

Lost souls still whisper on the Mesolithic island of Les Birvideaux

Grégor Marchand

▶ To cite this version:

Grégor Marchand. Lost souls still whisper on the Mesolithic island of Les Birvideaux. Mesolithic Miscellany, 2020, 28 (2), pp.3-12. hal-03125789

HAL Id: hal-03125789 https://hal.science/hal-03125789

Submitted on 20 Apr 2021

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



VOLUME 28: NUMBER 2 December 2020

| Editorial | 2 |
|---|-------|
| Lost souls still whisper on the Mesolithic island of Les Birvideaux Grégor Marchand | 3-12 |
| Human bones, burials and cemeteries: new sources - list 9 Christopher Meiklejohn | 13-24 |
| Waulsort Caverne X: A new cave site with Early Mesolithic human remains in Belgium Caroline Polet, Dorothée G. Drucker, Clémence Glas, Charlotte Sabaux, Quentin Goffette, Mathilde Samsel, Ivan Jadin, Eugène Warmenbol and Sébastien Villotte | 25-43 |
| Niverød Teglværk – a coastal site from the Ertebølle culture Andreas Valentin Wadskjær and Adam Cordes | 44-63 |
| A note on an exceptionally preserved Early Mesolithic camp and other remains at Killerby, UK Clive Waddington, David G. Passmore, Philippa Hunter and Luke Parker | 64-78 |



Greetings MM readers!

As a very challenging 2020 comes to a close, we are delighted to bring you Issue 2 of Volume 28, and celebrate our 40th year with you - Volume 1, Issue 1 was published in November 1980!

In this, our 52nd, issue there are five papers. The first by Grégor Marchand delves into an evocative narrative, bringing together folklore and the Mesolithic archaeology of southern Brittany, France. This is followed by Chris Meiklejohn's ninth instalment in his on-going series concerning recent publications on the theme of bioarchaeology. Caroline Polet and colleagues present previously unpublished stable isotopic and radiocarbon measurements obtained from human remains from a cave site, Waulsort Caverne X, in Belgium, which considerably increases the number of Mesolithic human finds from the territory. Moving east to Southern Scandinavia, Andreas Valentin Wadskjær and Adam Cordes describe the post excavation analysis of materials recovered from a coastal site, Niverød Teglværk, dating to the Late Mesolithic Ertebølle culture. Finally, Clive Waddington and colleagues provide an overview of a recently discovered Mesolithic settlement site at Killerby in the north of England, which includes the remains of well-preserved wooden structures.

Only one month has passed since 28.1, and we have, in fact, already received several contributions for Volume 29. We are keen to keep the momentum going, and submissions are most welcome.

Finally, we wish you all the best over the festive period and a Happy New Year.

Harry Robson on behalf of the editorial board.

Editorial board: Rick Schulting, Mary Jackes, David Lubell, Chris Meiklejohn and Harry Robson Book reviews: Aimée Little Management team and social media: Harry Robson and Sophy Charlton

Lost souls still whisper on the Mesolithic island of Les Birvideaux

Grégor Marchand

UMR 6566 CNRS, CReAAH (Centre de Recherche en Archéologie Archéosciences Histoire), Rennes Université, Rennes, France gregor.marchand@univ-rennes1.fr

Metamorphosis of the seascape

Several islands lie off the coastline of southern Brittany in western France, of which Téviec and Hoedic are the best known to prehistorians working on the Mesolithic (Figure 1). These sites were excavated by Marthe and Saint-Just Péquart between 1928 and 1933 (Péquart *et al.* 1937, 1954) who discovered domestic and funerary structures in a shell level. Subsequent research identified further occupation on the neighbouring large islands existing today, such as Groix and Belle-Île (Marchand 2013). By flooding large coastal areas facing the present coastline, the postglacial marine transgression created the present islands while causing others to disappear beneath the rising waters.



Figure 1. Distribution of the main insular and coastal sites of the Late Mesolithic in Southern Brittany. The -8 m level would correspond to the highest seas at the end of the Mesolithic, in the 6th millennium cal BC. The sites are numbered: 1: L'île aux Moutons, 2: Le Gorzed, 3: Quéhello, 4: Kerhillio, 5: Téviec, 6: Beg-an-Aud, 7: Beg-er-Vil, 8: pointe de Kerzo, 9: Bordelann, 10: Porh Lezoned, 11: Kervin, 12: Malvant, 13: Port-Neuf (Hoëdic), 14: Le Groah-Denn, 15: Kerjouanno, 16: Pors-Bali (DAO: G. Marchand, modified from Marchand 2013 and Meunier 2004).

Such is the case of Les Birvideaux, a former island west of the Quiberon Peninsula, a rocky plateau now submerged under at least 2 m of water, on which stands a 30 m tall lighthouse alerting sailors to the dangers of the waters in inclement weather. Surprisingly, the attention paid to a set of legends around that rocky shoal has led to its identification as a Mesolithic island. Curious convergences with archaeological knowledge first attracted attention. Specialists in Neolithic megalithism often make reference to legendary characters after whom monuments may be named, but fairies, giants, goblins and the undead rarely assist Mesolithic scholars in their explorations. The ephemeral material achievements of the last hunter-gatherers in Europe obviously did not give rise to such legends by later populations. Nevertheless, as we will see, the entire maritime landscape provides a rich source of material for the popular legendary fabric. This paper attempts to find out if the convergences between popular narratives and the archaeologist's quest are the result of similar cognitive pathways. It asks how this eruption of the legendary into the tranquil domain of science is managed, and by juxtaposing geomorphological, archaeological and folklore data, provides an opportunity to evoke the memory of places, and the curious, meandering, paths sometimes taken during prehistoric research.

Echoes of folklore and archaeology

The Birvideaux plateau is presumed to be the location of the sunken city of Aïse, occupied by the people of Les Birvideaux (in French) or Berbidao (in Breton). Its inhabitants refused to leave the area as the sea rose, first cutting off the land link with the continent and then submerging it for good. Since then, according to legend, the inhabitants continue to lament under the sea, living in caves and crevices like crabs. They feed on blue mussels and grey limpets and on November 23rd every year, on the feast of Saint-Colomban (Saint-Clément), they come out of the water to take part in the *Pardon* (the local name for the feast of a patron saint). Wrapped in red coats woven of pure fire, they attend mass and are blessed by the priest. At the end of the ceremony, the people of Quiberon set alight a mound of faggots and the inhabitants of the underwater plateau pass in front of the flames to throw their red coats on the fire, after which they return to live for another year under the ocean (Figure 2).

Does the legend of Les Birvideaux echo that of submerged shell middens? An island covered over during the inevitable rise of the ocean, its inhabitants resorting to marine molluses for food and wearing red clothes made of fire, are three motifs that reverberate throughout the Quiberon legend and local Mesolithic archaeology. Since there is no need to stress the first two elements, let me focus on the third. The curious coats of fire evoke certain Mesolithic funerary practices, as revealed by the Péquarts on the islet of Téviec from 1928 to 1930. Indeed, this site, which lies 12 km northeast of the Birvideaux lighthouse, includes 10 tombs for 23 individuals, with funerary practices that entailed placing red ochre on the buried bodies and creating hearths on the heavy stones that covered the tombs (Péquart *et al.* 1937). It should be stressed that written mention of this legend predates the excavations by the Péquarts and therefore cannot be a fanciful adaptation of the discoveries by prehistorians. Abbé Pierre-Marie Lavenot, a priest but also a collector of myths and an archaeologist, mentions this legend at the end of the 19th century (Lavenot 1886). Other collectors of oral

traditions later found variations of this (Sébillot 1905; Le Fur 1908; Gourong 1999) or produced more literary renditions (Er Mason 1943; Hélias 1983).

The proposition of a memory of vanished tribes and sunken lands preserved in popular traditions is one of the possible interpretations of this legend (Le Scouézec 1989, 518). In Australia, for example, this principle was used as a way of dating myths, thus conferring a literal value on them. Patrick D. Nunn and Nicolas J. Reid compiled 21 legends of coastal flooding and suggested dating these on the basis of the sea rise curve. This led to the dating of some Aboriginal tales back to more than 7000 years ago (Nunn and Reid 2016). I believe that such hypotheses pay far too little attention to the chains of oral transmission. In the case of Les Birvideaux for instance, hypotheses of literal value would disregard the lives and turbulent history of perhaps 250 or 280 generations of human beings. Moreover, in Western Europe the pre-eminent role of writing is the long-term preservation of memory, and the vigorous ecclesiastical policy of Christianising spiritual spaces – both physical and psychic – over the centuries, both play a predominant role in all legendary constructions. It is important to bear this in mind.

Legends of sunken cities, both in seas and lakes (Sébillot 1905, 60), are particularly numerous in western France, as they are in various places around the world where the traditions of flooding as punishment for a wrongdoing is often a local interpretation of the myth of the Great Flood (Le Quellec and Sergent 2018, 1327-1330). In the Middle Ages, the red cloak was the symbolic garment of sinners, but in the legends of Les Birvideaux, there is little mention of collective or individual wrongdoing; only of the inhabitants' obstinacy in remaining on the island while the ocean submerged them. According to certain versions of the legend, drowning precluded them from the right to a burial, or would send them to purgatory – their deaths being deemed "incomplete deaths"; the absence of appropriate funerary rites condemned them to returning to trouble the living (Er Mason 1943; Helias 1983). Indeed, the Catholic Church has appropriated the legend of Les Birvideaux, which can no longer be envisaged without permanent references to the church's own texts and rites, with perhaps the addition of an ancient Celtic backdrop that would place the afterlife in the islands of the setting sun.

Immersion and submersion of a Mesolithic island

As yet, bathymetric surveys and sea-level variation curves do not allow us to draw the contours of islands in the first millennia of the Holocene with any certainty, but it is possible to suggest some estimates from the separation of the landmass to the present stage. The Les Birvideaux rocky plateau is located 10.7 km west of Quiberon. Permanently submerged under a few metres of water, it is part of the "Breton Pre-continent", a peri-coastal strip, 5 to 15 km wide, which includes all the islands on the south coast of Brittany from Penmarc'h to Le Croisic (Pinot 1974). Two coastal systems comprising fossil cliffs, estuaries and pebble beaches have been reported for decades around the bathymetric levels of -30 m and around -8 m (Pinot 1968, 1974; Delanoë and Pinot 1974, 1977; Menier 2004, 149). They correspond to ancient marine stabilisations.



Figure 2. Evocations of the lost souls of Les Birvideaux, condemned to eat blue mussels and grey limpets (unpublished drawings by Gérald Musch, to whom I am particularly grateful).

MM 28:2 (December 2020)

Les Birvideaux island space as such, only appears between the -20m and -5m levels on the bathymetric map of the *Service Hydrographique et Océanographique de la Marine* (levels measured in France from the lowest spring tides, see Figure 3). With the bathymetric curve at -20 m, the island measures 5 km from east to west and 3.5 km from north to south, forming an approximate surface area of 9.2 km² (three times larger than the current island of Houat). At the -10 m contour, the island has already shrunk away considerably, and measures 800 m by 400 m, i.e. approximately 0.3 km².



Figure 3. Cartographic evocation of Birvideaux Island based on the bathymetric curves (the zero level in France corresponds to the current lowest sea level). Birvideaux Island is only truly constituted with sea levels higher than -20 m below the current lowest seas (DAO: G. Marchand).

The regional data concerning Holocene sea-level change also has its share of inaccuracies, linked to poor control of lateral variations in sedimentary facies in the cores, intrinsic imprecision of the radiocarbon method, sediment compaction and defects in some materials used to obtain isotopic counts such as shells (subject to a marine reservoir effect). It should also be recalled here that the tidal range is now 5.5 m during equinox tides at Portivy, near the island of Téviec, which gives a parameter for estimating the extent of Holocene tidal ranges. Since the sea level estimate corresponds to the highest seas and the bathymetric curves are measured in relation to the lowest seas, it should be remembered that a sea level 5 m lower than the current one on the curve would correspond to 0 m on the hydrographic map.

The rising sea level brings the shores around -30 m bathymetric curves at the end of the 9th and the 8th millennium cal BC, contemporary with the Early Mesolithic. The Birvideaux hills are then accessible on foot from the mainland to the east, at the level of the current Quiberon peninsula. Les Birvideaux was surrounded by water and became an island at the end of the 8th millennium. A notable slowdown in the dynamics initiated at the end of the last ice age then

occurred in the middle of the 7th millennium BC, bringing the shores to around 15 m below the current level. The rise in water levels stabilised from that time on (Ters 1973; Pirazzoli 1991; Lambeck 1997; Rabineau et al. 2006; Stéphan 2011; Goslin 2014, 16; Stéphan et al. 2015; García-Artola et al. 2018). A better estimate of this chronological phase can be made with the help of recent work carried out by Pierre Stéphan, based on more regional data. He estimates the sea level at a depth of between -15.5 m and -11.0 m below the present level (bathymetric depths of between -7.2 m and -14.0 m) around 6200 BC when the Mesolithic site of Beg-er-Vil was occupied (Stéphan in Marchand et al. 2018). Even before the 6th millennium and the Mesolithic occupation of the Téviec and Hoedic "necropolis-habitats", Les Birvideaux Island was only a few hundred metres long. The island may have been engulfed at the beginning of the Neolithic, between the 6th and 5th millennia cal BC. Of course we know nothing about the sedimentary or vegetal cover that was removed during the marine transgression and which may have slowed down the erosive process. Bathymetric curves and upwelling curves help to sketch the contours of an island that emerged from the 8th to the 6th millennium cal BC, for at least two millennia or more. Everything remains to be explored on this rocky plateau, where some of the low-lying areas may have trapped sediments, and more precise readings from digital terrain models will certainly improve the dating of this transitory island.

A hub in Mesolithic maritime mobility

The coastlines of the current departments of Morbihan and Finistère are dotted with Mesolithic sites, which help us to model the social, economic and cultural lines of force of those landscapes (Marchand 2014, 2020; Marchand and Musch 2013 - Figure 1). Here, several types of habitats on the Morbihan coast can be distinguished according to the nature of their archaeological remains and the activities recorded there:

- 1. Habitats with substantial structures, shell middens and a cemetery, such as Téviec on the mainland during the Mesolithic (Péquart *et al.* 1937) and Port-Neuf on Hoedic Island (Péquart and Péquart 1954);
- 2. A shell layer with pits, hearths, post-holes and dwellings on the continental coast at Beg-er-Vil (Kayser and Bernier 1988; Marchand *et al.* 2016, 2018);
- 3. Island sites without any substantial structures but with tens of thousands of flint pieces scattered in a single archaeological level, or just above the surface of the current ground, such as Malvant in Houat (Rozoy 1978), Bordelann in Sauzon (Marchand and Musch 2013), le Gorzed in Groix (Le Guen 2007; Denat 2017) and l'Île aux Moutons in the Glénan archipelago (Hamon and Daire 2015);
- Continental habitats that were close to the coastline at the time, without substantial structures but with tens of thousands of flint pieces, such as Kerhillio in Erdeven (Rozoy 1978), Kerjouanno in Arzon (Rozoy 1978) or Beg-an-Aud in Saint-Pierre-Quiberon (unpublished);
- 5. At Groah-Denn on Hoedic Island, a site with hearths dating from the 6th millennium BC, where lithic pieces are rare and whose function is not clear (Large and Mens 2017).

The separation of the present large islands from the mainland seems to have occurred during the 7th millennium, later than that of Les Birvideaux (Marchand 2013). There is evidence of maritime mobility, since the technical and stylistic characteristics developed both on the islands (Glénan, Hoedic, Malvant, Groix, Belle-Île) and on the mainland, are identical - an unmistakable sign of frequent contact. In this network of maritime mobility, the island of Les Birvideaux was inevitably a valued support point located between 10 and 15 km from the nearest land. Furthermore, the visibility of one from another can still be confirmed today. Such a distance would have been easy to cover in a single day on a calm sea, according to certain ethnographic references (Ames 2002; Rowley-Conwy and Piper 2016).

Such long journeys to the Mesolithic worlds...

A detour through the corpus of folklore that surrounds these submerged rocks provides an opportunity to confront the literal interpretations of trans-generational memory that may run from the distant Mesolithic, with explanations that may be sought in regional Christian themes. The analogies between certain motifs in the legends and in local archaeological knowledge may converge. Sometimes this is purely fortuitous, as with the predominant role of fire and the colour red. Conversely, the powerful mental images of sunken villages are shared ones, reflecting similarities in cognitive processes. Without blurring the boundaries between legendary and scientific projections, such reflections on a sunken space immediately demonstrate the power of maritime prehistory, which it would be foolish to ignore. Beneath the ocean surface, a veritable mirror of fantasy, everyone seeks a form of the past. Such diverse evocations sometimes find a way of coming to terms with each other. Ultimately, it is the same psychic mechanisms that lead archaeologists, religious devotees and storytellers to cross through the mirror of water in search of another world. Some archaeologists can benefit in their investigations from legends or toponymic indications that indicate missing monuments. Mesolithic scholars - specialists in the finer aspects of things - very rarely have this opportunity. The legend of Les Birvideaux shows that it is the landscape as a whole that provides the hook to the tale and not just a megalith or a cave. This indication is obviously not referring directly to the last hunter-gatherers, but rather a useful orientation to guide us to the remains of the Mesolithic, born of the same perception of such moving maritime spaces.

Archaeologists' access to Mesolithic worlds entails long chains involving both humans and non-humans, with all that this implies in the ideological structures that condition the questions asked and the answers obtained. During this long journey, field archaeologists will not dispute the preponderant weight of property ownership in their society, which allows them to have access or not to a plot of land, just as they cannot dispense with the authorisations they must obtain from the many public administrations which manage heritage and natural spaces today. After a few decades of practice, we have all experienced sublime research programs being summarily halted by a landowner, just as we have all taken advantage of land opportunities that were open to us (e.g. in preventive archaeological excavations). Nor can we dispense with communicating with the inhabitants and archaeological teams with whom we usually interact on a daily basis, leading, for example, to consequences such as whether or not to extend the fieldwork or even make changes to the schedule. The scientific results obtained only appear at the end of a series of compromises, which in no way detracts from their scientific value, but which nevertheless maddeningly distances us from that image of a pure scientific spirit, free of all contingencies. These multiple interactions with different segments of the population influence the words used. Researchers must constantly deliver narratives, whose subtle variations and various levels of language are supposed to satisfy their various interlocutors, scientists as well as schoolchildren, politicians and administrators. Certain stories, certain words, jump from one register to another. In this interweaving of words, things and humans, the legends and those who disseminate them, are ultimately only additional elements to be taken into account. The whispering of the lost souls of Les Birvideaux was heard by archaeologists and converted into a new point on the Mesolithic landscape as it is now presumed to be: a small shift from popular oral history to written "processual" archaeology. Thousands of other stories of submerged peoples will follow for those who want to explain this engulfment of a world that so intrigues humanity.

Acknowledgments

I would like to thank Georges Le Pessec, Martine Mangeon and Jean-Loïc Le Quellec for the information on some versions of the legends. I also owe a special debt to Gérald Musch, painter and archaeologist, for his remarkable graphic productions, Krystyna Horko for her invaluable help during the translation and the editorial team of *Mesolithic Miscellany* for its last-minute adjustments.

References

- Ames, K.M. (2002) Going by boat: The forager-collector continuum at sea. In B. Fitzhugh & J. Habu (eds) *Beyond foraging and collecting: Evolutionary change in hunter-gatherer settlement systems*, 19-52. Kluwer, New York.
- Delanoë, Y. & Pinot, J.-P. (1974) Etude structurale du Tertiaire de la région du banc Bertin entre Belle-Île et les îles de Glénan, Bretagne méridionale. *Bulletin de l'Union des Océanographes de France* 9, 59-64.
- Delanoë, Y. & Pinot, J.-P. (1977) Littoraux et vallées holocènes submergés en Baie de Concarneau (Bretagne méridionale). *Bulletin de l'association française pour l'étude du quaternaire* 14(3), 27-38.
- Denat, G.-A. (2017) *Le Gorzed (Groix, Morbihan): une occupation insulaire du Mésolithique.* Mémoire de Master 2, Université de Rennes 2.
- Er Mason, R. (1943) Chal ha Dichal, poésies en vannetais suivies de Pardon Er birvideu (Le Pardon des Birvideaux). Editions Dihunamb.
- Garcia-Artola, A., Stéphan, P., Cearreta, A., Kopp, R.E., Khan, N.S. and Horton, B.P. (2018) Holocene sea-level database from the Atlantic coast of Europe. *Quaternary Science Reviews* 196, 177-192, <u>https://doi.org/10.1016/j.quascirev.2018.07.031</u>
- Goslin, J. (2014) Reconstitution de l'évolution du niveau marin relatif holocène dans le Finistère (Bretagne, France): dynamiques régionales, réponses locales. Thèse de l'université de Bretagne Occidentale, Brest.
- Gourong, L. (1999) Contes de Quiberon et des alentours. Editions du Scorff.
- Hamon, G. & Daire, M.Y. (2015) L'île aux Moutons et l'archipel des Glénan (Fouesnant, Finistère), de la Préhistoire à la fin de l'indépendance gauloise. In L. Audouard & B. Gehres (eds) "Somewhere Beyond The Sea". Les îles bretonnes: perspectives archéologiques, géographiques et historiques. Actes

du Séminaire d'Archéologie de Rennes avril 2014, 55-69. Archaeopress (BAR International Series 2705), Oxford.

- Hélias, P.-J. (1983) Légendes de la mer. Editions d'Art Jos Le Doaré, Châteaulin.
- Kayser, O. & Bernier, G. (1988) Nouveaux objets décorés du Mésolithique armoricain. *Bulletin de la Société Préhistorique Française* 85(2), 45-47.
- Lambeck, K. (1997) Sea-level change along the French Atlantic and Channel coasts since the time of the Last Glacial Maximum. *Palaeogeography, Palaeoclimatology, Palaeoecolecology* 129(1-2), 1-22, <u>https://doi.org/10.1016/S0031-0182(96)00061-2</u>
- Large, J.-M. & Mens, E. (2017) Files de pierres dressées à Hoedic et dans l'ouest de la France. *Melvan, La Revue des deux îles* 14, 51-68.
- Lavenot, P-M. (1886) Les îles d'Hoedic et d'Houat et la Presqu'île de Quiberon. Etude géographique et archéologique. Fascicule 1. Imprimerie Galles, Vannes.
- Le Fur, M.-R. (1908) *Les âmes errantes. Légendes bretonnes de la Presqu'île de Quiberon.* Bibliothèque régionaliste - Bloud et Cie, Paris.
- Le Guen, A. (2007) Le Gorzed Une Station du Mésolithique moyen sur l'Ile de Groix. *Bulletin de la Société d'Archéologie et d'Histoire du Pays de Lorient* 35, 27-38.
- Le Quellec, J.-L. & Sergent, B. (2018) Dictionnaire critique de mythologie. CNRS Editions, Paris.
- Le Scouézec, G. (1989) Guide de la Bretagne Mystérieuse. Tchou (« les Guides Noirs »).
- Marchand, G. (2013) Le Mésolithique insulaire atlantique: systèmes techniques et mobilité humaine à l'épreuve des bras de mer. In M.Y. Daire, C. Dupont, A. Baudry, C. Billard, J.-M. Large, L. Lespez, E. Normand & Chris Scarre (eds) *Ancient Maritime Communities and the Relationship between People and Environment along the European Atlantic Coasts, Proceedings of the HOMER 2011 Conference*, 359-369. Archaeopress (BAR International Series 2570), Oxford.
- Marchand, G. (2014) *Préhistoire atlantique. Fonctionnement et évolution des sociétés du Paléolithique au Néolithique*. Éditions Errance, Arles.
- Marchand, G. (2020) Mesolithic networks of Atlantic France: the two faces of Brittany (7th and 6th millennia cal BC). In A. Schülke (ed) *Coastal Landscapes of the Mesolithic: Human Engagement with the Coast from the Atlantic to the Baltic Sea*, 202-226. Routledge, London.
- Marchand, G., Dupont, C., Delhon, C., Desse-Berset, N., Gruet, Y., Laforge, M., Le Bannier, J.-C., Netter, C., Nukushina, D., Onfray, M., Querré, G., Quesnel, L., Stéphan, P. & Tresset, A. (2016) Retour à Beg-er-Vil. Nouvelles approches des chasseurs-cueilleurs maritimes de France Atlantique. In C. Dupont & G. Marchand (eds) Archéologie des chasseurs-cueilleurs maritimes. De la fonction des habitats à l'organisation de l'espace littoral, Actes de la séance de la Société préhistorique française de Rennes, 10-11 avril 2014, 283-319. Société préhistorique française, 2016, (Séances de la Société préhistorique française, 6), Paris.
- Marchand, G., Dupont, C., Laforge, M., Le Bannier, J.-C., Netter, C., Nukushina, D., Onfray, M., Querré, G., Quesnel, L. & Stéphan, P. (2018) Before the spatial analysis of Beg-er-Vil: A journey through the multiple archaeological dimensions of a Mesolithic dwelling in Atlantic France. *Journal of Archaeological Science: Reports* 18, 973-983, <u>https://doi.org/10.1016/j.jasrep.2017.07.014</u>
- Marchand, G. & Musch G. (2013) Bordelann et le Mésolithique insulaire en Bretagne. *Revue archéologique de l'Ouest* 30, 7-36.
- Menier, D. (2004) *Morphologie et remplissage des vallées fossiles sud-armoricaines : apport de la stratigraphie sismique*. Doctorat de l'université de Bretagne Sud, Mémoires Géosciences Rennes, 110.
- Menier, D., Tessier, B., Proust, J.-N., Baltzer, A., Sorrel, P. & Traini, C. (2010) The Holocene transgression as recorded by incised-valley infilling in a rocky coast context with low sediment supply (southern Brittany, western France). *Bulletin de la Société géologique de France* 181(2), 115-128.
- Nunn, P. D. & Reid, N. J. (2016) Aboriginal Memories of Inundation of the Australian Coast Dating from More than 7000 Years Ago. *Australian Geographer* 47(1), 11-47.
- Péquart, M., Péquart, S.-J., Boule, M. & Vallois, H. (1937) *Téviec, station nécropole mésolithique du Morbihan*. Archives de l'Institut de Paléontologie Humaine, mémoire 18, Paris.
- Péquart, M. & Péquart, S.-J., (1954) *Hoëdic. Deuxième station-nécropole du Mésolithique côtier armoricain.* De Sikkel, Anvers.

- Pinot, J.-P. (1968) Littoraux würmiens submergés à l'Ouest de Belle-Île. *Bulletin de l'Association française pour l'étude du quaternaire*, 197-216.
- Pinot, J.-P. (1974) Le pré-continent breton, entre Penmarc'h, Belle-Île et l'escarpement continental, étude géomorphologique. Impram, Lannion.
- Pirazzoli, P.A. (1991) World atlas of Holocene sea level changes. Oceanography Series, 58. Elsevier, Amsterdam.
- Rabineau, M., Berné, S., Olivet, J.-L., Aslanian, D., Guillocheau, F. & Joseph, P. (2006) Paleo sea levels reconsidered from direct observation of paleoshoreline position during Glacial Maxima (for the last 500,000 years). *Earth and Planetatery Science Letters* 252, 119-137, https://doi.org/10.1016/j.epsl.2006.09.033
- Rowley-Conwy, P. & Piper, S. (2016) Hunter-Gatherer Variability: Developing Models for the Northern Coasts. *Arctic* 69, 1-4, <u>https://doi.org/10.14430/arctic4623</u>
- Rozoy, J.-G. (1978) Les derniers chasseurs. L'Epipaléolithique en France et en Belgique. Bulletin de la Société archéologique champenoise 605, 1-259.
- Sébillot, P. (1905) Le Folklore de France. Tome deuxième: la mer et les eaux douces. Guilmoto, Paris.
- Stéphan, P. (2011) Colmatage sédimentaire des marais maritimes et variations relatives du niveau marin au cours des 6000 dernières années en rade de Brest (Finistère). *Norois* 220, 9-37.
- Stéphan, P. & Goslin, J. (2014) Holocene relative sea-level rise along the Atlantic and English channel coasts of France: reassessment of existing data using "Sea-level index points" method. *Quaternaire* 25(4), 295-312.
- Stéphan, P., Goslin, J., Pailler, Y., Manceau, R., Van-Vliet-Lanoë, B., Hénaff, A. and Delacourt, C. (2015) Holocene salt-marsh sedimentary infillings and relative sea-level changes in West Brittany (France) based on foraminifera transfer functions. *Boreas* 44(1), 153-177, https://doi.org/10.1111/bor.12092
- Ters, M. (1973) Les variations du niveau marin depuis 10000 ans le long du littoral atlantique français. In *Le Quaternaire Géodynamique, stratigraphie et environnement*, 9ème congrès I.N.Q.U.A., Christchurch, déc. 1973, 114-135. Comité National de l'I.N.Q.U.A..