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# CREATING AND CHARACTERIZING A MODERN CONFLICT LANDSCAPE: A 1<sup>ST</sup> WORLD WAR EXAMPLE FROM AVESNES-LÈS-BAPAUME, FRANCE, 1914-18

## ARCHAEOLOGY OF A BATTLEFIELD BETWEEN ALBERT AND BAPAUME

Vincent Merkenbreack

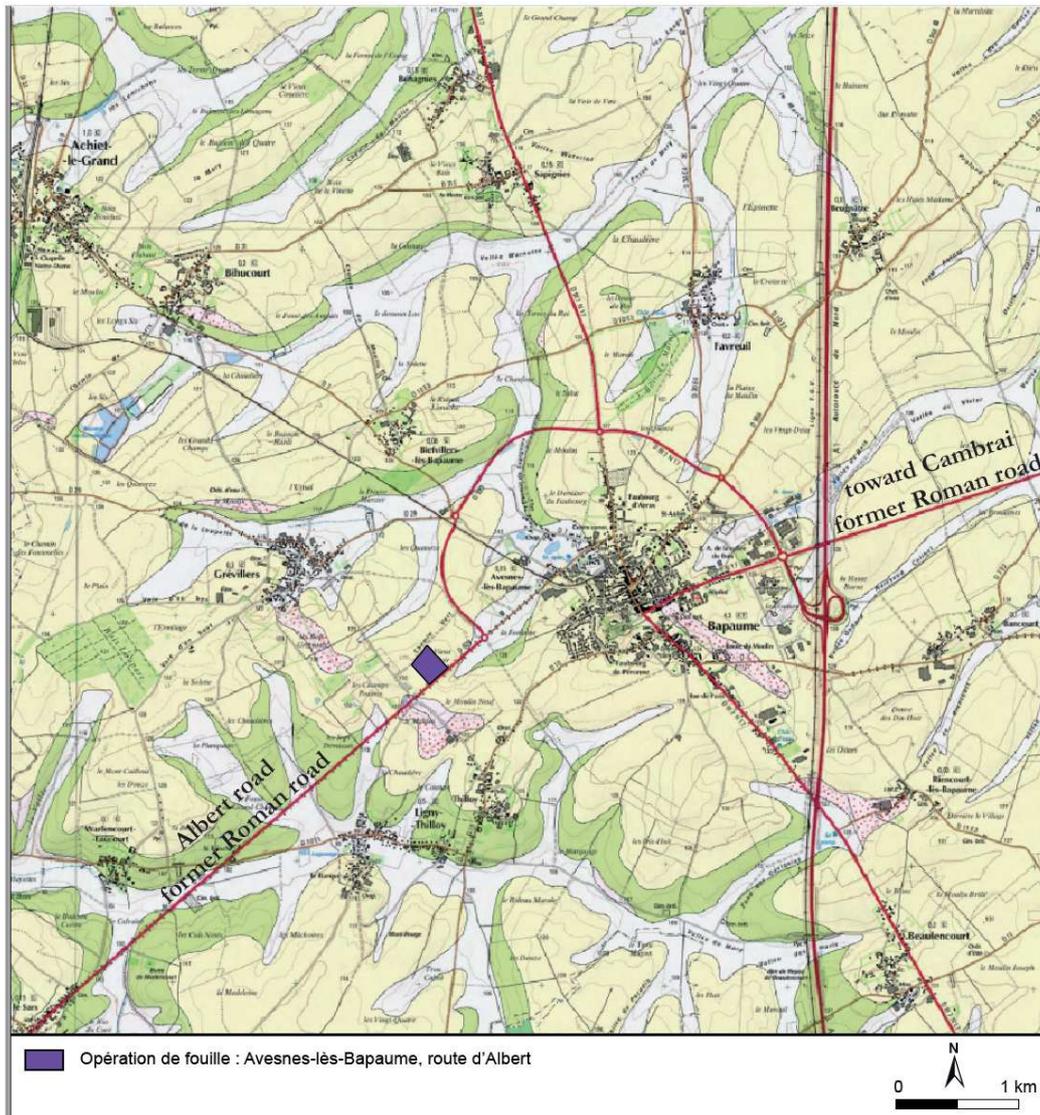
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### ABSTRACT

The area of Artois where Avesnes-lès-Bapaume is located, on the border of the department of the Somme, was the scene of several conflicts during the contemporary period, from the Franco-Prussian war of 1870 to the Second World War. The archaeological operation, in 2016 and 2017, along Albert road, a former Roman road, was an opportunity to expose a former battlefield of the First World War on an archaeological site containing the remains of Protohistory and Roman periods. Although the archaeology of the First World War has developed since the 1990s, it still remains an archaeological opportunity in anticipation of a comprehensive methodological approach of the French territory.

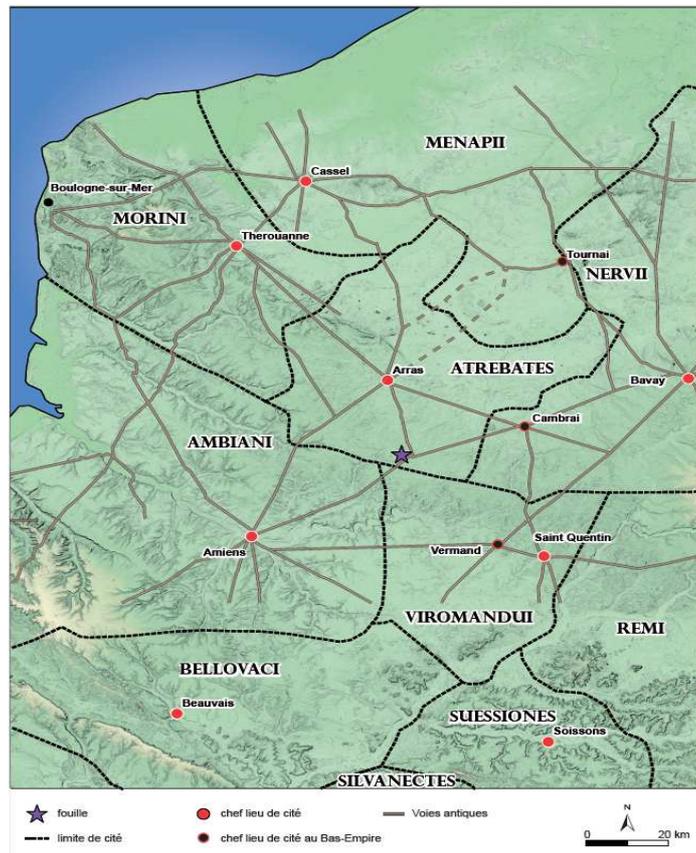
**Keywords** : Northern France; Pas-de-Calais; 1<sup>st</sup> World War; battlefield archaeology; soldiers' graves; pillbox

# INTRODUCTION



**FIGURE 1 LOCATION OF THE ARCHAEOLOGICAL DIG © C. COSTEUX, DA 62**

Initially, in 2016, the archaeological operation prescribed by the French Ministry of Culture was defined for a Gallic farm and a secondary Roman town along the road leading from Bagacvm (Bavay) to Samarobriua (Amiens) via Cameracvm (Cambrai) (Figure 1). The main archaeological remains corresponded to silos and Gallic enclosures, Roman elements of houses, crafts (pottery kilns, butcher's shop), together with numerous tombs, all along a main Roman road. The archaeological site of great importance located at the crossroads of the territories of Nerviens, Ambiens, Atrebatas and Viromanduens (Figure 2) dating from the 9<sup>th</sup> century BC until the 4<sup>th</sup> century AD, was also a battlefield during the 1<sup>st</sup> World War. These are the remains we will be discussing in this paper: an archaeological palimpsest (which can be deadly on a 1<sup>st</sup> World War battlefield; Saunders 2002: 101), an archaeological opportunity of a contemporary battlefield.



**FIGURE 2 ROMAN CITIES AND LOCALIZATION OF THE EXCAVATION © C. COSTEUX, DA 62**

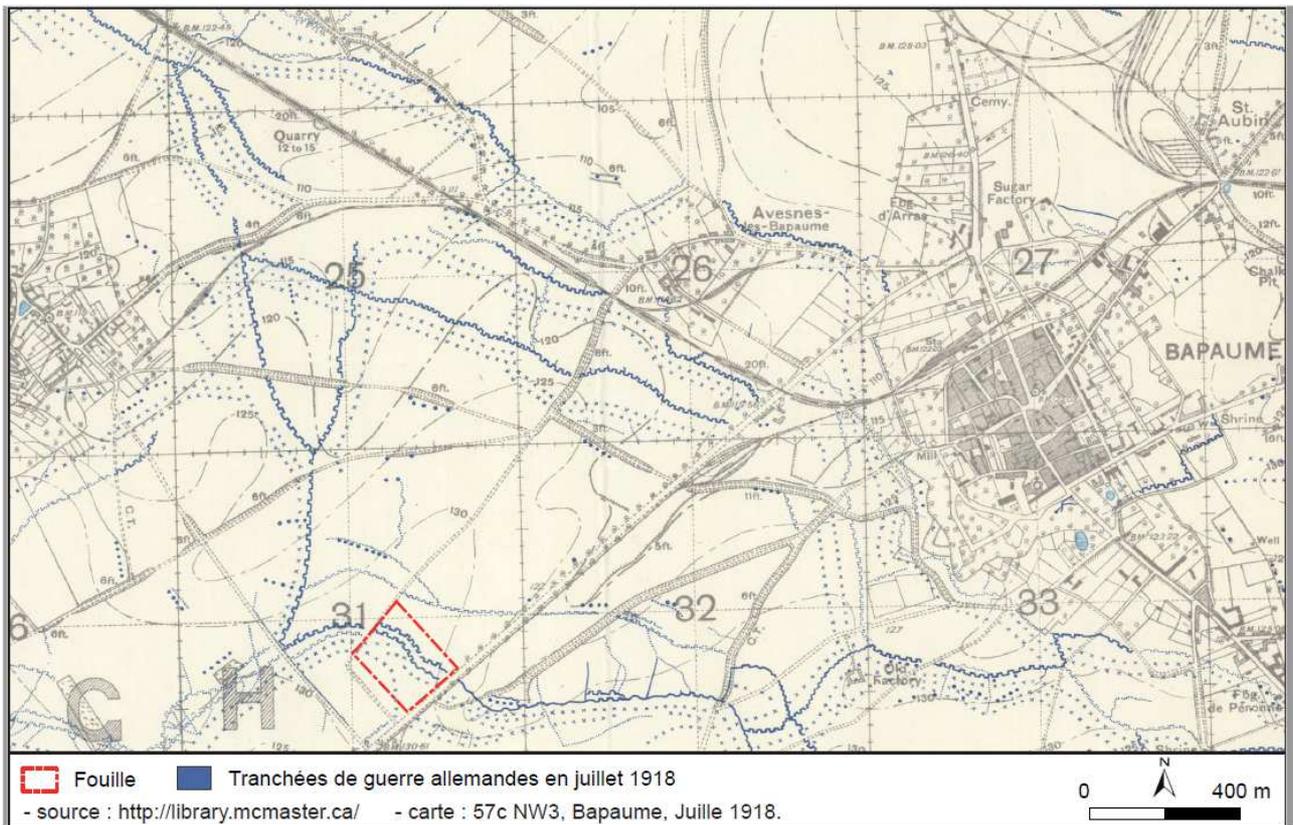
## BRIEF HISTORICAL REVIEW

After the first months of the positioning war and what is called the 'race to the sea', the front stabilised at the end of 1914. In the south of the Artois, after the first battle of Albert (September 25<sup>th</sup>-29<sup>th</sup>, 1914), the positions of the different armies became static. The area of Bapaume then came under German control. The front line in this sector didn't undergo major changes for the first two years of the conflict.



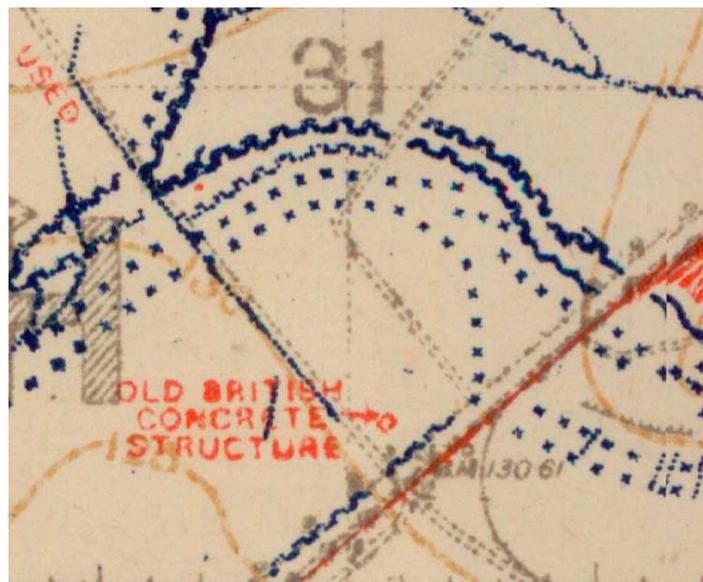
**FIGURE 3 THE BRITISH PILLBOX OF AVESNES-LÈS-BAPAUME © V. MERKENBREACK, DA 62**

In 1916, the city of Bapaume was an integral part of the offensive of the Somme which began on July 1<sup>st</sup>. The geographical area corresponds to the localities of Thiepval, Courcellette and Martinpuich. The great battle of the Somme lasted from July 1<sup>st</sup>, 1916 to November 18<sup>th</sup>, 1916 and didn't change the fate of the city; British troops were arrested near the village of Le Sars, 6 km from the first houses of Bapaume and 4 km from the present excavation.



**FIGURE 4 TRENCH MAP OF JULY 1918 © [HTTP://LIBRARY.MCMASTER.CA/](http://library.mcmaster.ca/)**

The town of Bapaume and the territory of Avesnes-lès-Bapaume remained under German control until March 1917, when the German army withdrew to the Hindenburg line. The Commonwealth forces remained for a year in the city of Bapaume and defended its surroundings. Archaeological remains dating from this period were discovered a few years ago east of Bapaume. The pillbox still in situ along the Albert road (Figure 3), is the last remaining British pillbox dating from the First World War in the Pas-de-Calais. The position is depicted on a single plan dated August 19<sup>th</sup>, 1918 (Figure 4); it is described as an "old British concrete structure" (Figure 5). The British therefore probably built it after the strategic withdrawal of the Germans in March 1917.



**FIGURE 5 FOCUS ON THE PILLBOX ON THE TRENCH MAP © [HTTP://LIBRARY.MCMASTER.CA/](http://library.mcmaster.ca/)**

During the spring of 1918, the Germans launched Operation Michael, a huge offensive that lasted from March 21<sup>st</sup>, 1918 until the early days of April. The city of Bapaume was liberated by the end of August 1918 (the 29th).

## FROM BATTLEFIELDS TO FIELDS

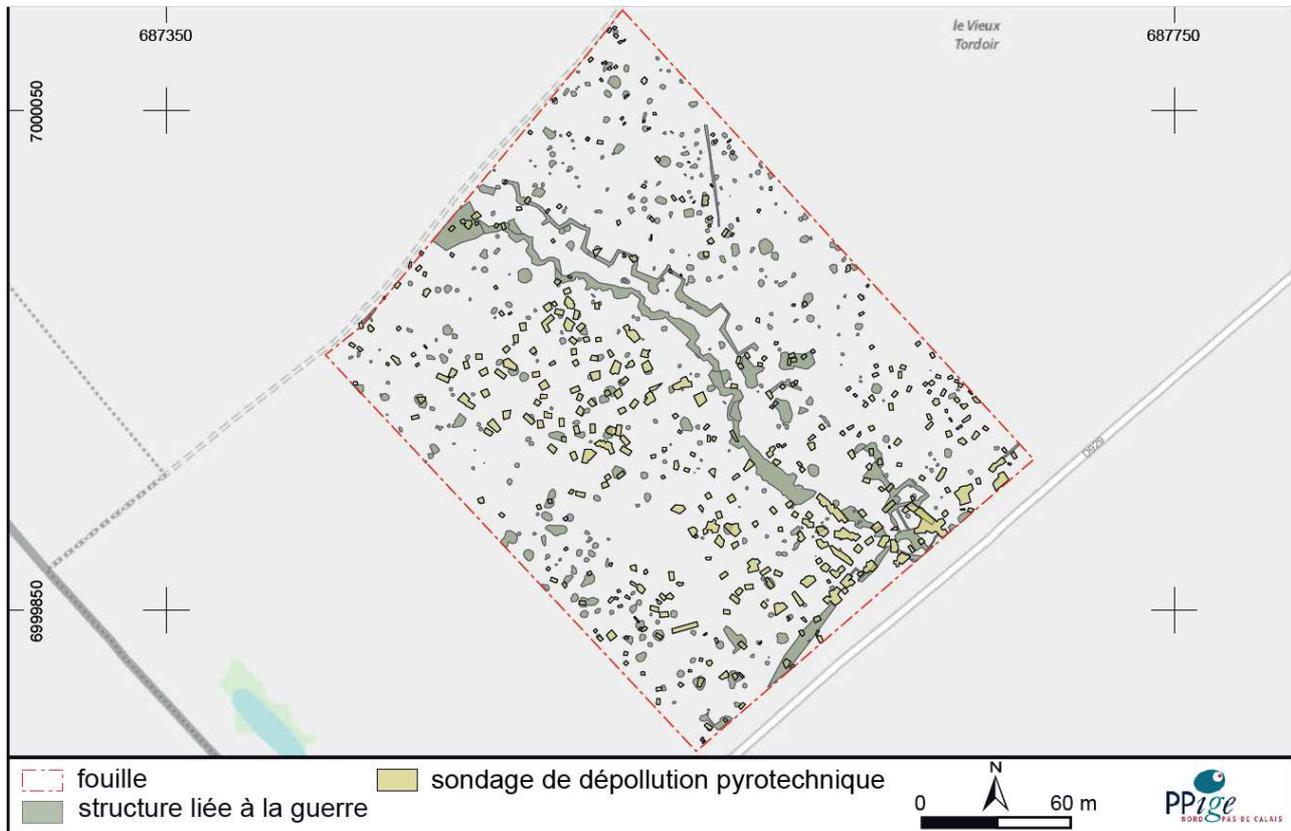


FIGURE 6 MAP OF THE WW1 REMAINS AND PYROTECHNICS HOLES © C. COSTEUX, DA 62

Since its destruction, the city of Bapaume was placed in the red zone after the Armistice for the risks related to the engines of war, by the French law of April 17<sup>th</sup>, 1919 on the "réparation des dommages causés par les faits de guerre" (repair of the damages caused by war). At the end of the war, a quarter of the Bapaume County is excluded from the first emergency work because of the red zone (Noël 2002: 164). Municipalities close to Bapaume were also devastated, like Avesnes-lès-Bapaume (Alexandre 1918: 149-150). The surrounding countryside bears the stigma of the First World War for some time and even becomes a place of interest with guided tours for tourists while the war is still raging. Guides dedicated to this tourism are emerging (Commemoration 2016, CWGC 2016, Anonymous 1919) before the area finally becomes suitable for agriculture again.

The high level of pyrotechnic pollution necessitated a longer than expected operation by several de-mining teams, which required their collaboration and a closure of the road RD929 in order to respect a 70 meter safety perimeter (just before the commemoration of the Centenary of the Battle of the Somme at Thiepval). The goal was to make the area safe and the pyrotechnic diagnosis took place on 7 ha representing the entire future planned construction; the pyrotechnic clearance required 52 days. A mesh of the area was established up to a depth of 2 m with a 100 pound bomb serving reference. 2214 objects were detected, corresponding to metallic elements such as rolls of barbed wire, corkscrew pickets, weapons, various equipment and, for the most part, corresponding to trench munitions or to artillery. The ammunition that was discovered, both German and British, includes explosive artillery projectiles (including rocket type KZ 14 7.7 cm, rocket 101 6 inches), grenades (more than 470 Stielhandgranate, especially the 1916 model, Eierhandgranate 1917 model, grenade Mills), bullet shells, rifles, machine guns (Lewis type) or ammunition cases (see Belot and Belot

2002). The total decontamination of the site, the Iron Harvest, thus represented 7 tons of ferrous waste of all kinds and, of the 1266 items of ammunition in total, 1093 (86 %) were still active.

## ARCHAEOLOGICAL REMAINS



**FIGURE 7 MAP OF THE WW1 REMAINS © C. COSTEUX, DA 62.**

The archaeological excavation on 4 ha revealed remains introduced gradually from ancient Protohistory to the First World War with a chronological hiatus between the Low Empire and the First World War. The preservation of the stratigraphy of the early periods, despite the location of the site on a battlefield, the recultivation and the increasing agricultural erosion, was quite surprising. Among the 1525 archaeological features recorded, 455 corresponded to anomalies assigned to the years 1914-1918. They were mainly shell holes, three trenches and a "boyau". As for the soldiers, they were discovered mainly in the trenches and the "boyau", two of them in a shell hole and only one in a dedicated pit. We can also note a concrete shelter along Albert road as seen above. It is made of reinforced concrete and has four openings: a front door and three windows. Regarding this building, there are two British iconographic sources: an aerial photograph and a map, both dated 1918. The photograph is dated June 30<sup>th</sup>, 1918, after the German offensive "Operation Michael". The map is dated August 19<sup>th</sup>, 1918, just before the launch of the second battle of Bapaume. On the photo, there is a clear distinction between the flat roof of the building and all the converging paths, including access from the south-west, towards the English lines. On the map, the construction is described as an "old British concrete structure". Considering its position and in relation to the unfolding of the various battles in the area, the British probably built this bunker after the strategic retreat of the Germans in March 1917 on the Hindenburg line. Rather than a bunker, it is actually what English call a pillbox, the French a "casemate" and the German a "MEBU" for

Mannschafts-Eisen-Beton-Unterstand. These buildings appear during the First World War with the rise of reinforced concrete in 1915-1916 and the Germans will develop their method of construction (MEBU). The Allied Forces, especially the British, will imitate these new constructions and will also name them MEBU at first, before the term "pillbox" becomes widespread and that new construction appears (Oldman 1995: 20).

The construction method of the concrete shelter of Avesnes-les-Bapaume is typically German (Oldman 1995: 161) and we can observe the imprints of the formwork boards used to pour the concrete on the surface of the inside and outside. An opening of approximately 20 cm in diameter is formed in the ceiling of the building and, regarding the openings, the door faces south-west towards the British lines, a window looks towards Grévillers to the northwest; two openings face south-east towards Thillooy and the Albert-Bapaume road. The northeast façade, towards the German lines, is blind. The photogrammetry of the building finally allows us, by using contrasts and grey levels, to highlight the different impacts of ammunition present on the façades. By their location, it appears that part of the scarring of bombs comes from British ammunition; these last, drawn by the troops of the Commonwealth, are to be attributed to the second battle of Bapaume of August 1918.

## WHEN 1<sup>ST</sup> WORLD WAR MATERIALS ARE MIXED WITH ANCIENT HISTORICAL REMAINS

There were more than 450 craters or shell holes which were registered during the excavation. On 4 hectares, we can estimate a minima from the identified features that a shell fell every 100 m<sup>2</sup> on average. Some of these holes (the most sizeable, around 5 or 6 m diameter) were tested with an excavator at the end of the operation to check the presence of burials. Finally, even after the pyrotechnic clearance, we still found active ammunitions trapped into Roman or Celtic pits, ditches and sometimes below older remains (Figure 8).



**FIGURE 8 ROMAN DITCH DAMAGED BY A SHELL © V. MERKENBREACK, DA 62**

Most characteristic and symptomatic remains of the First World War, the trenches and communication "boyaux" are still being discovered today especially through aerial photography. We found two German trenches crossing from the southeast to the northwest (Figure 9 and 10). Known by different military maps and by aerial photography dated from 1918, they were precisely located during the archaeological diagnostic. The defensive system made of barbed wire and chevaux-de-frise located upstream of the two trenches was also discovered in 2015. Trenches tend to have a common profile when sufficiently preserved in elevation. We can observe steep walls with a flat bottom and a stairway side. The wood floor of the trenches could be observed in some location. Concerning the "boyaux", they are less-well preserved and they have suffered from harvesting after the war and from contemporary agriculture. The filling of the trenches is composed of the sediment extracted during construction mixed with topsoil, often including rubbish of soldiers' daily life and a lot of metal artefacts. Some sections

of trenches were filled by the British troops after the recapture of the German positions during the summer 1918 and it is in these trenches that we found some German soldiers.



**FIGURE 9** DETAIL OF THE PRESERVED WOODEN FLOOR OF A GERMAN TRENCH © O. DEWITTE, DA 62.



**FIGURE 10** VIEW OF A GERMAN TRENCH © O. DEWITTE, DA 62

Here, I would like to highlight that with time, after more than a century, some trenches may look like a celtic or roman ditch, especially in a loess geological substrate where organic elements vanish faster. For example, I found in 2013 on the other side of Bapaume, in a British Trench (Figure 11), a little fireplace in a ditch (Figure 12 and 13). This feature really looks like a little roman kiln if we don't have any contextual evidence of the 1<sup>st</sup> World War.



**FIGURE 11** VIEW OF A BRITISH TRENCH IN BAPAUME © V. MERKENBREACK, DA 62



**FIGURE 12** DETAIL OF A FIREPLACE IN A BRITISH TRENCH IN BAPAUME © V. MERKENBREACK, DA 62



**FIGURE 13** PHOTOGRAPHY OF A GERMAN FIREPLACE IN A TRENCH © PRIVATE COLLECTION A. JACQUES

Another example can be given here with this underground shelter in loess which present wall effect as it can be observed for other historical or prehistorical period (Figure 14 and 15). This leads us to asks ourselves a question: what will be left of these remains in 50 years or in a century ?



**FIGURE 14 UNDERGROUND BRITISH SHELTER IN BAPAUME © V. MERKENBREACK, DA 62**



**FIGURE 15 UNDERGROUND BRITISH SHELTER IN BAPAUME © V. MERKENBREACK, DA 62**

The same question can be asked for other graves some of which are similar to celtic silo graves (Figure 16). This is a disaster grave probably dug out by comrades who saw in this crater the opportunity to bury their brothers in arms. The crater is about 3 m in diameter and has a preserved depth of between 30 and 40 cm. The two soldiers were not buried wrapped in a tarpaulin but placed as found in the pit.



**FIGURE 16 GERMAN SOLDIERS HEAD TO TOE IN AN SHELL CRATER © V. MERKENBREACK, DA 62**

The nature of the soil did not allow the preservation of the tissues (except some scattered fragments) but the uniforms buttons (very corroded) were recovered as well as their strapless knapsacks (presumably empty) that they wore on their back. (Figure 17 and 18).



**FIGURE 17 GERMAN SUBJECT 574 © V. MERKENBREACK, DA 62**

For German subject 574 (Figure 17), in the area of the femoral artery, a shrapnel ball was still in position in the left coxal bone. At least three pieces of shrapnel were found within the rib cage among which the central part of the vertebral column and the ribs are very damaged; a bullet wrapped in a piece of the uniform was found within the rib cage on the left side; finally, all the upper skull, except the lower jaw, was missing. Only a metal-framed monocle testifies of the potential presence of the right eye during the burying of the subject.



**FIGURE 18: GERMAN SUBJECT 575 © V. MERKENBREACK, DA 62**

For German subject 575 (Figure 18), a piece of shrapnel was found in the area of the cervical vertebrae, on the right. Concerning this subject, the left shoe was missing and the right one still presented some pieces of leather along with the nails and the iron band around the heel, characteristic of the standard-issue German shoes. In the sacrum area, and probably originally inside his left-hand pocket, a circular glass mirror was found. Three small fragments of his identification plate were discovered on his right flank. Made of zinc that could be broken into two parts to get a half from 1916, these plates are generally very poorly preserved). It is confirmed here in Avesnes-lès-Bapaume. Finally, the soldier 575 carried a ring (in gold, devoid of name inscription) on the ring finger of the right hand, indicating here that he was probably Protestant

Once the enemy positions was conquered, the soldiers often disposed of bodies that had become unmanagable and so, a trench or 'boyau' could be easily identified. In the area of Avesnes-lès-Bapaume, most of the soldiers' dead bodies were found in such graves. The mine-clearance experts completely removed the three dead bodies, for safety reasons. The archaeological office carried out the excavation of four bodies after the deminers secured the place (Figure 19 and 20). Then, the ONAC office (French equivalent of the CWGC) collected between two to five dead bodies after the end of the archaeological excavation; another was found during the stripping of the area. All the soldiers found were Germans. The rigorous excavation and the analysis of these burials can provide much information about : mass death

management, funeral practices (Adam 2013:2), identity (sometimes the name, nationality, religion), causes of death, (Adam 2013:1), temporality of burials (Desfossés, Jacques, Priloux 2008: 65 et suiv. ; Rigeade 2008)...

We note that the excavated soldiers, buried with their comrades or 'buried' by the enemy soldiers, did not have any helmets nor weapons. Only one (collected by the deminers) still wore his leather cartridge belt with Mauser rifle magazines still in place.



**FIGURE 19 GERMAN SOLDIERS IN A TRENCH © V. MERKENBREACK, DA 62**



**FIGURE 20 GERMAN SOLDIERS IN A TRENCH © V. MERKENBREACK, DA 62**



**FIGURE 21 DETAIL OF A GERMAN SOLDIER IN A TRENCH © V. MERKENBREACK, DA 62**



**FIGURE 22 DETAIL OF A GERMAN SOLDIER IN A TRENCH © V. MERKENBREACK, DA 62**



**FIGURE 23 GERMAN SOLDIER IN A TRENCH © V. MERKENBREACK, DA 62**



**FIGURE 24 DETAIL OF A GERMAN SOLDIER IN A TRENCH: WHAT IS LEFT OF THE NAMEPLATE (SCHOLL 2013, 2014) AND POCKET MIRROR © V. MERKENBREACK, DA 62**

## CONCLUSION

I would like to conclude this article with some thoughts and observations on the archaeology of the recent past.

Although the archaeology of the First World War was developed thirty years ago, there is still a lot of work to be done, especially with our colleagues and the various authorities. We are also still faced with the problem of looting, including the bodies of soldiers. Also, the process for the recovery of soldiers' bodies is different according to nationalities. The relationship to the remains of the soldiers also differ by countries, whether French, German or Commonwealth. The time allocated to research, both in the field and post-excavation, is also different, whether it is days allocated in the field for this archaeology, the post-excavation research and in particular DNA research, the ceremonies or even the commemorations. For example, for the site of Avesnes-les-Bapaume, archaeological efforts were focused on the Gallic and Roman site following the State's guidelines; while the remains of the First World War were excavated almost exclusively by myself, on my personal time. The same was true of the research. Although I was able to highlight the fact that the bodies of the German soldiers found died in combat, mainly in August 1918, no research was carried out afterwards by the German authorities in order to find the names, and I was told that all the remains were buried in a common grave in eastern France. Perhaps if the soldiers had been French, there would have been research by the ONAC; if they had been English, further research would have been done with certainty, and if they had been Canadian or Australian there would have been DNA analyses with certainty. The relationship to memory and heritage is actually stronger in Commonwealth countries (Roumegoux 2014). This is not a criticism but a simple observation.

In France, the approach is not homogeneous by region. There are sometimes specific searches in the East by french archaeologists; in contrast, in the West, for the Somme, North and Pas-de-Calais departments, the only First World War dedicated excavations are the work of Commonwealth archaeologists (such as Fromelles). We are also confronted with different laws; on the remains of foreign soldiers, the law on preventive archaeology in France, the inter-service relationships, the economic aspect. But the situation is gradually changing. For instance, with the Canal-Seine-Nord-Europe project, the CWGC will be leading the recovery of all soldiers, regardless of their nationality; this is a first, pragmatic step.

Some questions outside the management of the bodies:

What do we do with the artefacts? It is difficult to conserve, especially metal artefacts; of lesser interest, due to the industrial nature of the conflict. But they are archaeological remains and as such, by french law, we have to collect or sample them, or reject them; on the other hand we can't give them away. In any case, the question is still open. In my personal capacity, as part of my archaeological operations, I systematically carry out at least a photographic coverage of the structures and artefacts. Sometimes I sample the archaeological material for conservation purposes and as examples in our reserves (by material I mean everything other than ammunition). Often the archaeological furniture from the First World War remains on site (which is not a good idea in itself, especially in view of the looting of the area). Finally, from time to time I give furniture to organisations that do mediation on this period of history (CWGC, associations, museums).

The archaeology of the recent past still has a bright future ahead of it; new issues continue to develop; our methodologies are evolving but essential questions still need to be answered, in particular concerning the fate of the abundant archaeological material from these industrial periods (Schnitzler et al. 2013: 116-127). Finally, let us hope that better international collaboration will lead to stimulating research.

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