Searching for a World War II mass grave in Austria

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Abstract: In March 1945, nearly 200 Jewish concentration camp prisoners were killed in a small town at the Hungarian border. Until now, the mass grave or mass graves were not localised. The ministry of the interior started a searching campaign in the year 2005. The Geographical Institute and the Institute for Prehistoric Archaeology of the University of Vienna were engaged for the field survey. After collecting data, doing geophysical and areal prospection three hot spots were located. In October 2005 95 bore holes were drilled at the site. The drill cores were analysed and stored in buckets. After seven days six cadaver dogs were sent to the site to examine the holes and the buckets. At every hot spot several dogs signalled great interest. The bore hole samples were filtered, floated and analysed. One bore hole contained a textile trace, three holes tissue. In 2006 excavations were made at the 3 hotspots. The mass grave(s) was not found, but for the first time cadaver dogs were used for archaeological survey in Austria.

Keywords: Searching Mass grave; World War II; Cadaver dogs; First time in Austria

Towards the end of World War II the Nazis started to build a system of trenches along the border between Austria and Hungary. Jewish concentration camp prisoners, most of them from western Hungary were forced to dig the trenches. Besides the prisoners local population was also forced to build the so called “Südostwall”, the southern part of the “Ostwall” reaching from the river Danube south, along the Austrian Border to the boarder to Yugoslavia (FORSTER 2009, pp. 58). This earthwork should stop the red army at the border of the inner Nazi land. The work for the trenchsystem started in October 1944. Totally 83.000 men were forced to dig trenches, 35.000 of them were Jewish prisoners (LAFFER 2009, p. 75). The age of the prisoners was between 16 and 60 years. The prisoners were guarded by “Volkssturm”, the so called storm of people which was a militia of people at the end of the war, leaded by Nazis and “SA”, the paramilitary wing of the Nazi party. One of the eyewitnesses, Szabolcs Szita reported, that the “Volkssturm” and the “SA” were not better than the “SS” (Schutz Staffel, major paramilitary organisation of the nazi party, which were responsible for the deadly concentration camp system) which normally allocated the guards for prisoners (LAFFER 2009, p. 75). A lot of prisoners died due to heavy labour as well as lack of food and medical treatment (SCHWARZMAYER 2000, p. 40). In spring 1945 the digging-work at the trench system were stopped and the prisoners were “evacuated”, that means that they were forced to march primarily to the concentration camp of Mauthausen, located in Upper Austria at the river danube. Those, who were not able to walk anymore, because of illness or lack of food, were killed at the sites (LAFFER 2009, pp. 75). Thousands were killed in the last months of the Nazi regime. There are nearly 60 mass graves located along the border. Most of these mass graves were excavated and the human remains reburied on graveyards in Hungary in Austria.
In the night from 24th to 25th of March 1945, nearly 200 Jewish concentration camp prisoners were killed in a small town called Rechnitz in southern Austria, right next to the Hungarian border. The exact number of killed prisoners could not be established. Estimations range from 172 to 220 people (PÖLLHUBER 2009a, p.82).

In 2007 students started to find relatives of the victims of the massacre. They found 7 names of supposed victims (RAJAL et. al. 2009, p. 111). One of the victims was known since 1957. It was Laszlo Blum, born in 1923 in Budapest. An eyewitness saw Laszlo the last time in the camp next to the border, where he was separated because of his weak condition. (RAJAL et. al. 2009, pp. 123).

Deszō Reichlinger was born in 1897 in Hungary. He was deported in October 1944 and killed in March 1945 at Rechnitz. Deszös daughter Eva met a comrade of him two days after the massacre on the death march. The comrade told her about Dezös fate (RAJAL et. al. 2009, pp. 117).

Pal Bacs was 16 years in spring 1945. He met Kurt Rechnitz, an older man at Köszeg, where both were interned in a camp and were forced to dig at the “Ostwall”. On March the 20th Kurt was selected to the group of ill and weak men. He was brought to Rechnitz, where he was killed 4 days later. Pal remembered the last name of Kurt so well because it was the same as the village, were they had to work (RAJAL et. al. 2009, pp. 128).

Ernö Weisz is the second survivor. He was forced to dig the up the graves in the evening of the 24th of March 1945. After that he was brought back in to the camp. It seems, that the Nazis “forgot” him, because everyone who had to dig graves near Rechnitz was killed. Ernō had to march to Mauthausen in one of the death marches. He was freed in Upper Austria (BINDER et. al. 2009, pp. 99).
Until now, the mass grave or mass graves were not localised. Witnesses who heard the execution reported having seen 2 up to 21 mass graves the next day (HOLZINGER 2009, p.21). None of the murderers said anything about the shooting or the graves. In April 1945 the Red Army started to exhume 18 bodies. These people were killed after burying the 180 killed prisoners. The officers of the Red Army also opened one of the bigger mass graves and documented the state of the grave. Since then nobody tried to reopen the graves and the exact location of the mass grave got lost. It seems to be plausible that the bodies were filled in on of the trench-parts or bunkers.

In the 1960 a few people tried to remember the location, but they failed. Until the 1970s various organisations tried to find the mass grave. In the 1980 the Interior Ministry, which is responsible for mass grave research started the research with scientific standards. Since 1986 7 excavations without any archaeologists were done (HOLZINGER 2009, p 166).

Since 1995 different archaeological organisations try to provide help to locate the grave. Ground penetrating radar, geomagnetics and areal archaeology were done (and still are done).

The biggest problem at this site is that there are around 120 spots spread over 700.000 square meters where human remains might be found (HOLZINGER 2009, pp 22).

The second problem is that the frontline between the German Wehrmacht and the Red Army got stuck in this area two weeks after the massacre. So the 700.000 interesting square meters are full of human remains and exploders. Most of the documented structures in the last 50 years were bunkers, trenches and machine gun holes.

The Interior Ministry started an intensive searching campaign in the year 2005. The Geographical Institute and the Institute for Prehistoric Archaeology of the University of Vienna were engaged in the field survey (HOLZINGER 2009 p.35).

The idea was to make drill holes at so called „hot spots“ where the mass grave(s) eventually could be located. So either one drill hole hits the grave or cadaver dogs should probe the holes for decaying human bodies.

The Austrian police has got a cadaver dog unit (REBmann et.al. 2000. pp.15) which is trained on human remains, tissue of human remains and blood. Normally, they search for evidence weapons, graves, and bodies in the water. The dogs are trained to concentrate on proteins which break down to amino acids in the putrefaction and fermentation phase of the thaphonomy (GRASSBERGER & SCHMID 2009. pp.25).

The considerations were that:

Under the humus is a very hard, reddish strata, which is very homogenous and difficult to penetrate. This stratum could preserve remains of human decomposition from diffusing to the air.

Beneath the reddish strata there is a looser stratum of rubble and yellow clay. This stratum could keep the human remains moist.

The Austrian cadaver dog unit is well trained and the policemen are very interested in the idea of finding 60 year old human remains.
After collecting data, doing geophysical and aerial prospection three hot spots were located. The choice of the three „hot spots“ was also based on witness statements (HOFER & PETICZKA 2009. pp. 37).

In October 2005 95 bore-holes were drilled at the site. The bore-holes were spread from one side of the anti-tank trench to an aerial cable.

For the coring, a one meter hollow steel probe with a width of 6 centimetres internal diameter was used. The probe got two windows on one side, to analyse the soil strata. The probe was lowered in to the soil by an electric drill hammer down to 1 meter. Then it was pulled out with a hydraulic device.

Every single bore-hole was analysed and photographed right after dragging out the drill core. The drill cores were safely stored in labelled buckets. The drill hole was closed with a brick and marked with a little flag. So the air in the hole could circulate and traces of decay could move from soil in to the air in the hole.

One week later 7 cadaver dogs from the Austrian Police started their work. First every dog had to sniff the buckets. The dog handler entered the room alone with his dog; a supervisor stood in the door to observe the action. The policemen were not allowed to talk to each other about the results of the dogs. The supervisor of the cadaver dog unit supervised every single dog and interpreted every sign of the dog together with the dog handler. One dog had an allergic reaction caused by a plasticizer of the buckets. He started destroying one of the buckets. So he dropped out of the bucket series.
Right after the work with the buckets the dogs had to sniff on the drill holes. It was the same procedure like the day before. The policemen were not allowed to watch other dogs, except their own at the drill holes. The supervisor worked out the results with the scientists.

After the work of the cadaver dogs, the buckets were brought to the University of Vienna. Every drill core was rattled, floated and analysed.

![Cadaver dog at work](image)

**Fig.2 – Cadaverdog at work (Inst. f. Geographie Uni. Wien/Markus Mraz)**

The following observations were made:

At „hotspot 1“ the dogs showed very intense interest in drill hole 107. 6 dogs at the bucket sample, 7 dogs at the hole showed massive interest.

At „hotspot 2“ 311 and 312 were interesting, 314 & 315 very interesting. 6 dogs were interested in the buckets of the holes 314 & 315, 7 dogs at the holes.

At „hotspot 3“ only two drill holes were interesting, but a 10 centimetre thick stratum of chalk was observed in the drill core. The cadaver dog supervisor believed that the dogs overreacted because of the chalk.
The flotation of the drill core number 107 revealed a small, red coloured piece of tissue. This evidence was sent to the forensic laboratories of the Austrian police. There the detailed analyse revealed a small piece of non synthetic cloth with micro remains of human blood. The detective of the forensic laboratory believes that the fragment is older than 50 years. It is possible, that it dates back to spring 1945. It is a probably a fragment of cloth which originates from a gun defect and was transported by a bullet.

At all three sites (hot spots) samples were taken and five drill holes out of 95 showed significant signs of human remains for the cadaver dogs. These are the so called red holes. Further 7 holes in the vicinity of the red holes were interesting for the dogs.

The scientific analyses showed a similar perception. In one of the red drill holes was tissue, at one site was massive chalk located and in the centre site, 5 out of 7 holes were red, orange or yellow marked. The decision to make an archaeological excavation at the three sites fell in winter 2005.

In October 2006 excavations were made at the 3 hotspot.
Site number 1 was westward of the anti-tank trench, site number 2 eastward of the anti-tank trench and site number 3 at the area of the fire trench (HOFER et.al. 2007).

Site number 1:
Site number 1 had an acreage of 8x10 meters. Beneath the humus was the reddish layer. In this layer there was the lower edge of two trenches. In the middle of one trench there was the ID badge of drill hole 107,
which was buried in the hole in 2005. Except the badge no findings were made. The trenches are related to the trench system of the so called „Ostwall“.

Site number 2:
Site number 2 had an acreage of 10 x 14 Meters. In the eastern part of the site a bunker was located. His lower edge was in 4 meter depth. The infilling of this massive interface was inhomogeneous and filled with findings like brick fragments and construction waste. The lowest layer was a wooden floor construction of the 4 x Meter big bunker. There was nothing left from the walls. On the floor were three helmets, a machinegun belt, two parts of a door hinge and wire located. The three helmets were two „Luftschutzhelme“ air raid protection helmets and one helmet of the Austro-Hungarian army. The bunker was beneath the three red drill holes (BOCKBERGER & SCHMIED 2009. pp. 81).

![Fig. 4 – Site 2 Bunkerfloor with Helmets (AK Forensische Archäologie/Peter Pesseg)](image)

Site number 3:
Site number 3 had an acreage of 17 x 10 Meters. Here were two former test pits and a massive, 10 centimetre chalk layer in it. The chalk layer was the rest of fertilizer, which was stored at this field at the 1960s as the farmer told us. Except three drill hole ID badges no findings were made.

The most interesting site was site number 2. The findings at this site could be dated easily also the construction and its function could be determined.
The findings in site number 2 were:

3 helmets
part of an cartridge belt
2 parts of a door hinge
helmet band
part of a wire
wooden pole
fragments of tar paper

The findings in site number 2 can be dated to the end of World War II.
Special the helmets suggest this age determination. These helmets are one old Helmet, model 1917 (made between 1917 and 1925), and two air raid protection helmets. The helm band made of plastic belonged to one of the air raid helmets. The helmets were worn by members of the “Volkssturm” the so called storm of people which was a militia of people at the end of the war, led by Nazis. The lack of resources at the end of the war in the Nazi regime was so big, that the old men and boys of the “Volkssturm” only got old war material or material for civil use. The part of the cartridge belt fits to the German machine gun model 34 and 42. It was the standard machine gun of the “Wehrmacht” the regular German army. All other parts, the parts of a Door hinge, the part of a wire, the tar paper and the wooden pole were construction material of the destroyed bunker. The pole seemed to be the rest of the walls. Tar paper was used to seal up the bunker ceiling. The wire could be a small hint for the function as a bunker with a field telephone station in it. So it could be a bunker for commanding.
The bunker was probably built between November 1944 and February 1945. Without fail the Jewish prisoners were forced to dig the holes for such bunkers at the fields next to Rechnitz. (HOFER et al 2007, pp. 19)

There was a wooden floor of a bunker in a depth of 4 meters. On the floor were the three helmets which were mentioned earlier in the text. After the documentation of the floor, the helmets were obtained, all other findings equally. Only the wooden floor was left in the interface.

On the next day three dog handlers with their cadaver dogs were ordered to the site. The arrived one after another and had no chance to speak to each other. No one of the dog handlers had an idea what we have found. Especially the finding of the helmets was concealed.

Every dog was lowered to the wooden floor and made a fine search. All three dogs indicated the exact location of the three helmets. The dog handlers told us, that blood and dead human bodies had been lying there for several hours. Decomposing fluid could get into the wooden trunks. The wood was kept moistened for the last 60 years. So it could be possible, that the dogs could sniff the decomposition fluid after this long time. Some critical voices said, that there could be the possibility that the dogs reaction was caused by the smell of the wet wooden poles and not by the human remains. The result of several discussions was that if
the dogs smelled the wooden pole, the won’t be able to find the exact positions of the helmets. The whole wooden floor would be interesting for them.

What are the conclusions?
The mass grave wasn’t found yet. The historical, forensic and archaeological search for it still goes on.

One result of the search is the usage of cadaver dogs in an archaeological context.
The cadaver dogs helped to locate a site where dead bodies laid several hours. For sure, the special circumstances, the interests of the Interior Ministry, the possibility to get in contact with the cadaver dog unit of the Austrian police made it much more easier to try this prospection method. The motivation and the curiosity of the policemen, to learn new things, was and still is one of the most important point.
It is the special soil at the site which made such a prospection possible. The soil kept the wooden parts of the bunker moistened and so the dogs could detect the fluids.

It was the first time of use of cadaver dogs in archaeological prospection. There are still a lot of questions unanswered, such as how long are amino acids available for dogs, which await to be answered.
For a further deployment, scientific research, such as checklists, parameters for a successful deployment, exact procedures of an interdisciplinary team are necessary. The cadaver dog unit of the Austrian police and the association of forensic archaeology are working on this method.

There are several problems with detecting human remains, but a closer teamwork between archaeologists and the cadaver dog unit of the police can tie up the loose ends.

References


