

Revealing the Invisible: The Heritagization Process of the Underwater Environment

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ABSTRACT

Cultural heritage is not a given concept, it is a social construct. Thanks to the development of the SCUBA diving techniques, the XXth century saw the gradual heritagization of the underwater environment, with the emergence of the concept of "underwater cultural heritage" whose most relevant outcome is the 2001 UNESCO Convention on the Protection of the Underwater Heritage. However, the analysis of six case studies from the Mediterranean context shows how the process of institutionalization of underwater archaeology is not completed yet. Moreover, the general public still does not perceive ancient objects lying beneath the water as their heritage. The case of the invisible underwater heritage was the perfect example which showed how, in order to build a powerful cultural object (Griswold, 1987: 4), it is necessary to make it really accessible to people and, especially, linked to a powerful narrative. The analysis was developed using the Cultural Diamond (Griswold, 2004: 16) as a descriptive model and Schudson's (Schudson, 1989) five dimensions as an analytical tool.

Keywords: heritagization, underwater heritage, narrative

Introduction

The aim of this paper is to analyze the process of the transformation of the underwater environment from non-place into an historical place; with "non-place" I refer to Augé's definition (Augé 1995: 77-78) according to which "if a place can be defined as relational, historical and concerned with identity, then a space which cannot be defined as relational, or historical, or concerned with identity will be a non-place". In fact, the sea has always played a role in the development of human history. For example, the Mediterranean Sea, which has been sailed since very ancient times, had a crucial role in the development of ancient civilizations, in trade, wars and the movement of people (Braudel 2001). For this reason the Mediterranean seabed, as those of all the other Seas, is disseminated of remains of different nature, testifying to the long relations between humans and the sea. People have always found the idea of ancient remains lying beneath the waves fascinating, as demonstrated by the myth of the submerged city of Atlantis (Vitaliano 1968) or by novels and movies like *20000 Leagues under the Sea* by Jules Verne, that stimulated the collective interest in the idea of remains from ancient civilizations lying beneath the waves. During the XX century, this collective interest was also enriched by the development of the Self-Contained Underwater Breathing Apparatus (SCUBA) technique, which allowed the recovery of ancient objects from underwater.

However it was only in the XXth century that ancient objects lying on the seabed considered submerged treasures turned into "underwater cultural heritage", which means something that belongs to the community and for this reason has to be protected. This process has its more evident outcome in the 2001 UNESCO Convention on the Protection of Underwater Heritage (UNESCO 2001); and in fact, UNESCO has often described the sea as the "biggest museum of the world"¹. Nevertheless, we acknowledge that, in general, the notion of "cultural heritage" is not a given concept. "Cultural heritage" is a term which relates to something like objects, monuments or works of art inherited from the past, which are specific to a community or a society, and to which a given society attributes a "cultural" value (Throsby 2010: 321). Cultural heritage is a "cultural object", which means "a shared

¹ See more: <http://www.unesco.org/new/en/culture/themes/underwater-cultural-heritage/the-underwater-heritage/>. Last retrieved on December 6th, 2015.

significance embodied in form" (Griswold 1987: 4), that it is something in which a given society or a social group recognizes significance. Attributing the remains found in the sea or in a body of internal waters the status of "cultural heritage", means to recognize that the sea is a real social place, where things happened that influenced human history. This is quite relevant if we consider that, as has been recognized, often the marine dimension of history and social sciences has been considered of secondary importance in respect to what had happened on land (Cocco 2013).

The intention of the paper is to look particularly at the wider public reaction to and perception of underwater cultural heritage, looking at case studies from the Mediterranean context.

1. Methodology

Given the assumption that cultural heritage in general is a social construct, it is particularly interesting to analyze the relations between underwater cultural heritage and the public, since what lies beneath the water surface is by definition inaccessible to the general public. The aim of this paper is therefore to try to analyze different ways to reveal this heritage to the public and whether it is communicated in an effective way. In order to do that, I chose six case studies from the Mediterranean context. I have limited myself to countries bordering the Mediterranean, France, Italy and Spain; in fact, these three countries share a particular abundance of underwater archaeological heritage, which presents similar problems regarding preservation. Furthermore, although the relationship with the sea changes according to the cultural context, there are certainly points in common among the areas looking out onto the *Mare Nostrum* and, finally, the three selected countries share a long history in the field of underwater archaeological practices (Cibecchini 2013).

I have utilized the Cultural Diamond (Griswold 2004: 1-8) as a descriptive model, which allowed me to consider in my analysis all the stakeholders involved in the production of the underwater heritage, as well as the public to whom the heritage has to be transmitted, and the specific historical and institutional contexts for each of the three countries. Specifically, this tool makes it possible to analyze all the relations between a cultural object, and the society that produced it. The society in this case is divided into the social world, or the context, the creators and the receivers. This tool has been particularly useful in finding answers to the questions my research is asking, preventing also the risk of omitting some element in the analysis. In order to evaluate the impact that the underwater archaeological heritage has on society I used Schudson's five dimensions to evaluate the impact of a cultural object on society. In a 1989 article on *Theory and Society* Micheal Schudson (Schudson 1989) faces the problem of how to estimate the efficacy of a cultural object, taking a position midway between theories that state that culture and cultural objects are directly influenced and formed by superstructures, and theories that assume that culture is a toolkit (Swidler 1986) of ideals to be used according to the different social contexts. But Schudson, using mass-media as a case study, without destroying the previous theories on culture, wants to understand why cultural objects, equally created by a superstructure and equally available in the tool kit, work in different ways. Basically, he wants to understand why cultural objects can have a different impact on the "public". In order to reach his goal Schudson suggests that five dimensions (retrievability, rhetorical force, resonance, institutional retention and resolution) should be applied to the cultural object which could help in understanding whether or not a cultural symbol or object works. Applying the Schudson dimensions to the underwater archaeological heritage was particularly useful in order to evaluate its efficacy from the sociological point of view. In his analysis Schudson was using mass media as a case study; therefore I slightly adapted Schudson's dimensions because I refer to a material cultural object in my analysis.

Different sources were used for the analysis of the public reaction to heritage. First of all, for all the analyzed sites and museums I looked at the data on the number of visitors to sites where the underwater archaeological heritage is exhibited; most of these data were available thanks to the help of the different manager authorities that shared their information on the visitor flow to the sites. Obviously, in order to evaluate the visitors' level of

appreciation of underwater heritage, to look at the number of visitors was not enough; therefore, in most of the case studies interviews with the visitors to the different sites and museums were conducted. When visitors to museums and sites were interviewed, unstructured interviews were carried out, focusing on the people's general impression of their visit to the museum or site.

Obviously, in each site where interviews were conducted, people also spontaneously and openly expressed their impression of various aspects of the site in general (e.g. amenities or organization) which was coherent with the aim of the research, and the observations made were recorded and used in the description of the case study. For each site the aim was to reach a relevant portion of visitors (of course in relation to the total number of visitors to the site), but of course, not the same number of interviews was carried out in all the sites, and this was both due to time constraints and to the difference in the number of visitors to the different case studies. However, in all the cases the interviews were recorded in more than one day, trying to balance the interviews between working days and weekends or holidays. The people to be interviewed were selected randomly; as can be imagined, many people did not want to participate, therefore the only criteria used for the selection was whether people were willing to answer the questions.

Another tool that was used to gain an understanding of the public of the underwater heritage, was to carry out very short interviews with people in the street in crowded places located near an underwater archaeological site or a museum where the heritage from underwater is exhibited. This kind of interview was conducted, for all the six case studies, with people in Naples and Palermo (Italy), Marseille and Arles (France), Cartagena and Gerona (Spain). In this case the interview was extremely simple; people were just asked whether or not they had ever heard of the existence of underwater archaeological heritage. Then a simple "yes" or "no" was recorded as the answer, unless people spontaneously added some other information. Also in this case the aim was to interview as many people as possible, with an average of 300 interviewed people per city; and also in this case the only criteria for selection was the availability of people to answer. However, I am aware that, especially in densely populated cities like Marseille, Naples, and Palermo these interviews cannot be considered as statistically relevant samples; nevertheless, they were interesting experiments that could confirm or not the data from other sources. Direct observation was also used as a tool for gathering information.

In this paper, after a short description of the general context in the three analyzed countries and an overview of the six case studies, I will pass directly to the analysis of the five Schudson dimensions.

2. Countries Overview

The six case studies analyzed in this work came from France, Italy and Spain, and each case study is influenced by its general national context. Therefore, it is necessary to summarize the most important aspects regarding the management and the development of underwater archaeology in each one of the three countries:

1) General French context: France has a long tradition in the field of underwater archaeology since it is the country where the SCUBA diving techniques were developed (Bass 2011: 5), and in this country the management of underwater archaeological heritage became highly centralized with the creation of a specific public institution, the DRASSM (2010), active at national level and involved in the fields of the preservation and management of the underwater archaeological heritage, but also in the field of research; the DRASSM is also supported by many private bodies and other national institutions in the accomplishment of its tasks. Nevertheless, if in the past amateurs too could carry out underwater archaeological campaigns, at present this possibility has been considerably limited². In France there are many institutions, private and public, which collaborate with the DRASSM; in particular, most

² See the decree that regulates the activity of underwater archaeologists.
<http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000023413027&dateTexte=&categorieLien=id>. Last retrieved on December 6th, 2015.

of the dissemination activities related to underwater archaeological heritage are delegated to other bodies, like museums. The possibility of becoming an underwater archaeologist is clearly established by the law (Decree 2011-45 11/01/2011), and the DRASSM, thanks to the support of universities and research centers, is also involved in the organization of training schools for underwater archaeologists.

2) General Italian context: also Italy has a long tradition in the field of underwater archaeology, where the discipline was born at the same time as in France. The administration of the underwater heritage is the responsibility of the Ministry of Culture, which has a technical division for underwater archaeology (Archeologia subacquea 2009), whose task is to coordinate the activities on the territory performed by the local branches of the Ministry, that are the Superintendences (D'Agostino 1984: 76-78). Nevertheless, not all the Superintendences have trained personnel to undertake underwater archaeological campaigns; the situation is different in Sicily, which has autonomy in the management of its heritage (after the application of the Decree of the President of the Italian Republic no. 367 30/08/1975). The different regional Superintendences are involved in research projects, regarding especially the carrying out of censuses of the heritage, with the collaboration of many other Italian Institutions (like the "Archeomar" project. AA.VV., 2008). As regards the musealization of the heritage and its dissemination to the public, private bodies and local associations working on the territory make valuable contributions. However, there are no clear regulations regarding the qualifications necessary for working underwater and there is a lack of training courses.

3) General Spanish context: in Spain underwater archaeology developed a little later than in the other two countries, and especially thanks to the activities of amateur archaeologists. Because of the considerable degree of autonomy that Spanish Regions enjoy in the administration of heritage in general, each Spanish Autonomous Community is in charge of its own underwater archaeological heritage (Aznar Gómez 2006: 422-424). This means that there are Regions, like Catalonia³, that have very active research centers that study, carry out research and disseminate the underwater heritage, and Regions where such centers do not exist. Moreover, the different regional centers do not necessarily collaborate with one another. Regions that have centers devoted to underwater archaeology, also have centers to train new personnel. Also in the case of Spain, private bodies collaborate, especially in the dissemination activities related to the transmission of the underwater heritage to the public, and, as in Italy, in order to work as underwater archaeologists there is no clear regulation. The differences between the three countries' underwater heritage administration systems are necessarily linked to their tradition and the heritage administration systems in general; however, the history of the discipline also shed some light on the general interest in the topic in the three countries. In fact, in France the early interest for underwater archaeology developed also thanks to a close collaboration with Italy and which early on was translated into the creation of a centralized public institution devoted to the preservation and the management of the underwater archaeological heritage (Gianfrotta & Pomey 1981: 37-38). On the other hand, in Italy, the development of underwater archaeology was linked to the person of Nino Lamboglia and his *Istituto* (L'Hour 2012: 117-119). However, when Lamboglia died, Italy still did not have an institutional organization devoted to underwater archaeology, and for a long time the discipline developed thanks to the initiative of self-organized groups of archaeologists (Pietraggi 2007). In Spain, the discipline developed more slowly, and in different ways in the different Regions; in Spain, more so than in the other two countries, the work of the volunteers and non-professional archaeologists was fundamental for the development of the discipline (AA.VV. 1988). From this brief summary it is therefore clear that France, at institutional level, showed the earliest interest in the discipline, which, surely, encouraged its development.

³ See more about CASC (La seu del Centre d'Arqueologia Subaquàtica de Catalunya): <http://www.mac.cat/esl/Sedes/CASC/Yacimientos-subacuaticos-de-Catalunya>. Last retrieved on December 6th, 2015.

3. Case Studies Summary

Tab. 1. Summary of the case studies

1. Italy	1.1 Baia and Gaiola Underwater Parks in the Bay of Naples	Immovable structures and movable objects	<i>In situ</i> itineraries
	1.2 Sicily	Shipwrecks structures and movable objects	<i>In situ</i> itineraries
2. France	2.1 Marseille	Shipwrecks and movable objects	On land + <i>in situ</i> itineraries
	2.2 Arles	Shipwrecks and movable objects	On land + <i>in situ</i>
3. Spain	3.1 Catalonia	Immovable structures shipwrecks and movable objects	On land + <i>in situ</i> itineraries
	3.2 Cartagena	Shipwrecks and movable objects	On land

3. 1. Italy

The Baia and Gaiola Underwater Parks: the two Underwater Parks of the Baia and Gaiola in the Bay of Naples (Italy) were both instituted in 2002 (Inter-Ministerial Decree 7/8/2002). In these Underwater Parks (Maniscalco 2004; Simeone et al. 2012) we find mainly submerged structures lying not very deep below the surface of the water (on average 5-6 m). However, the structures can be very delicate presenting really fragile features, as in the case of Baia, where floors decorated with mosaics have been found. The mosaics are covered with a mat, and are uncovered and then covered up again every time there is a guided tour. Statues were also found in Baia, but the original ones were substituted with copies. Underwater Parks can be visited either SCUBA diving, or snorkelling, or sailing in glass-bottom boats. The latter is one of the solutions that gives the best results, since the heritage is accessible to a wider public. However, we have to acknowledge that often the creation of underwater parks where restrictions are imposed may meet with the resistance of the local communities, as can be learned from the experience of Marine Protected Areas instituted for environmental reasons (Day et al. 2012), and therefore, a close monitoring of the park is needed to guarantee the conservation of the heritage. In the case of Baia and Gaiola Underwater Parks the Public Manager Authorities often do not have the necessary means for controlling the parks and the visitor centres, so these activities are delegated to NGOs and local associations that struggle to accomplish all the activities that are necessary for the maintenance of an underwater park. However, both in Baia and Gaiola the number of visitors to the Parks has been increasing gradually over the years, although the two parks have still proved to be quite invisible to the inhabitants of Naples (Fig. 1 and 2). It is also true that, looking at the data on visitors to the archaeological sites in the area of Naples⁴, it is clear that the two archaeological Parks are located in an area, the Phlegrean Fields, where there is a general problem with the accessibility of the archaeological heritage, due both to the lack of visibility and the promotion also of the on land sites as well as, among others, to problems with the public transport that makes access to these sites very difficult. The Parks can only be visited by participating in guided tours, conducted by guides authorized by the Manager Authority.

⁴ http://www.statistica.beniculturali.it/Visitatori_e_introiti_musei.htm. Last retrieved on December 6th, 2015.

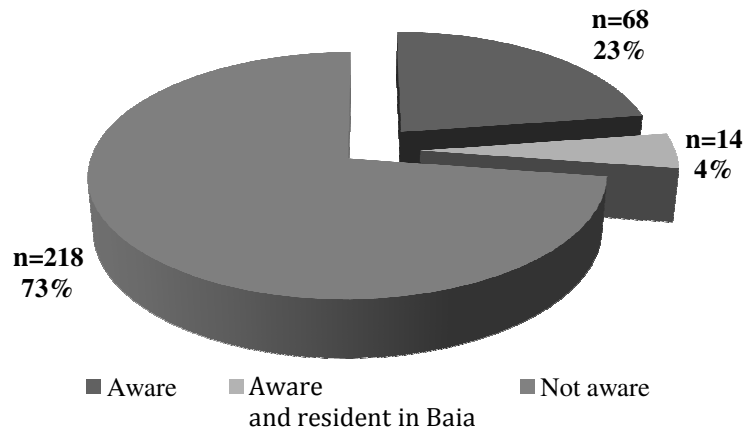


Fig. 1. Awareness of the existence of the Baia Underwater Park in Naples

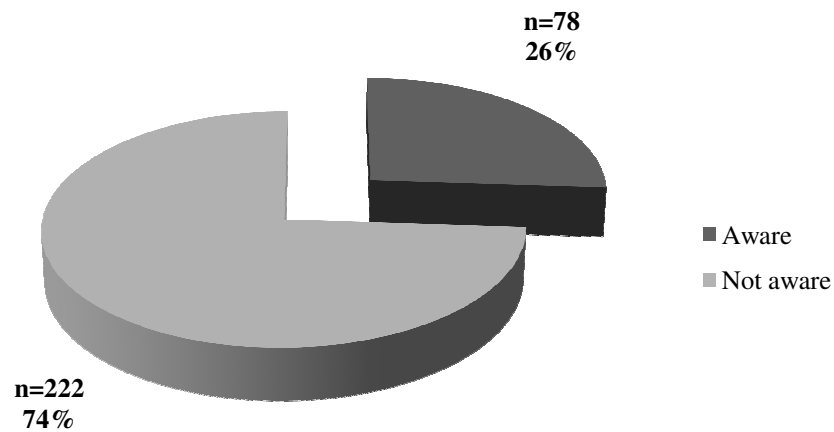


Fig. 2. Awareness of the existence of the Gaiola Underwater Park in Naples

Sicilian Underwater Trails: the Superintendence of the Sea, a Sicilian Regional Body dealing specifically with underwater cultural heritage, created all along the Sicilian coastlines underwater itineraries where informative panels and guiding ropes are placed around the archaeological objects to help divers follow an itinerary⁵. In this case we have mainly archaeological artefacts, sometimes positioned near covered or not excavated shipwrecks. Most of these itineraries are at a considerable depth (at least 10 m), so they are accessible only by SCUBA divers. In this case the heritage is definitely accessible to a limited public. The idea behind the creation of these itineraries is to entrust their maintenance and control to diving centres active in the area. Underwater trails may work or not, it depends on where they are set, and on whether the diving centres are willing to take care of them. If they are set in environmentally poor sites (like in the case of the itinerary in Mongerbino, near Palermo, where some Byzantine anchors are located on a sandy seabed), visitors will be very rare, or, if

⁵ <http://www.regione.sicilia.it/beniculturali/archeologiasottomarina/eventi/cartasr1.htm> .Last retrieved on December 6th, 2015.

the diving centres do not look after them, they will easily deteriorate and be destroyed. On the other hand, when, as in the case of Pantelleria, private bodies advertise the sites, good results in terms of public can be achieved (GIASS 2005). However the inhabitants of Palermo (Sicily's most important city) proved not to be aware of the existence of the underwater itineraries (Fig. 3) that, in fact, are accessible only to SCUBA divers.

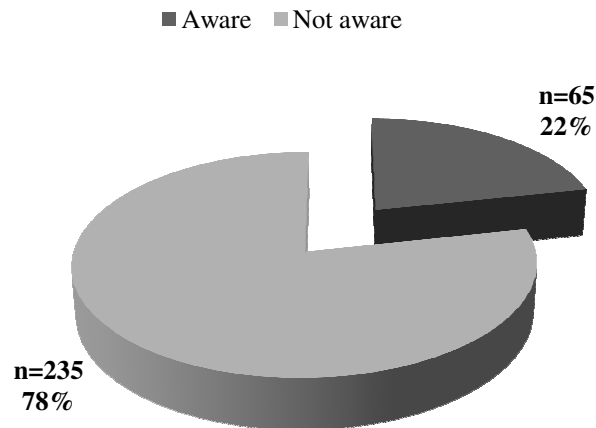


Fig. 3. Awareness of the existence of the underwater heritage in Palermo

3.2. France

The Bay of Marseille: Here we have the repositioning, not necessarily in their original context, of archaeological objects that were taken out of the water during archaeological investigations. This is, for example, the case of the amphorae of the *Grand Conglué* that were removed from the water in the 1950s (Long 1987), and then repositioned in different parts of the Bay of Marseille anchored to the seabed. In Marseille, the objects are positioned at a depth which is accessible only by SCUBA diving. As in the case of the underwater trails, the choice of the site where to position the objects is fundamental. The first experiment with the *Grand Conglué* amphorae did not work for the same reasons as the trail in Mongerbino in Sicily: the amphorae were positioned in two different places in the Bay of Marseille, which the diving centres considered archaeologically and environmentally uninteresting. In 2014 a new attempt was made in Hyères, where amphorae from the *Madrague de Giens* shipwreck were positioned on the seabed⁶. It will be interesting to follow the evolution of this project to see if it is more successful, although also in this case, the success of the itineraries will also depend on whether the diving associations are willing to collaborate. It is also important to mention that in Marseille it is possible to see archaeological artefacts from underwater excavations also in on land museums, like the Roman Docks Museum and the Marseille History Museum. However, both museums do not deal exclusively with underwater heritage, but, more in general with the history of the city of Marseille. Moreover, while the Marseille History Museum re-opened in 2013 after significant renovation work that lasted a few years during which the museum was closed (AA.VV. 2013) from the interviews with the public the Marseille Roman Docks Museum, proved to be not very known by the general public and not very well promoted. At present, however, it seems that the majority of people in Marseille are still not aware of the existence of the underwater heritage (Fig. 4). Moreover, from the interviews it emerged that visitors seemed to highly appreciate the Marseille History Museum, but most of the interviewed people in the street proved not to know the museum,

⁶ <http://www.sentiersousmarin.fr/sentier-sous-marin-archeologique-de-la-tour-fondue.html>. Last retrieved on December 6th, 2015.

probably because the interviews were carried out only a few months after the Museum reopened.

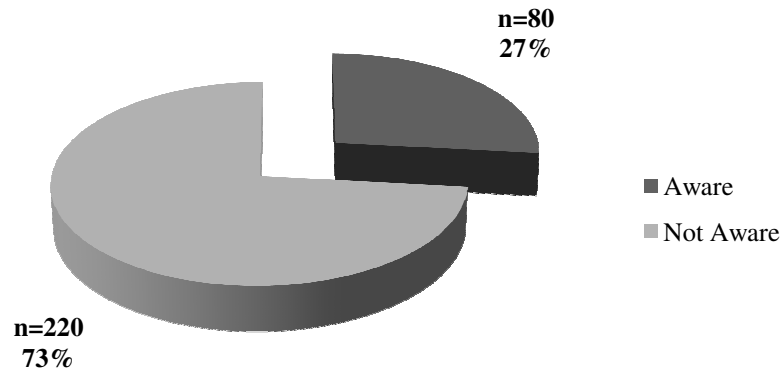


Fig.4. Awareness of the existence of the underwater heritage in Marseille

The Departmental Museum of Ancient Arles: The bed of the river Rhone in Arles is extremely polluted and murky, therefore it would be impossible to project underwater itineraries aimed at the promotion of its rich historical heritage (Long & Picard 2009; Martinez 2012; Marlier 2014). However, the Departmental Museum of Ancient Arles carried out significant activities aimed at the promotion of this huge ancient Roman heritage, while it was still on the riverbed. Of particular significance were the seminars organized for the local population to explain what was happening along the river during underwater archaeological campaigns. Everybody could attend the seminars, and informative panels were used to supplement the explanations of the archaeologists. Some materials recovered from the river were shown to the people present, also enlightening them on all the information that scholars can extract from one single object. Moreover, during some of these seminars it was possible to observe the archaeologists at work underwater. A party for the inhabitants of Arles was organized in the Departmental Museum at the end of the archaeological excavations in the Rhone and it is repeated each year to raise public awareness of the existence of the Rhone underwater cultural heritage. Another awareness raising activity that was created to promote the heritage of the Rhone river and which is still ongoing, is the organization of guided tours in a boat on the river. The material recovered during underwater archaeological campaigns is now exhibited in the museum, where also a participative exhibition involving the inhabitants of Arles was organized. Particularly, most of the event organized by the Museum focused on the discovery of the exceptionally well preserved *Arles Rhône 3* wreck (Marlier 2014), as well as of the bust portraying Jules Caesar (Martinez 2013). In fact, the museum proved to be extremely well known in Arles (Fig. 5) and appreciated by its visitors.

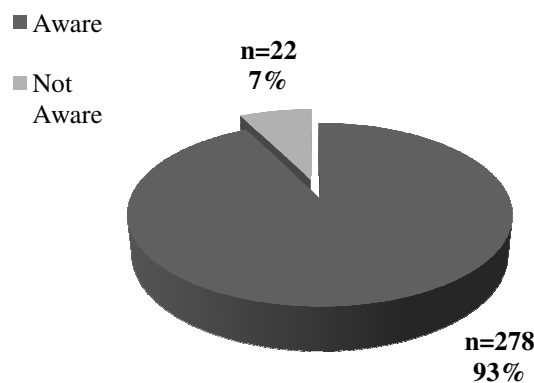


Fig. 5. Awareness of the existence of the underwater heritage in Arles

3. 3. Spain

The Catalonia Underwater heritage: The FECDAS (the Catalanian Federation for Underwater Activities) is the promoter in Catalonia of visits to shipwrecks while underwater archaeological investigations take place, thanks to a close collaboration with the CASC (the Catalanian public body responsible for the management of all the aspects connected with underwater archaeology). People who participated in this kind of guided tour proved to be enthusiastic. However, I have to acknowledge that, in this case, access is limited to a really reduced public; at the same time this can be a very effective way of letting visitors appreciate not only the archaeological object/site, but also the work of the archaeologists. At the same time, in 2014, it was possible to admire in the Gerona Archaeological Museum (also in Catalonia), an exhibition dedicated to the recovery of the XIX century *Deltebre I* shipwreck (Museu d'Arqueologia de Catalunya 2014). The exhibition presented all the remains from the *Deltebre I* wreck, as they were found lying on the seabed; the exhibition was enriched by images of the underwater excavations and by panels narrating the history of the ship as if it were told by one of the sailors of the ship. From the interviews, the exhibition proved to be appreciated by the visitors, but not very well known and promoted. In fact, most of the inhabitants of Gerona (Fig. 6), where the *Deltebre I* exhibition was organized, proved to be unaware of the existence of the underwater heritage in their region.

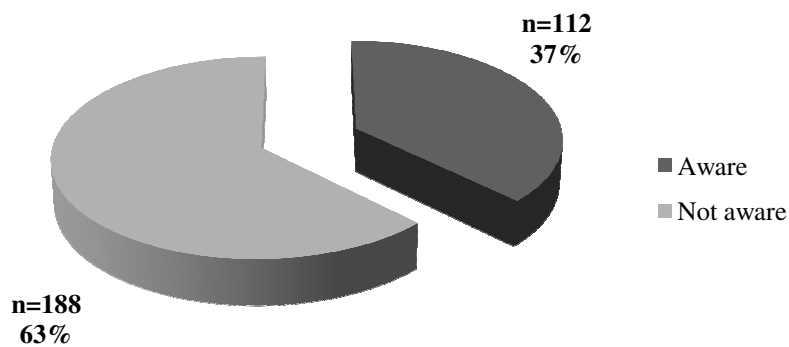


Fig. 6. Awareness of the existence of the underwater heritage in Gerona

The ARQUA National Museum of Underwater Archaeology of Cartagena: this museum in Spain is totally devoted to the presentation to the public of the Spanish underwater heritage, by both reconstructions and interactive tools, as well as the presentation of the original archaeological remains arranged to communicate the Spain's relation with the sea throughout the different time periods (AA.VV. 2010). A great deal of attention is dedicated to the importance of the 2001 UNESCO Convention and to the cargo of the XIX century *Nuestra Señora de las Mercedes* (O'Donnell & De Estrada 2013) shipwreck. The cargo of this Spanish ship was in fact brought back to Spain after the Spanish Government won a court case against an American Treasure Hunting Company that had recovered it; Spanish media gave a great deal of attention to this case that gave a lot of visibility to this museum. In fact, from the interviews with the public it was clear that the museum was extremely well known (Fig. 7) and it has a lot of visibility and success in terms of the public. However, the museum at the moment does not have any project to encourage accessibility to the *in situ* underwater heritage of the city of Cartagena.

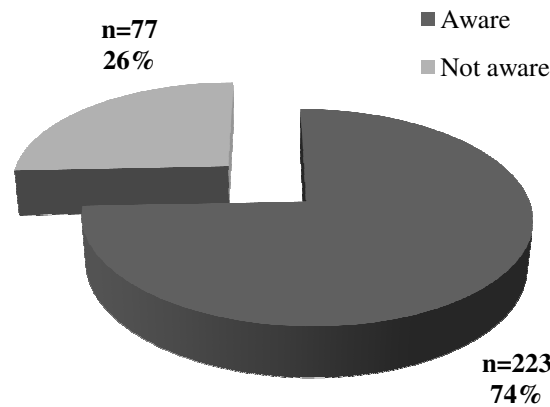


Fig. 7 Awareness of the existence of the underwater heritage in Cartagena

4. Analysis

After this summary of the six cases studied, I would like to present the result of the comparison of the analysis of the six cases carried out applying to each case one of the five Schudson dimensions.

1) **Retrievability:** I refer to Retrievability as the capacity of a cultural object to reach the people and to be available for them. In applying this parameter to underwater archaeological heritage, I tried to understand how, in the different cases, the underwater archaeological heritage was made accessible to the public, both on land and *in situ*. This dimension is particularly relevant, since underwater archaeological heritage is, by definition, located under the water surface, and for this reason invisible to the majority of the population. Moreover, to recover the underwater heritage from its context can be extremely complicated and costly, and at the same time, when it is left *in situ*, access has to be forbidden to assure its preservation (Maarleveld 2014).

Retrievability may seem the biggest obstacle for the promotion to the general public of the underwater archaeological heritage, invisible by definition. Nevertheless, the six case studies showed that there are many different, and sometimes also simple, simple solutions to engaging people with the underwater archaeological heritage by making it accessible. It is true that the most successful cases in terms of the public's awareness of the existence of the heritage are two on land museums, those of Arles and Cartagena, and it is also true that an on land museum is by definition more accessible than an underwater site. However, it emerged that the problems of retrievability of the underwater archaeological sites are not related only to their underwater locations. In fact, the less known and visited sites were either unappealing sites (like the French fields of amphorae), or underwater sites where there are also "invisible" on land sites (like in the Bay of Naples). By "invisible" on land sites, I refer to those sites that very few people visit, because of lack of promotion and accessibility. Therefore, the problem of those underwater sites seems to be not their lack of retrievability, but that they are located in non retrievable contexts. At the same time, the case of Arles clearly shows how the underwater heritage was made successfully accessible to the citizens of Arles also when it was still located on the polluted and un-welcoming Rhone riverbed. The success of the initiatives organized by the Departmental Museum of Ancient Arles to encourage the citizens to participate in the underwater archaeological campaigns demonstrates how the success in terms of retrievability of the underwater archaeological heritage, and of archaeological heritage in general, is more connected to communication, promotion and dissemination activities organized by the manager authorities, than to the location of the heritage. Finally, it is also important that part of the lack of the retrievability of

the heritage is due to the producers of the cultural objects, as is shown by the Italian case studies. In fact, in the Bay of Naples it seems the private bodies, without the necessary means and the necessary institutional support, take care of the underwater archaeological heritage; on the other hand in Sicily most of the private bodies involved do not seem to have a real interest in the promotion of the underwater sites. Both examples show that the lack of retrievability may also be caused by the lack of collaboration between the different bodies.

2) Rhetorical Force: I refer to Rhetorical Force as the capacity of a cultural object of being memorable and the degree of power it has over people. During the analysis of the different case studies, I looked for the rhetorical force like the narrative that is used by the producers to make the underwater archaeological heritage more interesting for the public. Broadly speaking, underwater archaeological heritage in general could benefit from the fascinating image of the past that comes out from the waters, from a submerged or unknown world. The aura and the intrinsic rhetorical force of the underwater heritage are probably demonstrated by the fact that most of the visitors to sites or museums that were interviewed stated that they would like to experience the visit to an underwater archaeological site preserved *in situ*. Nevertheless, the situation varies from case to case. The rhetorical force is very different in every case study, because, of course, in each site the producers try to draw attention to a particular characteristic of the cultural object, whether it is in a museum or an underwater itinerary.

What emerged from the interviews with the visitors is that the most appreciated sites are those where the narrative and the contents of the visit are clear. This is particularly true, because, perhaps with the exception of Baia and Arles, whose beautiful mosaics and statues are visible, in all the other cases visitors can see underwater archaeological remains that do not have a particular aesthetic value. They are simple objects or structures that, without an explanation, would probably have no meaning for the general public. It is for this reason that the rhetorical force of the different cases is given by the ability of the producers to make the objects narrate a story. In fact, it is not surprising that the fields of amphorae on the sandy seabed of the French underwater itineraries, and of some of the Sicilian itineraries were not considered attractive, simply because they could not communicate anything to the visitors, not even from the aesthetic point of view. At the same time, it is probably for the opposite reason that the visitors to Baia who, as emerged from the interviews, in some cases did not understand very much about the history of the place, were happy in any case. In fact, some of the Baia visitors were not even able to say what the site they visited was (they were not able to say if they had visited a port or a dining room); however, they were satisfied because they had the unique experience of seeing a beautiful mosaic floor perfectly preserved on the seabed. Therefore, and this is probably true also for on land archaeology, when an archaeological site has an outstanding evocative and aesthetic value, as Baia has, this is its rhetorical force, which speaks for itself.

On the other hand, and this is true for many archaeological sites and objects, when the aesthetic value is not present, because in most cases archaeological objects are everyday objects and not works of art, it is fundamental to make the objects tell a story, in a clear and intelligible way. It is probably also the way a story is told that contributes to the success of the Arles case, where self-explicative and evocative archaeological remains were used to create an exhaustive and modern narration of the history of a city. The importance of an intelligible narrative to build rhetorical force is even more evident in the case of the Cartagena Museum; in fact, in the museum more reconstructions, panels, interactive tools are exposed than real archaeological objects. Nevertheless, the visitors seemed to appreciate the experience of visiting the museum, because the majority of them felt that they had learned something and they received the clear message that had been conveyed. Finally, the Gaiola case was the only one to present to the public the idea of seascape, and the importance of protecting cultural and environmental heritage together. It is a pity that this was the only such case, because the interviewed visitors seemed to have appreciated and received this message. In fact, if it is true that environmental concerns are widely shared by society, linking the need for the preservation of the environmental heritage with the need for preserving the historical heritage, by, for example, promoting the idea of seascape, could give positive

results in extending people's attention to underwater heritage. However, this would call for, again, reliable connections and very close collaboration between institutions dealing with historical/artistic heritage and the environment. Once again, this also applies to the on land heritage, whose preservation would certainly benefit from the promotion of the idea of a protected cultural landscape (on the importance of the connection between cultural and environmental preservation and on the concept of cultural landscape see: Rössler 2007; Mitchell et al. 2009).

3) Resonance: I refer to Resonance as the relevance that a cultural object has for the general public opinion, how it effects peoples' perception of the heritage in general and if, for example, it convinces them to justify the money spent by public authorities on efforts devoted to archaeological heritage preservation. Also in this case, the situation varies from one case to another. Generally speaking, with the exception of Arles and Cartagena, the general public demonstrated that it knows very little about underwater archaeological heritage in general (see figs.). This is not surprising, since, as we mentioned many times underwater heritage is by definition invisible to the public. However, this indifference is not only due to the "invisible" nature of the heritage, since people were also unaware of museums that are focused not only on underwater archaeological heritage (as in the case of the Marseille History Museum). This leads us to think that this indifference is probably related to archaeological heritage in general, unless we are talking about great tourist attractions or places that are often in the media, like Pompeii or the Coliseum in Italy. In this panorama, Arles and Cartagena represent an exception. In the case of Cartagena, for sure, much of the success is due to the important media campaign related to the *Mercedes* cargo, demonstrating how much public attention heritage can have when it is discussed by the media. It is also true that now the attention focused on the *Mercedes* seems to be more about the court case and the legislative dispute than about historical value. At the same time, we also have to recognize that the ARQUA museum producers spared no effort in improving the resonance and the attractiveness of the museum, and surely these efforts are part of its success. The case of Arles represents the best possible example of how well-thought-out communication campaigns and the work with local communities can have good results in terms of heritage dissemination. This is true with archaeological heritage in general, but it is even more interesting in the case of Arles, because here, the Arles Departmental Museum staff was able to engage an entire community with archaeological heritage that was completely invisible to them, because lying on an extremely polluted riverbed.

4) Institutional Retention: I refer to Institutional Retention as the capacity of a cultural object to "intermingle with institutions" and itself become institutionalized. Since in all the three countries I took into consideration, archaeological heritage in general is managed by public institutions, this dimension was used to analyze how the different producers of the underwater archaeological heritage interact in each case study. Of course, in all six case studies there is a considerable level of institutional retention, since in the three countries I analyzed, the archaeological heritage is managed by the State. However, the situation varies considerably from one case to another. The main difference is given by the existence or not of specific institutions created expressly for the management of the underwater archaeological heritage and active on the territory. Not surprisingly, the case of France is eloquent.

In fact, in France there is a long tradition of a state run, centralized management system as far as the heritage is concerned (Leinaud 2007). The institution of the DRASSM is the clearest demonstration of this tradition; a national center responsible for the underwater archaeological heritage of the entire French territory, equipped with all the necessary means to carry out research in the sea and to preserve the materials, working in collaboration with other French institutions. This system has proved to be so efficient that it was used as a model for the creation of the Regional services in Catalonia and in Sicily, where, in respect to the French DRASSM, these institutions also have the advantage of being responsible for smaller territories that, theoretically, should be easier to monitor. The situation is different in the case of the rest of Italy and Spain. In fact, for example, despite the significant work carried out by the ARQUA Museum, we saw that the museum is not really acting as a Regional Service for underwater archaeology, and that many Spanish Regions do not have such a center at all.

This discrepancy is obviously a consequence of the autonomy that each Spanish Region has in the management of the heritage in general. As regards Italy, it is true that also in the Italian system the heritage is managed in a centralized way, by the Ministry of Culture, which then acts on the territory through the local Superintendences, but the local Superintendences are not adequately equipped for all the activities necessary to look after the underwater heritage; moreover, although it exists in the central Ministry in Rome there is a department devoted specifically to underwater archaeology⁷, which however is not a real centre compared with the DRASSM, but only a coordination center. Therefore, it is not a coincidence that the two Italian Underwater Parks and the case of Cartagena, where the institutions are not yet active on the territory, are also the cases where private bodies and especially no profit associations play a major role in the intense activity of promotion campaigns, and in conducting research on the underwater archaeological heritage, trying very hard with their work to compensate for the institution's lack of activity. However, this cannot be a satisfactory solution since no profit organizations in most of the cases do not have the means to carry out all the work necessary to fill the gap created by the institutions, unless they rely on volunteers' work.

At this point, it is also important to clarify that, although in all the six cases studied the underwater heritage is managed by Public institutions, there is also a consistent difference in terms of economic investment and available economic and human resources in the different cases. In fact, it is evident by simply visiting the sites and the museums that institutions like the DRASSM, the Departmental Museum of Arles and the Cartagena ARQUA Museum have significant means, especially in terms of human resources. The same is not true, for example for the CASC which has a very limited number of employees, or for the two Underwater Parks. Surely, since all the six case studies were administrated by Public institutions, the availability of more significant means testifies to a greater interest of the State and of the local Public bodies in investing in the management and the promotion of the underwater archaeological heritage. It is also true that in some cases, although there may be an interest in the promotion of the underwater archaeological heritage, there is still often, at a high institutional level, a lack of information on the topic.

Finally, a common factor all the cases share is the collaboration of private bodies, like diving centers, in the promotion of the underwater archaeological heritage. This is necessary to attract and bring visitors to underwater itineraries where the underwater heritage is preserved *in situ*, since to take people on SCUBA diving excursions, specific competences are needed. Moreover, the diving centers can be important points of reference, since, because of their work, they can be the first bodies to notice if the underwater heritage is at risk. However, diving centers are private bodies that rely on the income from the excursions that they organize to survive, therefore, they will not be interested in promoting something that they consider their clients will not find appealing. Therefore, from the analysis of the cases I described, it would probably be good practice to determine how involved these private bodies feel before creating underwater itineraries.

5) Resolution: I use Resolution as the capacity of a cultural object to directly influence audience action. This category was used to understand if the policies regarding underwater archaeological heritage have an effect on how people act when in the presence of underwater archaeological heritage.

The main problem which appeared at since the beginning of the development of the SCUBA diving techniques is the pillaging of underwater archaeological heritage, which, by most of the SCUBA divers was not perceived as heritage, but as something that anyone could take. Moreover, it has been recognized that in many cases SCUBA divers do not pillage underwater heritage with the intention of committing a crime; simply, they are not aware that beneath the water the same rules as to ancient objects on land apply (Tusa 2004: 218). Both National and International regulations limited the problem, but pillaging is still considered a serious problem. In this sense it is not the heritage itself that can change people's behavior, but awareness campaigns organized by the producers.

⁷<http://www.archeologia.beniculturali.it/index.php?it/151/archeologia-subacquea>. Last retrieved on December 6th, 2015.

In terms of resolution, we can say that, with the exception of the Cartagena Museum, all the other cases are still lacking resolution. In fact, in the Museum of Cartagena a great deal of attention is given to the explanation of the importance of international rules to protect the underwater heritage; at the same time, as resulted from the interviews with the visitors, the case of the *Mercedes* made the visitors to the museum aware of the importance of protecting the underwater heritage from pillaging and treasure hunters. This is not due to the fact that the different promotion activities directed at the underwater archaeological heritage are not effective, but that trying to change people's attitude towards underwater archaeological heritage, which is not a souvenir to take home, but an inheritance from the past, which gives the community some insight into its history, and should be treated with respect, is a long process which takes time; and all the cases that I examined are relatively new activities designed to promote archaeological heritage. However, I have to acknowledge that in all the sites and museums where people were interviewed, the majority stated that they would be fascinated by the idea of visiting *in situ* underwater sites; at the same time most of the interviewed people did not know about the existence of the underwater heritage before the visit to the site or the museum where they were interviewed. Therefore, although through the analysis of the case studies it emerged that not all the sites and the museums were appreciated by the public in the same way, people were fascinated by the idea of the possibility to visit historical heritage lying below the water surface, and this, we can assume, was also a consequence of the visit they made.

Conclusion

In the introduction I described how, as a consequence of the development of the SCUBA diving techniques, in the XX century there was a gradual discovery of the underwater environment. This discovery focused attention on the ancient objects lying on the seabed, and marked the beginning of a "heritagization" process of the underwater world. The term "heritagization" refers to the process by which heritage is constructed, through an administrative, political and intellectual process (Sánchez-Carretero 2015: 12). However, if cultural heritage is something in which a given society attributed a shared value (Throsby 2010: 321), the process of heritagization of the underwater ancient object cannot be considered accomplished only with the institutionalization of underwater archaeology as a scientific discipline. Of course, the institutionalization of the discipline is a fundamental step, and I described how it has not been accomplished at the same level in all the analyzed countries. However, the next fundamental step is the capacity for transmitting the heritage to the public and that the heritage is recognized as such.

The analysis I presented showed how still more work is needed in order to change people's perception and awareness of the existence of the underwater heritage. The five Schudson dimensions helped in understanding whether underwater heritage is considered as a powerful cultural object by the general public. Only two cases seemed to be completely successful, and they are the cases of Arles and Cartagena, where underwater heritage is promoted by two on land based museums. However, it is important to underline, that in the case of Arles, the underwater heritage was made accessible to the public also when it was still lying on the riverbed. This means, that the problem of retrievability of the underwater heritage is not, or at least not only, related to its underwater location, but more to the ability of the producers of the heritage to make it available to the public. The six case studies demonstrate that there are many solutions to do this, without counting the incredible support that nowadays could be offered by the modern technologies. However, all the solutions are useless if the capacity to reach the public by advertising the sites and making them easily accessible is missing.

The second factor that turned out to be fundamental to the creation of a powerful cultural object in the case of underwater heritage is rhetorical force. In fact, ancient objects often do not speak for themselves, and their historical value is not immediately recognized by the majority of people. This focuses the attention on the need to concentrate on the importance of creating an enthralling, believable narrative around the underwater heritage presentation to the public because this seems to be the key element for the success in terms

of public of the Arles and Cartagena museums. The narrative of the two museums, in fact, does not regard only the objects, but the entire discipline of underwater archeology; simply the two museums do not take for granted that people know what underwater heritage is. Moreover, it is important to acknowledge that people are not necessarily interested in the past, therefore it is not sufficient to say that an object is ancient in order to make it interesting or valuable to the general public. The cases of Arles and Cartagena, however, more than the others were able to give underwater heritage a meaning. According to Geertz's definition, culture is "an historically transmitted pattern of meanings embodied in symbols a system of inherited conceptions expressed in symbolic forms by means of which men communicate, perpetuate, and develop their knowledge about and their attitudes toward life" (Geertz 1973: 89). In this sense, the museums of Arles and Cartagena achieve the goal of transforming the underwater heritage into a symbol with an intrinsic meaning, a powerful cultural object (Griswold 1987: 4). Therefore, the coins of the *Mercedes* become the symbol of Spain's winning a court case against the treasure hunters company that wanted to pillage Spanish history, and the Arles underwater heritage is the symbol of the hard work of the archaeologists carried out in the polluted river Rhone in order to give back to the inhabitants of Arles their history. Of course, also the information on the past (like river navigation in ancient times) is given by presenting the objects, but the narrative somehow makes that history relevant for the people. Moreover, everything is comprehensible, so visitors even if they did not have any historical or archaeological background, were able to understand the history (which is true, for example, also for the *Deltebre I* exhibition).

This is fundamental because, the general public often has difficulties in interpreting archaeological objects. The real act of revealing the invisible is not only to let people know about the underwater heritage, but also to give it a meaning, for example through a context or a story. This was partially done also by the Marseille History Museum that uses underwater heritage, together with other archaeological remains, to tell the history of the most ancient city of France, but still, perhaps because it has just re-opened recently, people seemed to be unaware of its existence and of the Marseille underwater heritage. This is relevant, because it makes clear that also underwater heritage located *in situ* could be presented with the same power of the narrative. Moreover, the underwater heritage preserved *in situ* surely has a particular aura for the general public, since almost everyone, also those who had never heard of it, stated that they would like to visit an underwater site; most probably this aura *in situ* underwater heritage has, could help the construction of its social meaning. Quoting Geertz again, the two museums have been able to create a story (connected to underwater archaeological objects) people tell themselves and other people (Geertz 1972: 26), since the underwater objects are finally perceived by people as their cultural heritage.

All of this is true for the communication of cultural heritage in general. Nevertheless, the case of the underwater cultural heritage proved to be particularly interesting, since the underwater environment not only hides the heritage from the sight of the general public, but it was not considered as a place of history until relatively recent times. This could explain the SCUBA divers' pillaging, and as said earlier, the fact that they are not aware that in the sea the same laws as those on land are applied (Tusa 2004: 218). This demonstrates how, not only is underwater heritage still not perceived as such, but the water environment is still perceived as a non-place and as a place where social rules are suspended. The process of heritagization of the water environment is a clear example of the implications necessary to build a powerful idea of cultural heritage really shared by society.

Bibliography

- Augé, M. (1995), *Non-places: Introduction to an Anthropology of Supermodernity*. Verso, London. New York.
- AA.VV. (1988), *La Arqueologia Subacuática en España*. Dirección General de Bellas Artes y Archivos, Ministerio de Cultura, Museo Nacional de Arqueología Marítima - Centro Nacional de Investigaciones Arqueológicas Submarinas, Madrid.
- AA.VV. (2008), *Progetto Archeomar - Carta archeologica subacquea dei beni archeologici sommersi d'Italia: mari, laghi, fiumi, lagune, ipogei - News 2008*. Ministero per i Beni e le Attività Culturali - Direzione Generale per i Beni Archeologici - Sezione Tecnica per l'Archeologia Subacquea.
- AA.VV. (2010), *Museo Nacional de Arqueología Subacuática - Catálogo*. Ministerio de la Cultura, Madrid.
- AA.VV. (2013), *Marseille 2600 ans d'histoire - Musée d'Histoire de Marseille*. Beaux Arts/TTM éditions, Issy-les-Moulineaux.
- Archeologia subacquea (2009), <http://www.archeologia.beniculturali.it/index.php?it/151/archeologia-subacquea>. Last retrieved on December 6th, 2015.
- Aznar Gómez, M. J. (2006), *La Protección Internacional del Patrimonio Cultural Subacuático - con referencia al caso de España*. Tirant Lo Blanch, Valencia.
- Bass, G. (2011), "The Development of Maritime Archaeology", in: Catsambis A., Ford B., Hamilton D.L. (eds.). *The Oxford Handbook of Maritime Archaeology*. Oxford University Press; pp. 3-24.
- Braudel, F. (2001), *The Mediterranean in the Ancient World*. The Penguin Press, London.
- Cibecchini, F. (2013), "L'Archéologie Sous-Marine en Italie et en Espagne, Trente Ans Après Nino Lamboglia"; In Cérino C., L'Hour M., Rieth E. (sous la direction). *Archéologie Sous-Marine - Pratiques, Patrimoine, Médiation*. Presses Universitaires de Rennes, Rennes. pp. 77-93.
- Cocco, E. (2013), "Theoretical Implications of Maritime Sociology". *Annuals of Marine Sociology*, vol. XXII; pp. 5-18.
- D'Agostino, B. (1984), "Italy", in: Cleere H. (ed.) *Approaches to the Archaeological Heritage*. Cambridge University Press; pp. 73-81.
- Day, J., Dudley, N., Hockings, M., Holmes G., Laffoley D., Stolton S., Wells S. (2012), *Guidelines for applying the IUCN Protected Area Management Categories to Marine Protected Areas*. IUCN, Gland.
- DRASSM (2010), Le Département des recherches archéologiques subaquatiques et sous-marines. <http://www.culture.gouv.fr/fr/archeosm/archeosom/drasm.htm>. Last retrieved on December 6th, 2015.
- Griswold, W. 1987. "A Methodological Framework for the Sociology of Culture". *Sociological Methodology* 14: 1-35.
- Griswold, W. (2004), *Cultures and Society in a changing world*. Pine Forge Press.
- Gianfrotta, P.A. & Pomey, P. (1981), *Archeologia Subacquea - storia, tecniche, scoperte e relitti*. Mondadori ed., Milano.
- GIASS (2005), "Aree e siti individuati". In Tusa S. (a cura di) 2005. *Il mare delle Egadi: storia, itinerari e parchi archeologici subacquei*. Regione siciliana, Assessorato dei beni culturali e ambientali e della pubblica istruzione, Dipartimento dei beni culturali e ambientali e dell'educazione permanente, Palermo.
- Leniaud, J.M. (2007), "Patrimoine, decentramento e urbanistica", in: M.L. Catoni (a cura di) *Il patrimonio culturale in Francia*. Electa, Milano; pp. 171-179.
- L'Hour, M. (2012), *De L'Archéonaute à l'André Malraux - portraits intimes et histoires secrètes de l'archéologie des mondes engloutis*. ACTES SUD/DRASSM, Arles.
- Long, L. (1987), "Les épaves du Gran Conglué. Etude du journal de Fernand Benoit". *Archeonautica* 7; pp. 9-36.
- Long, L. & Picard, P. (2009) (sous la direction), *César. Le Rhône pour mémoire*. Actes Sud Musée Départemental Arles Antiques, Arles.
- Maarleveld, T.J. (2014), "Underwater sites in archaeological conservation and preservation". In C. Smith (ed.). *Encyclopedia of Global Archaeology*. Springer, New York; pp. 7420-7427.
- Marlier, S. (2014) (sous la direction), *Arles Rhône 3, une chalane gallo-romain du 1^{er} siècle après Jésus-Christ*. CNRS Editions, Paris.
- Martinez, J.L. (2012), *Arles, les Fouilles du Rhône. Un fleuve pour mémoire*. Louvre éditions Actes Sud, Paris Arles.
- Maniscalco, F. (2004), "Il Parco Sommerso di Baia". In Maniscalco F. (a cura di) *Tutela, Conservazione e Valorizzazione del Patrimonio Culturale Subacqueo*. Massa Editore; pp. 195-199.
- Mitchell, N., Rössler, M., Tricaud P.M. (2009) (eds), *World Heritage Cultural Landscapes. A Handbook for Conservation and Management*. Unesco, Paris.

- Museu d'Arqueologia de Catalunya. (2014), *Deltebre I. La història d'un naufragi*. Museu d'Arqueologia de Catalunya, Centre d'Arqueologia Subaquàtica de Catalunya.
- O'Donnell, H. & De Estrada D. (2013), *El litigio por el pecio de la fragata "Mercedes". Razones históricas de España*. Real Academia de la Historia, Madrid.
- O Rössler, M. (2007), "World Heritage cultural landscape: A UNESCO flagship programme 1992- 2006". *Landscape Research* 33 (41): 333-353.
- Schudson, M. (1989), "How Culture Works? Perspectives from Media Studies on the Efficacy of Symbols". *Theory and Society*, 2(18): 153-180.
- Simeone, M., De Vivo C., Masucci P. (2012), "An Interdisciplinary approach to the Posillipo Coastline, Bay of Naples (Southern Italy) , in: Marinus Ioannides, Dieter Fritsch, Hohanna Leissner, Rob David, Fabio Remondino and Rosa Caffo (eds.) *Euromed -4th International Conference - progress in Cultural heritage Preservation Short Papers*; pp. 373-378.
- Pietraggi, R. (2007), "Nino Lamboglia: l'archeologia subacquea e la burocrazia; luci ed ombre di un rapporto tormentato". *Archeologia Marittima Mediterranea - An International Journal of Underwater Archaeology* 4: 37-43.
- Swidler, A. (1986), "Culture in Action: Symbols and Strategies". *American Sociological Review*, vol.51, no. 2; pp. 273-286.
- Throsby, D. (2010), *The Economics of Cultural Policy*. Cambridge University Press, Cambridge.
- UNESCO, (2001), *Convention on the Protection of Underwater Cultural Heritage*. UNESCO, Paris.
<http://unesdoc.unesco.org/images/0012/001260/126065e.pdf>. Last retrieved on December 3rd, 2015.
- Tusa, S. (2004), "Ricerca e tutela archeologica subacquea in Sicilia nel quadro delle problematiche mediterranee". In Maniscalco F. (a cura di) 2004. *Tutela, Conservazione e Valorizzazione del Patrimonio Culturale Subacqueo*. Massa Editore; pp. 211-224.
- Vitaliano, D.B. (1968), "The Impact of Geological Events on History and Legend with Specific Reference to Atlantis". *Journal of the Folklore Institute*, 1(5): 5-30.