

THE USE OF INTERACTIVE AND EDUCATIONAL TOOLS TO UNDERSTAND ROMANESQUE HERITAGE: A CASE STUDY IN ERILL LA VALL (LLEIDA)

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ABSTRACT

This paper analyses the concept of interpretation centres as an effective tool to understand heritage. At the same time, it presents the case study of the *Centre del Romànic de la Vall de Boí (CRVB)* in Erill la Vall (Lleida). This model has been selected after a previous study taking into consideration qualitative, descriptive and exploratory criteria. The study was carried out in numerous Romanesque art interpretation centres throughout Spain. The results of the analysis show that this case includes those basic aspects established in the investigation in order to become an educational model that seeks as its main objective the proper interpretation of the Romanesque teaching.

KEYWORDS

Interpretation Centre, Vall de Boí, Romanesque Art, Museology, Education.

CAPITALIA VERBA

Interpretationis Domus, Valle Boinam, Ars Romanica, Musaeologia, Educatio.

1. Introduction. Interpretation centres: state of the question

In order to assess the state of the question of interpretation centres, we have to bear in mind that visual interaction with the object is indispensable during visits to heritage sites, but a strong intervention based on education and the principles of interaction can enhance the audience's interpretation of what they see. In fact, the main goal of heritage education is to give visitors keys to understanding the heritage.

Obviously, the nature of the works themselves and the need to ensure their conservation often means that we remain in the first stage of contemplation. However, the vast gap this creates between the audience and the object can be remedied with interpretative and educational elements. These elements of interpretation called museography are concentrated in particular in centers of interpretation. Remember that the interpretation centres born to make heritage more understandable whether the focus is an concept, natural element, era or an important figure.

Actually, the interpretation centre is:

un equipament creat per a posar en valor el patrimoni cultural i/o natural d'un espai determinat o d'una àrea geogràfica i transformar-lo en un producte didàctic, cultural i/o turístic. A diferència dels museus, aquests centres no col·leccionen, ni preserven ni estudien els objectes originals, però sí donen les claus per a permetre una millora en la comprensió del seu valor natural i cultural, per a alimentar la sensibilitat i la cultura, fent referència a alguna de les àrees del patrimoni cultural de la zona [...]. Aquesta és la solució possible per a difondre el concepte de patrimoni cultural en els petits nuclis i en les zones rurals, on no hi ha recursos necessaris per a crear museus reals i on aquesta riquesa pot convertir-se en un important factor de desenvolupament del sector turístic i de la recuperació de la identitat cultural dels habitants.¹

The first records of the idea of interpretation date back to Tilden,² who applies this concept to museology in the United States. When we analyse the word 'interpret', we see that it comes from the Latin lexeme *interpretare*, which means "to reveal the meaning of something". Nevertheless, the verb 'to exhibit', which comes from the Latin word *exponere* and is frequently used in relation to heritage, refers to *presentar*

1. "a facility created to showcase the cultural and natural heritage of a specific place or geographic area, and transform it into an educational, cultural and tourism product. Unlike museums, these centres do not collect, conserve or study original objects, but rather enhance our understanding of their natural and cultural value, developing sensitivity and culture, by referring to the cultural heritage sites in the area. Interpretation centres are potential solutions for disseminating the concept of cultural heritage in small towns and rural areas, where there are insufficient resources to create real museums, and where the wealth of the heritage could be used to develop the tourism industry and help local communities recover their cultural identity". *Interpretar el patrimoni, Guia bàsica*. Barcelona: Diputació de Barcelona, 2006: 43-44 (Based on the Research Project HICIRA, 2004).

2. In his work: Tilden, Freeman. *Interpreting our Heritage*. Chapel Hill: University of North Carolina Press, 1977 (first published in 1957). Translated into Spanish as: Tilden, Freeman. *La interpretación de nuestro patrimonio*. Pamplona: Asociación para la Interpretación del Patrimonio, 2006.



*una materia con claridad y método.*³ In fact, the aim of museology is to achieve both these things: to present material clearly and methodically, while also revealing its meaning. At the same time, we should also bear in mind that presenting, displaying and exhibiting an object is very different from revealing its obvious and hidden meanings. The meaning of the object when it was created and its meaning now. In other words, although these terms may seem synonymous, they are not. Shop windows exhibit products, for example, but in this case ‘exhibit’ means presenting an object to the public clearly and methodically and contrasts to our sense of the verb in musicology or museum design: in these fields, as well as seeking to exhibit objects and to display them for viewing and contemplation, the intention is to assist in their interpretation and to reveal their meaning.

The term ‘interpret’, therefore, is of little interest to the advertising executive, designer or windowdresser, but for the cultural manager or museologist, it is particularly important to go back to Tilden’s idea that *interpretar es lo equivalente a lo que se ve y se experimenta* interpreting is equivalent to what is seen and experienced.⁴ Similarly, Ham and Morales consider that effective interpretation is a creative process of strategic communication, which produces intellectual and emotional connections between visitors and the resource in question. This process generates meanings for the same resource, so that it can be appreciated and enjoyed.⁵ If we return to the constructivist theories of meaningful learning proposed by Ausubel, Novak and Hanesian, learning depends not on a specific method but on whether the information presented can form a cognitive bridge with what the audience already knows.⁶ On the basis of this principle, the authors reflect on when it is considered that a message transmitted about a heritage item is interpretive and effective. We intend that the message clearly identifies the physical characteristics of the heritage work. At the same time, we also seek to relate abstract ideas with those physical characteristics of the work of art; in short, with something concrete so that visitors can identify it easily.

Similarly, and relating this question to the previous item, the message should also be associated with intangible ideas that can nevertheless be linked to general concepts, so that the visitor does not feel lost. All of this fosters intellectual and emotional connections in the visitors, which stimulate deep thought and lead to profound respect for the heritage item, which in turn contributes to its protection. In a nutshell, and to take Ham’s reference to the maxim coined by an anonymous author in writing in the administrative manual of the US Park Service, we should

3. “the action of presenting a subject methodologically and clearly”. Miguel, Raimundo de. *Nuevo diccionario latino-español etimológico*. Madrid: J.M. Bosch Editor, 1867:356.

4. “interpreting is equivalent to what is seen and experienced”. From the Spanish version: Tilden, Freeman. *La interpretación de nuestro patrimonio...*: 25.

5. Morales, Jorge; Ham, Sam. “¿A qué interpretación nos referimos?”. *Boletín de Interpretación*, 19 (2008): 4-7.

6. Ausubel, David Paul; Novak, Joseph; Hanesian, Helen. *Psicología educativa: un punto de vista cognoscitivo*. Mexico D.F.: Trillas, 1997.



consider that *por la interpretación, comprensión, por el entendimiento estima; por la estima, protección*.⁷

Also, in addition to the messages communicated to the visitor, we should stress that for a process of interpretation to be effective, each heritage item requires three levels of meaning. The first is the functional meaning, in other words, what the item is and how it is used. The second is the symbolic meaning: what the item's value is for the individual viewer and for society. The third is the contextual meaning, which concerns the scenario and situation surrounding the item. To decode the meaning of any heritage item, various questions arise, which lead us to discover the three meanings described above, on which we can then act.⁸ To give a specific example: if we stand in the cloister of the Monastery of Sent Benet de Bages and contemplate the capitals around the sides of the central space, we might ask what their functional meaning is. Obviously, a capital is an element of architecture situated at the top of a pillar to take the load of the arch or roof and transmit it down to the pillars. However, in addition to this structural function, capitals also have a clear symbolic meaning and were used, in the Middle Ages, to educate the public. In many cases, they depicted figurative scenes with symbolic aspects referring to biblical characters. And finally such capitals also become endowed with contextual meaning that, in our case, reflects a series of characteristics associated with the Romanesque period. Taking into account the message and the three levels of meaning of a heritage item, we might therefore propose that an interpretation centre is *un equipamiento situado en un edificio cerrado o a cielo abierto que normalmente no dispone de objetos originales y que tiene por objetivo revelar el sentido evidente u oculto de aquello que se pretende interpretar*.⁹

All in all, we present below a decalogue¹⁰ which we consider essential for all those centres that seek to be efficient (nonetheless, we are aware of the fact that we are dealing with resources with an original lack of definition). The underlying theoretical base used to generate these items has been the previous analysis of the main interpretation centres:

1. *Relaciona el objeto a interpretar con las ideas previas del usuario.*
2. *Su objetivo es instruir, emocionar, provocar, o desencadenar ideas.*
3. *Tiene en cuenta los segmentos de edad de los visitantes.*
4. *Tiene presente que interpretar no es tan solo informar.*
5. *Organiza jerárquicamente los contenidos.*
6. *Selecciona conceptos relevantes.*

7. "Through interpretation, understanding; through understanding, appreciation; through appreciation, protection". Ham, Sam. "De la Interpretación a la Protección ¿Hay una base teórica?". *Boletín de Interpretación*, 18 (2008): 27-31.

8. Martín, Carolina. *Estudio analítico descriptivo de los centros de interpretación patrimonial en España*. Barcelona: Universitat de Barcelona (PhD Dissertation), 2011.

9. "a facility situated in an enclosed building or in the open air that does not normally contain original objects and whose aim is to reveal the obvious and hidden meaning of the item to be interpreted". Martín, Carolina. *Estudio analítico descriptivo...*: 36.

10. Martín, Carolina. *Manual del centro de interpretación*. Gijón: Trea, 2013.



7. *Contiene elementos lúdicos.*
8. *Utiliza recursos museográficos diversos.*
9. *Concibe la interpretación com un hecho global y no parcial.*
10. *Interpreta objetos patrimoniales sin la necesidad de que los contenga.*¹¹

This decalogue, on which we should base an interpretation center, must be complemented by other concepts which belong to a less educative field, but which we should never forget: we refer to planning or human resources.

2. Methodology

To carry out this research, we first did an exploratory survey and analysis of the Romanesque interpretation centres in Spain. The observations were performed *in situ* and the data have been reflected in a chart. The instrument has been created from the decalogue presented in the former item. Subsequently, the results indicate that one of the models fulfills the ten points. It is for this reason that we have carried out an in-depth study of this center in order to be validated as a model, basing it on this case study method. This way, we have been able to delve into questions which are mainly related with how it has been carried out and with what tools. The aim of the study is an integrating perspective and, therefore, as Yin points out, it is a question of taking into consideration that “Investigate a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident”.¹²

3. Analysis for the selection of the model

The great diversity resulting from the uncontrolled proliferation of interpretation centres in the last twenty years implies the need to draw up an effective educational model. If the objective pursued with their creation is to teach through heritage, it makes sense to establish mainly educational models. In order to develop one of the centers as a model, we must analyse those which have been already established. To do so, we have created an assessment tool for the collection of data based on the

11. “1. Relate the object to be interpreted with the user’s existing ideas; 2. Have the goal of instructing, moving and provoking visitors or triggering ideas; 3. Take into account the age range of visitors; 4. Bear in mind that interpreting is more than just informing; 5. Organize contents hierarchically; 6. Select relevant contents; 7. Contain entertaining elements; 8. Use a range of museum design resources; 9. Consider that interpretation addresses the whole item, not a part of it; 10. Interpret heritage items without needing to house them in the centre”. Martín, Carolina. *Estudio analítico descriptivo...*:37.

12. Yin, Robert K. *Case Study Research: Design and Methods*. Thousand Oaks: Sage Publications, 1994: 13.



ten items presented above. This tool is a technical datasheet drawn from a sectional and descriptive design.

The indicators are divided into five categories, depending on whether they refer to the contents (category 1), interpretation which takes place inside the centre (category 2), visitors (category 3), elements of mediation (category 4) and heritage works (category 5). In reference to the items of content, they have been structured in relation to three concepts: the user's previous ideas, the hierarchy and the relevance of the content covered. When dealing with the concept of interpretation, the items analyzed hinge around the question of whether it is conceived as a global fact, not just information that relates to the previous ideas of the user. Regarding the users, we have taken into account whether we might take the age range of visitors into consideration. In relation to the item of museography and educational elements, we have considered whether there is a diversity of museographic resources, as well as whether it uses ludic devices in its approach. Finally, we have considered the relationship with the heritage that it interprets.

The sample consists of those Romanesque interpretation centres which include the concept of 'Romanesque' in their nomenclature. The selection is based on the availability of access during the project life cycle (2015-2016). In total, ten interpretation centers satisfied the criterion mentioned above and it is evident that they are associated with the provinces that have more examples of Romanesque heritage.

Table 1. List of categories and items (Prepared by the author)

Categories	Items
Contents	Relate the object to be interpreted with the user's existing ideas
	Organize contents hierarchically
	Select relevant contents
Interpretation which takes place inside the centre	Have the goal of instructing, moving and provoking visitors or triggering ideas
	Consider that interpretation addresses the whole item, not a part of it
	Bear in mind that interpreting is more than just informing
Visitors	Take into account the age range of visitors
Elements of mediation	Contain entertaining elements
	Use a range of museum design resources
Heritage works	Interpret heritage items without needing to house them in the centre



The results of the study also follow a previous in-depth analysis which is not presented in this article.¹³ Out of the 10 centers analyzed, only one satisfied all the items, in addition to two centres which satisfied eight items, and two centres which satisfied six items respectively. In general terms, we can say that half of interpretation centres fulfill five or less items out of the total number of items. Also, we can highlight the two least satisfied items in most centres. We refer to the fact of considering the age range of visitors, as well as the fact that the main aim of the centres is to educate, stimulate, provoke or trigger ideas. Generally speaking, all the centres take into account that they do not have to contain the heritage objects in order to be able to interpret them as well as the selection of relevant concepts.

As it has been pointed out before, the initial analysis has made evident the only center that can become a model in the sense of representation and as an adjective that verges on the notion of 'ideal'. What we aim to seek by analyzing the model is to show an idealized representation of reality to show some of its principal and significant features. Due to the complexity of this phenomenon, it is necessary to undertake this research in order to understand it more easily, since many diverse factors converge in the educational process.

Table 2. Results of the comparative analysis applied to interpretation centres dedicated to the Romanesque art in Spain (Prepared by the author)

	10	9	8	7	6	5	4	3	2	1
Centre d'Interpretació del Romànic (Erill La Vall, Lérida)										
Centro de Interpretación del Románico (Villacantid, Cantabria)										
Centro de Interpretación del Románico en Álava (Vilafranca, Álava)										
Centro de Interpretación del Arte Románico en las Merindades (Medina de Pomar, Burgos)										
Centro de Interpretación del Románico (Huerta del Guadián, Palencia)										
Centro del Románico Rioja Románica (Treviana, La Rioja)										
Centro de Interpretación del Románico (Castañeda, Cantabria)										

13. Martín, Carolina. *Estudio analítico descriptivo...*



Table 3. List of items and interpretation centers that fulfill them (Prepared by the author)

Categories	Items	Centro de Interpretación del Románico en Álava (Vilafranca, Álava)	Centro de Interpretación Andorra Románica (Andorra)	Centro de Interpretación del Románico (Quintanama, Burgos)	Centro de Interpretación del Románico (Medina de Pomar, Burgos)	Centro de Interpretación del Románico (Villacastid, Cantabria)	Centro de Interpretación del Románico (Castañeda, Cantabria)	Centro del Románico Rioja (Treviana, La Rioja)	Centro de Interpretación del Románico (Erill La Vall, Lérida)	Aula de Interpretación del Románico (Artáiz, Navarra)	Centro de Interpretación del Románico (Huerta del Guadian, Palencia)
1	Relate the object to be interpreted with the user's existing ideas	X	∅	∅	∅	X	∅	∅	X	∅	∅
	Organize contents hierarchically	∅	∅	X	X	X	∅	∅	X	∅	X
	Select relevant contents	X	X	X	X	X	X	∅	X	X	X
2	Have the goal of instructing, moving and provoking visitors or triggering ideas	X	∅	∅	∅	∅	∅	∅	X	∅	∅
	Consider that interpretation addresses the whole item, not a part of it	X	∅	∅	∅	∅	∅	X	X	∅	∅
	Bear in mind that interpreting is more than just informing	X	∅	∅	∅	∅	X	∅	X	∅	∅
3	Take into account the age range of visitors	∅	∅	∅	X	X	∅	∅	X	∅	X
	Contain entertaining elements	X	∅	∅	X	X	X	X	X	∅	X
4	Use a range of museum design resources	X	∅	∅	X	X	∅	∅	X	∅	X
	Interpret heritage items without needing to house them in the centre	X	X	X	X	X	X	X	X	X	X



natural heritage attract large numbers of visitors.¹⁶ The history of the recognition of the whole must be sought in the 19th century, as part of a series of actions to safeguard and disseminate the Catalan artistic and archaeological heritage, which at that time was under endangered and disperse.¹⁷ We know that the value and importance of 11th to 13th century art as part of the history and identity of Catalonia was internationally recognized from the early decades of the 20th century.¹⁸ Studies and monographs written by notable members of the industrial bourgeois have helped appraise the value of Catalan medieval heritage¹⁹ and interest in restoring these monuments was fostered by notable figures such as Puig i Cadafalch, Domènech i Montaner,²⁰ Gudiol i Cunill and Folch i Torres through the associations such as the *Centre Excursionista de Catalunya* or the *Associació Catalanista d'Excursions Científiques*.

From UNESCO. "The Criteria for Selection". UNESCO. 27 September 2015 <<http://whc.unesco.org/en/criteria/>>.

Catalan Romanesque Churches of the Vall de Boí were included at the list of World Heritage Site were selected on the basis of two criteria:

"Criterion (ii): The significant developments in Romanesque art and architecture in the churches of the Vall de Boí testify to profound cultural interchange across medieval Europe, and in particular across the mountain barrier of the Pyrenees.

Criterion (iv): The Churches of the Vall de Boí are an especially pure and consistent example of Romanesque art in a virtually untouched rural setting".

From UNESCO. "Catalan Romanesque Churches of the Vall de Boí". UNESCO. 27 September 2015 <<http://whc.unesco.org/en/list/988/>>.

16. The office that manages Romanesque heritage in Boí, at Erill la Vall, explains that family tourism from around Catalonia predominates, although in recent years there has been a sharp rise in tourists from other parts of Europe, particularly French, Dutch, Italian and Spanish tourists. Visitors tend to combine the Romanesque route with nature tourism (one of the two entrances to the Aiguestortes i Estany de Sant Maurici National Park is in the Vall de Boí, through which around 240,000 tourists pass per year) and with skiing at the Boí Taüll Resort, which has been open since 1998. Consequently, the growth in tourism in the valley in the last ten years cannot be attributed solely to the UNESCO world heritage declaration. However, the mayor of the Vall de Boí municipality is convinced that cultural tourism has helped to break the seasonal nature of visits, and has led to the emergence in recent years of four small hotels and rural guest houses, and five new restaurants, as well as the renovation and improvement of existing establishments. Centre del Romànic de la Vall de Boí. "Protecció i reconeixement". *Centre del Romànic de la Vall de Boí*, 27 September 2015 <<http://www.centreromanic.com/ca/protecció-i-reconeixement>>.

17. The churches of Sant Climent and Santa Maria de Taüll were the first to receive institutional recognition in 1931, when they were declared historical and artistic monuments. This declaration was not extended to the churches of Sant Joan de Boí and Santa Eullàlia d'Erill la Vall until 1962. In 1992, the Government of Catalonia declared the entire ensemble of churches in the Vall de Boí 'Heritage of Cultural Interest'. Two years later, the government launched its restoration programme for the churches. Centre del Romànic de la Vall de Boí. "Protecció i reconeixement". *Centre del Romànic de la Vall de Boí*, 27 September 2015 <<http://www.centreromanic.com/ca/protecció-i-reconeixement>>.

18. Carbonell, Eduard. *Guia art romànic*. Barcelona: Museu Nacional d'Art de Catalunya, 2002.

19. Trepal, Cristòfol A. *L'Art romànic*. Barcelona: Editorial Barcanova, 1993.

20. Granell, Enric; Ramon, Antoni. *Lluís Domènech i Montaner, Viatges per l'arquitectura romànica*. Barcelona: Col·legi d'Arquitectes de Catalunya, 2006.



A key moment in the appraisal of this heritage took place in 1907,²¹ when the photographer Mas, along with Puig i Cadafalch and Gudiol i Cunill, undertook the *Missió Arqueològica-Jurídica a la Ratlla d'Aragó* ("Archaeological-Juridical Mission to the Aragon Border Area"), the first expedition organized by the *Institut d'Estudis Catalans* ("Institute of Catalan Studies").²² This meant its expansion around the world, while at the same time was one of the instruments which aroused greed on the part of international art collector.²³ After the different stages that the valley's heritage has passed through, it became strategically important to discover and understand the world of Romanesque art. This success brought certain responsibilities, which were mainly taken on by the World Heritage Consortium of the Vall de Boí,²⁴ amongst which we find the creation of interactive and didactic resources²⁵ in 2007.²⁶

The aim of this new facility, situated in Erill la Vall, was to welcome the flow of visitors who wished to see the churches, and to provide them with interpretive tools to stimulate cultural tourism throughout this small territory. The aim was to overcome one of the existing problems: visitors to the churches were only provided with some interpretive resources, such as information boards or leaflets handed out with the tickets.²⁷ Consequently, the visitors relied very much on their own resources when trying to interpret heritage items.

The proposal is supported by two questions that arise from the selection of relevant contents and the desire to create a hierarchy in the contents relating it to the user's previous ideas. The first question is 'how is this testimony, which belongs to such a specific historic period, preserved?', and the other one is: 'What are the historical and artistic circumstances in which it arose?' The project was conceived with the idea of interesting, entertaining and educating the visitor by using a dynamic new system, bearing in mind that interpreting is more than just informing. This system would be based on a highly participative strategy that not only promoted learning

21. Historical novels are also a good way of disseminating knowledge about historic periods. In this case, a novel by Martí Gironell (Gironell, Martí. *Strappo, l'espòli del romànic català*. Barcelona: Ediciones B, 2015) was inspired by an exhibition held in the *Museu Nacional d'Art de Catalunya* (MNAC) on the Romanesque period, and by the author's fascination for the history behind the paintings from Santa Maria de Mur that were taken to the Museum of Fine Arts in Boston, in one of the most paradigmatic examples of art plundering from the Pyrenees, and the trigger for subsequent campaigns to safeguard Romanesque paintings.

22. This initiative is considered one of the most relevant, as from this time on, the publications in instalments that appeared in the collection *Pintures murals catalanes* ("Catalan murals"), with illustrations of the most notable murals, became very important.

23. Camps, Jordi; Pagès, Montserrat. *Guia Visual Art Romànic*. Barcelona: Museu Nacional d'Art de Catalunya, 2002.

24. Comprising the Vall de Boí Town Council, the Alta Ribagorça Area Council, Lleida Provincial Government, the Government of Catalonia and the bishoprics of Lleida and Urgell.

25. Tomasa, Eudald; Serra, Rosa. "La museografía audiovisual e hipermedia y sus aplicaciones en el monasterio de Sant Benet de Bages (Barcelona)". *Hermes*, 1 (2009): 21-29.

26. Castellà, Cristina; Grifoll, Laia. "El conjunto románico del valle de Boí: patrimonio mundial en un entorno rural". *Hermes*, 1 (2009): 99-108.

27. Castellà, Cristina; Grifoll, Laia. "El conjunto románico del valle de Boí...": 99-108.



and the development of activities, but also contributed to interesting people in the material under analysis. In fact, these strategies constitute a way of working found in many procedures that simulate decision making²⁸ to solve problems. In short, the aim was to create an educational facility to educate, provoke or trigger ideas.

With its analysis, we can see how one of the objectives is to make the interpretation centre become a driving force to promote heritage in the region. Consequently, a wide target audience was considered. The intention was to avoid spaces that appear to be designed only for school visits. As a result, all the contents were designed so that visitors could enjoy the centre without needing any existing cultural knowledge. There are different levels to satisfy all visitors, including very young children, the general public, and special groups such as elderly people, taking into account the age groups of visitors. The intervention is based on mechanisms that promote interest in the knowledge and understanding of global interpretation as fact and part with three ingredients were essential inasmuch as these are also the factors that govern most of our actions: visual attraction, sensory stimulation and emotional pleasure. Without these, there would be no interest in asking questions, and therefore no interest in the replies.²⁹

At the same time, these three axioms are applied in order to work on the contents provided by the center and, that are based principally on the idea that learning that paintings, sculptures and architecture of the Romanesque period can be used as a primary source to understand the Middle Ages firsthand. Moreover, they are useful to get historical and social information from their iconographic and iconologic analysis, both about the personalities of the time and about the relationship between them. Similarly, the iconographic sources of the time are analyzed with the help of further primary sources such as the Bible, bestiaries, the *Physiologus* and the Golden Legend.

5. Basis for the analysis of museography in interpretation centres

In this section of the analysis, the museography of the centre is studied in depth center and whether it uses diverse museographic resources and various ludic elements as the main tool for the interpretation of heritage. The museum items in the interpretation centre were designed using a simple format. They mainly rely on audiovisual and interactive resources, so as to reduce the number of texts on information panels and facilitate more effective communication. For the same reason, push buttons were used on each item in the museum space, so that visitors could choose from four languages: English, French, Spanish or Catalan.

28. Santacana, Joan; Llonch, Nayra. *Manual de didàctica del objecte en el museu*. Gijón: Trea, 2012.

29. Batista, Ricardo. "Diseñando centros de interpretación. De la idea al resultado, un proceso lleno de seducciones". *Her@Mus: heritage & museography*, 2/2 (2010): 88-93.



In fact, the facility is designed as a fully interactive installation³⁰ whose main concern is to constantly engage and entertain visitors as they explore the processes and sequences. This kind of facility is defined as entertaining and scientific, and its particularly interactive design is intended to appeal to a wide audience, from schoolchildren to specialists. The centre's focus on fun and enjoyment, which is bound to be attractive to the youngest audiences, is not incompatible with the scientific rigour of its approach. It is this rigour that captivates the specialists.³¹ As a result of the study, we can observe that the approach used in the CRVB was based on scientific rigour, which had a specific impact on the work methods, the techniques, and all aspects that reflect the hypothetico-deductive method.³²

In terms of the arrangement of the centre, the space is divided into modules that follow a clear script, but can be operated independently. The visitor decides how long to spend on each of them, and often takes a lot of time on just one module that is of particular interest.³³ In the construction of facilities is discernible functional elements are prioritized over design, so that the modules are strong and can be operated easily, which enables visitors to interact with them directly.

The atmosphere is provided by oversized books that surround the visitor. Romanesque art heritage is like an open book, but we only know how to interpret and read it properly with the right decoder. The scenography in the CRVB is a metaphor for this.

The study shows that the design encourages an open kind of visit, with no fixed or linear route, mainly because experience shows that such routes bore and demotivate most visitors.

With the analysis, we see that it affects how visitors learn, and to take into account the theoretical models that explain this learning. This led to the design of the selected teaching-learning process and the type of interactive relationship to establish between the material and the user. Social and information processing models were particularly notable. The former are based on models of participation strategies, in which learning, and therefore interactivity, is normally established through a social group. The latter, learning and information processing models, are based on constructivism or discovery learning, which tends to occur in individual learning processes.

30. Alcalde, Jaume; Martínez, César. "Interactividad para nadie en general y para todos en particular: hacia una interactividad total". *Her@Mus: heritage & museography*, 2/2 (2010): 15-19.

31. Martín, Carolina; Castells, Júlia. "Análisis y clasificación de los modelos interactivos", *Manual de Museografía Interactiva*, Joan Santacana, Carolina Martín, coords. Gijón: Trea. 2010: 87-335.

32. Santacana, Joan; Llonch, Nayra. *Manual de didáctica...*

33. Coma, Laia; Sallés, Neus. "Recursos y materiales didácticos interactivos", *Manual de Museografía Interactiva*, Joan Santacana, Carolina Martín, coords. Gijón: Trea. 2010: 415-462.





ILLUSTRATION 1. LARGE FORMAT BOOKS, INTERIOR OF THE CRVB. PICTURE BY THE AUTOR.

The route begins in the central reception area where visitors are received. A counter selling products related to the Romanesque period and the region is situated in this part of the centre. This is also where visitors can obtain all the practical information they need for enjoyable excursions in the region, particularly to the Romanesque ensemble of churches. The space therefore functions as a kind of visitor centre. On each side of this central reception area are two rooms housing the spaces for interpretation.

On the right is the first interpretive space, called *Fa mil anys, quan la vall es va obrir al món* ("A thousand years ago, when the valley opened up to the world"). This space uses mainly audiovisual language. The first item is a display involving video, light and sound that transports the visitor to the historical context of the Romanesque period in the Vall de Boí, around the year 1000. This is an unconventional audiovisual show, as it is complemented by concealed props that are only revealed by a play of lights during the projection.

The system uses a screen situated at the front of the room, made of material that becomes transparent as a result of changes in the intensity of the spotlights on either side of the screen. Behind this screen and inside light boxes are various props that are only visible when the backlighting system inside the boxes is activated. They include items that provide context, such as the chair of Sant Pere, papal parchments

with seals, half constructed altar frontals, and a still life of a table with pigments, brushes and chalk.



ILLUSTRATION 2. PROPS IN THE AUDIOVISUAL SHOW. PICTURE BY THE AUTOR.

In this space, which has a capacity of about 50 people, the aim is to immerse visitors in the Romanesque period without using very technical language. Following the analysis, we can see that the visitor is captivated by the situation in the region around the year 1000, 'when Catalonia opened up to the world', in the words of Ramon d'Abadal i Vinyals.

We can see that to the left of the reception area is the specific interpretive space. As it was decided not to remodel this bright, relatively small room with a high ceiling, the modules were distributed so that they did not form very small compartments that would have broken the unity of the space. Therefore, the modules are enclosed in spaces that are quite low, so that the roof can be clearly seen and the space is not broken up. The entire interpretive space is based on the concept of the *scriptorium*, that is, a set of manuscripts and miniated works. It is well known that a set of Catalan books were illuminated in some of the major production centres of the



region, including the Missal of Arles, the Beatus of Turin and that of Girona, the Homiliary of Beda, the Bible of Ripoll and that of Rodes, and the Beatus of the Seu d'Urgell. We also know that much of the Romanesque iconography was inspired by miniatures in these works.³⁴ To the visitor's eye, the room appears to be a set of large books, of vast dimensions, piled up in a disorderly fashion. But if we look closely, the large format books make up four exhibition spaces that are slightly hidden and imperceptible on first glance. From the outside, all of them appear to be large medieval miniated codexes. Some are open, whilst others are shut so that only the spine or the covers are visible. The visitor is immersed in an unknown space, like a large library in which only four books can be seen. Each one of these books—which forms a subspace in the room—explains part of the history associated with this period of notable importance of the churches (both in medieval times at the start of the 20th century).

The results of the analysis show that textual and iconographic primary sources are used throughout the centre, as they are considered most interesting from a methodological perspective, to introduce students to scientific logic in history. The idea is to present individuals with a series of objects, remains or written texts so that they can extract as much historical information as possible, to resolve a specific problem or answer a certain question. We intend to work with primary sources so that the visitor can be able to determine what information is provided by a source at a given moment. Whatever option is presented, whether from the present or the past, individuals must know how to improvise mechanically and automatically, to differentiate between opinions based on direct experience, and those reconstructed from distant or clichéd views. A multi-faceted approach must therefore be used to examine all of the potential information.³⁵ The lack of accessible spaces for the general public that focus on primary and secondary sources was also taken into account. For this reason, primary textual sources were chosen for the Romanesque interpretive space. These texts take us back to the past directly, and are an essential element to provide information about history. This is the case in the first sub-area: *La Vall en el gresol de l'art* ("The valley in the melting pot of art"), which was designed to help people understand the essence of Romanesque art in the valley. As well as the symbology, this area explains how between the seventh and tenth centuries in western Europe there was a conflict of numerous styles, which began to be reconciled at the end of the period, in approximately the year 1000. The display shows how some people at this time, particularly in monasteries and convents, appreciated the art of reading and admired the works of the Ancient World that had been preserved. These erudite clergy held important positions in the courts, the countships and the homes of the lords.

In the middle of the piles of books, a small space exhibits illustrations with loops and geometric elements belonging to the 'Barbarian' aesthetic, together with illustrations that form the Late Roman and Byzantine world. All of these

34. *Iniciación al arte románico*. Aguilar de Campoo: Fundación Santa María La Real, 2002.

35. Feliu, Maria; Hernández, Francesc X. *12 ideas clave Enseñar y aprender historia*. Barcelona: Graó, 2011.



images ‘fuse’ into one that shows the aesthetic of Romanesque art in the Vall de Boí. The message of this space is therefore that artistic styles came together in the Romanesque melting pot to form the first great art styles of the West. All of this information is transmitted inside a circular enclosure that represents a book from the late Roman period, in other words, a large format scroll. In the centre is a lectern holding an interactive touch screen with information about the primary sources that inspired the items that today form part of the Romanesque collections at the *Museu Nacional d’Art de Catalunya* (MNAC), which are from the Vall de Boí.



ILLUSTRATION 3. INTERACTIVE INSTALLATION BASED ON THE PRIMARY SOURCES ABOUT ROMANESQUE ART IN THE VALL DE BOÍ. PICTURE BY THE AUTHOR.

In this module, visitors can look up excerpts from these sources (the Old Testament, the Gospel and the New Testament) and other sources from the medieval and earlier periods (the bestiaries, the *Cathemerion* by Prudentius, the *Apocryphal Gospels*, the *Physiologus* attributed to Melito of Sardis, and the works of Pseudo-Dionysius, among others) that were used to illustrate the most representative works in the churches of Vall de Boí. The faithful who went to church and all the notable figures from the feudal period knew how to interpret and decipher these codes. The aim of the touch screen content is to help visitors to read between the lines, in the same way as in the medieval period.



The next sub-area that we find, called *La Vall de Boí, entre el Pallars Jussà i el Pallars Sobirà* (“The Vall de Boí, between Pallars Jussà and Pallars Sobirà”) appears on a large open book, projected as a chronicle of the period. This module describes how the valley was caught between two powers of the time: the counts of Pallars Jussà and Sobirà, as well as the bishoprics of Roda and Urgell. The script for this module was drawn from another primary source, the *Crònica d’Aladò* (covering a period from 1154 to the end of the 13th century). The visitor suddenly finds a page that appears to be from the Bible of Ripoll, which is preserved in the Vatican Apostolic Library;³⁶ it is a page from the Second Book of the Maccabees. The chronicler comes to life and takes us back to the typical feudal society of the time, to explain in narrative form the disputes that arose between Pallars Jussà and Pallars Sobirà.



ILLUSTRATION 4. OPEN BOOK RECREATING THE FIGURE OF A CHRONICLER OF THE PERIOD. PICTURE BY THE AUTHOR.

36. Biblioteca apostolica vaticana. Manoscritti Vaticani latini, 5729.



The third sub-area that the visitor finds is called *Les esglésies de la Vall de Boí: Les 9 pedres vives* ("The churches of the Vall de Boí: 9 living stones"). This space is organized like a *scriptoria* with medieval desks as props. In this area, visitors discover the specific features of the nine churches in the valley at three key moments: during construction, rediscovery and restoration.



ILLUSTRATION 5. EDUCATIONAL MODULES BASED ON THE FEATURES OF A SCRIPTORIUM. PICTURE BY THE AUTHOR.

The desks use different resources, such as viewers or interactive pull-out drawers, to display information about the removal of the paintings, the architecture of the churches (with ground plans and elevations), and reproductions of the materials



and tools used in the painters' workshops. Using a play of mirrors, these medieval desks are repeated to infinity; the aim is to show that history is immensely long.



ILLUSTRATION 6. DETAILS OF EDUCATIONAL SCRIPTORIUM. PICTURE BY THE AUTHOR.

Finally, to end the visit, the climax of the interpretation centre is found in an area called the *Veus de la Vall* ("Voices of the Valley"). In this space is a replica of the Presbytery bench from Sant Climent de Taüll (held at the MNAC).³⁷ The bench is a metaphor for the valley's society: many pieces of wood brought together in one piece. In this case, the bench is shown bare and on its own. It acts as the backdrop for the appearance of three key figures in the history of the Vall de Boí. With the right atmosphere created, three ghostly figures appear as witnesses who describe their experiences of events related to the conception and rediscovery of Romanesque art. The three scripts were also based on primary sources from the periods that the figures represent. The first, the Countess of Erill (based on texts of Countess Duoda³⁸ and accounts about the Countess of Erill), explains how the paintings were commissioned, and describes the typical concerns of women of the time of her status. The second figure is a priest, a figure of high social standing in the Middle Ages, who describes society at that time.

Finally, Puig i Cadafalch appears and tells the exciting story of the discovery of the paintings, with a script drawn from his diaries.

37. Camps, Jordi; Pagès, Montserrat. *Guia Visual Art Romànic...*

38. Portet, Laura. *Duoda, comtessa de Barcelona*. Barcelona: Rafael Dalmau, 2008.





ILLUSTRATION 7. STYLIZED DEPICTION OF THE COUNTESS OF ERILL. PICTURE BY THE AUTHOR.



ILLUSTRATION 8. STYLIZED DEPICTION OF PUIG I CADAFALCH. PICTURE BY THE AUTHOR.

6. Conclusions

This study has been carried out in order to provide tools to avoid the lack of strategic planning and the lack of fundamentals needed to create an effective centre. Talking about models of heritage interpretation is talking about something similar to translating. We intend to translate images, concepts, written messages in different languages into a language known to all. This complex task must be carried out by a team able to translate science into a language comprehensible to users. To do so, very specific skills and knowledge are required, and in the same way that there is no an automatic universal translator, there is not a universal expert either. We need experts in the different disciplines (in the subject and teaching) in order to translate correctly —to interpret— scientific heritage. Experts should be able to select relevant concepts and organize hierarchically the content. Likewise, these experts must also create diverse museographic elements, ludic and didactic, in order to get closer to the audience. This implies being an expert in teaching, pedagogy and museography. In fact, we have to take into account the interests of the audience, who are the *raison d'être* of interpretation centres, since they exist because they are there. Seeing that cultural facilities have become educational spaces, where users do not stare at elements, but they experience them, they experience emotions and



learn. The audience happens to enjoy a new focus. It is therefore necessary to keep the museographical and museological proposals which appeal to users, leaving aside those which have become obsolete or those which only stir the managers of the centre's interest, but not the users'.

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