

Almadrava: a proposal for a touristic revival

N. Batista & M. M. Gonçalves

Universidade do Algarve, Faro, Portugal

ABSTRACT: It was very common to see the establishment of the tuna's fishermen in the Algarvian beaches, from April to June or August. The *Arraiais* (fishing yards) in the sand, strategically placed near the *Almadravas* (tuna nets) placed in the sea, had their own socio-economic relations and their own temporary urban landscape. In this paper, it is elaborated a touristic proposal, based in the tuna fishing theme. There are almost no offers for touristic proposals, based in tuna fishing heritage, in Algarve. We believe that this may be an alternative to the high season, because of its meaning during the tuna fishing season and, due to Algarve geographical location, it is also related to the Mediterranean Diet. This proposal can enhance the awareness of the loss of this heritage, being a way of spreading and reviving something that has been lost and forgotten.

1 INTRODUCTION

For long decades, it was very common to see the establishment of the tuna's fishermen in the Algarvian beaches, from April to June or August. The *Arraiais* (fishing yards) in the sand, strategically placed near the *Almadravas* (tuna trapping-nets) placed in the sea (Fig. 1), had their own socio-economic relations and their own temporary urban landscape. Algarve is the only continental Portuguese region where such fishing technique was used.



Figure 1. *Almadrava* in Zahara de los Atunes, Andalusia, Spain, April 2017 (Source: authors)

Nowadays this heritage is almost extinct and, with the purpose of reviving this way of living, a touristic proposal, based in the tuna fishing theme, was elaborated.

Recently, the Algarve Regional Tourism launched the 365 Algarve program, to find tourism activities during the lower season and this proposal goes along its lines.

Limitations to the development of this work were found due to the scarcity of available information and to the advanced age of the people involved, who are now about 90 years old.

The main goal of this proposal is to enhance the awareness of the loss of this heritage, awaking minds and consciousness, and, at the same time, spreading and reviving something that has been lost and forgotten.

In the development of this work, we begin framing the concepts of heritage and tourism dealt with here, followed by an explanation of the *Armação do Cabo de Santa Maria, Ramalhete and Forte* (CSMRF), situated in Faro, in the Portuguese region of Algarve and we end this paper with a proposal for a touristic revival of the tuna's fishery in this region.

2 FRAMEWORK

“Heritage is one of the important components which has the role to create character, identity and image of city”... “Heritage concerns our past history, present and future” (Petronela, 2016), p. 732. *“Spread through generations and constantly recreated, it ensures humanity with a sense of identity and continuity”* (*ibidem*) p.731.

As human beings, we tend to define ourselves as belonging to a given social category or group, as opposed to another existing one, and are constantly constructing our collective identities, that is, the way each individual recognizes himself as a member of a group or community and how they distinguish one from another (Díaz Iglesias and Guerra Iglesias, 2010). For these authors, identity supposes this process of classification and identification, making it, at the same time, a factor of differentiation.

In this context, heritage plays a very important role, helping to define our belonging to a particular community, our identity, our character and, of course, our image (Gonçalves, 2016; Petronela, 2016). When their intrinsic values are valued, the bonds it establishes between the past, the present and the future, the spirit and the *being* of the various cultures are also valued (Villacis-Mejía et al., 2016).

Because there are many factors that endanger the continuity of the heritage, whether by internal factors, such as the loss of the meaning and symbolism of this heritage for the social group that keeps it alive (Villacis-Mejía et al., 2016; Chan, 2017) or by external factors, such as the exaggerated exploitation of natural resources, or the imposition of development projects that completely ignore the social organization of a particular group, resulting in the loss of relations with the place (Villacis-Mejía et al., 2016), it is important to carry out surveys, registers and dissemination of this heritage, to allow it to perpetuate.

Related to the construction or deconstruction of identities is always the phenomenon of globalization, to which, having been initially oriented toward a cultural homogenization, among others, people quickly reacted by rediscovering their idiosyncrasies as a differentiating factor and identity. Today, we are now reaching a more balanced point in the relationship between this duality. Moraes (2014), p.3, states that: *“Whether this is a reaction to urbanisation or the result of an ever-growing world population, tourism plays an important role in the process of globalization. Tourism helps breaking the barriers that once isolated and protected remote areas comprising important world natural and cultural heritage elements. Not only tourism is driven by a more connected world, it also promotes it”*.

In the case of the heritage discussed here - about tuna fishing in the Faro area - what remains are the memories of the people who experienced it (*companheiros*) and the passion of the Algarvians for the sea and everything related to it. It is the collective memory related to a certain identity, which (still) survives. That is why it is urgent to record in writing the data that (still) is possible to find and report. To achieve these objectives, tourism appears as a privileged vehicle, since it can cover a wider spectrum of people, helping to safeguard and preserve this heritage.

Safeguard is understood as proposed by Villacis-Mejía *et al.* (2016) for intangible heritage, which considers it to be a process that consists of the identification, investigation and definition of specific actions to guarantee its continuity and, therefore, it is a social construction that allows the heritage to remain alive and experienced by future generations, as long as they have relevance to a given culture. That is why the same authors affirm that the safeguarding of (intangible) heritage is important for: *“Strengthen local identities, foster coexistence and the enjoyment of local knowledge, provide a historical continuity to the psychological need of people to belong; as well as for the intangible cultural heritage, the pride of a few become the*

pride of all". In fact, all these statements are also applicable to other concepts of cultural heritage, as is the case of the heritage dealt here.

The safeguard is a mechanism for the dissemination and enhancement of heritage, and, therefore, it is important to involve the society and people (Petronela, 2016; Villacis-Mejía et al., 2016). It is also important offer tourist products, anchored in cultural planning, being, the cultural tourism, an alternative to another tourist offers (Villacis-Mejía et al., 2016). We hope that the tuna fishery's heritage will become a new cultural offer in Algarve and that this will provide a way of safeguarding it.

For long time, economic development and heritage preservation are considered to be in opposite sites. Nevertheless, both, together, have economic and social value, helping countries to develop. Economic value is easy to understand, like the number of tourist visits and their consumption, but social value, not so common, can be measured by evaluating the improvement of social cohesion, community empowerment, skill and development learning (Petronela, 2016), which will reinforce community's resilience (Gonçalves, 2016).

Tourism is a cross-cutting activity, which is important to the economic context, but, simultaneously, it combines dynamically endogenous and exogenous resources, that can result in social, economic and environmental gains (Oliveira and Manso, 2011).

In this way, the income that tourism generates, can be invested in several initiatives that can be the support to preserve and potentialize the cultural heritage supporting its long-term survival (Villacis-Mejía et al., 2016). However, being tourism based on human mobility, it has interactions and consequences arising from these interactions, and so, tourism must be addressed from a holistic point of view, including social, economic, environmental, cultural and political different dimensions of interactions (Moraes, 2014).

The Algarve, today known for its beaches, turned from one of the poorest regions of Europe into the second richest in Portugal (PORDATA, 2017), due to the tourist industry. The tourism sector is the biggest booster of the local economy, so the proposal presented in this article has relevance and utility; and, due to the 365 Algarve program context, it is also trendy. Linked to the tuna fishery in the Algarve, there is an immense heritage, in all their three forms: environmental, tangible and intangible, which can be used for tourism purposes.

3 THE ARMAÇÃO OF CABO DE SANTA MARIA, RAMALHETE AND FORTE: ALMADRAVA AND ARRAIAL

3.1 Introduction

Geographically, Portugal is situated at the western end of Europe and the Algarve in the South of Portugal (Fig. 2). It is bathed by the Atlantic Ocean, but the Algarve, due to its characteristics, is considered a Mediterranean area.

In fact, the entrance of the Mediterranean Sea, where the Northern Bluefin tuna (*Thunnus thynnus* LINNAEUS 1758) will spawn, lies not far from the Algarve, making here tuna's fishery possible. In continental Portugal, Algarve is even the only place where tuna is caught and, consequently, where the *Almadrava* (tuna-trap) technique is used. This technique constitutes a passive system and will be referred below.

Almadrava, an Arabic term meaning: "place of death" (Santos, 1989) was adopted as a designation for what represents a complex system of fixed nets intercepting shoals of tuna, called *atum rabilho*, northern bluefin tuna on its genetic migration from the Atlantic Ocean to the warmer waters of Mediterranean Sea to spawn, called *atum de direito* (inward-tuna), during April, May and June (it ended by 24th June, that is, on midsummer's day, also coincident with St. John's day), and in the reverse direction, after spawning called *atum de revés* (outward-tuna), during July and August (Fig. 3).

In this migration cycle, the tuna crossed along the Algarve coast was fished from the most remote times. In order for fishing to be possible, specific environmental conditions must be met due to the behavior of tuna schools: the wind must have a certain direction, which leads to clear waters, or schools are being harassed by predators. Traditionally the means used for tuna fishing require intelligence, physical strength and highly developed senses (Florido-Corral, 2013), only possible due to the practice and transmission of knowledge from generation to generation.

The *almadrava* is a fishing system that already existed in the Algarve when the territory was reconquered from the Muslims in 1249 (Lyster Franco, 1947), having as first known written reference to an *Armação* on the coast of Cabo de Santa Maria (Faro) in the XVI century (Baldaque da Silva, 1891).

The *Almadrava*, located in the sea, was supported by the *Arraial*, located onshore, which consisted of the dwellings of the fishermen and their families, forming the *Armação*, a short-term fishing community, during the fishing season, every year.

3.2 *The armação of Cabo de Santa Maria, Ramalhete and Forte*

The *Armação* of CSMRF, was the greatest in the Algarve since 1931, and the *Almadrava* had an extension of approximately 10,000 meters at sea surface and its central part was extended to a depth of 20 meters. There were used 70,000 meters of steel cable from 2 to 3.5 inches, 90,000 kilos of cork for the confection of floating and signaling buoys, and 400,000 square meters of fishing nets of various dimensions which were attached to the seabed through 350 iron anchors of 2 to 3 meters long which weighed a few hundred kilos each (Brito, 1943). All the works were carried out manually, without using mechanical means.

In 1935 (*ibidem*) the *Arraial* had 144 fishermen and their families living there, coming from the most different places of Algarve, namely, Faro, Quarteira, Albufeira, Armação de Pêra, Olhão, Santa Luzia, Culatra, Fuzeta and Tavira, resulting in an exchange of knowledge and habits, fostering mutual acculturation. Until 1935 they lived in about 30 reed houses (*junco* or *barrão*) with wooden doors and without windows, shared by 2 to 3 families each (information verbally provided). After 1935 and until 1967 (when the *Armação* finished), there was a change in the location of the *Arraial*, due to the change of the seafront, replacing the reed houses by six new wooden sheds shared by 20 to 24 families each.

Although there was a hard life, without electricity, drinkable water or sanitary infrastructures, between the *companheiros* (fishermen and their families), a spirit of camaraderie, union and mutual aid, was developed (information verbally obtained, which is confirmed by Brandão (1988) and Rebelo (2010)).

4 THE PROPOSAL

4.1 *General remarks*

Tuna has assumed, over time, a great importance in the economy and in the food of the Algarve and all the Mediterranean peoples. It is one of the constituent elements of the Mediterranean Diet, considered Cultural and Intangible Heritage of Humanity by UNESCO, of which Portugal is a member. It is in the Algarve that there is the *Confraria do Atum* (Tuna Brotherhood), which demonstrates the importance that this industry has in the region.

There are almost no offers for touristic proposals, based in tuna fishing heritage, in Algarve. We believe that it can be an alternative to the high season, by his meaning during the tuna fishing season (from April to June or August).

In Andalusia (Spain) already exists the “Almadrava’s tuna festival”, which can be an opportunity to extend this proposal beyond frontiers; nevertheless, the proposal presented here, is different from the Andalusian, and might function as another cultural tourism offer and be an example for other municipalities in Algarve.

It was verified that existed *almadravas* in all the Algarve municipalities of the coast (Fig. 3 and Fig. 4), which includes the municipalities of Aljezur, Vila do Bispo, Lagos, Portimão, Lagoa, Silves, Albufeira, Loulé, Faro, Olhão, Tavira, Vila Real de Santo António and Castro Marim. This strengthens the extension of the festival to all the Algarvian municipalities where there were *almadravas*, forming a regional network.

Based our proposal on tuna fishery experiencing and this way of life, it is also based on the heritage related to this theme, since it is intended to revive this knowledge. In relation to the tuna fishery in Andalusia, Florido-Corral (2013) proposes to exploit the tuna fishery heritage from an ethnological point of view. The proposal of this author served as the starting point for what is proposed in this article.

4.2 Proposal for a touristic revival

4.2.1 Starting point

Being a cultural festival, the proposal is structured in the following way: based on the heritage (Table 1) it is developed in phases, starting as a gastronomic festival.



Figure 4. Municipalities of Algarve (Source: Algarvepress, 2013)

Table 1. Aspects of tuna trapping heritage that can be the basis to the proposal for a touristic revival (Source: authors, based in Florido-Corral, 2013)

Natural heritage	Cultural tangible heritage	Cultural intangible heritage
<ul style="list-style-type: none"> • Landscape, natural environment of Ria Formosa, with the sea, the beach, etc. • Natural resources for construction. • Tuna fish. • Salt exploitations, flamingos and Glasswort (<i>Salicornia</i>). 	<ul style="list-style-type: none"> • Archaeological remains: roman salting tanks. • Patterns of habitation characteristic of tuna-fishing collectives: migrations, characteristic types of houses. • Fishing gear and vessels: technological systems and instruments developed for fishing. • Communal and local fisheries and social service systems developed in the past as forms of spatial management. Fishermen's associations. • The role of women in the family economy: their involvement in the local economy in the past though work in canning factories, house economy through fish shellfish, etc. Heritage through the family: ways of handing down material assets, etc. • Perceptions of living area derived from work at sea. • Dishes prepared on the basis of fish available locally using traditional local recipes. Ways of processing oily fish (bluefish): for trade and own consumption. Local ways of using tuna by-products (offal, stomach, roe, etc.) for commercial use an own 	<ul style="list-style-type: none"> • Fishing gear and vessels: 'know-how' applied to techniques. Ancillary trades and activities: wooden boat building and the manufacture and repair of tools, nets, etc. • Values, ideas and representations linked to working at sea. • Work relations and social stratification in the work environment, in factories and in local society. Ways of distributing fish: share system, share outs and perks obtained by workers, pilfering. • Characteristics of marketing. • Communal and local fisheries and social service systems developed in the past as forms of spatial management. Fishermen's associations. • Organization of the family economy. Ways of saving characteristic of fishing families. Heritage through the family: ways of handing down knowledge, etc. • Socialization of children. Gender division of tasks. Gendered forms of sociability and their spatial expression: sea/land and home/tavern. • Organizations of the working day

	<p>consumption. <i>Moxama</i> and <i>estupeta</i>. <i>Ronqueio</i> (local method of gutting, boning and cutting up tuna). Industrial processing of fish in factories.</p> <ul style="list-style-type: none"> Some documentaries and movies about tuna-trapping are available. Archives and collections: documents of accounts, reports and maps, the stand out for tuna-trapping records, etc. Specific literature about tuna-trapping: whether they are scientific, theses or literary. Illustrations for various purposes: mapping, drawings, for administration, etc. Photographs. 	<p>(on land and at sea) in terms of time: working periods and waiting and/or leisure times.</p> <ul style="list-style-type: none"> Distribution of knowledge about food preparation between men and women. Ways of processing oily fish (bluefish): for trade and own consumption. Local ways of using tuna by-products (offal, stomach, roe, etc.) for commercial use and own consumption. <i>Moxama</i> and <i>estupeta</i>. <i>Ronqueio</i> (local method of gutting, boning and cutting up tuna). Rituals: beginning of fishing with the baptism of the gear. Cursing: it is very common in Algarve, to curse someone. Specific vocabulary used in tuna-trapping.
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The proposal is based on the realization of an annual gastronomic festival, the theme of which is tuna, with a duration of 3 to 5 days, which coincides with the period in which the CSMRF's *Armação* was in full operation, between April and June. Being a period outside the tourist high season, during Spring, it fits into programs of support and incentive to tourism as an alternative to the high season bathing, like the 365 Algarve 2017's program.

Initially, it could be realized in the Faro dock, where festivals of this type usually take place, or in Largo de São Francisco, where the annual Santa Iria fair is held.

The restaurants of the municipality will be invited to participate, presenting themed menus based on tuna, Algarvian wine and desserts, presented in tents gathered in the same place, where there will be a stage allowing the simultaneous action of local groups of performing arts, dramatic and musical, for example, mostly related to the experience in the *Armação* (blessing of the nets, tuna *copejo* (action to raise the nets and start to take tunas), tuna counting with flags, division of the tuna, etc.). In the menu presented, there will be a "social dish", which will revert part of the profit for social purposes invested in the community.

In addition to the gastronomic festival per se, a very important moment are the meetings/conversations with people who were directly involved in *Armação*, which are now around 90 years old, in a quieter place such as the municipal library, being these conversations recorded by audiovisual means with the purpose of drawing up a file and an inventory.

4.2.2 Proposal stages

The first phase, as described in the previous point, consists of a thematic gastronomic festival, with a social component and dissemination of local knowledge, and a register of reports of people directly involved in tuna fishing.

As a consequence of the evolution of the gastronomic festival, one could make a collection of recipes made by locals, which would include the name of the person who gave it and the place where it was collected. This would enrich this heritage, helping to generate some revenue from the sale of this publication, and would certainly fill with pride who participated in it.

In a second phase, it is intended that the scenic component would be slightly altered: i) the place should be in Faro Beach, where replicas of the primitive houses would be constructed (Fig. 5), where the day-by-day in the *Armação* would be staged, and would perform (and record) the reports of the elders to the younger; ii) The staging of the various scenes of the *Armação*, little by little, would not be done by local theater groups but are to be made by elements of the population, who would register to participate, as is done in the Feast of Tabuleiros in Tomar, which is advocated by people of diverse origins and not just by locals.

Inside the reproduced buildings, it would be explained how was the life in the *Armação*, how people cooked, how seafood was caught, etc.

In another phase, it could include boat visits to see tuna schools, tours in the Ria Formosa, workshops to catch shellfish, visits to Roman salting tanks, through salt explorations, passing the area where there are flamingos, with explanations about this system, including how the of Glasswort (*salicornia*) was used to cook.

On the beach, it is taught to repair the tools, nets, boats, the technological systems and the instruments developed for this fishing, the know-how applied to fishing gear and vessels.

Later, the family theme would be included: the role of women in the family economy, their involvement in house economy through shellfish fishing, organization of the family economy, ways of saving characteristic of fishing families, ways of handing down knowledge, socialization of children, gender division of tasks, gendered forms of sociability and their spatial expression (sea/land and home/tavern), organizations of the working day (on land and at sea) in terms of time (working periods and waiting and/or leisure times) and, of course, heritage through the family: ways of handing down material assets, etc.



Figure 5. Former set of traditional cabins in Fornico, Faro (Source: Oliveira, Galhano and Pereira, 1994)

About culinary related to tuna, it would be interesting to recognize the distribution of knowledge about food preparation between men and women, dishes prepared on the basis of fish available locally using traditional local recipes, like local ways of using tuna by-products (offal, stomach, roe, etc.) for commercial use and own consumption, how to cook *moxama* and *estupeta*, for example.

Tuna fishing also have a specific vocabulary and, in Algarve, it is very common to curse someone. This may lead to an exhaustive collection of the curses and the vocabulary used, for collection, inventorying and subsequent publication.

All the contents of table 1 can constitute a new theme for each edition of the festival, having as final objectives the following:

- Construction of a monument alluding to *Armação* in the place where it existed, in the Faro Beach;
- Creation of a tuna museum in Faro, where all the collections related to tuna fishing in the *Armação* of CSMRF could be gathered, accessible to the public, inclusive and participative in relation to the local population; it would have a research component with the goal of enriching the museum's assets, using the profits generated by the festival, for example;
- Expansion of this festival to at least, one village of all Algarvian municipalities that had or still have *almadravas*, forming a regional network, giving here place to the industrial heritage linked to the canning industry;
- Linking and exchanging experiences with Andalusia, Spain, forming a cross-border network.

5 FINAL CONSIDERATIONS

It seems to us that this theme has a lot of potential for a tourist exploitation, and at the same time, tourism is used as a means of dissemination, but mainly of collection and registration of a disappearing heritage, encouraging the population to play an active role in this safeguard.

Cultural festivals allow the experimentation of fungible goods because, at the moment they are produced, they expire, giving an idea of the previous cultural panorama of a given community (del Barrio, Devesa and Herrero, 2012).

At an economic level, cultural festivals are generally more economical than other seasonal activities, allow the use of culture as a tool for regional economic development strategies, and also permit policies for urban regeneration and city's image improvement. Despite being a service from an economic point of view, attracting revenues and expenses related to the consumption of cultural tourism, it also has the facet of being an expression of the cultural heritage (*ibidem*).

In this way, festivals are a complex cultural phenomenon (*ibidem*), but they can be a vehicle for the safeguarding and awakening of a dormant heritage, such as the heritage connected to tuna fishing on the coast of the Algarve, mainly in *Armação* of Cabo de Santa Maria, Ramalhete and Forte.

With this proposal, it is expected that decision-makers will wake up for something that is unique, but, above all, is expected that the population arises, takes an active part, revives and will be proud of this heritage that is theirs.

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