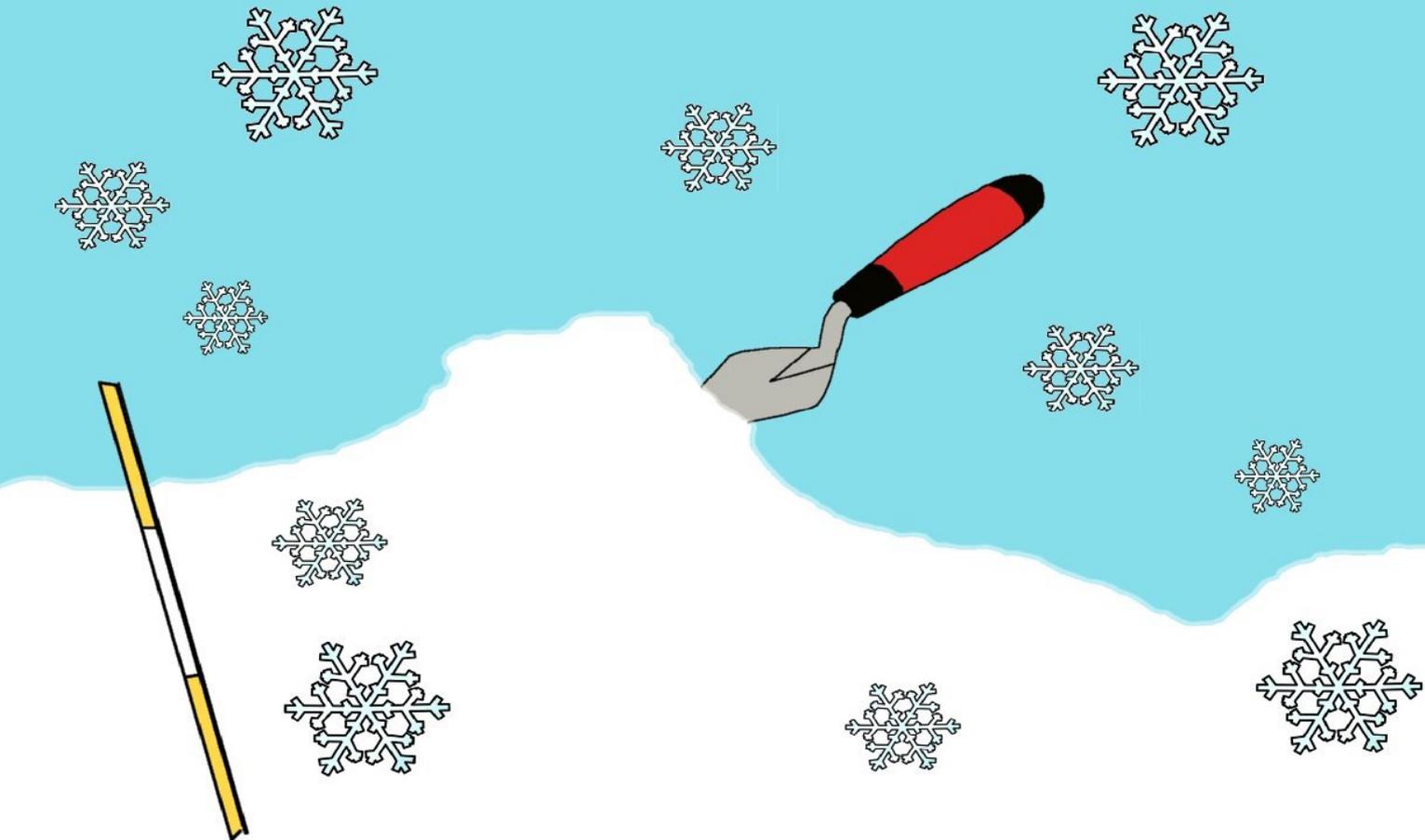


The Student Run Archaeology Journal

THE POST HOLE

Issue 19 December/Christmas 2011



Dissertation Woes?

Stuck for a topic/idea?

Four Year 3 students share their experiences

Also this issue:

Great War Archaeology; Mysteries of the Deep?; The Perfect Archaeological Christmas Present; Theory 101, and more.

The Post Hole

Issue 19

2011-12-05

Cover by Izzy Winder ('Snowflake clipart from www.clipartpal.com/clipart_pd/weather (<http://tinyurl.com/c2tpdvw>).

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1 Editorial

Mark Simpson (<mailto:ms788@york.ac.uk>)

So, as 2011 comes to a close it is time to reflect on the archaeological year gone by.

During the last twelve months archaeology has come under fire from a number of sources. Budget cuts mean that various councils across the country have not only shelved building programmes, hence doing away with the need for watching briefs and rescue excavations, but they have also been cutting back on museums and heritage sector staffing.

In June, the council leader in the Fenland district told an awards dinner for developers that he would ‘sweep away’ the need for expensive archaeological ‘interference’ in any future building plans for the area, sparking a national outcry and a Facebook group to co-ordinate a response. I am proud to say I was a part of that protest, though a small part, but as they say at Tesco, ‘every little helps’. That debate raged across BBC national radio, broad sheet newspaper and even had questions asked in both Houses of Parliament, before the council leader was taken to task by his own political hero, Eric Pickles, the Secretary of State for Communities and Local Government.

Closer to home, the student digs in York at Heslington East and Hungate, both of which have been running for about five years, are now reaching their final phases. So, is this a bad time to be studying archaeology?

Not a bit of it!

The University of York has taken in over 100 archaeology students again this year. There are more students staying on beyond the three-year degree to do Masters and PhD courses than ever before. The recession meant that many people moved out of the archaeological profession and despite the gloomy forecasts on the news, the market WILL pick up. So students going through the education system now are in possibly the best place, ready to step in as the jobs become available. It is only a matter of time.

So, as the old year gives way to 2012, the year of the London Olympics, remember that you are fortunate to be studying at one of the top universities in Britain, with some of the best staff it is possible to study under, in a subject that has relevance to everybody. We are the lucky ones. . .

On a final note, congratulations to the archaeology department for winning the Queen’s Anniversary Prize for Higher and Further Education in November.

Mark Simpson (Co-editor)

2 Dissertation Woes?

Clare McKenna, Rachelle Martyn, Jessica Smith, Harry Gregory

Year 2 students, stuck for a dissertation idea? Have an idea but not sure how to put it into practice? Below, four Year 3 students briefly outline their dissertation ideas, why they chose them and some of the problems they have encountered and overcome.

Clare McKenna is a pre-historian doing the BA Archaeology course, Rachelle Martyn is a science student doing the BSc Bioarchaeology course while Jessica Smith and Harry Gregory are both doing the BA in Historical Archaeology.

Dissertation Woes by Clare McKenna

Having just spent the best part of the last week attempting to get my head around both statistics and computer programming I may have a slightly negative outlook on the whole process of writing a dissertation. Surprisingly it is the complete opposite; I have never found something as stimulating as letting your mind wander on a topic that really interests you. My topic focuses on several areas; firstly stone tool use during the Palaeolithic in Britain, namely East Anglia and the associated butchery on the sites. As part of this I have been privileged not only to complete experimental work but also to work on faunal remain assemblages in the Natural History Museum. I chose this topic as it was inspirational to me; not only was it something I knew very little about, it was also a topic that had not really been completed before and I would be adding something completely new to the field. However, this was a curse in disguise as there is a severe lack of literature on the subject and I ended up having to find some very odd journals in order to gather the background information needed.

The museum work brought the biggest challenge and it came in several parts: firstly, anyone who wants to work on museum-held artefacts, start trying to contact the relevant people as soon as possible as they seem to have not entered the 20th century, let alone the 21st. Though an email is the easiest way to contact curators they will never normally reply and if they do it will be around a month or so later. The best thing to do is to find a phone number and ring them incessantly until someone talks to you. The second major problem with working with museum collections is though the museum may hold the artefact or artefacts, they may be on display or, like many of mine, are simply lost. Also, if the museum does know vaguely where the artefacts are then be prepared to be put into some kind of attic space to find the artefacts, which in my case have not been touched, let alone documented since they were excavated in 1959. The last and largest problem I encountered was pretty specific to my field and it involved the sampling of some of my faunal remains to such an extent that the butchery marks on them were destroyed. Normally this would be a good thing as the sampling is done for dating, however the only information available on what the sampling was done for was written on a computer punch card not used for over 10 years and completely unreadable. Other than these minor setbacks, all of which have been overcome, my dissertation has been interesting as well as informative. Though you will encounter setbacks eventually, this will make your dissertation a more rounded piece of work and allow others in the future to continue your research, if not yourself.

The Big 'D' by Rachelle Martyn

There are some things in life that pass us by pleasantly, painlessly and without hassle. There are others whose presence adds effort, frustration and, at times, hostility to an already hectic lifestyle. For the majority of third, and to an extent, second year students, the latter sentiment can be applied to our dissertations.

As a bioarchaeology student, these frustrations have been predominantly lab based; however, such issues apply to us all in archaeology, and students as a whole; evoking the same sense of futility and anger. This is, however, perfectly normal. Although not a particularly comforting thought to those yet to begin, the propensity for dissertation research to go wrong and a relative amount of time to be wasted, is common, but not to be feared.

After five attempts encompassing several modifications and two complete topic changes, I finally this week received data back with which I can finally begin my practical write up. The predominant issue I encountered with my dissertation was not in obtaining samples for research, but the inescapable unreliability of scientific analysis.

My original idea consisted of an isotopic dietary study of human skeletal remains from the Neolithic site of Mehrgarh, Baluchistan, dated to around 8,000 years BC. In essence, this appeared both interesting and relatively straight forward. However, after two extraction attempts it was clear that the collagen content of the bones was too low in yield to run through mass spectrometry; as well as questions surrounding its isotopic integrity due to collagen digenesis and degradation.

Thus, we reluctantly resigned Mehrgarh to the unfathomable for now and turned our attentions to Herculaneum and collagen yield. Throughout the summer I prepared and extracted collagen from half of the Herculaneum samples available to me; the second batch having been completed a few weeks ago! At the same time as this initial batch was being processed, it was agreed that a study into collagen preservation, focusing on yield and thermal age modelling, would be an interesting topic to supplement my project. It was here, however, in which the problem lay.

Taking 3 x 5 0.6g bone samples from Mehrgarh, Herculaneum, Coppergate and Modern bone (60 in total), all were demineralised, gelatinised and put in to freeze dry for their final stage before analysis. It was this point at which I encountered one of the most common and frustrating problems in research: human error. I do not know the reason as to why such an error occurred; impatience perhaps, tiredness, or maybe excitement for my imminent trip to Italy. Whatever the reason, the samples went into the freeze dryer unknowingly thawed slightly and thus came out in less than good shape.

Three weeks of work abandoned, I started again post-holiday. At this stage, I successfully prepared (thankfully) the second batch of Herculaneum samples for mass spectrometry. Unfortunately, the second attempted yield samples had not been so successful. Due once more to human error in which I failed to read an email in time to stop me gelatinising prematurely (...ahem), my second attempt was once more a failure.

However, not to worry! As we get ready for the Christmas holidays I have the mass spectrometry results for both batches of the Herculaneum samples, and am soon to have third time lucky extracted yield data (FINGERS CROSSED!).

My point is, as with everything, not every aspect of a dissertation will go smoothly. One day you can be floating on the joy of success only to plunge without warning into set back. The trick is to not give up. We have all had our fair share of anger and stress-induced hair pulling, however, these moments are but temporary, and the frustration we feel from set back will be negated tenfold by eventual accomplishment.

To those yet to begin, if there is one piece of advice I can give, it is to start early. Without doing so I would never have had the time to rectify the setbacks that were beyond, and within, my control.

It does not matter if you are BA or BSc, Prehistory or Historical; the earlier you start, the more time there is to rectify inevitable problems. With time on your side there is always chance to address issues and work around them.

Thus in a nutshell, second years: start early, be adaptable and do not throw or damage any library books in a murderous, academic rage. You will get a fine. Third years, ditto on the books; keep positive and relish your achievements. And if that does not help, just remember, it will be over by April!

Castles and Women by Jessica Smith

My dissertation will focus on women and domestic life within Medieval castles and fortified manor houses in the North of England, specifically Yorkshire, and explore how the roles of women and domestic life are made visible and are considered within heritage material.

The methodology is as follows: It involves going to all my five sites (Helmsley Castle, Skipton Castle, Middleham Castle, Ripley Castle and Scarborough Castle), taking notes on all the information boards, seeing if they mentioned the women who lived there and domestic life in general, then looking at the guidebooks to see if they mention the same. Finally, I have conducted a questionnaire to some of the visitors I encountered at these sites to see what they remembered, such as who were the main characters mentioned during the visit and what were the main stories told. This is because all too often castles only tell their military history and if they do not have much of a military history then they simply tell of the lords who lived there and what they did, portraying castle life in general as a very masculine thing. Obviously, this dissertation is taking a mildly feminist approach.

I chose this topic for a few reasons. Firstly, that I find castles fascinating and thought that spending some time going around visiting them would be nice. Secondly, that I have, since first year, thought that women are a little ignored in the archaeological record in medieval writing and that that should be addressed. Finally, that after a little reading about castles (which are also covered in second year), I discovered that the main debate within archaeology on castles is about their purpose: symbolic vs. military, and that neither of those really considered the role of the castle in a domestic setting.

Some problems I have had have been in getting my questionnaires answered; people are not always happy to stop for two minutes when they are on a day out to talk to a student with a clipboard. This is dependent on a few variables: weather and their temperament. Some people just do not like answering questionnaires and most in general will actively avoid you. Another problem I have had is in finding relevant feminist literature on castles and on making medieval women visible; there is not a lot of literature out there as yet. The

heritage sector literature is especially lacking; it seems that feminism is slow in reaching that stage. My final problem and one I am still working on is that of how to use the information gathered in my questionnaires, as it is qualitative not quantitative.

**'Lovely Little Places' – The Prefabs of the Excalibur Estate, London
by Harry Gregory**

Prefabricated houses, 'prefabs', are a type of building that were seen briefly in this country in the years following the Second World War and were built to temporarily replace houses that had been bombed out during the conflict. Around 156,000 prefabs were built in the UK and whilst there are several types, they all share common features in design; they were built in factories out of various materials such as wood, asbestos and aluminium. Designed to stand for a maximum of ten to fifteen years, a handful have survived to this day despite their intended short life span. The Excalibur estate in Catford, South East London is Britain's largest remaining estate of prefabs consisting of 187, and a unique prefabricated church built between 1946-7, but is currently at risk of demolition. Whilst six of the prefabs have been granted Grade II listed status, the rest are at risk. The main aim of my dissertation will be looking at whether the decision to completely replace the estate with modern housing is the right one.

Under current English Heritage guidelines, Policy Planning Statement 5, where there has been more of a focus on the social heritage of buildings, these buildings are arguably worthy of preservation. However, since starting my dissertation there have been proposed changes to the current guidelines which means that buildings such as the prefabs might not be protected as they once were. Therefore, the aims of the dissertation have changed slightly since starting, which whilst sounding slightly problematic has made the work more interesting.

The major problem with work such as this is the lack of academic writing on the subject; either it is a very sterile history of prefabs in general, or it is a social narrative of living in prefabs, which whilst useful are not ideal. The second problem, which I am sure is not exclusive to dissertation work, is getting information from people. I cannot count how many emails I have sent to people trying to find information, and to have very few replies. However, as with most things it is all about persistence and as long as you are enjoying it then do not worry; those pesky people will and do eventually reply!

Whilst having no personal ties to prefabs, or the area in the London, I find this area of archaeology, that of the contemporary, overly interesting. I have always had a strong interest in more recent history, especially the industrial era, and whilst this dissertation may come more under heritage than archaeology, I would argue that the study of buildings such as these from the contemporary past are as equally valid as the study of a medieval cottage or a Georgian town house. Prefabs only appear for a very brief time in Britain's architectural landscape; however, they are intrinsically linked to the Austerity period after the Second World War and the beginnings of the welfare state, a time which is very potent in the development of Britain's current cultural heritage. Despite the fact that prefabs were specifically designed to be torn down after ten to fifteen years, these unusual buildings should be recognised as part of recent cultural heritage,

and hopefully some reminder to their presence will remain on the Excalibur estate, as well as in the public consciousness.

3 A Brief History of Great War Archaeology on the Western Front

Alex Sotheran

The Great War of 1914-1918 was a time of major upheaval and change throughout Europe and the world. The four year conflict left millions dead and changed parts of the landscape of France and Belgium forever. The scars of battle are still prevalent today in the form of trenches, craters and damage to buildings; it is these scars the modern day battlefield archaeologist hopes to explore and further understand. This article intends to give a rough guide to the history of archaeological practices carried out on the Western Front.

A massive amount of data is available for the study of the Great War in a historical sense. Data from the Official Histories down to the letters and diaries of private soldiers exists for study and are readily available. The problem that lies within this data set is that it is subjective in that it only records army movements (as in the Official Histories) or how a particular person was feeling about a certain situation (as in the diaries). What this data rarely covers is the minutiae of every day life of the soldiers and the daily routine of trench life. This is where Great War archaeology bridges the gap in an attempt to understand the Great War from another perspective.

Great War archaeology had been in existence since the very outbreak of the war with the creation of the longest section faces ever known with the digging of the trenches by the opposing armies. These resulted in archaeological trenches running some 500 miles from the Belgian coast to the border of France and Switzerland and in doing so uncovered more archaeological remains than ever seen before or since. Obviously the very nature of the recording of these discoveries varied through the need for soldiers to get under cover as soon as possible. Having said that, there were instances where archaeological discoveries were treated in a manner respecting their importance to the understanding of antiquity. One of the more outstanding examples is that of Bucy-le-Long, where German soldiers excavating communication trenches in February 1915 happened upon a 'Gaulish' cemetery. The local commander realised the importance of this discovery and set a volunteer to work on excavating and recording the remains. In total, thirty two tombs of the La Tne period were recorded. The site was investigated again in the 1970s and the total number of excavated tombs was brought to around three hundred and fifty. The thirty two tombs excavated in 1915 were a small part of the cemetery that was actually destroyed by quarrying that led to the site's 'rediscovery' in the 1970s.

There was a period immediately after the war (1919) that ran all the way up to the 1990s, in which there was no academic approach to the archaeology of the Great War, so to speak. Immediately after the war the old battlefields were reconstructed as people started to make their way back to their former lives and properties. As this went on, the precursor to the Commonwealth War Graves Commission (the Imperial War Graves Commission) scoured the battlefields in search parties in an attempt to locate and rebury the missing soldiers. This is now described as forensic archaeology, but at the time it was an official duty to respect the remains of the fallen.



Figure 1 – Author discovering wooden trench boarding, Ypres 2010 (Image Copyright – Alex Sotheran)

Another development during this time was the burgeoning collector's field. Military objects taken from the old battlefields quickly became collector items and were surreptitiously gathered to feed this growing demand. Human remains that would be uncovered were quickly reburied with no ceremony or attempt to rename. In France and Belgium the local archaeological authorities did not recognise the battlefields as worthy of archaeological investigation except in very rare cases, such as the TGV line that ran across the Great War battlefields to Paris. By the 1980s local French and Belgian enthusiasts along with a few British counterparts began amateur attempts at archaeological excavations on the Western Front. These groups took their work seriously, even if it had little academic merit, as can be seen by the publication of *Battlefield Archaeology* by John Laffin in 1987.

Within the 1990s a new approach had been developed within the field of this amateur battlefield archaeology. The loose knit groups of amateurs began banding together and the amount of excavations quickened in pace. In France archaeological excavations were mainly carried out by professional archaeologists as part of other archaeological works when Great War remains were encountered. This shift happened differently in Belgium where amateur groups tended to be more historical based rather than archaeological based. The largest group of amateurs in Belgium, known as the Diggers, carried out excavations under the license of the archaeological authorities in Flanders. These were strictly amateur excavations and a documentary called *Battlefield Scavengers* brought their activities to a wider audience. It also scandalised their activities in the British press and calls for a parliamentary enquiry were heard.

In France, however, the approach remained pragmatic and during this time professionally led excavations were carried out under the responsibility of the

Direction Regionale des Affaires Culturelles (DRAC). DRAC has a responsibility to control a region's total archaeological heritage, much in the same way as the British County Archaeologists operate. In 1991, excavations at Saint-Rmy-la-Calonne recovered twenty one French soldiers, one of whom was the novelist Alain-Fournier. Other sites of interest excavated by the French archaeologists at this time include the twenty four Royal Fusiliers recovered at Monchy-Le-Preux, German remains from near Gavrelle and the Grimsby Chums at Le Point du Jour.

By the end of the 1990s, Belgian battlefield archaeology had stalled with the negative publicity of the Diggers' activities in the British press. A solution was needed and in 2003 the Department of First World War Archaeology was inaugurated as part of the wider Institute of Archaeological Heritage (IAP). This development went hand in hand with the A19 project, a proposed road scheme that ran across old battlefields outside Ypres. This scheme was subsequently stopped due to the sensitive nature of the ground which the road ran over, and was only possible through the work of the Department.



*Figure 2 – '08 webbing with cartridges attached, discovered by author, Ypres 2010
(Image Copyright – Alex Sotheran)*

Back in France, the early 2000s saw the development of what became known as 'No Man's Land' (NML): a collection of professional archaeologists, historians and other interested parties. Working primarily at Auchonvillers tea rooms to excavate and reconstruct a communication trench and to discover if the cellar of the original building had been used as a dressing station, this team went from strength to strength. Work with the BBC at Serre showed an attempt to discover Wilfred Owen's dugout. Instead they recovered three sets of remains (one British, two German), leading to further television work. Two series of *Finding the Fallen* were commissioned by a Canadian production company

(YAP Films) and a one off special. During this time the team excavated no less than twelve battlefield sites: namely; Serre, Loos, Beaumont, Bixschoote and Forward Cottage (near Ypres), Hill 70 (near Loos), Moreuil Wood, Courcellette, Gheluvelt and Bournal Wood, Hanon Wood and Monchy Le Preux. The team were also asked to help excavations in a cross community project from Northern Ireland headed by the Somme Association of Belfast. This involved bringing volunteers from Northern Ireland and using the expertise of NML members to excavate the frontline trench system that the 36th (Ulster) Division had fought from during the battle of the Somme. The premise of this ongoing excavation was education and interpretation, with the excavations being reconstructed using period techniques to give the visiting public a chance to see how the trenches would have appeared. NML are also involved in ongoing excavations at Plug Street near Messines in Belgium.

Alongside NML there exist smaller groups who also operate in Belgium and France. One of the older groups is the Durand Group whose main interest is in exploring the underground tunnel systems of the Great War. A labyrinth of tunnels was created during 1914 and 1918 to carry soldiers to the front but were also used as explosive mine shafts. Many of these still exist and occasionally 'sink holes' appear without warning in farmers' fields (sometimes under houses!). The Durand Group use their combined experiences to map and record these subterranean features. GUARD based in Glasgow University have also run excavations on the Western Front, along with the historian Peter Barton, one of which has been the feature of a Time Team Special. Oxford Archaeology also carried out excavations at the mass grave of Fromelles which in turn led to the creation of the newest Commonwealth War Grave Commission cemetery. These excavations involved the taking and tracing of DNA to identify the fallen soldiers to their modern Australian descendents.

Hopefully this piece will have demonstrated that there is a lot of archaeological activity that is ongoing on the Western Front in France and Belgium, some of this beginning during the war itself. This is only a taster of the archaeological work that has been carried out and it is suggested that anyone interested in following up this article use the suggested reading list that follows. The approach to Great War archaeology began, at best, as an amateur endeavour of collectors but has grown beyond these as a discipline in its own right. Taking modern archaeological techniques and applying them to the battlefields of the Western Front, archaeologists can hope to gain hitherto unseen and unexplored knowledge of the conduct of the war.

Suggested further reading and resources

- Brown, M. & Osgood, R. (2009). *Digging up Plugstreet*. Yeovil: Haynes
- De Meyer, M. & Pype, P. (2004). *The A19 Project: Archaeological Research at Cross Roads*. Flanders: AWA Publications.
- Desfosses, Y. Jacques, A. & Priloux, G. (2009). *Great War Archaeology*. Rennes: Editions Ouest-France.
- Discovery Communications, Inc. (2005). *Finding the Fallen*. [DVD]
- Robertshaw, A. & Kenyon, D. (2008). *Digging the Trenches: the archaeology of the Western Front*. Barnsley: Pen & Sword Military.

- Saunders, N.J. (2007). *Killing Time: Archaeology and the First World War*. Stroud: Sutton Publishing.
- Summers, J., et al. (2010). *Remembering Fromelles: A New Cemetery for a New Century*. Maidenhead: CWGC Publishing.
- Association for World War Archaeology Website: www.a-w-a.be/ (<http://www.a-w-a.be/>)
- The Durand Group Website: www.durandgroup.org.uk/ (<http://tinyurl.com/coxgr5s>)
- Great War Archaeology Group Website: www.gwag.org/ (<http://www.gwag.org/>)
- No Man's Land Website: www.no-mans-land.info/ (<http://tinyurl.com/cxx95vn>)
- Plugstreet Blog: plugstreet.blogspot.com/ (<http://tinyurl.com/kksu43>)
- The Sergeant Alvin C. York Project Website: www.sergeantyorkproject.com/ (<http://tinyurl.com/cm9udsu>)

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4 Mysteries of the Deep? Pleistocene Archaeology and the Underwater Record.

Jennifer Borrett (mailto:jb793@york.ac.uk)

Of all the modules I have studied at King's Manor, perhaps my favourite has been Geoff Bailey's Prehistoric Coastlines. This is a summary, as best I can manage, of what I learned. I cannot think that there is any more important consideration when researching the Palaeolithic than the fact that most of the archaeology from this time might now be underwater.

Why so? The coastlines we see all around the Earth now have only looked like that during the last 6,000 years. Before then, we were in the grip of an ice age and our planet looked much less blue than it does now. This is due to the sheer size of the ice-caps. Much of the water in our current seas and oceans was trapped as ice at the poles, bringing sea-levels down to striking levels, as much as 120 metres in places (Bailey and Flemming, 2008) and revealing extensive lowland plains. For ease of communication, I shall call our modern day land areas 'The Uplands' and the now submerged plains 'The Lowlands'.

How extreme was this sea-level change? Well, as an example of a Pleistocene Lowland, during the last ice age the North Sea was a vast Lowland, known as Doggerland, with evidence of birch shrubs and large game, possible permafrost (White 2006), valleys and rivers (Gaffney, *et al.* 2007). At times glaciers may have spread over it making it potentially uninhabitable to humans (we will discuss this later). Obviously finding archaeology from over 10,000 years ago, under the seabed of the North Sea is quite a task, so Palaeolithic human presence is often guesswork, except for some very exciting clues:-

- 1. A North Sea trawler working near the Dutch coast brought up a Neanderthal cranium with brow ridge which was reported in 2009 (Anon, 2009).
- 2. Another North Sea Trawler dredged up a cache of Mousterian (i.e. Neanderthal) stone tools in 2008 off the East Anglian coast (Keys, 2008).
- 3. There is a Neanderthal presence in England, at Beedings, indicated by tools that are currently dated at between 35-42,000 years ago (McGourty, 2008).

Though dating for Neanderthals is currently under review, it may be significantly older. This begs the question: how did they get to England? Well, they either crossed the North Sea plain, perhaps following the large game, or they would have had to cross a wide river that existed then across the channel. Either Neanderthals had the technology to survive extreme cold and tundra or they had the capacity to cross water. Now that is exciting! Furthermore, a new dating for England's first known *Homo sapiens* at 41,000 years old (Amos, 2011) means that our own species were crossing these lowland plains, or had water craft sturdy enough to cross the channel river, and may have been contemporary with Neanderthals if dating reviews can confirm this.



Figure 1 – Map of finds around European coasts (Image Copyright – Geoff Bailey)

These are just some of the many examples of potentially exciting lowland activity, and these areas exist around every continent, forming large Palaeolithic fertile plains and even land-bridges. Beringia is a famous land-bridge that connected Alaska with Siberia during the Palaeolithic. Sunda was an extended land region connecting many of the Indonesian Islands, and Sahul was a large continent that connected Australia to New Guinea.

Why might humans have strayed onto these lowland plains? Well, the Lowlands could actually have been far more attractive than the Uplands. The reasons: coastal resources, migration and drought.

During the last Ice Age, drought conditions existed in the Uplands which were caused by the volume of water held in the ice-caps. However, on the Lowlands the water table was higher. Flora and fauna were therefore richer on the Lowlands and one could hypothesise that humans would have clustered there too.

Secondly, there is the attraction of marine resources. There may be good reason why we see little archaeological evidence of marine and coastal exploitation during the Palaeolithic. Those habitats are now underwater and we are restricted to information from previously inland regions. However, after 10,000 years ago, there is abundant global evidence of shell middens, vast mounds of shells along coastlines that once provided food for people through the Holocene. There is some enquiry into whether such middens also exist underwater along the now submerged Palaeolithic coastlines, and this is currently being researched at the Red Sea (Bailey and Flemming, 2008). Also, at a time of variable patterns of climate change, when land food sources might have been unreliable, the sea can keep people alive, feeding them with fish, shellfish and even sea mammals if they can catch them. In fact, even now in very cold regions, the sea can support complex, very cultural communities of hunter-gathering humans as can be seen

on the Western Seaboard of Canada and Alaska. Fish from Arctic waters is very high in oils and therefore calories. Sea mammals can provide skins for homes, boats and clothes; bones for tools; and fat for burning as well as food. Therefore *Homo sapiens* may have been able to exist on frozen coastlines during the Ice-Age. There are, however, controversial implications of this. Could humans have survived on the edges of glaciers in the North during the last Ice Age? Indeed could they have held a niche in the area of the North Sea during the Last Glacial Maximum? Were Neanderthals capable of carving such a niche also? Sadly due to melting of such areas, we may never know.

Finally, there is the matter of migration, or stated rather more simply, human *movement* (humans may not have been aware they were migrating as such, perhaps just moving from resource to resource as pressure demanded). Even with simple watercraft like canoes, coastlines provide a quick and easy way to transport belongings and perhaps whole families. Indeed, in some places communities today live on boats instead of land. Trade and contact with fellow coastal groups is made easier, providing emergency fallback for each other in times of hardship. This is suspected as a dispersal method into the Americas, from Siberia, across Beringia, and down the west coast of Alaska, Canada and North America. However, dates of human occupation in South America, for example at Monte Verdi dated at 14,220 and 13,980 years ago (Dillahay, *et al.* 2008), appear to be earlier than the appearance of an ice-free corridor that opened along Beringia after 11kya (Bradbury and Stanford, 2010). This could suggest a second, earlier, and as yet unsolved dispersal into the Americas.

Therefore, in more frozen lands, coasts could have provided an essential path around the ice and possibly a favoured travelling route. Once watercraft were invented, travel by water was possibly faster and easier than over land in all zones. The young, frail, heavily pregnant and elderly do not have to walk, and heavy belongings do not have to be carried if they are travelling by boat. In addition, water, whether by sea or river, will take people from one well-watered fertile zone to the next, more than land travel would. Large land predators, such as the sabre-toothed big cats of the Pleistocene, would find travelling humans to be out of their reach. One could easily imagine how well nourished family groups who travelled rapidly and safely along fertile coastlines would have considerable advantage over those family groups that travelled slowly on foot over the dry Uplands. Such people may though have become dependent on migrating herds of game for resources, analogous with the Chukchi of Siberia who are traditionally reliant on reindeers.

What is the impact of these potential regions on current archaeological understanding? It could be immense. We could be underestimating the spread of *Homo sapiens*, and maybe even the Neanderthals during the last Ice Age. At worst, we could be missing the majority of archaeological evidence from this time. The remains found on the Uplands may not be truly representative of human cultural and technological behaviour at this time. We may be missing early *Homo sapiens* art, possible Neanderthal cultural activity, and complex Palaeolithic communities.

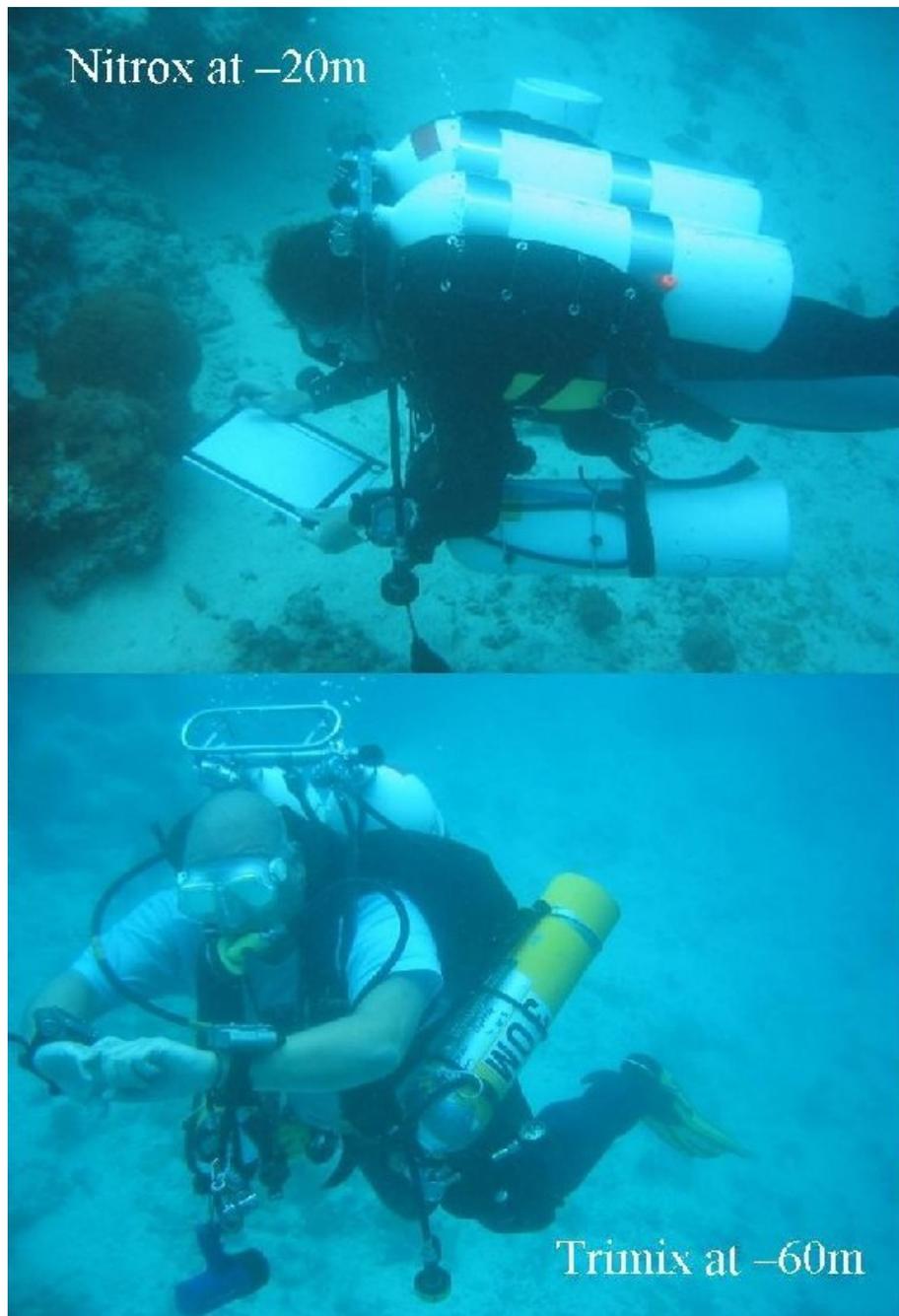


Figure 2 – Divers looking for archaeological deposits (Image Copyright – Geoff Bailey)

But can anything be done about this? Is this heritage lost forever? It is not believed to be so (Bailey and Flemming, 2008). Areas of real potential have been identified, such as Gibraltar and the Red Sea, but from there the problem is the cost, as well as the practical constraints of research. In areas like the North Sea, archaeology prior to around 24,000 years ago may have been

destroyed by the intense glaciation of the Last Glacial Maximum that ran from that time to around 15,000 years ago. However, the East Anglian tool cache and the Dutch Neanderthal skull did survive, but having been dredged, are of unknown context. Could they have been dragged from a rich, meaningful, and in fact priceless context which now lies destroyed under the sea?

Perhaps the most important consideration for now is to identify the most pertinent undersea areas and place them under protection from any further human and environmental damage. One day archaeology may be well placed to research very effectively there, and it would be a tragedy for them if we let these areas be rendered useless now by human activity such as off-shore wind farms, oil prospecting and benthic trawler fishing methods. Perhaps we owe something to future generations by creating undersea World Heritage Sites.

A Glossary and some further info

- **Beringia** – This was a land-bridge that connected Siberia to Alaska when sea levels were low. However, it was heavily glaciated, except for the opening of an ice-free corridor between Alaska and Siberia allowing a window of opportunity for dispersal of humans from Siberia into the Americas.
- **Doggerland** – This is the name given for the land-bridge that connected Britain to Europe during the last Ice Age.
- **Palaeolithic** – Also known as the Old Stone Age, it is divided into Early, Middle and Late, with Late Palaeolithic coinciding with the Last Glacial Maximum. The dating of this varies around the planet.
- **Pleistocene** – The last Ice Age, running from 2 million years ago to 10kya. The climate in Europe was very unstable at this time, marked by swinging temperatures in the low range, high snowfall and fierce winds, but other regions were more temperate, yet prone to drought.
- **Holocene** – Our current time period, starting around 10,000 years ago, marked by a temperate and relatively stable climate. This saw also the start of the Mesolithic period.
- **Benthic Trawler Fishing** – This is a fishing technique that involves scraping the sea floor with a large heavy metal bar that is followed by a huge net, in order to make large catches of fish. Ecologically it is very damaging; the majority of the catch is useless and thrown away dead (often they die painfully from decompression being deep-sea animals), but additionally, archaeological contexts may be destroyed. This is a commonplace fishing method in the North Sea, bringing up mainly Mesolithic material, bones of large land mammals but sometimes Palaeolithic archaeology.
- **Last Glacial Maximum** – Around 24,000 years ago, Europe became suddenly much colder and the Ice Age reached its maximum extent, with glaciers covering Wales and reaching East Anglia. This is known as the Last Glacial Maximum and most of Europe may not have been habitable. It was followed by sudden warming and melting, with sea levels rising erratically, at around 15,000 years ago. 10,000 years ago the climate stabilised, marking the start of the Holocene.

- **Shell Midden** – Huge mounds of shells in coastal areas that result from human shellfish economies. They can be full of fascinating archaeology, including other foods and objects and even burials. Modern coastal humans still build up shell middens in some areas.
- **Sahul and Sunda** – Humans (modern) may have been present in Australia 60,000 years ago. Very odd when it could only be reached by sea. Sahul and Sunda did not have a land-bridge. Did we get there by boat? Or washed up there by storms or tsunamis? How did *Homo floresiensis* (possibly a *homo erectus* type) reach the island of Flores across water? Some interesting questions exist here.
- **Gibraltar and Norway** – These areas have coasts more similar to those of the Pleistocene, compared to other regions, resulting in more Palaeolithic archaeology. This suggests that people were indeed living on coastlines at this time. Neanderthals are shown to have utilised marine resources in Gibraltar.
- **Monte Verdi** – In Chile, South America, this is currently the earliest known presence of humans in the Americas and dated at 15,000 years old, is earlier (and very far away from) the opening of the Beringia land bridge. Interesting!

Bibliography

- Amos, J. (2011). Teeth and jaw are from earliest Europeans. *BBC News: Science and Environment* [online] available at www.bbc.co.uk/news/science-environment-15540464 (<http://tinyurl.com/3gwsneb>) Accessed 21-11-2011.
- Anon (2009). Neanderthal of the North Sea. *Natural History Museum* [online] available at www.nhm.ac.uk/about-us/news/2009/june/neanderthal-of-the-north-sea32888.html (<http://tinyurl.com/boovaxc>) Accessed 21-11-2011.
- Bailey, G.N. and Flemming, N.C. (2008). Archaeology of the continental shelf: marine resources, submerged landscapes and underwater archaeology. *Quaternary Science Reviews*. 27 (2324), 21532165.
- Bradbury, B. and Stanford, D. (2010). The North Atlantic ice-edge corridor: a possible Palaeolithic route into the New World. *World Archaeology*. 36 (4), 459-478.
- Gaffney, V.L., Thomson, K. and Fitch, S. (2007). *Mapping Doggerland: the Mesolithic landscapes of the southern North Sea*. Oxford: Archaeopress.
- Keys, D. (2008). Neanderthal treasure trove at bottom of sea. *The Independent* [online] available at www.independent.co.uk/news/uk/home-news/neanderthal-treasure-trove-at-bottom-of-sea-793678.html (<http://tinyurl.com/2czye8>) Accessed 21-11-2011.

- McGourty, C. (2008). Neanderthal tools found at dig. *BBC News* [online] available at news.bbc.co.uk/1/hi/sci/tech/7466735.stm (<http://tinyurl.com/cxatah2>) Accessed 21-11-2-11.
- White, M.J. (2006). Things to do in Doggerland when you are dead: surviving IOS3 at the North-Westernmost fringe of Middle Palaeolithic Europe. *World Archaeology*. 38 (4), 547-575.

5 My Ideal Archaeological Christmas Present...

Staff & Post Graduates

Ever wondered what to buy the archaeologist in your life at Christmas time? Well wonder no more! In this fun article, staff and post graduate students of the University of York archaeology department share their ideal archaeological Christmas gifts with us...

Dr Oliver Craig – “A week off...”

Dr Cath Neal – “Munsell chart.”

Jocelyn Hayes (staff and post-grad) – “I have been thinking of trying to disguise my boiler vent extractor that spews out clouds of steam – with something more decorative such as a dragon shaped gargoyle so that at least it will look more decorative and exciting with a dragon breathing out steam... Otherwise – a William Morris or Ruskin’s drawings calendar would do nicely...”

Prof. Terry O’Connor – “Ideal archaeological Christmas present? Obvious – a pair of state-of-the-art replacement knee joints!”

Dr Steve Ashby – “For me it would obviously be a well-provenanced Ashby Type 8b comb with chequerboard decoration and a nice runic inscription.”



Figure 1 – Merry Christmas from The Post Hole (Image Copyright – Mark Simpson)

Prof. Matthew Collins – “A robot to speed up sample preparation in the lab, so we could move bioarchaeological analysis onto an ‘industrial scale’.”

Michael Tigwell (post-grad) – “My ideal archaeological Christmas present would be: ‘Dr Alice Roberts’ Preferably, gift-wrapped and delivered to my home in Suffolk!”

Dr Soren Sindbaek – “The ideal archaeological Christmas present? The app which turns your iPhone into a portable 3D RXF scanner and automatically uploads the results to Facebook (but ask again if the Benghazi treasure turns up on e-Bay).”

Lee G. Broderick (post-grad) – “A time machine. Not to go back to the past, just to freeze the present so that I could get all my work done.”

Robbin van Splunder – “Archaeological christmas present? A trowel in the shape of a christmas tree.”

Katie Whitaker (post-grad) – “Can’t say I wouldn’t mind a huge skeletal collection with excellent preservation and permission to sample as much as I want!”

Prof. Julian Richards – “A time machine – so I could check out a few theories.”

Thanks to all the staff and post-graduates that took the time to reply, and a Merry Christmas to all our readers.

6 Theory 101

Erik De'Scathebury

So many *isms*, so little time...

In the last issue, we looked at the rise of Archaeological Theory (AT) and what it meant to the profession, today we shall be turning our sights on one of the early stars of AT: Functionalism. Ah yes, functionalism, that great paradigm of theory which looked at society as though it were a living organism with all its various factions and facets playing its own special part in supporting the *function* (get it?) of the whole. As you can probably imagine, if one of those *subsystems* were to say, break down (shock horror right?) it would be very bad for us all. This is because in this model, each part of society or its subsequent culture are viewed as intrinsically important to the smooth running or *function* of larger systems, thus falling under the umbrella of *Systems Theory* (a school of thought which is defined very basically in the same fashion as the aforementioned *functionalism*).

Now surely to the modern analytical mind with a greater understanding of sociology or the broader social sciences as a whole, this must read like an exceedingly flawed system, as it allows for little or no social mobility, with a society that must remain static. However in the late 19th century, notable *functionalists* such as August Comte, Herbert Spencer, Emile Durkheim, Alfred Radcliffe-Brown and Bronislaw Malinowski were passionate about the idea that cultures acted as organisms, with their past easily explained in terms of their overall function in relation to one another as well as that culture as a whole. When the archaeologists of the mid-20th century felt that their intellectual efforts were effectively drying up, forward thinkers, like David Clarke, proposed a way of introducing science-based archaeological techniques to the profession, and *functionalism* had a significant part to play in that.

Much of *functionalist* archaeology was born out of *functionalist anthropology*, which placed a significant emphasis on social structures, the artefact values, as well as group based social systems. From *cultural ecology* was borrowed the concepts of the way in which technology and the environment interrelate; the impact upon the development of cultures caused by the exploitation of a society's environment. As a result, the relationship between culture and environment was explored as a process rather than merely a collection of assemblages. Once distilled by the *functionalist* archaeologist, society can be seen to develop to merely facilitate the sociological and cultural structure or function of the society itself. Furthermore, the more complex a culture and its technology may be, the more improved its knowledge of the environment in which it functions, and its technological machinations and manipulations within it will be.

As I mentioned above, all of this fits neatly into the *New Archaeology* and *Processualism* (yes, we have come back to it again, you will find this often with AT). *Processualism* expanded upon the more basic *functionalism* which introduced deduction, explanation, generalisation and quantitative scientific objectivity to the profession, and expanded the archaeological *systems theory* to include such important advances as the use of computers, the study of environmental remains, pollen diagrams, dating techniques, soil geomorphology and palaeopathology. This laid the groundwork for David Clarke's vision of a recognised and accepted

scientific archaeology, and proves that *processualism* is not all bad. Ironically the term *processualism* was not even used to describe these archaeologists, until in the 1980s, when the self-proclaimed *post-processualists* created the word so that they could embody the archaeological parallel to the anthropological *post-structuralists*.

Once again, by the late 20th century, the archaeological profession had those members within it that saw the slow death of any true intellectual development within the field. *Post-processualism* or as it is sometimes referred to, *interpretive archaeology*, developed out of this general dissatisfaction or the malaise of the *New Archaeology* of Clarke's era. Unlike their adversaries, the *processualists*, the *post-processualists* rejected the idea that science, theory and data were separate entities, because in their opinion, data is always theory-heavy. Furthermore, they argued that interpretation was biased by the meanings we as archaeologists assign to them either consciously or subconsciously, and we merely assume those meanings and values assigned to ancient cultures as we cannot understand the mind of these ancient peoples. Additionally, no matter how detached and logical an archaeologist might consider themselves to be, it is impossible to disconnect the associations we might place on an object due to our place within the socio-political present in which we reside.

Finally, context is key to understanding meaning of assemblages within their culture or a culture's place within a larger society or landscape. Without this, we cannot begin to see beyond our own preconceptions and gain a deeper insight into the assemblages and cultures we examine as archaeologists. With *contextualism*, archaeologists have a tool which can be applied to understand an object, and how it has come about, by placing it in its relationship to the larger functioning whole, thus referring back to the environmental and behavioural context of action and expression. *Contextualism* also considers the relationships between the individual, society and the moment throughout the long-term, differing from the more simplistic views in a search for deeper meaning which is often tied to the historical context.

In the next Theory 101, I will be examining Archaeological *Marrism* in all its productive glory. If you have any questions about this or any of the themes covered in Theory 101, please send them to the editors who will be glad to pass them on to me to be answered in the next article. Thank you for joining me on this theoretical journey, and I hope you enjoyed the ride.

7 Competition Winner

Thanks to everybody who entered the Alice Roberts signed book competition in Issue 18, I can reveal that the winner is...

Sam Briscoe

Sam has been informed and will collect his prize soon from the Editorial team at King's Manor.

About The Post Hole

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