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An Introduction to Rochelongue Shipwreck

1.1 Introduction

Over the course of the eighth to sixth centuries B.C., Phoenician maritime activity, commercialisation and settlement in the western Mediterranean reached its peak (Aubet 2001, 257-341). The latter half of this period also witnessed the emergence of Greek and Etruscan sea trade in the central and western Mediterranean, with the latter particularly prevalent in the environs of the Tyrrhenian Sea and especially between Italy and the Languedoc region. Evidence from a number of sixth- and fifthcentury shipwrecks, which Broodbank (2013, 546) calls collectively the 'first tangible horizon of wrecks', supports this general picture of a burgeoning maritime trade (Nantet 2010, 97). These conditions promoted greater economic mobility, which contributed directly to a significant growth in mineral exploitation and metalworking in the region (Garcia and Sourisseau 2010, 238; Garcia and Vital 2006, 64; Ugolini 2010, 32). Evidence of this is visible in the archaeological record, in both local and foreign material culture, and provides a window to the respective cultural practices and the processes impacting upon them (Bradley 1990; Dietrich 2014; Fontijn 2002; Huth 2017; Vives-Ferrándiz 2015, 287).

The underwater site at Rochelongue was discovered in 1964 in Cap d'Agde (West Languedoc, France). The site was subject to archaeological investigations between 1964 and 1968 and again in 1970 (Gascó et al. 2014). Archaeological material at the site was scattered over an area measuring roughly 25×14 m at a depth of 6–8 m (Bouscaras and Hugues 1972). The recovered artefact assemblage has traditionally been described as comprising more than 800 kg of metal and at least 1,700 artefacts (Bouscaras 1964b, 288; Hugues 1965, 176; Jézégou 2012, 6; Parker 1992, 369).

The material assemblage recovered from the underwater site at Rochelongue, off Agde, France, is emblematic of this body of evidence. The diverse types and cultural origins represented by these objects have facilitated multiple characterisations of the site, all keeping with traditional views on the initial phase of colonial contact and their ramifications for archaeological interpretation.

1.2 Significance

The Rochelongue collection represents large accumulations of heavily fragmented metalwork and raw materials (Bradley 1990; Dietrich 2014; Fontijn 2002; Huth 2017). It comprises raw ore, bulk metals, scrap material and manufactured objects, including Atlantic, Mediterranean and local bronze works. The site, therefore, offers a unique

opportunity to investigate long-distance trade and the movement of metals along the entire metallurgical chaîne opératoire. It is the first maritime assemblage in southern France that manifests foreign cultural influence from the eastern Mediterranean, with the implication of attendant cultural contacts. The site also demonstrates vividly the importance of the region as the intersection of major land and sea trade routes that connected the British Isles and Atlantic seaboard to central Europe and the Mediterranean in the Late Bronze and Early Iron Age (Verger and Pernet 2013). Finally, being situated temporally during the high point of Phoenician commercialisation in the far western Mediterranean and the flourishing of Greek and Etruscan maritime activity in the region, the site offers a unique opportunity to study different colonial and economic strategies as they pertain to the procurement and trade of metals, metalworking and supply of metal wares, and the recycling of scrap metals.

This book research takes advantage of this unique collection by studying it within a framework of maritime connectivity using a network analysis approach in order to elucidate cultural contact and globalising dynamics of the Archaic period that helped shape Classical antiquity and, ultimately, Western culture. In doing metal so, it contributes significantly to the proper description and cataloguing of the Rochelongue assemblage and further clarifies the lack of clarity surrounding its historical and archaeological contexts and interpretations. This book also adds new information that assists in an improved interpretation of the site. Locally, this work will be used by the curatorial staff at the Ephebe Museum in Agde to improve the collection's exhibition and presentation to the public.

To date, the Rochelongue artefacts and their archaeometallurgical characterisations remain understudied and poorly published. Similarly, the archaeometallurgy of lead, tin and copper in the western Mediterranean during this period, which is evidenced only by material from a few shipwreck sites (Lucas-Pellicer and Ramos 1993; Ramos 1993; Wang et al. 2016, 41), is not well understood either. Chemical analyses for provenance materials, in addition to standard typological studies, provide valuable new data that allow assemblages with limited or no context to supply new meaningful evidence. This book is strategically placed to contribute significantly to methodological approaches using Social Network Analysis (SNA). While this has only recently been applied in archaeology, it has yet to be used for underwater sites, so its application is specifically significant for maritime archaeological studies.

Studies on the Rochelongue site have traditionally focused on the chronologies and cultural attributes of



the remains, and especially on the question of what type of site it represents—a shipwreck or ritual deposit (Barbot 2000; Gascó et al. 2014; Long 2004; Long et al. 2002a). As yet, there is no general consensus on the answer. This book introduces a new investigation of the Rochelongue metallic finds, using them as a case study to explore cultural contacts within this pre-colonial context in southern France and the western Mediterranean. Rather than focusing on site characterisation, this study approaches the site as a 'contact zone', using Dietler's (2010, 13) definition, which argues that it is a 'zone of direct, sustained encounter between indigenous people and alien colonist, where mutually misunderstood cultural differences were worked through in political and economic practice, pidgins and creole languages and, often, violence'. This book applies multiple methods of analysis to address larger questions of cultural contact and its socio-economic repercussions.

The following section discusses the primary and secondary research questions addressed in this book as well as some of the supporting aims that will help establish the archaeological context and conditions of analysis.

1.3 Research purpose

1.3.1 Research Questions

This book is based on a key question: how can a research framework using multiple methods of analyses provide a better approach to theorising and interpreting evidence derived from the metal assemblage of the Rochelongue underwater archaeological site in order to create a clearer understanding of the dynamics of cultural interaction in the Western Mediterranean during the Archaic period?

In the process of formulating the research framework for this research study and applying it to the analysis of the Rochelongue assemblage, several other inquiries will be addressed in pursuit of answering the main research question above. These secondary questions are:

- How can an interpretation based on the concept of 'contact zone' allow us to locally contextualise the initial phase of colonial encounters in southern France?
- How does the Rochelongue metal assemblage compare with other metal hoards of LBA–EIA found in terrestrial archaeological contexts?
- Do the characteristics of these assemblages reflect the social and cultural logic of indigenous societies and their institutions, cosmologies and structures, and if so, how can their analysis contribute to a better understanding of these assemblages?

To fully address these questions, this book investigates the nature of the Rochelongue assemblage in order to establish whether it resulted from shipwrecking or some other processes, such as ceremonial or votive acts. This research also sets out to establish a more accurate dating of the assemblage and to characterise the individual items in the assemblage, including their material, likely provenance (especially of the raw materials), method of manufacture, use and meaning. This artefact study will provide a complete context for the assemblage through the extraction of new data that can help answer broader questions related to the dynamics of cultural interaction and its impact on the cultures involved.

1.3.2 Aims

In pursuit of answers to these questions, this book will address the following aims relating to archaeological context and provenance and to the network analysis framework.

Archaeological context

- Critically review site records from the 1960s excavation to establish a detailed understanding of the existent data and a clear picture of the archaeological context;
- Establish a definitive catalogue of the Rochelongue collection and a more accurate identification and chronology of the individual constituent items;
- Discriminate between local objects and foreign imports using a standard typological approach;
- Identify the method of manufacture using metallurgical analytical techniques; and
- Use the historical and archaeological contexts, identification and provenance of the objects to ascertain their socio-economic function and meaning.

Provenance

- Undertake lead isotope analysis (LIA) of the objects and compare of the resultant data with studies of similar materials from other sites. This analysis will determine the probable provenance of the raw minerals or mineral ores used for the production of the Rochelongue manufactured objects;
- Determine the elemental composition of artefacts in the Rochelongue assemblage using energy dispersive x-ray fluorescence (ED-XRF) and inductively coupled plasma mass spectrometry (ICP-MS) in order to assess their elemental variability as another possible means of establishing provenance for the metal artefacts; and
- Combine the typological and chemical/microscopic analyses to investigate possible types of interactions between local and foreign peoples.

Network Analysis

- Visualise the social relationships between local Languedoc populations and foreign peoples by using a network framework integrating the results of typological and chemical/microscopic analyses;
- Use the assembled data to investigate maritime connectivity in the region; and
- Use the results of network analyses to expose evidence of cultural interaction.





In the following discussions, key analytical and theoretical concepts are briefly introduced. These will be important for contextualising and interpreting the results of the metal assemblage analyses and will be discussed in much greater detail in chapter four(Theoretical Approach).

1.4 The Mediterranean context

Defining an archaeological site as a contact zone means approaching the study of these places from multiple perspectives that encompass not only material or geographical considerations, as is traditional, but also social and cultural concerns. This book approaches maritime connectivity on a micro-regional basis in order to better understand how such domains cohabit and contribute to the 'whole'—in this case, to the entirety of the Mediterranean region. Studying the Mediterranean from a local perspective is an essential step in addressing a broader interpretive context. In recent years, some scholars have approached connectivity in the Mediterranean from a Braudelian point of view, where the Mediterranean Sea is viewed as a composite group of many smaller seas (Braudel 1972, 17). From this, Horden and Purcell (2000) recreated Mediterranean spaces as interlaced sea routes that bring coasts and centres of distribution face to face and re-shape micro-regions through interaction and connection with each other. These micro-regions create 'spheres of interaction' that contain geographical, temporal and material scales characterised as: (1) coastscapes, (2) maritime small worlds, (3) regional or intra-cultural and (4) inter-regional or inter-cultural (Tartaron 2014). The Mediterranean appears, then, as a space both fragmented and interconnected by the opportunities the sea affords (Horden and Purcell 2000).

The sea has always been the medium for sustainable trans-Mediterranean relations, a common tool of mobility (Arnaud 2011, 131). The maritime exchange has been both the object and tool of profound transformations in societies and the foundation of all sorts of cultural traditions, resulting ultimately in a so-called 'Pan-Mediterranean' context (Arnaud 2011, 132). The movement of people can thus be viewed as a structural phenomenon, one based on the sea and the reticulate system it made possible (Moatti 2012, 41). In this sense, scholars do not attempt to understand the macro-structure and its attendant political and economic forces directly but rather through the evaluation of local experiences and situating local histories in relation to larger historical structures (Dietler 2010, 10). All this provides the clear observation that the cross-cultural trade this book analyses in relation to pre-colonial Mediterranean France depended on the sea (Dietler 2010, 149).

1.5 The connected past: mobility, migration and connectivity

Prior to the 1980s, mobility was rarely used as a broad theoretical construct for studying Mediterranean immigration (colonisation), cultural encounters and their

social ramifications (Finley 1973; Van Dommelen 2012). Although this research indicated that the movement of populations in the Bronze Age was important and relevant to understanding processes, such as Greek expansion (Morel 1983), mobility was treated merely as longdistance movement rather than as a socially-structured phenomenon (Moatti 2012, 40). In recent decades, however, the question of the mobility of individuals in ancient societies has received greater attention. Osborne (1991), for example, has argued that historians of antiquity should not underestimate the degree of mobility of ancient populations and stressed the need to study its forms and causes. He also emphasised the relative character of distance in the study of migratory phenomena. It is, therefore, important to take into account how past populations conceived of space and not just distance in an absolute sense (Moatti 2012, 41).

Claudia Moatti, in her 2012 publication 'Mobilités circulations: approches historiographiques et conceptuelle', distinguished four aspects of mobility when analysing migration as a phenomenon and process of population change.

Social: Mobility is a social process and, as a result, cannot be understood without taking into account its impact on the 'social reality' of the group in question. No matter the type of movement (regional micromobility, seasonal movements, chain migration, etc.), the social group and sub-groups (such as family unit) are impacted materially, culturally and even across generations (Page Moch 2002, 142).

Flow: Rather than approaching mobility from the linear perspective of movement from the point of departure to the point of arrival, Moatti introduced the idea of 'flows', a concept capable of communicating both movement and which De Wenden (2001, 7) calls 'the mobile practices of space'. Other conceptualisations of Moatti (2012), such as 'circulatory space' and 'migratory field', are based on an understanding of space constituted by the displacement between the places of origin and reception; however, she preferred the term 'migratory circulation' to designate all the mobilities induced by the migratory act-flows, both visible and invisible. Her concept is reflected in the term culture of mobility introduced by previous authors (e.g. Clifford 1997), which designated all the values, behaviours and knowledge produced by and for the experience of movement (Moatti 2012, 44). Mobility then, involves a certain savoir-faire—knowledge of routes, identification of navigation risk, and so forththat allows the migrant to seize opportunities.

Organisation/structure: From integration to the structuring of life in motion. Cohen (1997) defines the concept of diaspora as characterised by an initial forced or voluntary dispersion, being distinct from the host society and having a continual social and spiritual connection with the origin (Lilley 2006, 287-312).

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Based on this definition, Moatti (2012, 46) argued that diasporas need to be understood as the organisational capacity of moving peoples and can be categorised as cultural, imperial or commercial.

Lives in motion: Somewhat paradoxically, mobility (the act of moving people) requires some sort of structure—infrastructure or framework—and so we must refine how we think of sedentariness and mobility (Moatti 2012, 46). In the context of the present study, mobility can be understood as maritime transhumance (Gras 2012, 21), which constantly disrupts the stability of local populations, or cabotage (about this term, see Arnaud 2005, 2011), which combines elements of sedentary life and phases of mobility such as the journey from port to port. Moatti (2012, 46) argued that the binary opposition of sedentariness (or permanence) and migration is problematic and cautions that, in fact no society is purely sedentary.

Thus, mobility may be conceived as the mechanism that produces a degree of connectivity, which, using Horden and Purcell's (2000,123) approach, are the various ways in which 'micro-regions cohere, both internally and also one with another'. More broadly, connectivity is the mobility of people and goods, the means of travel and communication, and any resultant social exchange (Knapp and Demesticha 2016, 30).

From the perspective of western Mediterranean encounters, chain migration or mobility, that is, communities migrating one after another over an extended period of time and settling down together, is an important mechanism for the creation of patterns of connectivity that directly affect the region of settlement (Van Dommelen 2012, 404). Socially, material culture allows us to further explore the relationship between mobility patterns and contact situations. Material culture, or materiality, can help us address the diversity and scale of mobility and connectivity between microregions in coastal Languedoc by examining imports, that is to say, what was imported and from where, imitations as indicators of value and meaning and numbers of such goods (as indicators of the intensity of interaction) (Vives-Ferrandiz 2015, 279; Horder and Purcell 2000, 123).

Connectivity and mobility also are pertinent to discussions concerning maritime contexts and have been used to create a theoretical framework for investigating past Mediterranean societies and the formation of identity through subsequent cultural interactions (Leidwanger 2013, 302). Following this, maritime connectivity (via merchants, mariners and local traders) determines the level of relationship between different coastal or island communities, as well as the intensity of these connections (Knapp and Demesticha 2016, 30). Furthermore, approaches based on networks apply new insights from network theory concerning the dynamic interactions between 'actors' as nodes or links, where connectivity and distance are measured by the degree of separation instead of physical distance (Malkin 2011, 9).

1.6 Conclusions

This research examines the material culture of the Rochelongue site by providing key information to better understand traditional discussions about the site, such as its chronology, cultural attribution or nature. This book, however, focuses on the concept of a 'contact zone' as a new approach that permits access to a much broader evaluation of the material culture in terms of maritime cultural interaction. In order to reach this objective, multiple methods have been proposed that cover not only the materiality but also the geographical and social connectivity represented by the assemblage. The investigation traces maritime interactions using network analysis in order to understand socio-economic changes and processes in cultural contact and colonial settings in western Languedoc, which occurred during the seventh to the sixth centuries B.C. It abstracts the direct network around the Rochelongue site by analysing the distribution of metallic objects from the site assemblage in order to investigate maritime networks and connectivity with the western and broader Mediterranean Sea. These interactions have been reconstructed using geographical and contextual distributions via typological and archaeometallurgical studies. In a context where for the first time in history, the entire Mediterranean was connected from East to West, the Rochelongue assemblage represents the earliest evidence of maritime contact between local and foreign cultures in southern France. The research associated with this site undoubtedly contributes to an improved understanding of Greek and Phoenician colonisation efforts in the western Mediterranean during the Early Iron Age.



