

Fátima Matos da Silva, *mfms@upt.pt*

Department of Tourism, Heritage and Culture

Universidade Portucalense Infante D. Henrique. Porto, Portugal

Researcher at REMIT – Research on Economics, Management and Information Technologies,

Portucalense University, Porto and at CITCEM - Centre for Transdisciplinary Research

Culture, Space and Memory, Research Centre (uID 04059), Oporto University, Faculdade de Letras da Universidade do Porto-FLUP

Tourism potential of castreja culture from the north-western Iberian Peninsula

Key words: Archaeological tourism, *Castreja* Culture, hillforts, saunas with *Pedra Formosa*, Proto-History

Abstract

In this paper we clarify some considerations about the enhancement of archaeological heritage of the hillforts or castros from the castreja culture of the Iron Age, located in the northwest of the Iberian Peninsula (north of Portugal and Galicia). Some ideas and reflexions, regarding the aspects considered relevant at the time of elaborating enhancement projects for this kind of heritage are included, with the aim of improving its sustainability and capacity of being of interest for both the general public and for cultural or archaeological tourism. In this sense, we summarise the results obtained in the rehabilitation projects for some of the hillforts that are located in the north of Portugal, including some bath-saunas with ovens. The *Pedra Formosa* (beautiful stone) structures of these hillforts are also briefly mentioned. Finally, we present some possible archaeological tourism routes.

Introduction

Archaeological ruins should be seen as part of our past which, though poorly maintained, has information to give us, a message to convey. The preservation and *in situ* exhibition of archaeological remains is one of the greatest problems of archaeologists and of all those who wish to preserve the memory and the protection of heritage, as we are dealing with structures in an advanced state of deterioration [Cronyn, 1990].

The appreciation of the archaeological stations by various audiences is one of the main objectives. Defining the profile of audiences is very important. We must consider the general public and the specific public (school, university, the elderly, families and community, national and international tourists) for whom it is necessary to structure the type of visits planned (in small groups with or without autonomous visit). The whole organization of the enhancement and safeguard project of the fortified settlements described in this article should be based on, among others, these principles.

Thus, we have, as main goals of this publication, to divulge an archaeological heritage that is poorly known; to describe the chronological and cultural context of the *castreja* culture; to reflect on the constitutive phases of the enhancement projects, exemplifying it with some of the hillforts and their sauna baths with *Pedra Formosa*, valued and liable to be visited by various publics; and, finally, to present the possible archaeological tourism itineraries.

In methodological terms the study is based on a bibliographical review of several authors, and on our own publications, resulting from various archaeological field works (exploration, excavation and enhancement) that we have developed over the years.

The bibliography related to archaeological tourism, in the case of Portugal, and applied to this type of archaeological station is practically non-existent. Regarding the knowledge of the *castreja* culture, we recourse to works that we have published, as well as other archaeologists, which we systematize in several publications [Silva, 2008; 2015a; 2015b]. In terms of sauna-baths, we have also studied some [Silva, 1987] that served as a basis, especially for the exhaustive bibliographical collection, the most recent being related to the problem of thermalism and tourism enjoyment [Silva, 2017; 2019].

Ideas have also been exchanged with some archaeologists in order to know the details about each of the monuments and the updated knowledge of them.

Archaeological and historical context

The *castro* culture of the north-west of the Iberian Peninsula is usually characterized by the existence of fortified settlements, situated high on hills, chronologically attributable to the Iron Age (Proto-History). However, its evolution did not occur in a uniform way, so we can group it into several evolutionary models, which vary according to authors and regions [Silva, 1986; Martins, 1990].

Following our perspective [Silva, 2008; 2014b; 2015a], there was a first model, where we can insert two types of villages.

The fortified settlements that generally appear between the 9th and 7th-6th centuries BC, successors of the Late Bronze societies and located in geographically prominent places. Despite the influences they may have suffered from other societies, they evolved from an autochthonous population, which established ties with the surrounding geographic area. Agricultural and pastoral activities are developing in the sense of sedentarization, leading to the creation of the *castrejos* settlements. These communities gave continuity to the socio-cultural traditions of the previous period, of which the most notable elements - present in the archaeological record - are bronze objects, and handmade ceramics, among others.

Iron technology is quite late. Its implantation and development was the cause and the consequence of these large settlements being built at the turn of the millennium under Roman influences - which do not exist throughout the area attributed to the implantation of the *castro* culture, namely in the area where we develop our research projects - the upper basin of the river Coura, Alto Minho [Silva, 1994; 2008; 2014, 2015a].

The second type of settlements of this early epoch would be in duality with the former, coexisting with the large-scale settlements, which would assume an influential and centralizing role - the so-called central place - with smaller settlements which, while having autonomy and life of their own, would develop close ties with the former. This relationship would be based on economic assets managed by the centralizing village, such as the exploitation of ore, which would be commercialized with other peoples, namely the Mediterranean basin. These settlements would be situated on the coast and near navigable river basins.

Many of the larger settlements dominated vast areas associated with the means of river transport and would have a population, whose social stratification was based on kinship relations, as well as a community-based subsistence economy, in choosing one or another product for exchange with other communities.

With the first signs of the arrival of an invading people - the Romans - the *castrejos* will have abandoned their outstanding villages: a move that will have been recorded around the third and second centuries B.C. For this group, the evolutionary model would end. The same

must have happened with the smaller settlements, whose geographical situation gave them enough exposure. So far, for what has been verified, there are no sauna-baths of these chronologies.

These people left their settlements, but often founded new ones, near previous living areas, this time in places camouflaged in the landscape, preferably with natural conditions of defence, corresponding to the second model of territorial occupation. Some of these settlements, of small dimensions, will have a relatively small occupational chronology compared to the others, some of them abandoned when Augusto arrived in the Iberian Peninsula and the consequent pacification of these peoples. Yet, some were occupied again.

These settlements were scattered over different areas, even though they may be suppliers of metals or ore to the Romans, they would not easily assimilate the elements of the new culture: they maintained their way of life and did not even undergo significant changes after the pacification.

Gradually, they moved their way of life to the valley, now to settlements without walls, and mingled with the Romans, but they built *castrejo* huts eventually, because the techniques of production of so-called iron / steel were not sufficiently disseminated. Only in later stages they adapted the Roman way.

They dedicate themselves to agriculture, resembling economically the Roman *modus vivendi*, although maintaining many of the autochthonous characteristics.

Other pre-existing or built settlements at this time, especially those occupying larger geographic areas, will undergo major urban, economic, social and cultural changes resulting from contact with the Romans. The housing structures are developed in a proto-urbanism that tends towards grouping in housing nuclei.

They adopt a different construction system, with huts constructed with a more elaborate apparatus, with ornaments in the doors and *trisceles*. Also, the construction of buildings of community character is transformed with the construction of impressive walls and, above all, with the appearance of the sauna-baths.

In economic terms, it expands the exploration of the territory by developing a real agricultural activity. Society becomes more complex, organized according to a stratified scheme, in which certain elements were heroic - similar to Roman, as the statues of Gallic warriors prove. They, thus, transform their culture and their symbolic-religious traits.

Only in the second century B.C., or even later, these settlements are abandoned, beginning to generalize the type of occupation markedly Roman, by the means of construction of *vicus* and *villas* adopting diverse Roman elements, but maintaining some of the local material culture.

The development of these large settlements, said to be of long duration, is only possible thanks to the technical changes introduced by the Romans, for example, in the production of iron tools or in architectural construction. It is in this historical-geographical context that sauna baths take place, whose construction model with large granite slabs, namely the *Pedras Formosas* - with decoration carved in stone - is only allowed by this technological evolution and by the manifest flourishing of the society and economy of the late Iron Age.

This society has a marked regional diversity, as is witnessed both by the objects of daily life and by certain economic and social indicators. Such diversity is common in both Galicia and northern Portugal. It should also be noted that the Portuguese Minho *Castros* constitute a strong cultural unit with their Galician counterparts closest to the Minho River (south of Galicia), while the latter, in turn, have marked differences with respect to those of northern Galicia [Silva, 2015].

Archaeological enhancement projects as a form of archeotourism development

The design of enhancement program for an archaeological site implies the elaboration of a multidisciplinary but also interdisciplinary plan, that considers the existing heritage values, the environmental context, the support structures to be built or to be recovered and what is intended to be seen and interpreted by the cultural user, the tourist. Such a project can only be elaborated after a detailed scientific investigation, foundation of all the work that will be carried out.

The archaeologist's interpretation of the archaeological record is necessarily reflected in the project and its execution, especially since it will be responsible for defining the new function that the ruins will assume - a place of public enjoyment that is intended to be visited by various types of audiences.

The criteria for the selection of archaeological sites subject to recovery projects are varied. Among them, we can mention, for example, the monumentality, the singularity, the state of conservation, the aesthetic and symbolic value, the possibility of inclusion in tourist routes and accessibility conditions.

There are other elements that must be taken into consideration in order to create sustainable development strategies. That is, to allow maintenance, conservation and research on a permanent basis, as well as the training and updating of the work teams that oversee them. In this regard, we must emphasize the need for a stable budget and human resources. However, above all, the primary respect for cultural heritage and its importance within the community must always be present.

In the case of an archaeological site visited by mass tourism, organized by tour operators (which unfortunately is not the case of the *castrejos* settlements), seasonal or permanent, it is necessary to develop a series of elements of protection; not only for the public, but also for the site, due to the threats of degradation that arise from the flow of visitors. Likewise, the valuation project must study and articulate the reception conditions and the lodging and catering possibilities existing in the region, in order to minimise the negative effects in the local community.

Many of the ideas and actions proposed here have already been put into practice at several archaeological sites [Silva, 2004a; 2004b; 2008; 2015b], and should be considered as theoretical indicators that may be the basis for the suggested road map.

Figure 1 presents a schematic synthesis of the stages of a process of valuing an archaeological site. One of the relevant points of this diagram that we want to highlight for fortified villages (also designated *castros*, *citânias* or *cividades*) are those related to accessibility, a difficult problem to address in this type of site.

Accessibility begins in the physical and architectural aspects of the site - the accessibility of space - but goes far beyond them, because it also refers to the accessibility of information, affecting components of the social, intellectual and emotional condition of visitors. Accessibility does not refer only to people with disabilities but to all of us, at different stages of life, in a transitory or permanent way (for example, vision or hearing varies with age) [Silva and Borges, 2019].

The interpretation plan and its signage must allow all the visitors - with and without special needs - to participate in various programmed activities, including the use of products, services and information.

The issue of accessibility must be well thought through and applied according to the situation, since it is difficult to apply the same solutions in all archaeological stations. It presupposes elements as varied as the clarity in the access information (signage, for example), physical and architectural aspects of site adaptation, different levels of information, different ways of communicating, intellectual and emotional aspects of each type of public. Thus, it is

necessary to inventory the types of barriers that can occur to communication at both the sensory and the intellectual level, as well as at the physical level, so that a large part of them can be overcome - bearing in mind that complete accessibility is not possible.

In this sense, the initial project must consider a management plan that explicitly includes the areas of accessibility and restriction and, consequently, a maintenance plan for different spaces, either those of the site itself or the spaces of support for the enhancement of the site. These auxiliary spaces can be very varied, such as interpretation centres, monographic museums, reserved areas, exhibition spaces, public spaces (store, bar, restaurant, self-service, ticket offices, reception, toilets), parking, snack areas and specific routes in the surrounding landscape, among others.

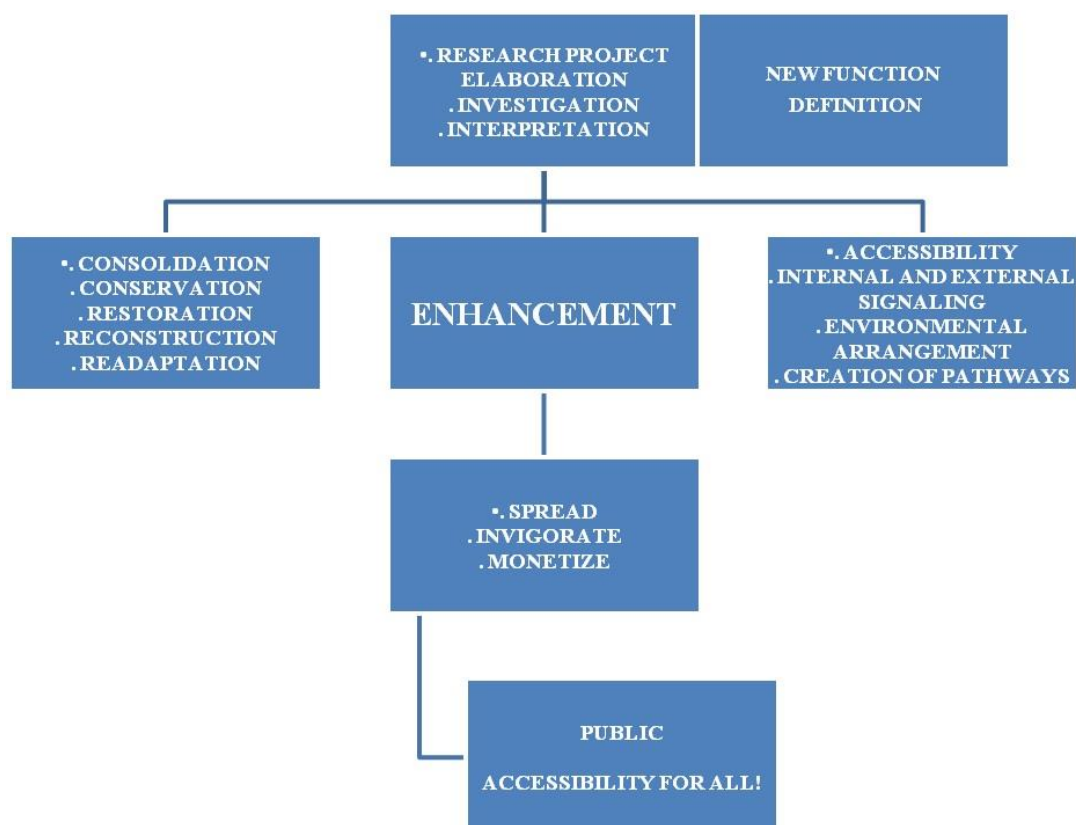


Fig. 1. Schematic synthesis of the stages involved in the value enhancement process of an archaeological site

Source: author's own elaboration

Signage and accessibility must be well studied and applied, depending on particular situations. For example, traffic signs in relation to access, circuits, itineraries and routes must be designed with a set of symbols that are coherent to the archaeological site, considering directional plates in previously defined places, in continuity and creating linear routes.

It must also consider the condition of the routes and access roads and various obstacles. These must be overcome by ramps protected by guardrails.

The archaeological remains that have been recovered from the archaeological excavations after being studied and performed, if necessary, conservation and restoration interventions, should be displayed in interpretation centres on site or at a nearby museum.

The publication program should be thought of as an instrument for disseminating knowledge produced in the research, management and extension of the network of relations with other cultural and financial institutions. The preparation of promotional material, such as

brochures and other tourist prospects and catalogues, for educational and informational purposes, should be prepared according to the age and cultural level of the persons for whom they are intended. Thematic exhibitions; guided visits to the sites; historical reconstitutions with school collaboration; congresses and other scientific events, among many other initiatives, should be included in the dissemination plan.

Thus, the dissemination/communication must consider different methodologies and techniques, using publications on paper, such as: brochures, maps, plans, guide itineraries, postcards and posters, among others; or, of another type such as CDs, DVDs, web pages, multimedia stations, audio guides, models and merchandising, in order to reach different audiences. For such purposes, a substantial exchange should be established with the tourist offices and, in particular, with the travel agencies.

For profitability and dynamism to be effective, all activities must be scheduled in a timely manner, annually and articulated with the organization of local and regional events. The dissemination material must have markedly pedagogical characteristics, suitable for various audiences.

Books must be illustrated, easy to read, synthesising the information. Drawings should portray activities and scenes of daily life, based on the data obtained from investigations. Consequently, to produce this material it is necessary to join the work of different professionals: archaeologists, pedagogues, designers, photographers, communicators, among others.

Information should be prepared with attention to the smallest detail, starting with the appropriate colour contrast or letter size, for example, in the name of the archaeological site, at the time of visit. This information must be available in a constant position, in a simple and clear way and in several formats (writing, visual, tactile).

Road signage should be based on directional plates, in previously defined places, in continuity and in linear paths. In villages, given the exposure to climatic conditions, information should be placed in places previously studied in explanatory plates, preferably bilingual.

In the reception areas or interpretation centres, several facilitating devices should be placed in the field of multimedia that must comply with some basic rules in the sense of the information contained, so that it can reach those who need it. These enable, for example, the hypothetical 3D reconstruction of the site and its environments, among others.

For such purposes, some basic rules must be complied with so that the content can reach all the people who need it. This is how accessibility for people with motor disabilities can be solved by creating enough space in front of multimedia equipment that, placed at a proportional height and with an adjustable screen angle, can be accommodated according to need. Another example that can be mentioned is related to the use of durable materials for making models, so that they can be investigated by touch, which is essential for the blind.

For an effective profitability and dynamization of the archaeological sites, an annual program of activities must be prepared that allows planning and dissemination sufficiently in advance to achieve the return of the public. This program can and should consider the organization of local events of various kinds in the field of theatre, music and dance, among others, that add value to the programmed actions. You can also create thematic itineraries, guided tours for specific audiences, night visits, among many other initiatives.

Other elements to be considered, in a somewhat more daring project in financial terms, are paleoenvironmental reconstructions, lighting, protection of the site and creation of monographic and municipal museological spaces [Silva, 1994; Silva and Silva, 2008; Silva 2015b].

In Portugal, fortunately, in the last decade, interventions to enhance the value of archaeological sites have increased significantly, covering various types of archaeological

sites, from different periods, also focused on the *Castro* settlements. These interventions have been carried out by tutelary organizations, but also by the municipalities associated with various institutions, such as, for example, universities or archaeology companies [Ayán Vila, 2001]. It should be remembered that these interventions are the result of Portugal entering the European Community, and that, for the most part, they have been paid for by EU funds. Without this type of financial aid, projects for the enhancement of archaeological heritage would not have existed.

The valorisation of a fortified settlement necessarily depends not only on the consolidation and restoration of the excavated structures, but also - whether we agree or not - on the construction of replicas of the houses or other structures, taking advantage of the existing foundations. Although contrary to the spirit of the Athens Charter (1931), and even to the ethic of conservation-restoration that archaeological reconstruction has for some, and in spite of the risks that derive from the uncertainty of archaeological knowledge regarding the height of the walls or the shape of the roof system, among other aspects - the reconstruction of this type of structures in excavated archaeological stations has a huge impact on the visitor. This not only covers the visual and the volumetric, but above all is given by the attraction generated by the discovery of buildings in their completeness, which contributes to the apprehension of archaeological sites, thus fulfilling the pedagogical aspect that these replicas should have in the framework of valorisation projects.

At present, there are old house replicas in the fortified villages of *Citânia* de Briteiros (Guimarães, Portugal) and Santa Tecla (La Guardia, Galicia, Spain) and more recently, among others, in the hillfort of Cossourado, in Paredes de Coura (Minho) - which will be described in more detail later. Replicas have also been made in the São Lourenço hillfort, in Esposende (Minho); in the *Castro* of Lanhoso, in Póvoa de Lanhoso; and in the *Citânia* de Sanfins, in Paços de Ferreira. In the latter case, the intervention covered a whole *neighbourhood* and not just some dwellings, as in the settlements mentioned above. Although there are no detailed statistical studies, it is estimated that the reconstruction of these life-size replicas has significantly increased the influx of visitors.

Other enhancement interventions with the construction of a reception and interpretation centre and an aerial tour system, by footbridges, was developed in the *castro* of Santa Luzia, in the district of Viana do Castelo. In the settlement of Terroso, in Póvoa de Varzim was also built an infrastructure for the reception of visitors.

There have also been various types of events organized, such as symposia, among others, whose results for the archaeological heritage of the Iron Age (and other times) are generally very positive, since they have a great impact on the public that leads to a growing interest in archaeology. Largely, however, the role of recovery projects, including those that have supporting structures - such as interpretation and reception centres or museums - is little known, due to the absence of dissemination projects aimed at the local and regional public at different age levels, and above all, the lack of studies addressing the so-called archaeological tourism [CriadoBoado, 1996; Manzato, 2007].

The municipal offices of archaeology have done quite a lot of outreach work with local schools, so that most of the activities are limited to guided tours for an essentially school public. Although it is a very valuable element for the creation of a more informed public in the future, we seem to have forgotten to address other types of public, so tourism in Portugal has not shown much interest in visiting of archaeological sites, except for some well-known sites such as the Roman ruins of Conímbriga (Condeixa-a-Nova, Coimbra) and especially the archaeological park of the Côa Valley, in Vila Nova de Foz Côa, which has been declared a World Heritage Site by UNESCO.

In the upper basin of the Coura river, territory largely coinciding with the current municipality of Paredes de Coura (Alto Minho, Portugal), we developed the first integrated

research project [Silva, 1994; 2007a;2014a; 2015a]. The archaeological interventions that began in 1992 in the hillfort of the Iron Age of Romarigães (Paredes de Coura), gave account of a very destroyed archaeological site. In view of the above, the work was limited to the conservation of a small area that did not allow progress towards the implementation of an enhancement project, due to the high cost associated with sites with high destruction rates [Silva, 2015a].



Fig. 2. Partially restored and rebuilt structures and comprehensive construction of two model buildings in the hillfort of Cossourado, Paredes de Coura municipality

Source: photo by Sofia Silva

A second integrated research initiative was carried out in the hillfort of Cossourado [Silva 2015a], also located in the municipality of Paredes de Coura, which has a chronology between ± 700 to 138/136 B.C. (centuries VII / VIII and II B.C.), similar to that of Romarigães [Silva 2014b, 2015a]. Only after a few years of intervention has it been possible to have an excavated area large enough for the implementation an enhancement project (Figures 2 and 3).



Fig. 3. Comprehensive construction of two model buildings in the hillfort of Cossourado, Paredesde Coura municipality

Source: photo by Sofia Silva

The conservation, restoration and reconstruction of the architectural units followed, in turn, a scheme that included several actions, followed by integral construction works of two model buildings, whose design was based on the data obtained through archaeological excavation. The first one, in a circular way, would have served mainly for a room and for carrying out household chores; the other, elongated and larger, would have been used as a place for several work activities.

In relation to the signalling and information installed in the deposit, two types of plates were placed: the plates indicating access by road and those of didactic-explanatory nature. The latter, bilingual and in number four, were distributed by the archaeological station, each with a different function: presentation of the settlement, characterization of the habitat, clarification of the defensive system and support for the understanding of the built core.

Regarding the dissemination of the hillfort, various materials with markedly pedagogical characteristics were developed: two educational brochures (one for children and adolescents and the other for adults); a puzzle-type didactic game; a collection of postcards and a slide show; as well as a profusely illustrated, easy-to-read book that tried to synthesize the information obtained up to that time [Silva and Silva, 1998]. Subsequently, many other activities and publications were carried out, both pedagogical and scientific. Within the various activities carried out, it is necessary to highlight a historical reconstitution in vivo [Silva and Silva, 2004a], which brought to the present the ways of life of the *Castreja* Culture (Figures 4 and 5).



Fig. 4. and 5. Live historical reenactment, showing domestic life of Castreja Culture inhabitants of Cossourado

Source: photos by Carlos Gouveia da Silva









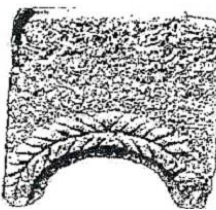
As for the cultural material that was recovered from these archaeological sites, it should be noted that this has been fully studied, as well as processed in terms of conservation and restoration. What was not stored in the museum's deposits, is currently exposed in the Archaeology Centre of the Regional Museum of Paredes de Coura. It is an educational-pedagogical exhibition, made with different models and with reconstructions of the functionality of the utensils in images and replicas, among other elements. In addition, the catalogue of the collection was made [Silva and Silva, 2007b] and replicas of some pieces were made, functional miniatures (that are usable, for example, as decoration) in silver and other non-precious metals to sell.


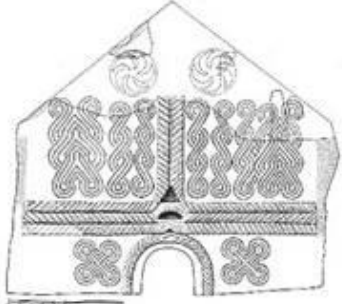




The enhancement projects exposed have tried, in various ways, to turn these archaeological sites into a hub of pedagogical, touristic and cultural dynamization, integrating them in a sustained way in the landscape, constituted by the Municipality of Paredes de Coura, the Alto Minho and the Galicia (Spain), which is very close.

The *castrejos* sauna are monuments with oven, of hypogenous construction, with an original and complex architecture, whose front wall, monolithic, is sometimes decorated, giving rise to the designation of *Pedra Formosa*. The decoration of the front stelae in the present Portuguese area (in that in the Spanish area there is only one with decorative motifs), has a great symbolism.

Although they have some constructive uniformity, they present a significant architectural variety, probably associated with several thermal models.

These singular architectural structures within the *castreja* culture of the Peninsular Northwest, apparently for public sauna baths, stand out for their apparatus and constructive technique as different monuments within the *castreja* architecture.

DESIGNACION	PEDRAS FORMOSAS	LOCATION
PEDRA FORMOSA 1 BRITEIROS HILLFORT		<p>Can be visited in the <i>Cultura Castreja</i> Museum Solar da Ponte, in São Salvador de Briteiros, Guimarães.</p>
HILLFORT BRITEIROS SAUNA Citânia de Briteiros, Salvador de Briteiros, Guimarães. 		<p>Can be visited in the Citânia of Briteiros with access by the centre of interpretation. It is located next to the access road and has been the object of a recovery project.</p>
GALEGOS HILLFORT SAUNA 		<p>Can be visited in the Castro de Galegos Santa Maria de Galegos, Barcelos), having been object of an enhancement project.</p>
SANFINS HILLFORT SAUNA 		<p>Can be visited in Citânia Sanfins (Sanfins Ferreira, Paços de Ferreira) with access by the interpretation centre and was the object of an enhancement project.</p>
FREIXO SAUNA 		<p>Can be visited with access by the Archaeological Area Romana do Freixo - Tongobriga, Marco de Canaveses. It is located next to the Roman thermal baths.</p>

EIRAS HILLFORT SAUNA 		Can be visited in Castro das Eiras, Alto das Eiras, Famalicão, but difficult to access. The scale replica currently cannot be visited.
  <p>Replica scale and Virtual Model of the Interpretive Centre.</p>		
SAUNA FROM MAXIMINOS HILLFORT 		Can be visited at the railway station of Braga and has been the object of an enhancement project.

Tab. 1. Several elements about some sauna and the *PedrasFormosas*

Source: author's elaboration

At present, references to thirty-three such sites systematized by us [Silva, 1987; 2017; 2019] and by other authors are known; at least fifteen are distributed in the Spanish area, and at least eighteen in the Portuguese area, which extends from the Minho (with the highest concentration) to the south bank of the river Douro.

As we said, these sauna-baths appear in the time of heyday of the *castreja* culture, in the final phase of the Iron Age, being also associated with a new organizational structure of the space of hillforts, with a new urban prototype, organization in *neighbourhoods*, streets, imposing walls and undoubtedly the apogee of the diversity of artistic expressions, passing through stone art, related to the architectural decoration and sculpture of warriors, the proliferation of decorated ceramic vases and the diversified and unique gold and silver.

An important part of the building was the oven, covered in a false dome, usually of circular plan, half-buried. The large oven door allowed the passage of heat and people into a rectangular cabin, the chamber, with a two-sloped roof, with a *Pedra Formosa* as the front wall. The chamber was used for sauna type baths, so the slabs were polished and well fitted. The entrance stones were also polished as users entered with their bare backs turned down by the small entrance of the beautiful stone. Steam was produced by the release of water into rocks (quartzite, granite, quartz) which, after being heated in the kiln, were placed in the chamber [Silva, 1986].

Structurally, the *Pedras Formosas* have a tectiform shape, with a lateral fitting, and features that allow the roof to be laid. They also have a semi-circular orifice, in the lower part, with small inner and outer recesses (only in some sites) that assist the entrance in the horizontal position. The thinness of the opening helped to preserve the heat that the oven threw into the chamber and could still be covered. It also limited access and use to relatively thin and agile people.

In front of the *Pedra Formosa*, the antechamber and, later, the atrium with tank, spout and conduits to drain the waters complete the structure. The tank was associated with the cold, outdoor bath, since *atrium* would not have a cover, as well as possibly the antechamber.

They are usually located in the peripheral area of the fortified settlements, topographically of lower altitude, near the waistlines of walls, mainly, of the exterior, next to the access ways and doors. Its location was therefore determined by the capacity of capturing and draining water. They are thus always associated with the existence of water and gutters / conduits leading from the well or another source to the tank and spout in the atrium, which holds it in storage.

The decoration of the *Pedra Formosa* adapts, in general, to its architecture-function, emphasizing also its architectural utility - that is, of entrance and support of the roof.

The decorative theme hardly diverges from that used in the decoration of the *castrejas* dwellings of the final phase of the Iron Age. There is, in some cases, a greater density as in the specific case of steles 1 of *Citânia de Briteiros*, *Castro* of Eiras (Famalicão) and, probably, of the *Castro* of Calvos in which, besides the tectiform decoration, there is a horror to the emptiness and an organization of the reasons differentiated, justified by the spatial distribution of motifs in the stela and functional, as a reflection of the symbolic and cultural tradition distinct from the architectural decoration of the huts where they lived.

These monuments would have been of great importance for the *castreja* society of the end of the Iron Age of the peninsular northwest, because of the difficulty of building them and the taste to decorate them as unique works that they were. They would certainly have a cultural and social function within the various *Castro* communities where they were inserted, trying to represent elements vital to their survival. Representation to which we point out some readings: spiritual function, religious function, through the management of vital elements: sun, water, fire. A symbolism central to his daily life that we cannot fully comprehend, but that can impress us with an art that has both beautiful and simple as well as rude and imposing [Silva, 2017].

With the aim of divulging this type of monument, a scale replica of the sauna of the Alto das Eiras (Famalicão) *castro* was built for exhibition, in 2007, at the National Archaeological Museum, in Lisbon [Silva, 2007; Silva, Oliveira and Lobato, 2010-11], currently dismantled and stored, awaiting the interpretive centre of the Eiras settlement, already designed and to be built (as expected) in Famalicão.

This replica, being a reconstruction of the past, was a project of great magnitude that, in our opinion, needs to be dignified, as well as all of the thermal sauna precursors of the Iberian Peninsula and of the various hydrotherapy treatments, balneotherapy, among others, now so in vogue in several tourist and medicinal routes.

The conservation, restoration and enhancement policy that some of these saunas have been targeting already constitute a basic work for the creation of a tourist-cultural or tourist-archaeological route of these archaeological monuments, precursors of the peninsular hydrotherapy.

In Portuguese space, the venue of the script could take place in the projected interpretive centre of the sauna of Monte Alto das Eiras, in Famalicão, where the replication would achieve all the pedagogical and informative aspect that this type of project's needs,

being the centre of interpretation that would house it, duly equipped among others, with the elements suggested previously.

The visitors, after having provided various information, would be guided to the *castrejos* settlements with sauna located in the region and indicated on the two routes for which we have already provided some elements in Table 1 and in Maps 1 and 2.

The suggested itinerary comprises five hillforts, one Roman station and three exhibition sites, constituting at least two routes, given the distances to be travelled - route 1 about 114 km and route 2 about 76 km - and which we suggest in Maps 1 and 2 (Fig. 6 and 7).

Route 1 would start in the hypothetical interpretation centre of the *castrejo* sauna in Famalicão and continue to *Castro* das Alto das Eiras, *Citânia* de Briteiros and visit to the *Castreja* Culture Museum, passing by the railroad station of Braga, where there is the sauna of the *Castro* of the Maximinos and finishing in *Castro* of Santa Maria de Galegos (Barcelos). There is also the possibility of visiting the Martins Sarmiento Society Museum, in Guimarães. The alternative Route 2 would have hypothetical interpretation centre of the *castrejo* saunas in Famalicão and would follow to the *Citânia* of Sanfins finished later in Tongóbriga (Freixo, Marco de Canaveses)

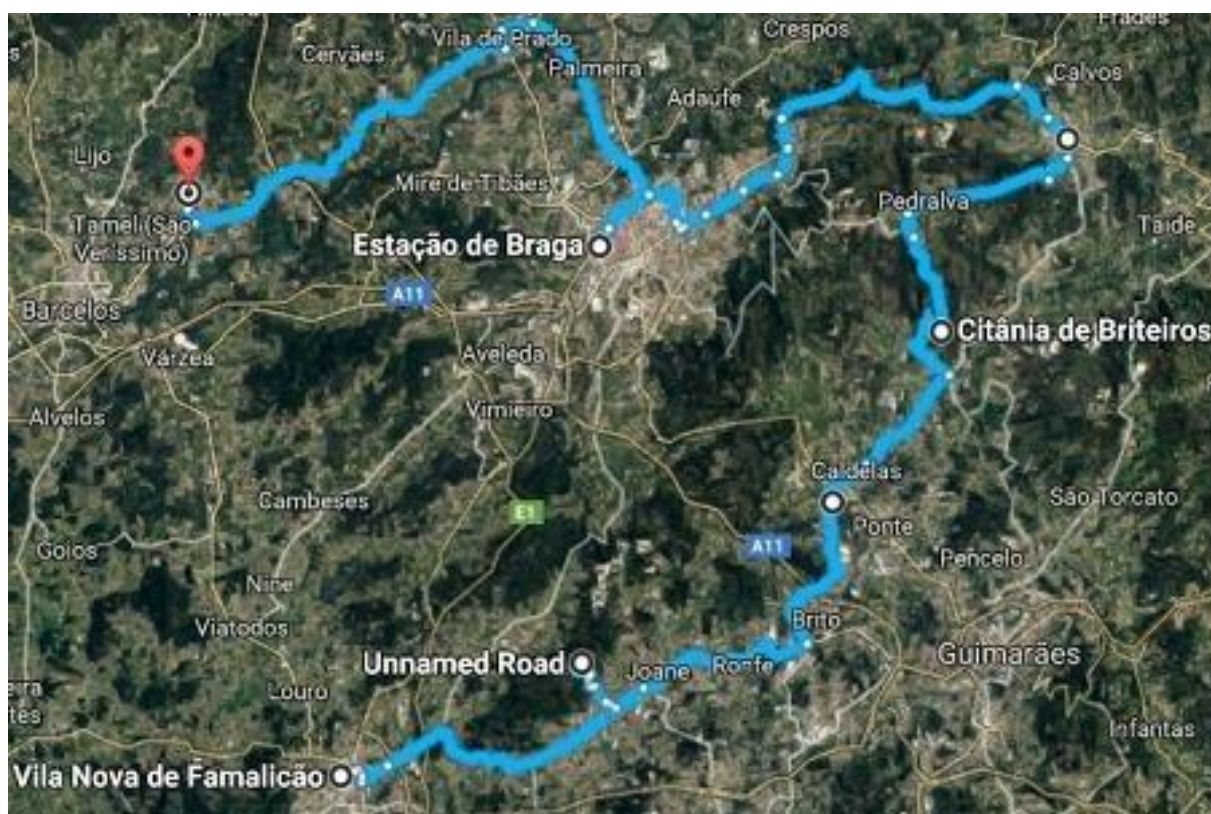


Fig. 6. Route 1, potential itineraries of some hillforts and sauna *castrejos*

Source: author's elaboration and Google Maps

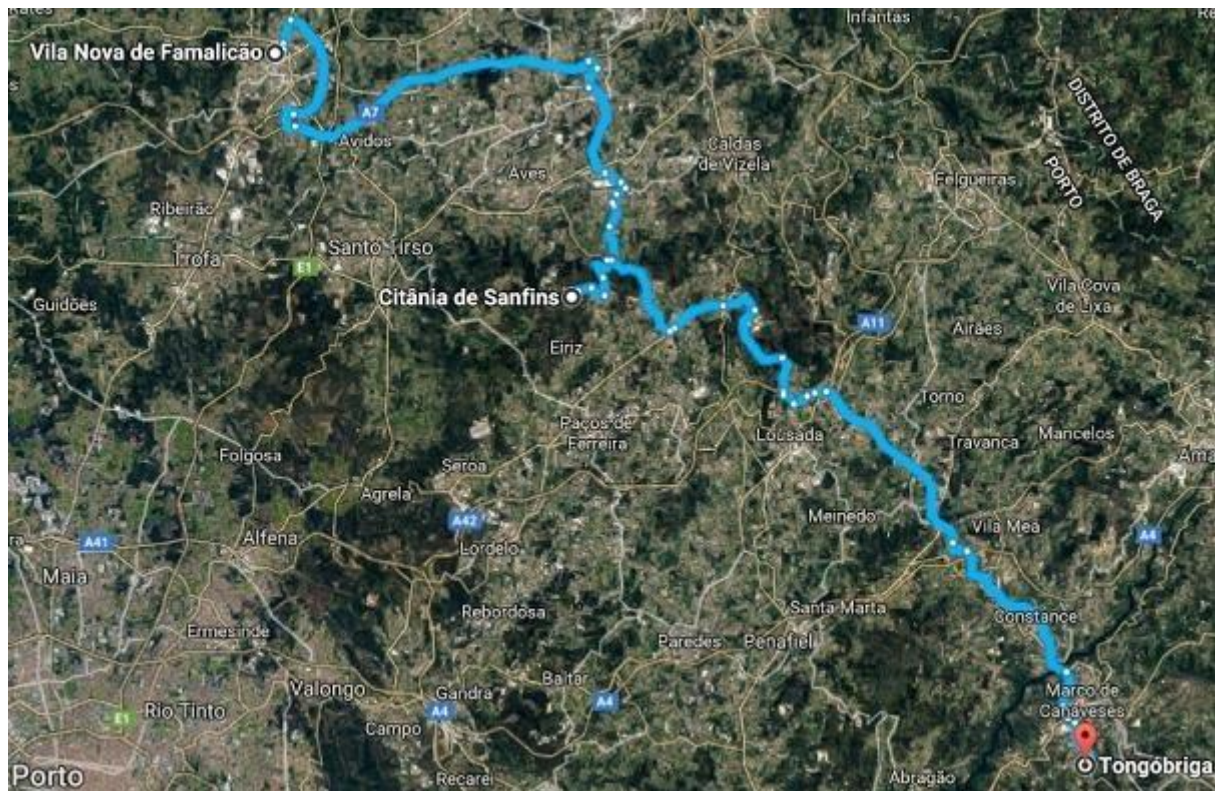


Fig. 7. Route 2, potential itineraries of some hillforts and sauna *castrejos*

Source: author's elaboration and Google Maps

Concerning the visit of the Alto-Minho *castros*, which do not have saunas, we propose Route 3 (Fig. 8), about 55 km, beginning in Viana do Castelo, at the Municipal Museum, with a later visit to the *castro* of Santa Luzia and the interpretation centre, following to Paredes de Coura, with a visit to Cividade de Cossourado, and later, in the centre of the village, to the Paredes de Coura Regional Museum.

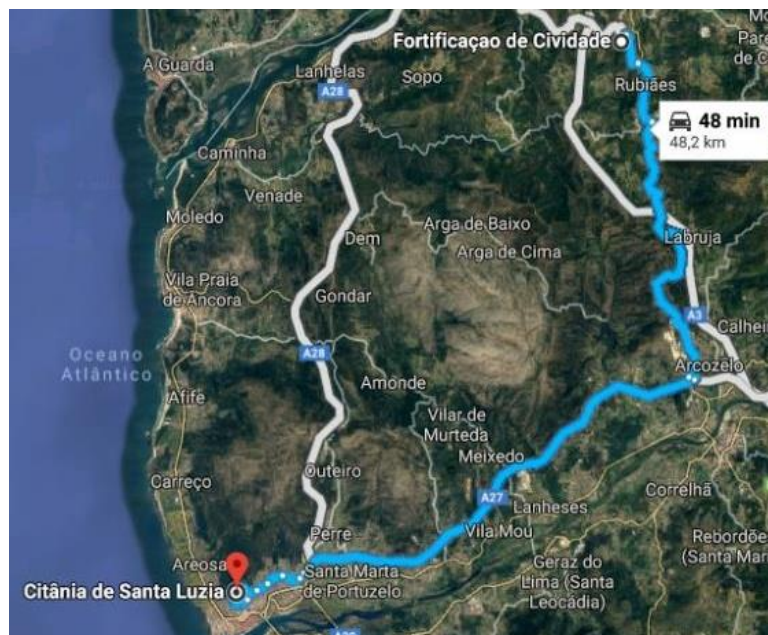


Fig. 8. Route 3, potential itineraries of some hillforts in Alto Minho.

Source: author's elaboration and Google Maps

Finally, Route 4 (Fig. 9), an alternative route, with many kilometres -about 230 km -, to be done in two days, where we include all the hillforts and the sauna mentioned in text and referred to in Routes 1, 2 and 3.

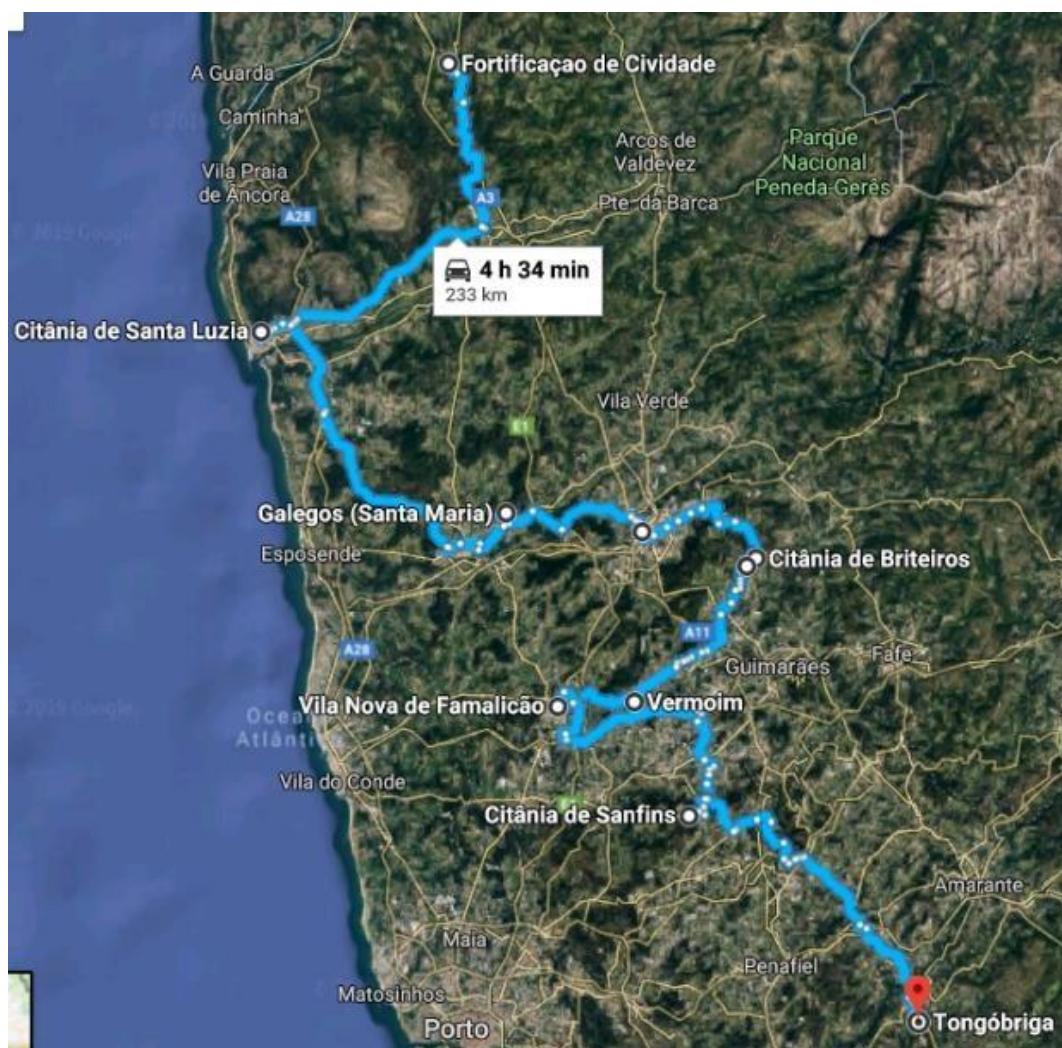


Fig. 9. Route 4, potential itineraries of all referred hillforts and sauna *castrejos*

Source: author's elaboration and Google Maps

These or other possible routes should be articulated with elements of the cultural heritage tourist of the region, encompassing elements about the hotel and restaurant (typical gastronomy and wines), in good articulation with tourism services and travel agencies, adding value for the region's development and tourism sustainability.

Some final ideas

We had as one of the main objectives to present and commemorate little known archaeological heritage that can be visited by as many as interested. We can say that the importance of these archaeological sites has been recognized and highlighted through a policy of conservation, restoration and enhancement, some of which have been targeted, but need better maintenance of the projects developed in archaeological sites by various agencies.

A project of valorisation must articulate the scientific study of the archaeological space with its enhancement (restoration, conservation, promotion, diffusion), in order to recreate the *castrejo* world, making it more intelligible to the general community but also with a diffusion and tourist dynamism that allows and enhances the archaeological tourism of the different regions that we gather in Table 1 and in the maps where we

inserted the different routes.

The *castrejos* saunas are those that we consider having a manifest cultural-tourist potential, just as the settlements in which they are located, within the framework of the itinerary that we recommend only in the theoretical plane. The entities that administer these archaeological sites need to develop their internal and external maintenance and management plans, especially in the field of dissemination and dynamism.

The institutions that manage the valuation projects already carried out are certainly, in various ways, intended to convert these archaeological sites into centres of pedagogical, tourist and cultural dynamism, integrating them in a sustainable way in the region.

We must continue to insist on the improvement of these projects and, above all, their dissemination and dynamism, to increase the tourist value from an economic point of view, by providing employment and development from generated activities, by safeguarding and valuing the heritage. This would increase their importance to the region where these types of archaeological sites are located, usually away from the great centres, assuming archaeological research as an integrated project placed at the disposal of the community, and catering to the cultural and archaeological tourist.

References

- Ayán Vila, J.M., 2001, *Arqueotectura 2: La vivienda castreña. Propuesta de reconstrucción en el castro de Elviña*. TAPA 23. Traballos en Arqueoloxía da Paisaxe. Galicia, España: Laboratorio de Arqueoloxía e Formas Culturais, Instituto de Investigacións Tecnolóxicas, Universidade de Santiago de Compostela, <http://digital.csic.es/bitstream/10261/6007/1/TAPA23.pdf>
- Criado Boado, F.. 1996, Hacia un modelo integrado de investigación y gestión del patrimonio histórico: la cadena interpretativa como propuesta. *PH Boletín del Instituto Andaluz del Patrimonio Histórico*, 16, 73-78, <http://digital.csic.es/handle/10261/11657>
- Cronyn, J.M.. 1990, *The Elements of Archaeological Conservation*. London, Reino Unido: Routledge
- Manzato, F.. 2007, Turismo arqueológico: diagnóstico e análise do produto arqueoturístico. *Pasos. Revista de Turismo y Patrimonio Cultural*, 5(1): 99-109. <http://www.pasosonline.org/Publicados/5107/PS080107.pdf>
- Martins, M.. 1990, *O povoamento proto-histórico e a romanização da bacia do curso médio do Cávado*. Cadernos de Arqueologia, Monografias - 5, Unidade de Arqueologia da Universidade do Minho, Braga
- Silva, A.C.F., 1986, *A cultura castreja no Noroeste de Portugal*, Paços de Ferreira
- Silva, A.C.F., 2007, *Pedra formosa: arqueologia experimental*, MNA/CMVNF, Vila Nova de Famalicão)
- Silva, A.C.F., Oliveira, J.; & Lobato, R., 2010-11, Balneários Castrejos: Do Primeiro Registo à Arqueologia Experimental *Boletim Cultural Câmara Municipal de Vila Nova de Famalicão*, III série, 6/7, 79-87
- Silva, M. Fátima M., 1987, Subsídios para o estudo da Arte Castreja-Arte Decorativa Arquitectónica. *Revista de Ciências Históricas*, Universidade Portucalense, Porto, 2, 124-147

- Silva, M. Fátima M., 1994, *O povoamento proto-histórico e a romanização da bacia superior do rio Coura: estudo, restauro e divulgação. Cadernos de arqueologia e património*, 2. Paredes de Coura, Câmara Municipal de Paredes de Coura, Gabinete de Arqueologia e Património.
- Silva, M. Fátima M., 2008, A evolução cronológica da cultura castreja e os modelos interpretativos sócio-culturais: ensaio de síntese. *@arqueología y Territorio*, 5: 49-77. <http://www.ugr.es/~arqueologyterritorio/PDF5/Matos.pdf>
- Silva, M. Fátima M., 2014a, Resultados de las intervenciones arqueológicas en el poblado fortificado de la Edad del Hierro de Cristelo (Paredes de Coura). *Vínculos de Historia*, 3: 161-198. <http://vinculosdehistoria.com/index.php/vinculos/article/view/113>
- Silva, M. Fátima M., 2014b, O ordenamento do território durante a Idade do Ferro do noroeste peninsular. Modelos evolutivos e cronologias dos povoados da bacia superior do rio coura. *Anuário do Património*, 2: 192-201. <http://repositorio.uportu.pt/jspui/handle/11328/1278>
- Silva, M. Fátima M., 2015a, *Montes, Pedras e Gente. A ocupação proto-histórica do vale superior do Coura*. Porto, Portugal: Editeque. <http://hdl.handle.net/11328/1360>
- Silva, M. Fátima M., 2015b, Valorización de los poblados fortificados de la edad del hierro del noroeste de la península ibérica y el turismo arqueológico. *Conserva*, 20, Centro Nacional de Conservación y Restauración (CNCR) de la Dirección de Bibliotecas, Archivos y Museos de Chile - Santiago, Chile, pp. 23-41 http://www.cncr.cl/611/articles-57154_archivo_05.pdf
- Silva, M. Fátima M., 2017, Os primórdios do Termalismo: os balneários castrejos e o seu potencial turístico. *Tourism and Hospitality International Journal*, 9(2), 4-28.
- Silva, M. Fátima M., 2019, Decoração e simbolismo das pedras formosas dos balneários-saunacastrejos: leituras possíveis. *Vínculos de Historia*, Departamento de Historia de la Universidad de Castilla-La Mancha, Accepted for publication in 30/04/2018.
- Silva, M. Fátima M. & Borges, I., 2019, Religious Tourism and Pilgrimages in the Central Portuguese Way to Santiago and the Issue of Accessibility, *Handbook of Research on Socio-Economic Impacts of Religious Tourism and Pilgrimage* (pp. 375-395). Hershey, PA: IGI Global. doi:10.4018/978-1-5225-5730-2.ch020
- Silva, M. Fátima M. & Silva, Carlos A. G., 1998, O povoado fortificado de Cossourado. Retratos de um habitat da Idade do Ferro. Paredes de Coura, Câmara Municipal de Paredes de Coura e II Quadro de Apoio Comunitário. <http://repositorio.uportu.pt/jspui/bitstream/11328/295/2/O%20povoado%20fortificado%20de%20Cossourado.pdf>
- Silva, M. Fátima M. & Silva, Carlos A. G., 2004a, Estratégias pedagógicas de dinamização e divulgação do povoado fortificado de Cossourado: uma experiência de "História ao vivo. *Boletín GC: Gestión Cultural*, 9. http://www.gestioncultural.org/ficheros/1_1316774039_CMachadoMMatos.pdf
- Silva, M. Fátima M. & Silva, Carlos A. G., 2004b, Projecto de valorização e divulgação do povoado fortificado de Cossourado (Paredes de Coura). *Boletín GC: Gestión Cultural*, 9. http://www.gestioncultural.org/ficheros/1_1316774144_MMatosCMachado.pdf
- Silva, M. Fátima M. & Silva, Carlos A. G., 2007a, *Carta arqueológica da bacia superior do rio Coura*. Paredes de Coura, Câmara Municipal de Paredes de Coura. <http://hdl.handle.net/11328/301>

- Silva, M. Fátima M. & Silva, Carlos A. G., 2007b, *Catálogo do Núcleo de Arqueologia do Museu Regional de Paredes de Coura*. Paredes de Coura, Câmara Municipal de Paredes de Coura.
- Silva, M. Fátima M. & Silva, Carlos A. G., 2008, Valorização, rentabilização e difusão como culminar do processo de gestão do património arqueológico. O caso do povoado fortificado de Cossourado, Paredes de Coura. *Praxis Archaeologica*, 3: 91-116. http://www.aparqueologos.org/images/PDF/praxis3/2008_91116.pdf