos V. Serie Arqueológica. Varia XI. Diputación Provincial de Valencia, Valencia.
- Bea, M. 2012 *Arte rupestre de la Comarca del Matarraña / Matarranya*. Comarca del Matarraña, Valderrobles.
- Beltrán Martínez, A. 1987 La conservación de arte rupestre. In *Arte rupestre cuaternario: connotaciones semánticas y rituales*, J.M. Gómez-Tabanera García (eds.). Diputació de Castelló, Servei d'Investigacions Arqueològiques i Prehistòriques, Castelló, pp. 61-81.
- Beltrán Martínez, A. 1989 *Los Parques Culturales y el arte rupestre en Aragón*. Diputación General de Aragón, Zaragoza.
- Beltrán Martínez, A. 1999 El Arte prehistórico del Arco Mediterráneo y el Patrimonio de la Humanidad, de la UNESCO. BARA. *Boletín de Arte Rupestre de Aragón* 2, pp.11-13.



- Black, G. 2012 *The Engaging Museum: Developing Museums for Visitor Involvement*. Routledge, London.
- Buckley, R. 2004 The Effects of World Heritage Listing on Tourism to Australian National Parks. *Journal of Sustainable Tourism* 12(1), pp. 70-84.
- Cabré, J. 1923 Las pinturas rupestres de la Valltorta I. Desaparición de las pinturas de una de las estaciones de este valle. *Actas y memorias de la Sociedad Española de Antropología, Etnografía y Prehistoria [Memoria XIV - sesión 14]* 2(2), pp. 107-118.
- Cantabria Rural ny Red Cántabra de Desarrollo Rural. Available from: <http://redcantabrarural.com/proyectos/repparp/> (14 March 2015).
- CARP ny Asociación Internacional Caminos de Arte Rupestre Prehistórico (CARP) Available from: <http://www.arqueotur.org/redes/asociacion-internacional-caminos-de-arte-rupestre-prehistorico-carp.html> (14 March 2015).
- Castells Camp, J. and G. Hernández Herrero 2009 La gestión de los conjuntos con pinturas rupestres en Catalunya: estado de la cuestión (2008). In *El arte rupestre del Arco Mediterráneo de la Península Ibérica: 10 años en la lista del Patrimonio Mundial de la UNESCO. Actas IV Congreso (Valencia, 3, 4 y 5 de diciembre de 2008)*, J.A. López Mira, R. Martínez Valle and C. Matamoros de Villa (eds.), Generalitat Valenciana, Valencia, pp. 197-204.
- Cellini, R. 2011 Is UNESCO recognition effective in fostering tourism? A comment on Yang, Lin and Han. *Tourism Management* 32(2), pp. 458-460.
- Cleere, H. 2012 The impact of World Heritage Listing. In *Heritage, a driver of development. Proceedings of ICOMOS 17th General Assembly, 2011-11-27*, ICOMOS, Paris, pp. 519-525..
- Clottes, J. 1999 La UNESCO y el arte rupestre. *BARA. Boletín de Arte Rupestre de Aragón* 2, pp. 9-10.
- Collado Villalba, O. 1998 El parque Cultural de Albarracín. *BARA. Boletín de Arte Rupestre de Aragón* 1, pp. 41-59.
- Comer, D. 2012 *Tourism and Archaeological Heritage Management at Petra: Driver to Development Or Destruction?* Springer, New York.
- Council of Europe ny Culture, Heritage and Diversity - Prehistoric Rock Art Trail Available from: [http://www.coe.int/t/dg4/cultureheritage/culture/routes/prehistoric\\_en.asp](http://www.coe.int/t/dg4/cultureheritage/culture/routes/prehistoric_en.asp) (14 March 2015).
- Díaz-Andreu, M. 2012 A Hundred years of post-Palaeolithic rock art studies in Spain / Cien años en los estudios de pintura rupestre post-paleolítica en la investigación española. In *The Levantine Question: the development of Spanish Levantine Rock-art*, J.J. García Arranz, H. Collado and G. Nash (eds.),

- Archaeolingua, Budapest, pp. 23-53.
- Fernández Moreno, J.J., L.M. Lobo García and R. Ontañón Peredo 2012 Consideraciones y reflexiones sobre la protección de los sitios con arte rupestre. In *Jornadas técnicas para la gestión del arte rupestre, Patrimonio Mundial*, M.N. Juste, M.A. Hernández, A. Pereta, J.I. Royo and J.A. Andrés (eds.), Comarca del Somontano, Huesca, pp. 151-166.
- Gázquez Milanés, J.A. 2009 Arte rupestre y turismo: la gestión del arte rupestre como elemento dinamizador del territorio: la Cueva-Sima de la Serreta, Cieza (Murcia). In *El arte rupestre del Arco Mediterráneo de la Península Ibérica: 10 años en la lista del Patrimonio Mundial de la UNESCO. Actas IV Congreso (Valencia, 3, 4 y 5 de diciembre de 2008)*, J.A. López Mira, R. Martínez Valle and C. Matamoros de Villa (eds.), Generalitat Valenciana, Valencia, pp. 259-268.
- Giménez Belló, F.J. and M. San Nicolás del Toro 2009 Los cierres en los sitios de arte rupestre Prehistórico de la Región de Murcia: la Cueva-Sima de la Serreta (Cieza) y los Abrigos del Pozo (Calasparra). In *El arte rupestre del Arco Mediterráneo de la Península Ibérica: 10 años en la lista del Patrimonio Mundial de la UNESCO. Actas IV Congreso (Valencia, 3, 4 y 5 de diciembre de 2008)*, J.A. López Mira, R. Martínez Valle and C. Matamoros de Villa (eds.), Generalitat Valenciana, Valencia, pp. 233-240.
- Goldhahn, J. 2005 We paint and we are proud of it. *Norwegian Archaeological Review* 38(1), pp. 55-60.
- Guillamet, E. 2000 Intervencions de conservació-restauració en pintura rupestre. *Cota Zero* 16, pp. 111-9.
- Guillamet, E. 2012 Intervenciones de conservación de arte rupestre al aire libre. In *Jornadas técnicas para la gestión del arte rupestre, Patrimonio Mundial*, M.N. Juste, M.A. Hernández, A. Pereta, J.I. Royo and J.A. Andrés (eds.), Comarca del Somontano, Huesca, pp. 123-128.
- Guíu, V.M. 2004 El Parque Cultural del Maestrazgo: un modelo de gestión al servicio del desarrollo rural. In *Comarca del Maestrazgo*, Colección Territorio, 27. Gobierno de Aragón, Zaragoza, pp. 247-262.
- Gustafsson, A. and H. Karlsson 2004 Solid as a rock. An ethnographical study of the management of rock-carvings. *Current Swedish Archaeology* 12, pp. 23-40.
- Hall, C.M. and R. Piggin 2002 Tourism business knowledge of World Heritage: a New Zealand case study. *International journal of tourism research* 4, pp. 401-411.
- Hernández Pérez, M.S. 2009 Arte rupestre Postpaleolítico en el Arco Mediterráneo de la Península Ibérica: balance de 10 años de descubrimientos y estudios. In *El arte rupestre del Arco Mediterráneo de la Península Ibérica: 10 años en la lista del Patrimonio Mundial de la UNESCO. Actas IV Congreso (Valencia, 3, 4 y 5 de*

- diciembre de 2008), J.A. López Mira, R. Martínez Valle and C. Matamoros de Villa (eds.), Generalitat Valenciana, Valencia, pp. 59-79.
- Hernández Pérez, M.S. and J.A. Soler Díaz (eds.) 2005 *Arte rupestre en la España mediterránea. Actas del congreso celebrado en Alicante 25-28 de octubre de 2004*. Instituto Juan Gil-Albert, Alicante.
- Hølleland, H. 2013 What does Skiing have to do with World Heritage!?: Glimpses into Visitors' Awareness of World Heritage. In *The Significance of World Heritage: Origins, Management, Consequences; The Future of the World Heritage Convention in a Nordic Perspective: Papers Presented at Two Conferences in Falun (Sweden) 2010 and in Vasa (Finland) 2011*, B.G. Jansson (eds.), Dalarna University Report; 2013:1. Höskolan Dalarna, Falun, pp. 106-121.
- Huang, C.-H., Tsaor, J.-R. and Yang, C.-H. 2012. Does world heritage list really induce more tourists? Evidence from Macau. *Tourism Management* 33, pp. 1450-1457.
- Información 1999 Información. BARA. *Boletín de Arte Rupestre de Aragón* 2, pp. 95-97.
- Jornadas 1990 *Jornadas sobre parques con arte rupestre (1989, Zaragoza)* (Colección Actas 16. Diputación General de Aragón, Departamento de Cultura y Educación, Zaragoza.
- Juste Arruga, M.N. 2012 Los parques culturales como ejemplo de gestión, desarrollo territorial e implicación de la población local. In *Jornadas técnicas para la gestión del arte rupestre, Patrimonio Mundial*, M.N. Juste, M.A. Hernández, A. Pereta, J.I. Royo and J.A. Andrés (eds.), Comarca del Somontano, Huesca, pp. 241-246.
- López Mira, J.A., R. Martínez Valle and C. Matamoros de Villa (eds.) 2009 *El arte rupestre del Arco Mediterráneo de la Península Ibérica: 10 años en la lista del Patrimonio Mundial de la UNESCO. Actas IV Congreso (Valencia, 3, 4 y 5 de diciembre de 2008)*. Generalitat Valenciana, Valencia.
- Loubser, J. 2001 Management Planning for Conservation. In *Handbook of Rock Art Research*, D.S. Whitley (eds.), AltaMira Press, Walnut Creek, London, New Delhi, pp. 80-115.
- MAC na Ruta de l'Art Rupestre. Available from: <http://www.mac.cat/Rutes/Ruta-de-l-Art-Rupestre> (14 March 2015).
- Mandt, G., K. Michelsen and K.S. Riisøen (eds.) 1992 *Conservation, preservation and presentation of rock art* (Arkeologiske Skrifter, Historisk museum, Univ. of Bergen 6. University of Bergen, Bergen.
- Martínez García, J. and M. Hernández Pérez (eds.) 2013 *Actas del II Congreso de Arte Rupestre Esquemático en la Península Ibérica. Comarca de Los Vélez*

- (Almería), 5 al 8 de Mayo 2010. Ayuntamiento de Vélez Blanco, Vélez Blanco.
- Martínez García, J. and M.S. Hernández Pérez 2006 Actas del Congreso de Arte Rupestre esquemático en la Península Ibérica: Comarca de los Vélez, 5-7 de mayo 2004. s.n., Almería.
- Martínez Valle, R. 2000 El parque cultural de Valltorta-Gasulla (Castellón). *Trabajos de Prehistoria* 57(2), pp. 65-76.
- Mateo Saura, M.A. 2013 A vueltas con el Centro de Arte Rupestre de Moratalla. Available from: <http://miguelangelmateosaura.blogspot.com.es/search?q=a+vueltas+con+el+arte+rupestre+de+Moratalla> (14 March 2013).
- Millán Pascual, R. 2012 Cambio e imagen de un Patrimonio Mundial. Las pinturas levantinas de Cantos de la Visera. In *Actas del Primer Congreso Internacional de Buenas Prácticas en Patrimonio Mundial: Arqueología // Proceedings of the First International Conference on Best Practices in World Heritage: Archaeology*, A. Castillo (eds.), Universidad Complutense de Madrid, Madrid, pp. 953-959.
- Mínguez García, M.C. and M. San Nicolás del Toro 2008 Unidad y diversidad en la gestión de arte rupestre del Arco Mediterráneo de la Península Ibérica. In *Espacios turísticos: mercantilización, paisaje e identidad*, J.A. Ivars Baidal and J.F. Vera Rebollo (eds.), Universidad de Alicante. Instituto Universitario de Investigaciones Turísticas. Available from: <http://hdl.handle.net/10045/12501>, (14 March 2015), Alicante, pp. 141-152.
- Montes Barquín, R. 2007 El proyecto Red Europea Primeros Pobladores y Arte Rupestre Prehistórico (REPPARP, Interreg IIIB Sudoe): Hacia la consolidación de un Itinerario Cultural Europeo basado en los recursos arqueológicos, en el ámbito rural del Sudoeste de Europa. In *IV Congreso Internacional sobre Musealización de Yacimientos Arqueológicos (Santiago de Compostela, 13-16 noviembre 2006)*, M.P. Varela (eds.), Xunta de Galicia, Santiago de Compostela, pp. 118-122.
- Montes Barquín, R. 2012 Protecciones físicas para el arte rupestre: su filosofía, tipología, resultados y algunas propuestas novedosas. In *Jornadas técnicas para la gestión del arte rupestre, Patrimonio Mundial*, M.N. Juste, M.A. Hernández, A. Pereta, J.I. Royo and J.A. Andrés (eds.), Comarca del Somontano, Huesca, pp. 179-192.
- Morere Molinero, N. and J. Jiménez Guijarro 2007 Análisis del turismo arqueológico en España. Un estado de la cuestión. *Estudios Turísticos* 171, pp. 115-139.
- Moure Romanillo, A. 2006 *Escritos sobre historiografía y patrimonio arqueológico [compiled by M. Angeles Querol and Lourdes Ortega Mateos]*. Servicio de Publicaciones de la Universidad de Cantabria, Santander.
- Pérez Plaza, A. 2009 La tutela del arte rupestre en la Comunidad Autónoma de

- Andalucía: estado de la cuestión y nuevas perspectivas para su investigación y difusión. In *El arte rupestre del Arco Mediterráneo de la Península Ibérica: 10 años en la lista del Patrimonio Mundial de la UNESCO. Actas IV Congreso (Valencia, 3, 4 y 5 de diciembre de 2008)*, J.A. López Mira, R. Martínez Valle and C. Matamoros de Villa (eds.), Generalitat Valenciana, Valencia, pp. 179-184.
- Rebanks, J. 2009 *The potential for a new fundraising model for World Heritage destinations*. Consulting Ltd and Trends Business Research Ltd, Penrith.
- Rodwell, D. 2002 The World Heritage Convention and the exemplary management of complex heritage sites. *Journal of Architectural Conservation* 3, pp. 40-60.
- Rodwell, D. 2012 The Unesco World Heritage Convention, 1972–2012: Reflections and Directions. *The Historic Environment* 3(1) , pp. 64-85.
- Sanz Gallego, N. (ed.) 2008 *L'art rupestre dans les Caraïbes / Rock Art in the Caribbean / Arte Rupestre en el Caribe* (World Heritage Papers 24. UNESCO, Paris.
- Shackley, M. (ed.) 1998 *Visitor Management*. Butterworth Heinemann, Oxford.
- Thiel, M.-J. 1998 Universalidad del arte rupestre. *El Correo de la Unesco* April:38.
- Thorn, A. and J. Brunet (eds.) 1995 *Preservation of rock art* (Occasional AURA Publication 9. Australian Rock Art Research Association, Melbourne.
- UNESCO 1972 *Convention Concerning the Protection of the World Cultural and Natural Heritage*. UNESCO. Available from: <http://whc.unesco.org/archive/convention-en.pdf> (15 March 2015), Paris.
- UNESCO 1998 *World Heritage. Convention concerning the Protection of World Cultural and Natural Heritage. Report. World Heritage Committee Twenty-Second Session. Kyoto, Japan. 30 November-5 December 1998*. UNESCO. Available from: <http://whc.unesco.org/archive/repcom98.pdf> (14 March 2015), Paris.
- Viñas, R. 2011 Les manifestacions rupestres de Catalunya: un patrimoni per conèixer i gaudir. Notes sobre historiografia, conservació i divulgació. *Podall* 1, pp. 14-50.
- Viñas, R., A. Vericat and J. Mor 2012 Els centres d'interpretació de l'art rupestre de Catalunya (CIAR). Divulgar el patrimoni mundial. *Podall* 2, pp. 26-55.
- Yang, C.-H., Lin, H.-L. and Han, C.-C. 2010. Analysis of international tourist arrivals in China: The role of World Heritage Sites. *Tourism Management* 31, pp. 827-837.