HOLOCAUST ARCHAEOLOGY: ARCHAEOLOGICAL APPROACHES TO LANDSCAPES OF NAZI GENOCIDE AND PERSECUTION
ВУ
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ABSTRACT

The landscapes and material remains of the Holocaust survive in various forms as physical reminders of the suffering and persecution of this period in European history. However, whilst clearly defined historical narratives exist, many of the archaeological remnants of these sites remain ill-defined, unrecorded and even, in some cases, unlocated. Such a situation has arisen as a result of a number of political, social, ethical and religious factors which, coupled with the scale of the crimes, has often inhibited systematic search. This thesis will outline how a noninvasive archaeological methodology has been implemented at two case study sites, with such issues at its core, thus allowing them to be addressed in terms of their scientific and historical value, whilst acknowledging their commemorative and religious significance. In doing so, this thesis also demonstrates how a study of the physical remains of the Holocaust can reveal as much about the ever-changing cultural memory of these events as it can the surviving remnants of camps, execution sites and other features associated with this period. By demonstrating the diversity and complexity of Holocaust landscapes, a case is presented for a subdiscipline of Holocaust Archaeology.

'I have buried this among the ashes where people will certainly dig to find the traces of millions of men who were exterminated'

(Salmen Gradowski in Bezwinska 1973:75)

This thesis is dedicated to all those whose lives have been, and will be, affected by the Holocaust.

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Referencing Notes

The records of the International Military Tribunal at Nuremberg (IMTN) consist of forty-two volumes. The volume number is shown after the date of publication e.g. IMTN 1947(1):4-6.

Archival sources are listed in a separate bibliography. Where items had an archive number, this was used. Where a specific archive number was not available or where multiple documents were used for large archive files, references were allocated by the author to allow the reader to distinguish between sources e.g. AMA 1942a, WO311/11-a etc. All archive references are preceded by a code for the archive to which the documents belong e.g. PRO for the National Archive in Kew.

Texts from the volume by Arad et al (1999) are listed by author where one is specified. Where an author was not given, a reference to Arad et al with the relevant page numbers has been cited.

1. INTRODUCTION

1.1. INTRODUCTORY STATEMENT

History now records that the Holocaust was a European-wide event that affected, and continues to affect, the lives of countless individuals across the world. These atrocities, which for the purposes of this thesis include all forms of persecution undertaken by the Nazis during their occupation of Europe, resulted in the deaths of over eleven million people and irreversibly altered the geographic, political and demographic map of the world (Gilbert 2002; Figure 1.1). However, whilst clearly defined historical narratives exist (Lang 1999), in most European countries the Holocaust has only recently begun to be considered in terms of its surviving buried remains and landscapes. Although many sites of the Holocaust have been designated memorials or museums, the majority have not been examined archaeologically. As such, they are still ill-defined and only partially understood from both spatial and structural points of view, with evidence of their existence relying substantially on witness accounts and documentary sources. Additionally, thousands of sites across Europe remain unmarked, whilst the locations of others have been forgotten altogether. Given the social and political magnitude of the events represented by these sites, it is astonishing that so many lie unrecorded, neglected, misunderstood, or are simply being allowed to pass into anonymity. With the passage of time, hundreds of these sites will be unlocated and thousands of victims unremembered by even the simplest of memorials; thus there is an immediate need to locate, record and commemorate these sites.

This thesis explores the untapped potential and implications of Holocaust archaeology. The interdisciplinary approach taken is based on a thorough consideration of the resonance that the Holocaust still has in modern society, in terms of political and social impact, religious thought and a desire by various groups to influence and claim so-called ownership of the past. Indeed, it is stressed that the history of Holocaust sites did not end with their abandonment or the collapse of the Nazi regime. Therefore, it is argued that, when this is acknowledged during archaeological surveys, it is possible to derive as much about the cultural memory of these events and cognitive processes that have shaped landscape formation, as the surviving remnants of camps, execution sites and other features associated with this period. As well as assessing the broader temporal scope of these sites, the wider extent of Holocaust landscapes in spatial terms should be considered. Sites, and their subsequent analysis, should not be restricted by boundaries of camps, apparent extents of graves or walls of ghettos; instead it should be recognised that the impact of these landscapes transcends geographical boundaries and they form part of a wider network of sites (Gilbert 1999).

The non-invasive methodology implemented focuses on the complementary use of historical and archaeological data at case study sites; documentary, cartographic, aerial reconnaissance, topographic and geophysical data are assimilated, allowing the sites to be addressed not only in terms of their scientific and historical value, but also as places of remembrance and religious significance. The integration of these data types demonstrates the potential of Holocaust archaeology to enrich heritage and education programmes in the future; the physical nature of the evidence provides a more tangible and potent reminder of

these events for future generations. By utilizing case studies that demonstrate the breadth of features within Holocaust landscapes, this thesis challenges many of the widely held perceptions of this period, including: the nature and extent of the physical remains, the survivability of archaeological material and the notion that the Holocaust was solely an Eastern European phenomenon centred around the death camps. By demonstrating the success of this methodology at a sample of sites, this research is intended to provide a platform for further academic work focused on recording and preserving the sites of the Holocaust, and a socially relevant dataset for studies of this event, World War II and sites of modern conflict, as a whole.

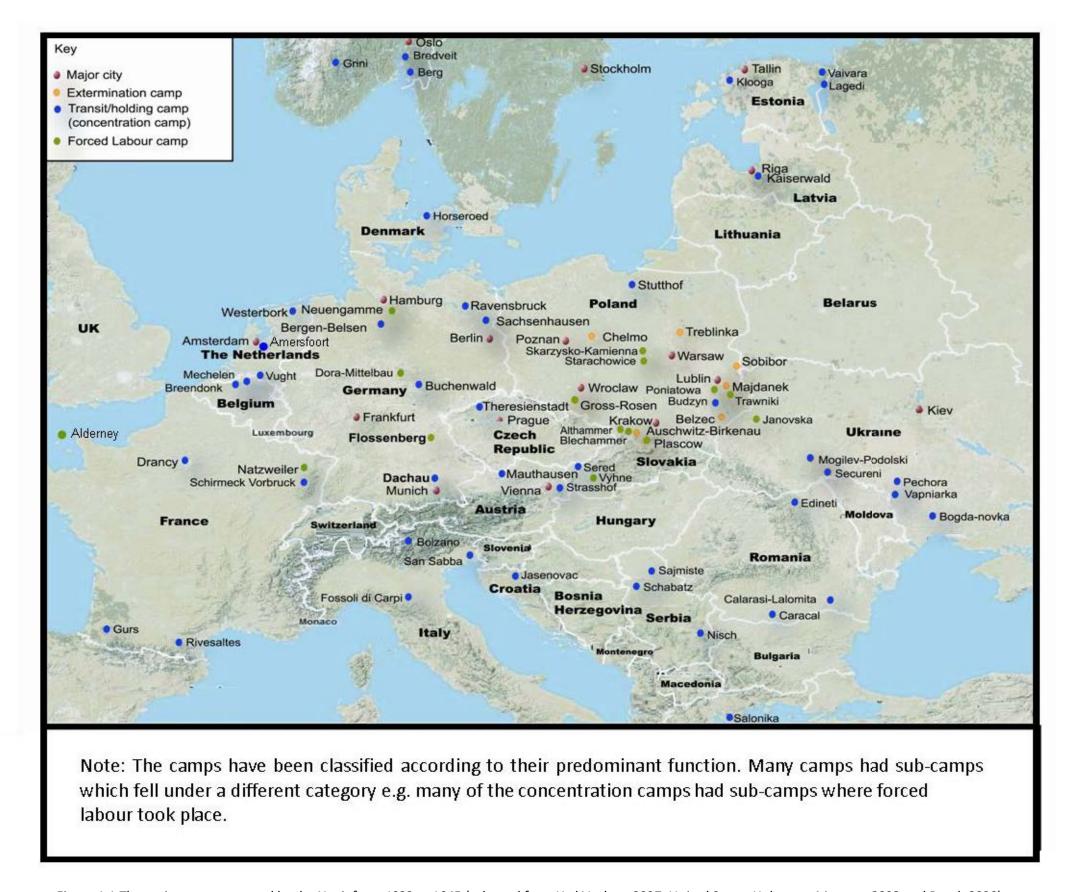


Figure 1.1.The main camps operated by the Nazis from 1933 to 1945 (adapted from Yad Vashem 2007; United States Holocaust Museum 2008 and Beech 2000)

1.2. CONTEXTUALISING ARCHAEOLOGICAL APPROACHES

Whilst these events are, sadly, not the only acts of genocide to have taken place in the recent past, the Holocaust can be seen as a unique period in world history, in terms of its scale, the number of countries involved and the variety of ethnic, racial and social groups that were affected (Davidowitz 1990). The latter range from survivors and victims' families to modern inhabitants of the towns and villages in which the atrocities occurred. Consequently, the Holocaust poses a unique set of questions to both scholars and the public alike; almost everyone knows about the events and as many have opinions concerning them. Whilst some people consider them part of their identity, others feel that this dark part of the past should not be made into a tourist attraction. Others feel little connection to events that happened outside of their lifetime; some people have a cultural affiliation, others, such as the Jewish community, may feel a religious connection; for some people these sites represent areas of reflection and commemoration, for others they are merely dilapidated remains of a distant past located within forests or housing developments. These opinions will also change based on modern political events, the commitment of national bodies and local councils to heritage management, and multiple other social factors (Smith 2007; Baker 1988; Marrus 2000).

One of the key challenges for modern scholars is reconciling these different opinions in order to pass on knowledge to future generations in a way that does not upset or offend others (Council of Europe 2005). Whilst historians (Roth 2005; Kushner 2006), artists (Lang 2000), psychologists (Raalte et al 2007; Kellerman 2001), and educationalists (Short and Reid 2004; Davies 2000) have formulated approaches that balance these considerations, given the longevity of research in these areas, similar practices for the study of the archaeological

remains of this period have not yet been established. In the past, some archaeological projects have faced criticism for failing to account for the beliefs of affected groups and this has undoubtedly impacted upon the number of subsequent projects undertaken (Weiss 2003; Gross 2004). The methodology utilised in this study had such considerations at its core and the ethics involved in archaeological examinations of this period will be addressed.

1.3. PREVIOUS INVESTIGATIONS

The examination of Holocaust sites is not virgin territory and, since the Second World War, a number of investigations into the nature of the war crimes perpetrated during the Holocaust have taken place.

1.3.1. LEGAL INVESTIGATIONS

Early investigations of Holocaust sites were undertaken immediately after the war by specially assembled war crimes commissions, which usually comprised of medico-legal professionals tasked with the collection of evidence for the conviction of the perpetrators (IMTN 1947; Central Commission for the Investigation of German War Crimes in Poland 1982; Profatilov 1945; Plate 1.1). Given the scale of the events, and the fact that forensic anthropological and archaeological methods had not been developed at this time, emphasis was placed upon verifying that the camps and graves existed, rather than detailed investigation (Arad et al 1999; IMTN 1947). A few isolated attempts were made after this immediate post-war period to locate further graves as a result of legal proceedings or repatriation programs. Work by Mant (1950) and the Mission de Recherché (Rosensaft 1979)

in the 1950s, in Serniki in the Ukraine in 1990 (Bevan 1994), and in Jedwabne in Poland in 2002 (Gross 2004) have perhaps been the most high profile. In the latter two cases, archaeologists were employed, although political and judicial restrictions were placed upon their work (Bevan 1994; Gross 2004).

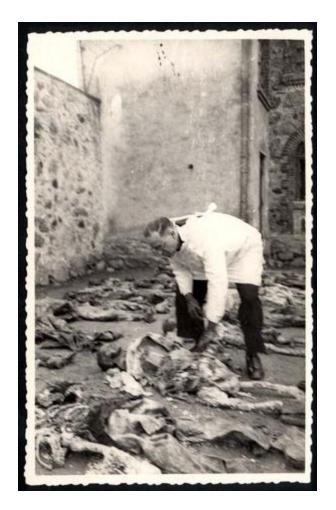


Plate 1.1. An examination of corpses after exhumation in Valmiera, Latvia (after YV 1868/10)

1.3.2. HISTORICAL DATABASES AND SITE RECOGNITION

A number of important surveys have been undertaken which have sought to create databases of sites. Some of these projects have been solely desk-based in nature (USHMM 2009; Yad Vashem 2009), whilst others have been field projects that have logged locations,

brief histories and current site conditions as part of wider surveys of Jewish heritage (Gruber and Myers 1995; US Commission 2005; International Jewish Cemetery Project 2010). All of the above have focused on site recognition and identification at a basic level; they have presented the sites as isolated entities, as opposed to assessing them as part of a wider landscape context and making cross-site comparisons.

Whilst these surveys make a significant contribution to knowledge about the Holocaust, only two surveys of this nature have progressed to more detailed examination of the physical remains, both of which have been undertaken by Father Patrick Desbois. Both projects are aimed at locating mass graves of this period through the collection of witness testimony, historical research and site visits, the first in the Ukraine (Desbois 2008) and the second in the Ukraine, Belarus, Poland and Russia (Yahad In-Unum 2011). Archaeological expertise was sought during the former project, although only a small percentage of the overall number of excavations were carried out under such supervision (Memorial de la Shoah 2007). Given that the second project is in its infancy, it is unclear how many sites, if any, will be examined archaeologically. Although these surveys represent the most comprehensive investigations of Holocaust sites to date, in light of the development of forensic archaeological techniques, it is unclear why archaeology has not been more integral during project designs for proposed examinations of Holocaust sites (Hunter and Cox 2005).

1.3.3. ARCHAEOLOGICAL PROJECTS

The assessment of a Holocaust site using archaeological methods, for reasons unconnected to judicial proceedings, did not take place until the late 1980s. The growing number of

projects that have taken place since collectively demonstrate the potential of surviving remains to reveal new insights into this period. However, an assessment of these projects indicates that their geographical distribution remains a reflection of political circumstances, societal developments and attitudes towards the sites themselves.

In Germany, the political commitment to recording sites from this period is reflected in the excavations at concentration camps Buchenwald (Hirte 2000), Ravensbrück (Antkowiak 2000), Dachau (David 2001), Flossenbürg (Ibel 2002), Bergen-Belsen (Assendorp 2003) and Sachsenhausen (Theune 2010); at sub-camps Rathenow (Antkowiak and Völker 2000) and Witten-Annen (Isenberg 1995); at the forced labour camp at Groß Schönebeck (Grothe 2006); and at the execution site of Herberthausen (David 2003). Many of these projects have been undertaken with a view to using the material generated in 'political education' and a number of considerable finds databases in particular have been created for that purpose (Theune 2010; Theune 2011; Hirte 2000). The extent of the commitment to recording Holocaust sites is reflected in a more unusual case presented by Fiedler et al (2009) who located the former position of mass graves in Stuttgart over sixty years after the bodies had been exhumed. Using a combination of aerial photographic analysis, coring and excavation, the investigators were able to pinpoint the location of the former mass grave that had previously contained sixty-six bodies, thus allowing the local community to erect a memorial at the site (Fiedler et al 2009). A similar, recent pledge to examine Holocaust sites using archaeological methods can be seen in Austria, where excavations have been conducted at the former Euthanasia hospital at Hartheim (Klimesch 2002) and concentration camp Mauthausen (Theune 2010; Artner et al 2004; Figure 1.2).



Figure 1.2. Ground Penetrating Radar survey of one of the gas chambers at Mauthausen (after Theune 2010:7 and Archaeo Prospections)

A smaller number of projects have been undertaken in Poland, all of which have centred on the extermination camps. In the late 1980s, museum curator Pawlicka-Nowak carried out excavations at Chelmno to define the locations of barracks and crematoria, and to identify personal effects of the prisoners (Pawlicka-Nowak 2004a and 2004b; Golden 2003). As a result of the planned redevelopment of the memorial, excavation and coring were undertaken at Bełżec by Kola and thirty-three mass graves were located (Kola 2000; O'Neil 1998; O'Neil and Tregenza 2006; Figure 1.3). This project highlighted the fact that not all of the victims' bodies were cremated as the historical accounts suggest, something which clearly has implications for the examination of other sites (Kola 2000). However, the methods failed to account for the need to prevent disturbance to human remains, as stipulated by Jewish Halacha Law, and this resulted in the significance of the work being

overshadowed by the considerable opposition presented to it (Weiss 2003). Research at Sobibor by Kola (2001) and by a German geophysical company (Friends of Sobibor Remembrance 2006; pers. comm. Yoram Hamai) has been built on by the Under Sobibor project, undertaken by a team from Ben Guirion University in Israel (Under Sobibor 2008). This investigation sought to define the nature of the structures that survive from this camp and has demonstrated inconsistencies between the historical accounts and the physical evidence uncovered (Gilead et al 2009). Recently announced projects at Stutthof (Paris 2011) and Auschwitz-Birkenau (pers. comm. Wrzosek) demonstrate an emerging acknowledgement in Poland of the potential of archaeology to provide new evidence for this period. In recent years, a handful of projects have emerged elsewhere in Europe: excavations have recently been completed at Amersfoort and Westerbork in The Netherlands (Schute and Wijnen 2010, pers. comm. Schute), surveys of the sites pertaining to the Atlantic Wall are being undertaken in Norway (Jasinski 2011), remote sensing of mass graves has been undertaken in Croatia (Babic et al 2000) and a series of mass grave excavations were undertaken by Wright (1995) in the Ukraine.

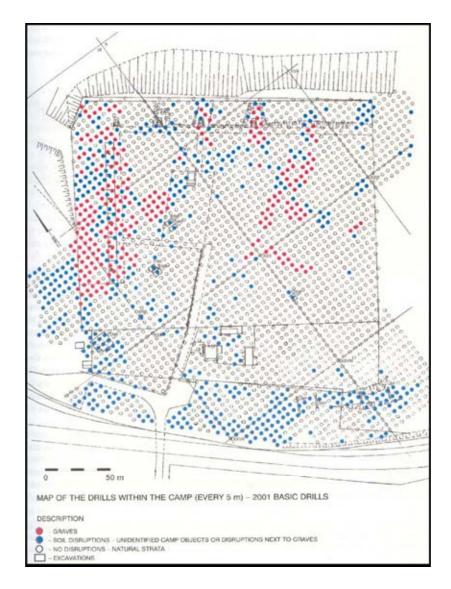


Figure 1.3. Results of the coring carried out at Bełżeć (after Kola 2000:70)

A Europe-wide trend that can be acknowledged is that the search and recovery of mass graves of the Holocaust has rarely been undertaken by archaeologists and the majority of investigations have been as a result of serendipitous discoveries, due to anthropogenic or natural landscape modification. Often, the bodies are removed quickly by non-specialists, thus the significance of the context in which they were found is not considered, and rarely is anthropological analysis of the bones undertaken (Susa 2007; International Herald Tribune

2007). Where archaeologists have been involved, this has often been under restrictions of extreme time pressure; there is little time for desk-based research, limited recording is permitted and, in the haste of recovery, damage may be caused to the remains (The Guardian 2009). Not only does this deny the victims the dignified treatment they deserve but valuable information about the events which resulted in their deaths is being lost. Additionally, only the discovery, rather than the actual results themselves, have been published, and this is usually in the media as opposed to academic literature (BBC 2007; De Spiegel 2006).

In a recent article, Theune (2011:10) suggested the upsurge in archaeological projects pertaining to the Holocaust stems from the fact that 'the offices for preservation of ancient monuments recognise the importance of these places and sites and carry out excavations when necessary, as is done at sites of older periods'. This citation highlights several important points.

Firstly, there is an emphasis on excavation and all of the projects to date can be seen to have centred on this. Some of the more recent projects have utilised geophysical survey (Fiedler et al 2009; Gilead et al 2009; Theune 2010) but the full potential of these methods has rarely been acknowledged. Indeed, Gilead et al (2009) have suggested that sites where excavation is not permitted due to Halacha Law cannot benefit from archaeological work, thus further failing to recognise the value of non-invasive methods.

Secondly, the term 'when necessary' (Theune 2011:10) alludes to the fact that many investigations of Holocaust sites to date have been reactive responses, either to the redevelopment of memorial sites (e.g. Schute and Wijnen 2010) or in light of impending anthropogenic threats (e.g. The Guardian 2009 and International Herald Tribune 2007). Whilst important findings have emerged from such projects, there is a need to bring studies of the Holocaust in line with other areas within the remit of archaeology and have a parallel programme of research coupled with a systematic search for the graves of victims.

Thirdly, whilst Theune's assertion may be true in Germany and Austria, as shown above, there is considerable diversity in approaches to sites of the Holocaust throughout Europe and, in the majority of countries, these sites are far from treated as equals to their ancient counterparts. The lack of a legislative infrastructure to support the recording of sites from this period has also resulted in other political, social and religious issues dictating the extent of archaeological investigations. To return again to Fiedler et al's (2009:34) work, whilst at this site it was deemed important to locate empty graves and the local community 'wished to erect a monument in memory of those dark times in German history', this stands in stark contrast to other places, where even identifying unknown mass graves still containing human remains is not deemed to be necessary or desirable (Kuwałek 2008).

Therefore, whilst the literature concerning projects in Germany and Austria represent valuable contributions to knowledge of this period, it does not allude to the complexity of undertaking archaeological work across much of the rest of Europe. Most importantly this, coupled with the fact that projects elsewhere have failed to address the aforementioned

issues directly, has resulted in a situation whereby a consideration of the ethical implications, religious obligations and other restraints to fieldwork have not been considered (see Chapter 2). Similarly, the potential of such a consideration to reveal valuable information about the post-Holocaust history of the sites has not been acknowledged. Finally, given the number of Holocaust sites across Europe, the number of archaeological investigations can still be seen to be limited.

1.3.4. HOLOCAUST HERITAGE LITERATURE

The limited number of publications relating to the physical remains of the Holocaust stands in contrast to the abundance of literature published in recent years within the disciplines of conflict and public archaeology, and heritage studies concerning this period. This literature has focused on the implications of so-called 'dark tourism' (Lennon and Foley 2000; Ashworth 2003), 'hot interpretation' (Uzzell 1989), the reasons why sites should be maintained (Myers 2008) and approaches to them within heritage frameworks (Beech 2000), as well as the educational potential of archaeological heritage (Darmamin and Mootz 2006). Beech (2002:200) has explored the issues that may arise at such sites in light of the fact that 'the camp meets the needs of two groups of visitors with totally different motivations...those who suffered personal loss as a result of what happened at the camp...[and] those who lack a personal connection'. Myers (2007:243) has also considered this theme, suggesting a 'historical archaeological' approach, which considers not only the landscapes of the Holocaust themselves but also the implications of such research, the relevance of these sites for modern society and how we should continue to address them within European heritage studies. Jacobs (2004) considered the 'profane to the sacred' at concentration camps, whilst

Young (1994) and Marrus (2000) both addressed the significance of history and memory at memorial sites. Other important papers have emerged over the last few decades that have also addressed the various attitudes to sites of National Socialism, including a consideration of the former Gestapo, SA and SS headquarters in Berlin (Baker 1988), and the subsequent Holocaust memorial built at this site (Knischewski and Spittler in 2007). Similarly, scholars have begun to consider the authenticity and experience of the Holocaust camps, coinciding with efforts by some museums and memorials to redevelop their heritage provision (Van der Laarse 2008).

1.4. BASIS OF STUDY

Despite the contributions that previous investigations have made, the full extent of the archaeological remains of the Holocaust has not been fully realised. Previous research has failed to see the emergence of a robust methodology that satisfies the scientific, historical, ethical and commemorative demands of the study of the Holocaust (see Chapter 2), nor has it seen the merits of archaeological research of this period being widely accepted. In fact, some of the investigations have resulted in exactly the opposite situation (Weiss 2003). Previous work has either focused on the verification of site locations, excavation or an assessment of public approaches to Holocaust sites and cultural memory. No single investigation has incorporated historical, archaeological and ethical aspects into its methodology and none of the projects undertaken by archaeologists have utilised the diverse range of up-to-date, non-invasive methods that are employed as standard practice in many archaeological and forensic archaeological investigations (Hunter and Cox 2005). There has never been an archaeological study that moves away from single site interpretation.

General trends about the nature of Holocaust archaeology have not been derived, whilst cross-site comparisons have not been made. In light of the small number of projects that have been undertaken, Holocaust deniers have often attempted to use archaeology, or lack thereof, to suggest that these events never happened (Irving 2000). Consequently, there is a need to develop a discipline of Holocaust archaeology and to provide the physical evidence and published accounts to dilute the saturation of revisionist claims in popular media.

To summarise, the archaeological remains of the Holocaust survive as a testament to the suffering of the victims and a source of evidence of the actions of the perpetrators, the investigation of which has the potential to contribute to both national and international histories of this period, and its aftermath. The aims of the research are as follows:

AIM 1: To analyse the variety of social, political, ethical and religious factors impacting upon successful archaeological investigations of Holocaust sites;

AIM 2. To devise a suitable interdisciplinary methodology based on these factors and recent advances within forensic and conflict archaeology, and heritage studies;

AIM 3. To apply this methodology at selected sites in order to demonstrate its potential to contribute to our understanding of Holocaust landscapes, both in terms of their contemporary and post-abandonment histories;

AIM 4. To demonstrate the diversity of the physical remains of the Holocaust throughout Europe and to highlight the forgotten narratives of this period.

1.5. SCOPE OF STUDY

1.5.1. SITES SELECTED

Thousands of sites pertaining to the Holocaust remain unrecorded and neglected throughout Europe. Whilst it is equally as important to protect and survey each of these sites, and although this study will consider a geographically diverse range of examples, detailed fieldwork will only be undertaken at two sites: the former extermination camp Treblinka in Poland, and the complex of camps and associated sites on the island of Alderney in the United Kingdom. The latter was selected given that the Holocaust is considered to include all forms of persecution undertaken by the Nazis, not just the extermination of victims in the extermination and concentration camps. These sites are intended to reflect general trends prevalent across Europe, with an emphasis on providing new insights into relatively well-known sites and revealing lesser known aspects of history and the experiences of the victims at more discrete locations. This will hopefully provide significant new information about the areas in question, whilst providing a platform for further research at other sites in the future.

In the first instance, the sites were selected because they are not fully understood. Neither has been adequately mapped and there are many questions outstanding regarding the locations of individual features. Unmarked burial sites may exist in both locations, despite

claims that all of the graves have either been marked or exhumed (Muzeum Walki I Męczeństwa w Treblince 2011; PRO FO371/100916). Similarly, both sites were reportedly destroyed by the Nazis upon abandonment (Central Commission for the Investigation of German Crimes in Poland 1946; Davenport 2003), yet preliminary site inspections revealed that material remains of structures were likely to exist. As will be demonstrated through other examples provided throughout this thesis, this is probably the case for thousands of other sites across Europe; thus this work will demonstrate future potential.

The diversity of Holocaust sites across Europe, in terms of site type, size, function and survivability, will be highlighted. The sites in Poland are located in the country that is perhaps most widely seen as having been affected by the Holocaust and Treblinka represents one of the main death camps from this period (Gross 1979; Gilbert 2002). In contrast, the sites in Alderney lie within a country where it is often believed the Holocaust did not reach, yet where an SS camp, labour camps and hundreds of associated sites were located (Holocaust Task Force 2006). Whilst Treblinka is established as a tourist attraction, the archaeological remains at these sites have never been examined. On Alderney, the sites are unmarked and, whilst the locations of some features are known, others have not been identified.

One of the main aims of this research is to demonstrate the diversity of the Holocaust throughout Europe, something which is reflected in the breadth of examples given and the locations of the sites selected for detailed fieldwork. Whilst archaeological survey can provide evidence that is complementary to historical data, emphasis has also been placed on

revealing new insights into lesser known aspects of the Holocaust; for example, the diversity of burials during this period, new aspects of the experiences of the prisoners and labourers, particularly as part of the 'Death through work' policy, Jewish experiences in Western Europe, the actions of the perpetrators, the post-war deconstruction of the extermination and labour camps and the subsequent survivability of the remains. This thesis sets out to challenge what we think we know about the Holocaust and demonstrate that, without the physical evidence provided through archaeological survey, we only have part of the story. Knowledge about the sites selected for this study varies considerably; whilst most people know the name Treblinka, few know where it is located (Glazar 1999; Jacobs 2004). The sites on Alderney are not widely known and none are well marked. Whilst many would claim to "know" what happened at Treblinka, often making generalised assumptions about all of the victims being cremated and the camp being totally destroyed (Gilbert 2002; Młynarczyk 2004), with regards to Alderney, some people are not aware of its existence or function, whilst others make claims about systematic extermination comparable to Auschwitz (pers. comm. Alderney Society; Freeman-Keel 1995). Consequently, these sites will demonstrate the extent to which the archaeological evidence corroborates or refutes historical thought.

The attitudes towards the sites selected are also diverse and demonstrate the issues that archaeologists concerned with the recording of the remains of the Holocaust need to be aware of. Political, social, ethical and religious factors have shaped the ways in which the sites have been treated to date and certainly impacted upon the application of archaeological techniques. The diversity in approaches to Holocaust heritage in government policy, academic literature and on-site interpretation will also be demonstrated by the sites

selected for detailed study, post-abandonment narratives will be derived and affected communities acknowledged. Given the diverse range of national and religious groups affected, the opinions of individuals and groups from across the world will be considered. Similarly, both of the main sites examined are remote, the majority of victims or those imprisoned there coming from across Europe. Thus, important questions will be raised over sustainable heritage management for the future, something which will be relevant for countless other locations.

1.5.2. METHODOLOGY

This research will focus upon the *search* for the physical remains of the Holocaust, utilizing a range of state-of-the-art techniques and research tools drawn from archaeology, conflict studies, history, forensic science, geography and social anthropology. No excavation or other intrusive activity will be undertaken, thus the remains will be identified, recorded and will be left undisturbed.

The intention of this project is not to suggest that non-intrusive methods should replace excavation or that these methods will be applicable to all sites pertaining to the Holocaust. However, by demonstrating the benefits of an interdisciplinary approach and the individual merits of each of the techniques used, it is the intention to suggest that, in cases where excavation is not permitted, required or wanted, there are alternative means to gaining substantial information about buried remains. By focusing on these methods as part of this study, it will ensure that they are thoroughly tested at a diverse range of sites and the issues with their use will be thoroughly explored. Predominantly, this research is aimed at raising

awareness of these methods; it will show that excavation is no longer the only option and that the combined use of non-intrusive methods should be considered more often in the future, either as standalone methods or to narrow down large search areas to permit targeted excavation.

1.6. POTENTIAL OF ARCHAEOLOGICAL RESEARCH

In addition to the issues highlighted above, there exist several other justifications for future work at Holocaust sites centred on the potential of the evidence derived through the use of archaeological methods to contribute to our knowledge of this period. Throughout this thesis, it will be argued that archaeological approaches can offer new insights into the events that are not available through other means.

1.6.1. HISTORY, ARCHAEOLOGY AND CULTURAL MEMORY

There is a tendency for people to perceive archaeology as dealing with ancient and long-gone societies, a dark and unexplored past veiled in mystery. Consequently, as Schofield (2009:408) points out, we often think we know the most about the recent past and, for that exact reason, we often don't; 'what some consider 'familiar' is perhaps the least familiar of all the periods we study'. There are many important reasons, however, why we should consider recent events (in particular recent conflicts) from an archaeological perspective. Holocaust sites not only act as memorials to the victims of the Holocaust, whether or not they are actively maintained as commemoration sites, but they also remain as physical reminders of the suffering and horrors of this period in our history (Beech 2002). Archaeological research has the potential to bring these often neglected and ill-understood

reminders to the forefront of public consciousness, thus re-reminding us of these events and their impact upon society. These material remains represent a unique, unexplored body of evidence that has the potential to alter our perceptions of these events and provide a more tangible reminder of the Holocaust for future generations. One need only look at the millions of museums, memorials and archaeological sites across the world that represent and commemorate various events, and the individuals affected by them, to recognise that physical remains of historical episodes can provide more perceptible representations of the past to which people can relate, regardless of whether or not they were directly affected by the event in question. This rationale should not be underplayed simply because the Holocaust occurred only seventy years ago, particularly as this appears to have had the effect of restricting our knowledge about certain aspects of these events to date (Chapter 2).

Most notably, the general public often believes that there is little need to survey modern remains, for which we often have maps, plans and other detailed documentary evidence, or perhaps we lived through the events in question (Schofield 2009). However, again Schofield (2009:408) argues 'to question the validity of archaeological research on the basis that we know it all already, from other sources, seems unhelpful'. This sentiment is particularly relevant to the Holocaust, given that many people have cited the vast array of historical sources when archaeological research has been proposed. Indeed Marrus (2000:202) argued that it was necessary for academics and the public to resign themselves to the fact that 'for better or for worse, we shall have to rely increasingly upon historians to transmit what is known about the massacre of the European Jewry', and this belief has been upheld by the majority since it was first expressed.

In recent years, within the discipline itself, the term archaeology has come to have more of an association with methodology rather than a distant past (Harrison and Schofield 2010; Little and Shackel 2007). As this thesis seeks to demonstrate, the material evidence revealed as part of an archaeological assessment can provide an account, and a source of evidence, which is complementary to documented history. Archaeological research can ask new questions of old material; documentary evidence for example will be utilised in different ways by archaeologists and what cannot be found in archives, can potentially be derived from analysis of the landscape. New aspects of the past can be explored through archaeological research and historical knowledge can be corroborated, complemented or challenged. As González-Ruibal (2008:248) confirms, 'most historical archaeology is justified by the belief that we need alternative stories - that oral and written data do not tell us everything about the past, that there are other things to be learned from artefacts and other experiences have yet to be accounted for. Add to this list the potential for archaeologists to obtain information about landscapes, buried structural remains and graves, and the potential for this discipline to contribute to narratives of the Holocaust increases considerably.

To date, in the absence of large-scale investigations of the physical evidence of the Holocaust, it seems reasonable to ask the question, if such evidence has not been considered, how then can we claim to fully understand these events? If we have not explored the material remains that can provide us with 'alternative stories' of the past, how can we accept that our current knowledge of the Holocaust is accurate and representative of

its extent and nature (González-Ruibal 2008:248)? Consequently, it is important to move away from the notion that the presence of historical sources precludes the need for physical evidence in the field of Holocaust research so that new insights into the events can be provided. Such beliefs potentially offer one reason why Holocaust archaeology has not been widely studied, an idea that will be discussed further in Chapter 2. Indeed, such investigations can provide new dimensions to Holocaust studies; not only will direct information be provided about the nature of life in Europe during World War II but archaeological remains at the sites destroyed or taken over by the Nazis also have the potential to reveal information about communities both before and after the war. Archaeology can provide information about people's lives that is not available through any other means, particularly where such evidence may not have been written down or may have been lost (Brickley 2003; González-Ruibal 2008).

1.6.2. 'REMEMBERING' AND 'NOT FORGETTING'

Beech (2002:199) has argued of Holocaust memorial sites that they fulfil both a 'remembering function', thus providing for 'the needs of the survivors and the families of those who did not survive', and a 'not-forgetting function', which focuses more on 'general societal needs'. The same distinction can be made with reference to the rationale for completing archaeological work at Holocaust sites.

1.6.2.1. Remembrance

Archaeological investigations at Holocaust sites can fulfil both humanitarian and commemorative functions, by providing physical evidence for survivors and victims' families

about the locations that they, their friends or relatives lived, worked and died. This thesis will address the importance, and potential, of archaeological work to identify further mass graves, cremation pits and other massacre sites, in order to provide 'basic dignity' to the victims (Haglund 2002:245). This is based on the fact that 'the desire to know the fate of loved ones lost in armed conflicts is a basic human need which should be satisfied to the greatest extent possible' (United National General Assembly 1974). Thousands of these sites remain unmarked, whilst the locations of others have been forgotten. Others lie within memorial sites but their full extent and nature has never been determined through scientific means and, at many such locations, visitors will walk over these graves, unaware that the victims of genocide lay beneath their feet. Although some, largely localised, attempts were made to locate Holocaust graves after the war, there has never been a large-scale, objective effort made to commemorate the majority, as has been the case for recent conflicts in the Balkans and for the repatriated military war dead of various twentieth and twenty-first century conflicts (ICMP 2010; Haglund 2002; Commonwealth War Graves Commission 2010, Volksbund Deutsche Kriegsgräberfürsorge 2010). The significance of the identification of graves of victims of genocide has been noted in these recent forensic investigations, for example in Bosnia, Kosovo, Spain, Cyprus and Rwanda, something which is reflected in the legislation introduced in recent years, and the considerable number of organisations that have been established that aim to locate massacre sites (ICMP 2010; Cox et al 2007; Hunter and Simpson 2007; Field 2007; Ferrandiz 2006; Haglund 2002: Hoshower 1998).

Locating further Holocaust graves would fulfil several important functions, with regards to remembering the dead. Firstly, over the last decade, again most likely in light of recent war

crimes, a collective desire to locate sites of genocide appears to have arisen in public consciousness. Thus archaeological investigations of Holocaust sites would satisfy these demands and reconcile the treatment of the graves of victims with those of other recent conflicts (Scheur and Black 2002; Hunter and Cox 2005; Williams and Crews 2003). Secondly, within the discipline of Holocaust studies, the ethos of remembering the dead is reflected in the sentiments of various organisations and in the semantics associated with these events; for example, the literal translation of Yad Vashem, one of the world's largest Holocaust archives and museums, is 'a name and a place' and they have suggested that this is 'the minimum of remembering that the living owe to the dead', whilst the phase 'Never Again', with the commitment to educating future generations about genocide, has become synonymous with the Holocaust (Yad Vashem 2010). As has already been highlighted above, 'for survivors, who have not respectively buried their dead, the mass graves and memorial centres become immensely powerful places for grieving, mourning and honouring them' (Field 2007:219). Similarly, psychologists have noted the importance of funerals and other grave-side services in order to provide finality in death and closure for victim's families, whilst various religious requirements are also fulfilled by the existence of a marked burial site (Beder 2002; Smith 2007). As the number of survivors of these events decreases, the need to fulfil this 'remembering function' appears more immediate and will take on further importance for subsequent generations of the families of these survivors and victims. The recent developments in archaeological techniques can facilitate this and can ensure that these burial sites are appropriately marked and protected.

The location and adequate demarcation of Holocaust burial sites is particularly important, given that it seems improbable that large-scale identification and exhumation of the victims will ever be practically possible or desirable, in light of the scale of the atrocities, the time that has elapsed since burial and the impact of Jewish religious law, which prohibits disturbance to human remains (Young 1994; Smith 2007; pers. comm. Rabbi Gluck). Consequently, this study in part focuses on the application of a range of non-invasive survey methods that can facilitate the identification and appropriate demarcation of specific burial locations in order to fulfil personal, religious and collective mourning functions, whilst enhancing historical and scientific knowledge.

1.6.2.2. 'Not-forgetting'

The physical evidence provided by archaeological surveys will not only contribute to the immediate collective memory of the victims of the Holocaust but it will also fulfil the 'not-forgetting' function for the wider public and for future generations (Beech 2002: 199). Knischewski and Spittler (2007:183) have argued that 'the Holocaust is turning into a universally accepted and understood metaphor for evil that is becoming more and more decontextualised, more and more removed from the actual historical events'. Archaeological investigations can provide a means to bring our understanding back to the individual events, both at site level and in terms of the general trends that can be deduced about the Holocaust from the results.

In terms of the other material remains associated with the Holocaust aside from burials, attention has usually been focused on recognising that certain camps, execution sites and

ghettos exist, rather than providing physical evidence with regards their extent and layout (Central Commission for the Investigation of German Crimes in Poland 1982; Profalitov 1945; International Jewish Cemetery Project 2010). Being able to provide physical evidence of what these sites would have looked like, how prisoners and victims of the Holocaust would have lived, worked and died within them and what still survives below the ground, can offer a more perceptible history to the public even when the remains themselves cannot physically be unearthed. Performing the 'not forgetting' function through archaeological research is as much a sensory exercise as a scientific one; it is obviously much easier for people to 'not forget' and to realise the impact of conflict if there are physical remains of it to see, in whatever form, than it is for them to achieve this from reading books or oral descriptions. Consequently, the material can be used as part of sustainable heritage programmes in order to inform the wider public about these events. It can be used to enhance the visitor experience and provide a permanent visual record of the site for future generations at a time when the events that occurred are fading from living memory.

Although the remains may not always be excavated, on-site interpretation in the form of information boards, above-ground feature markers, visualisations and improved museum displays, can be realised using archaeological data. Given the increased interest in both archaeology and the history of World War II in recent years, such provision seems a logical step to ensure sustained visitor numbers in the future. Digital resources such as websites, interactive exhibitions and publications can be created to ensure a long-lasting, versatile and global record of the physical remains of the Holocaust (Council for Europe 2005). Additionally, although the events of the Holocaust are reported on in the media and form

the basis of books, films and documentaries, this often blurs the divide between historical fact and fiction (Jick 1981; Hoskins 2003). The depleting number of war crimes trials demonstrates that a chapter in the history of the investigation of the Holocaust is coming to an end (Oroschakoff 2011; BBC 2011a). The widespread investigation of the sites of the Holocaust using archaeological techniques could mark the beginning of a new one.

Additionally, at a broader level, this work will have important educational implications, both in terms of complementing existing histories of the sites in question and the Holocaust in general, and through providing an untapped body of evidence for analysis and discussion. This physical evidence will offer new insights into the crimes that took place and will hopefully facilitate cross-discipline academic engagement. Not only will it demonstrate the potential applications of the methods used in the context of the Holocaust and other sociohistoric conflicts within the discipline of archaeology, but it will also provide material for study within other subject areas, such as Jewish Studies, history, social studies, geography and politics. New material will also be provided for use in school-level education, to ensure that the horrors of the Holocaust can be recounted to future generations. Figure 1.4 shows a cartoon demonstrating the importance of ensuring that future generations understand the events of the Holocaust in which the child questions 'so you kept it [Auschwitz tattoo] to remind yourself about the dangers of political extremism?' to which the Auschwitz survivor responds 'no my dear, to remind you' (Wiley 2002). Educating children about the Holocaust has relied heavily on survivor testimony and historical accounts to date, thus ensuring it has remained an integral part of school curriculums in most European countries (Holocaust Task Force 2006). However, as the survivors pass away, and the younger generations becomes

more desensitised to war and violence, there is a need for new material for study. As Darmamin and Mootz (2006:465) have argued, 'as the Holocaust recedes further into the past, archaeology can provide a new source of information and inspiration'. Field (2007:232) has also argued that it is important that 'educational strategies need to locate peoples' memories within broader contexts and frameworks of understanding', something which can also be facilitated through a deeper understanding of Holocaust landscapes.



Figure 1.4. Cartoon highlighting the importance of passing on knowledge of the Holocaust to future generations (adapted from Wiley 2002)

As well as the relevance of archaeological data for shaping our understanding of the events themselves, as Huyssen (1994:9) has argued, 'as individuals and societies, we need the past to construct and anchor our identities and to nurture a vision of the future'. Therefore, the material remains of the Holocaust can demonstrate trends and lessons that have the potential to shape approaches to the study of genocide and causes of conflict in the modern world. Far from being viewed as distant and socially-removed events that should be addressed like any other period of history, 'the archaeology of the contemporary past has to do justice to the enormous relevance of things in our recent history' (González-Ruibal 2008:252). Holocaust archaeology as a subject area can provide new opportunities to reflect on the past, whilst highlighting issues such as intolerance and racial hatred, something which seems increasingly important given the divisions affecting modern society. As Sir Philip Bailhache (2009) noted in his Holocaust Memorial Day speech, 'we cannot teach people to be heroes. But we can teach children to understand how the bullying and hatred or disdain of minorities, and discrimination against people who are different in some way, are the first steps on the road to Auschwitz'; the physical evidence provided by archaeological surveys provides a more visible (and more difficult to deny) means to achieve this. Additionally, Harrison and Schofield (2010:8) have suggested that archaeological studies of the recent past can have a 'redemptive function', whilst the notion of Vergangenheitsbewältigung (the need to come to terms with the past) has been acknowledged in Germany society with respect to the Nazi Occupation of Europe (Knischewski and Spittler 2007:166). Therefore, the potential for studies of the material remains of the Holocaust extends to inspiring openness about the events in question, thus facilitating peace and social cohesion in the future.

The sensitive nature of studies of the Holocaust and other genocides, and the potential effects that this can have on society, are central to this thesis and will be examined further in Chapter 2. However, in terms of reinforcing the lessons that society should learn in order to prevent further genocide, as González-Ruibal (2008:252) has argued, modern archaeology should conjure up painful memories. By conducting archaeological research, even before the implications of the results of the surveys are considered, themes such as the impact of nationalist, fascist and oppressive regimes as well the implications of discrimination, violence and conflict, are bought to the fore (González-Ruibal 2009; Paperno 2001). Whilst there are many valid reasons for approaching the archaeological remains of the Holocaust with a measured and carefully calculated approach, in light of the various ethical, social, political and religious factors that impact upon their examination, it is not sufficient to continue to use the excuse that the events are too sensitive as a reason not to explore the physical evidence, particularly when historical research is carried out in abundance. This denies the public the information concerning aspects of the events that can only be gleaned through landscape analysis. Thus, as Harrison and Schofield (2010:13) have argued, archaeology should be viewed in the same way as documents, witness accounts and historical studies, given that 'it has a role in bringing forward those things that are hidden from view and placing them before the public'.

1.6.3. TIMELINESS OF RESEARCH

Aside from the reasons stated above, this research is timely on several other levels. As time since these events passes, the former prisoners pass away and fewer people live who can

feel a tangible and direct connection to this aspect of the past, the risk that these sites will remain unmarked and become dilapidated increases. As the United States Commission for the Preservation of American Heritage Abroad (2005:53) have argued, 'without prompt action, the knowledge of many of these places will disappear as the generation that suffered the horrors of the Holocaust passes'. This is also coupled with the fact that Holocaust sites are increasingly under threat from both natural and man-made landscape change. For example, countless Jewish cemeteries, which are also the sites of mass burials of the Holocaust, lie dilapidated, over-grown and vandalised throughout Europe (International Jewish Cemetery Project 2010; Plate 1.2). Archaeological research at these sites would not only revive interest in them and hopefully facilitate appropriate protection and commemoration, but it would also ensure that, should the latter not occur, the sites are at least preserved by way of record.



Plate 1.2 Dilapidated and vandalised Jewish cemeteries in Cieszyn (top) and Katowice (bottom),
Poland (author's own photographs)

Development and alternative uses of former Holocaust sites is perhaps the largest threat, particularly to sites containing structural remains. In particular, there exists a number of sites that have been used since the war and, not having been recorded in their former state, now reveal little of their former function. For example, former camps are now the sites of prisons, youth centres, parks and even camp sites (Baker 1988; Reinartz and von Krokow 1995; Plate 1.3). Whilst such redevelopment of Holocaust sites should not necessarily be viewed negatively, archaeological surveys of such sites would at least allow them to be recorded and their former function acknowledged; the past should not inhibit the future but we must acknowledge the past in order to move forward (Logan and Reeves 2009). Perhaps equally as vulnerable, and more susceptible to a lack of interest in archaeological work, are those sites that are already marked as memorials, particularly those at which this occurred immediately at end of the war (Iwaszko et al 2000; Kranz 2007; Polish-Soviet Extraordinary Commission for Investigating the Crimes Committed by the Germans in the Majdanek Camp in Lublin 1944). There is a tendency for people to believe that we know everything about these sites given that they often have museums, the purported camp structures and grave sites are sometimes marked and above-ground structures can often be seen, as at Majdanek and Auschwitz (Sweibocka 1995). Two points arise here. Firstly, rarely are questions raised about how the locations of the buildings and graves that are marked on the ground were established; few people allude to the fact that they may be incorrect and even fewer suggest that further remains might also exist below the ground. Secondly, recent news reports about potential funding cuts for Auschwitz and thefts, vandalism and accidents at the latter and at other sites such as Majdanek, demonstrate that even those sites that appear protected are still under threat (Auschwitz-Birkenau Memorial and Museum 2010; State Museum of

Majdanek 2010). Again, archaeological survey can create a long-lasting record of these sites and revive popular interest in them, thus facilitating sustainable heritage programmes for the future.



Plate 1.3. Neuengamme camp in Germany, which was used as a prison until 2003 (top left; after KZ NEUENGAMME 2010), the remains of Plaszow camp in Poland, which are now in parkland (top right; after H.E.A.R.T. 2010), Nordemey camp in Alderney (bottom left; author's own photo), which is now a holiday camp site, and Trawniki in Poland (bottom right; Copyright H.E.A.R.T. 2010), which is now an industrial site.

Additionally, perhaps the most convincing argument for archaeological research at Holocaust sites is the fact that, to date, approaches to their discovery have been shown to be largely been passive or have taken place as a secondary effect of other activities (BBC 2007, De Spiegel 2006). There is a need for an active approach to the analysis of Holocaust archaeology and for a body of literature addressing the ethical issues involved when studying this period. Whilst it is recognised that it would never be possible to identify every

single site in Europe, nor would it be possible to prevent any further serendipitous discoveries of remains, if increased research into Holocaust archaeology using an appropriate and widely tested methodology were to take place in the immediate future, considerably more information about these events could be gleaned. Similarly, when serendipitous discoveries were made, there would be a large number of similar cases to which local authorities could refer and more appropriate methodologies could then be implemented. Instead of waiting, unprepared and unsure of the potential of these remains to reveal information about this important event, it is time to seek out the archaeology of the Holocaust using a systematic and scientific approach.

Finally, this research is set against a backdrop of recent advances in the archaeological investigation of conflict and the growing recognition of the need to preserve sites from the modern era (Carman forthcoming; Schofield et al 2002). This thesis draws on the lessons learnt from both conflict and forensic archaeology, as many of the themes prevalent in these sub-disciplines exist within the study of Holocaust archaeology; for example, humanitarian and ethical issues, the impact of political thought (both past and present) and the sensitivities, obstructions and advantages of studying the recent past. The investigations undertaken within these sub-disciplines have occurred only recently and many faced some of the same objections as were faced as part of this study. For example, studies of World War I battlefields and the exhumation of soldiers on both sides now rest within a strong framework of dedicated organisations, university research programmes and public support (Saunders 2001; Wilson 2007). As already noted above, the location of war dead and civilian casualties is subject to international investigation, with relevant standards and legislation in

place to support this (ICMP 2010). Consequently, these investigations demonstrate the potential of new avenues of enquiry with regards archaeological examinations of conflict; what were once isolated investigations of sites pertaining to a particular period, have often sparked a whole new sub-discipline, and revealed and recorded sites of international importance. Perhaps, if the potential of archaeological approaches to contribute to knowledge of the Holocaust can be demonstrated, the same will occur in this research field in the future.

1.7. AGENDA

This chapter has highlighted the reasons why further work is required with regards to the archaeological remains of the Holocaust. The remainder of this thesis intends to demonstrate the potential of archaeological survey, in conjunction with a thorough consideration of the various factors impacting upon successful searches, to contribute to, and challenge, histories of this period.

The questions and challenges posed by studies of the physical remains of the Holocaust will be discussed in detail in Chapter 2, as a precursor to suggesting an appropriate methodology in Chapter 3. The results of the fieldwork undertaken at Treblinka and Alderney will be discussed in Chapters 4 and 5 respectively, with Chapter 6 focusing on common trends that can be derived regarding the study of Holocaust archaeology. Finally, conclusions regarding the suitability of archaeological methodologies for the investigation of sites of the Holocaust, potential for future work and considerations when researching sites of this period will be examined in Chapter 7.

2. ISSUES INVOLVED IN THE STUDY OF HOLOCAUST LANDSCAPES

2.1. UNIQUENESS OF THE HOLOCAUST

The multiple genocides, wars and violent acts of the twentieth century are well documented and have become embedded in public consciousness. Unfortunately, acts of mass murder by dictatorial leaders, national governments and rebel forces based on religious or ethnic discrimination have become all too familiar. However, based both on its impact at the time and since, many scholars continue to emphasise the uniqueness of the Holocaust. This has been based on a multitude of factors, ranging from the number of victims and groups affected, through to the industrialised and far-reaching methods of killing employed (Wiesel 1967; Friedlander 1992; Cargas 1986). Jäckel (in LaCapra 1996:112) remarked:

'the Nazi extermination of the Jews was unique because never before had a state, under the responsible authority of its leader, decided and announced that a specific group of human beings, including the old, the women, the children, and the infants, would be killed to the very last one, and implemented this decision with all the means at its disposal'.

Davidowitz (1990:18) also focused on the distinctiveness of the Holocaust in terms of its finality: 'never before in modern history had one people made the killing of another the fulfilment of an ideology, in whose pursuit means were identical with ends'.

However, whilst Cargas (1986:xiii) has argued that 'the Shoah was an extraordinary event...it requires extraordinary responses...so must each of our responses be unique to us', it would

appear that in terms of the examination of the archaeological remains of this period, such a unique response has not been generated. In particular, archaeologists have failed to consider the array of responses generated by the public and affected communities (section 1.4; Smith and Waterton 2009). As noted in Chapter 1, there is considerable disparity between the examination of the material remains of the Holocaust and those from other twentieth-century conflicts. Similarly, there have been no attempts to explain why this situation has arisen and questions remain over whether such studies have been obstructed, deliberately avoided or simply overlooked. Consequently, in advance of the development of a field methodology to be employed at the sites examined as part of this study, this chapter will examine the various reasons that may have impacted upon this situation and which, in turn, will undoubtedly impact upon future work.

2.2. BETWEEN HISTORY AND MEMORY

Sixty six years have passed since the end of World War Two. However, whilst the Holocaust may be distant in terms of time, in terms of memories and resonance in modern society, these events are current and significant. Indeed, as Harrison and Schofield (2010:4-5) have noted, the contemporary past is 'called contemporary not simply because it is "now" and recent but because it is not 'closed' in interpretation nor emotional influence'. The extent to which this is the case will of course vary in nature, with respect to race, religion, cultural group or personal experience at both individual and national level. For example, in the Ukraine, given the number of victims whose graves were never found, the Holocaust remains an ever-present component of society for many families, whilst in Israel and Palestine one of the legacies of the Holocaust is evolving daily on the world stage (Golbert

2004; Zertal 2010; Plate 2.1). The fact that many victims of the Holocaust and their affected family members are still alive perhaps remains the most influential factor that has led to the positioning of these events within the grey area between history and memory.



Plate 2.1. Contested ground in Jerusalem, as part of the ongoing Israeli-Palestinian conflict (after BBC 2011b)

Such a perception of this period does result in several potential issues that need to be considered by archaeologists operating in this field. On the one hand, the social relevance of these events has led to increased calls to locate the victims, maintain the memorials and educate the public; indeed, the connections that have been made between modern genocides and the Holocaust have reinvigorated studies, ensuring this period remains in public consciousness (USHMM 2009; Beth Shalom 2010). Additionally, people wish to commemorate the dead, visit the sites where the deceased were killed or interred, and gain a broader understanding of the lives of their ancestors through direct engagement with the past, as opposed to learning about it through secondary sources such as the media (Schofield 2004). The continued presence of victims from this period has ensured that, for

the past several decades, the Holocaust has remained 'living history' (Cargas 1986:xiii). Kleiman and Springer-Aharoni (1995:9) have identified two distinct strands of remembrance that have taken place: one which focused on documenting personal experiences and the other which centred on commemorating mass graves, and that 'the two operations were similar, but one looked ahead, to future generations, whilst the other looked back, to the dead'. Thus, archaeologists have to consider the wishes of these individuals and how their research can contribute to memorialisation.

On the other hand, whilst 'the need for filling the "black hole" between the archaeological past and the present' has been acknowledged by conflict archaeologists examining other periods, it would appear that there has been a marked reluctance, and in some cases refusal, to do so for the Holocaust (González-Ruibal 2008:247). The question remains, therefore, what is it about this period that places it "off limits" as it were to those wishing to examine its physical evidence? Has this situation arisen due the nature of the Holocaust itself or can this be identified as a trend with regards to any other socio-historic events? Is it the fact that the events sit in this so-called grey area between history and memory that has led to this situation?

In response, comparisons can be made between the delay in investigating sites of the First World War (Saunders 2001), the Spanish Civil War (González-Ruibal 2007), the Turko-Cypriot war (Cassia 2005) and those relating to Stalin's Purges (Jankauskas 2005; Paperno 2001), all of which have only been examined by archaeologists in the last decade. All of these sites had been avoided for a number of social, political and ethical reasons. Additionally, as with the

Holocaust, sufficient time had not passed for them to be considered archaeological, according to the traditional definition of this term, but their forensic significance no longer remained (Scheuer and Black 2002). Similarly, only in recent years has the humanitarian rationale for recovering the victims of conflict and genocide been acknowledged, and further technologies and protocols have been developed; thus it has finally become possible to address socio-historic sites in the same way as recent ones (Chapter 1; Hunter et al forthcoming). Similarly, archaeology as a discipline has in general only relatively recently begun to consider the post-medieval period. That said, the Holocaust has still been left behind in archaeological terms, despite the fact that significantly more sites across a wider geographical area pertaining to this event exist than for many others of the twentieth century. Indeed, if time was the major contributing factor, then surely other sites relating to the Second World War would also not have been examined, yet there has been a keen interest in the fortifications, aircraft, camps and other structures relating to the war itself (Gaffney et al 2004; Williams and Williams 2007; English Heritage 2003).

By way of explanation concerning recent conflict in general, González-Ruibal (2008:248) has suggested that 'it seems that, for both scientific and personal reasons, we cannot study what we or our relatives have directly or indirectly experienced'. This raises several further important questions. Why then have well-established protocols been developed, allowing the immediate response by international teams to recent disasters and genocides, yet not employed at Holocaust sites? Similarly, why have countless other periods of our recent past been subject to detailed archaeological and historical enquiry? Indeed, why has the Holocaust been studied intensively from a historical perspective if we are unable to address

events in living memory? It would appear that, for whatever reason, from an archaeological perspective, the Holocaust, despite its similarities with other conflicts from this period, is sometimes deemed 'too near and too painful' (Polonsky and Michlic 2004:43).

2.3. THE DIVERSITY OF GROUPS AFFECTED

One probable explanation for these approaches to the Holocaust lies with the diversity of the individuals and groups who were and, as part of its long lasting legacy, still are affected by it. It is perhaps the number of countries involved that make it unprecedented in scale, and a diverse range of national and local factors have to be considered. Not only will each country have experienced the Holocaust differently, dependent upon its location, the make-up of its population, its government and its place in the Nazi's plans to occupy Europe, but subsequent approaches to memorialising these events will differ, based on politics, social trends, religious thought and heritage policies. Additionally, such approaches will not have remained static and since the end of the war they have evolved and diversified according to numerous factors. It is perhaps these issues (discussed below) that represent the largest challenge facing archaeologists considering this period.

2.3.1. POLITICS

2.3.1.1. "Official Histories"

Since the war, various groups have attempted to shape the perceptions of the events and, in many cases, national "official histories" have emerged, often with an underlying political agenda directed towards limiting discussion on more contentious aspects of the past

(Polonsky and Michlic 2004; Cruikshank 1975). In historical dialogue, certain common ideas have been presented, such as the fact that the majority of the Nazis' victims were cremated and all physical traces of some of the camps were entirely destroyed (IMTN 1947, Chrostowski 2004; Davidowitz 1975; Rost 1999; Sweibocka 1995). Public impressions of the Holocaust can be seen to have derived from common representations presented in the national and international media: the piles of emaciated bodies photographed by the liberators, the gas chambers, the railway lines to the camps (Abzug 1985; Lattek 1997).

Such a prescribed approach to general public education has also been taken with regards to the presentation of the physical remains. 'Conscious political decisions' to preserve Auschwitz-Birkenau and present it as a symbol of the Holocaust have been maintained since the end of the war (Sweibocka 1995:283; Plate 2.2). Whilst this approach may be due to the sheer number of sites throughout Europe, and the need to have a centralised education strategy, it has attracted criticism for entering the realms of so-called 'dark tourism' and 'infotainment' (Lennon and Foley 2000; Sweibocka 1995; Cesarani 2005). Various critiques of the presentation of these sites have been presented in the literature, from those that accuse archaeologists seeking to bolster tourism of being 'victims of fast capitalism' (Matthews 2009:87), to those that claim that 'the new museum and memorial culture of recent years betrays any real sense of history and has instead turned to spectacle and entertainment' (Huyssen 1994:12). If increased efforts are to be made to examine the physical remains, particularly in the context of their potential contributions to heritage and education, then these issues clearly need to be addressed.



Plate 2.2. The gates of Auschwitz, which have become the iconic image of the Holocaust (author's own photograph)

Additionally, such an approach has been at the expense of other sites, some of which have become neglected and misrepresented, in particular the smaller massacre and cemetery sites. By channelling the history of the Holocaust through a selection of well-known sites, this has served to create an image of the Holocaust that centres around the systematic and industrialised processing of victims, as well as one which implies that all that remains survive above the ground (Sweibocka 1995): *ergo* the Nazis purportedly destroyed all traces of the camps, *ergo* there is little need for archaeological investigations.

In some countries and amongst some groups there is an apparent desire to separate the killings that occurred from the events of the Holocaust entirely, as reflected in the semantics used and the exclusion of the killings of the Jews and other minority groups from discussions (Yad Vashem 2010; pers. comm. Alderney Society). Instead there has been a focus on the deaths of civilians, whilst memorialisation has been 'influenced by and become a focus for the politics of nationalism' (Pollard 2007:143). In Poland, for example, attempts to seek

victims not of Catholic affiliation have been deemed 'anti-Polish' by past governments (Polonsky and Michlic 2004:9). Terms such as 'martyr' have been used to describe Polish victims, with the media and national curriculum focusing almost exclusively on the massacre of Polish soldiers at Katyń (Ministry of Foreign Affairs 2008). Elsewhere, there are attempts to stress that only work camps and not concentration or extermination camps existed in a given location, thus attempting to separate the deaths caused through ill-treatment from direct annihilation (pers. comm. Alderney Society; Aulich 2007). Not only does this defile the memory of those who died in these camps but it ignores the diversity of the Holocaust. For example in France, there appears to be a marked reluctance to address the impact of the Holocaust, which according to Aulich (2007) stems from fears over admitting the crimes which were carried out. Therefore, these approaches place the atrocities 'at the margins of memory' and allow disassociation of cultures from the darker parts of history (Aulich 2007:195-196). Consequently, one of the priorities of this research will be to examine the physical evidence in order to demonstrate the diversity of the Nazi Occupation.

In many cases, current approaches to the physical remains of the Holocaust are consistent with Bernbeck and Pollack's (2007) assertion that 'the perpetrators and their actions are missing in modern heritage, which prioritizes the achievements of the victims'. Often there has been a focus on defining the numbers of victims or simply the fact that the victims were present in a given area (Bernbeck and Pollack 2007; Kola 2000). Attention has been placed on themes such as 'passive suffering' and 'vicarious victimhood' (Novick 1999:5), something which is reflected in the presentation of tourist sites at which 'visitors are interpolated into passive subject positions and encouraged to accept a dominant narrative in which they

sympathise with innocent victims, identify with brave national heroes, and demonize, vilify and dehumanise the enemy! (Lisle 2007:98).

An almost mythical veil has been drawn over some Holocaust sites, consistent with approaches to other sites of the contemporary past; 'these names seem to conjure images of a devastated landscape, hideous industrialised war, and infinite pity for those who fought' (Wilson 2007:227). Perhaps it is this opinion that has also contributed in part to the view that Holocaust sites should remain untouched, preserved in time as sacred landscapes (Jacobs 2004). Little attention has been paid to how landscape studies can reveal information about the Nazis' methods and plans for extermination, their methods of camouflage or the intentions of groups of perpetrators. This is where taking a more forensic archaeological approach can help to rectify this, thus ensuring that both the victim and perpetrator archaeology can be emphasised; the grave sites can be located and commemorated, whilst the development and intention of the Nazis' plans can be demonstrated.

This apparent dehumanization provides an escape from acknowledging the uncomfortable reality of humanity; that is, that it is capable of war, aggression and persecution (Moshenska 2008; Gipps 2011; Clendinnen 1999). As Gould and Schiffer (1981) have argued 'more than anything else, these modern material culture studies show us that we are not always what we seem, even to ourselves'. It is easier to face these uncomfortable aspects of the past believing that the Nazi aggressors were somehow different, separated from the rest of society, overcome by inhuman rage, than it is to admit that it is precisely because the

perpetrators were human that these events are so terrifying. Certain subjects are also seemingly off limits or at least frowned upon, such as the involvement of children and women in perpetrating crimes them (Sofaer Derevenski 2000; Gilchrist 2003), and instead of embracing studies that have sought to examine issues such as collaboration and the role of 'ordinary men' as revolutionary, many in the past have sought to marginalise this research (Browning 1993; Bunting 1995). Additionally, attempts have also been made to describe the Holocaust as a religious struggle where the Jews were chosen by God to suffer for mankind but, as Garber (1994:4) has argued, in order to fully understand the events it should instead be seen 'as one more tragic example of man's inhumanity to man, in which both mur derers and victims are ordinary human beings in an extraordinary situation, a secular event without either saints or demons'. Seemingly we need to find a way to address such issues and recontextualise the events. The fact that the physical evidence of the Holocaust is capable of providing a vivid reminder of the crimes perpetrated by these individuals is perhaps both the biggest strength in this regard, but also its biggest challenge, given that archaeological approaches forces uncomfortable aspects of the past to the forefront of memory (González-Ruibal 2008).

Additionally, perhaps one of the greatest challenges facing researchers studying this period is how to address and account for the fact that their research may dispute popular histories; thus, whether intentional or otherwise, the latter may be perceived as an act of resistance and defiance (Baker 1988; McGuire 2008). Additionally, the idea that historical accounts have taught us all we need to know about these events needs to be overcome by archaeologists. However, to examine the physical remains requires fieldwork, whether

intrusive or non-intrusive, but permission is unlikely to be granted when it is believed that this will have little impact, or there is no research or social benefit.

It would also appear that archaeologists, perhaps wary of these issues, have to date reacted in a similar way to historians thirty years ago; as Browning (1993:xi) notes, 'often their response was to treat the Holocaust as an aberration – a freakish inexplicable event – not to be analyzed in the same way historians approach other occurrences and not to be assimilated into our self-understanding'. Separating the events as somehow inhuman serves to disconnect them from the traditional well-tested mechanisms for investigating archaeological sites and by seemingly accepting that these events were somehow different, we as a discipline are able to bury our head in the sand.

2.3.1.2. National and Societal Divisions

Despite the time that has passed since the Holocaust, in many countries it still represents a contentious and commanding issue. At the most serious level, the examination of the physical remains of the Holocaust has incited further conflict, for example in the former Yugoslavia, where the exhumation and memorialisation of Holocaust victims led to war and genocide in the 1990s (Skinner et al 2002). Considering lessons learnt in the search for victims from other genocides, as Skinner et al (2002:297) have argued, such investigations can facilitate propaganda, thus 'archaeologists have to be careful not to inspire...genocide by providing a pedigree for hatred with simplistic consumer-orientated interpretation of a complex past' (Pyburn 2009:162).

Such an approach reflects another trend in respect to the Holocaust; that is that, irrespective of the details of what really happened, in many cases 'the past has...been reshaped by an altered present' (Pullan 2007:89; González-Ruibal 2008). Thus, modern political relationships have often shaped approaches to representations of these events and its material past. For example, the former example of a focus on Katyń is also reflective of a current heightened hostility towards Russia that is felt in Poland (BBC 2011c; Meng 2010). Other examples demonstrate this trend and how approaches to these sites have altered and diversified in the decades since the war, reflecting the social and political changes that have occurred. One particularly good example of this is the various attitudes that have evolved in Germany. Whilst an uncomfortable silence was maintained about the Nazi atrocities for many years, the decision to examine the site of the SS, SA and Gestapo headquarters represented a dramatic act of defiance and remembrance, which incited the West German government to relent and support the venture (Baker 1988). However, the fact that East German artists were imprisoned for entering the competition to design a new memorial at this site demonstrates how modern political thought influenced its representation (Moeller 2006; Baker 1988). Following the collapse of the Berlin Wall, attitudes changed again and the subsequent developments in Germany have now resulted in an ethos with regards to the Holocaust that 'draw lessons from the past with a view to building a better future' and acknowledges the responsibility of individuals and institutions (Knischewski and Spittler 2007:166).

Similarly in the former Eastern Bloc countries, it was not permitted to discuss the atrocities of the Second World War under Communist rule but, since the 1990s, and in recent years in

particular, changes in approaches have emerged (Paperno 2001; Jankauskas 2005). Although many attempts to address these events have been made at local level, usually inspired by academics or specific projects as with the searches for mass graves in Russia and the Ukraine, some national and even international groups have emerged with government backing (Paperno 2001; Faith in Focus 2008; Wright et al 2005). For example, the Commission of Historians in Latvia (2001), the Commission on Concealed Mass Graves in Slovenia (Ferenc 2008), the Estonian International Commission for Investigation of Crimes Against Humanity (2006) and the Institute of National Remembrance in Poland (2009) are all active. However, the remit of these groups varies considerably and the majority are limited to historical research. Particularly concerning those groups that were not established until relatively recently, it is probable that it will be a long time before suggestions are made to examine the physical remains relating to these events. The long period of time in which it was not deemed acceptable to even discuss the events of the Holocaust offers one explanation as to why the physical remains of this period have undergone limited investigation. Such issues may be far beyond the control of researchers but it is vital that a consideration of them forms a fundamental part in the development of search strategies. Given the fact that archaeology has often been perceived as both physically and metaphorically digging up painful aspects of the past, the act of conducting archaeological research can in itself be seen as political (McGuire 2008). Whilst it is clearly important to ensure that research does not become sanitised and a process of 'stamp collecting' (Saunders 1998:9), the political resonance of the excavations at Serniki and Jedwabne for example have demonstrated the issues that can arise when conducting invasive investigations at Holocaust sites (Wright et al 2005; Bevan 1994). Indeed, those

investigations undertaken, particularly by non-natives, 'just to satisfy a desire for knowledge about the past' (Wright et al 2005:137) will not always be well received and 'memorial and educational processes need to pay considerable attention to containing the threat of both socio-political and emotional fragmentation' (Field 2007:228). Questions need to be asked over whether the potential damage, upset and upheaval caused by such investigations is justified in light of its potential to enhance public knowledge and understanding of the past; thus there is a need to thoroughly consider the significance and impact of the research, both in scientific and societal terms (Wright et al 2005; Pyburn 2009).

2.3.1.3. A Hierarchy of Atrocity?

Whilst in some countries conscious efforts have been made to shape perceptions of the Holocaust, the lack of study with regards to the physical remains in other countries may stem from the fact that other events have been deemed, over time, to have more social relevance on a daily basis. Indeed, what can almost be described as a hierarchy of atrocity has developed in some European countries. For example, it is apparent on memorials and in heritage displays in countries such as Estonia, Latvia and Lithuania that emphasis is often placed upon the crimes perpetrated against these nations by Russia, both during the Second World War and in subsequent years (Estonian International Commission for Investigation of Crimes Against Humanity 2006). It is likely due to the fact that the impact of these Russian regimes is still felt by the citizens in these countries, and still has a dominant part to play in political thought, whilst the Nazi regime's remit was limited to the war years (International Commission of Historians in Latvia 2001). Additionally, the fact that the Germans were often viewed as the lesser of two evils, as it were, in many Eastern European countries by those

not persecuted during the Holocaust, has also led to a marked difference with regards to the investigation of Nazi crimes. Perhaps for many who have lived through the 'Total War' period of 1914 to 1989, the Holocaust for whatever reason, fails to stand out in several decades of violence and bloodshed (Schofield 2004:1). Alternatively, Lowenthal (1998:77) cites another view based on the responses of Israeli, Arab and Jewish children: 'that Jews mourned grandparents lost in the Holocaust amazed Arab children: "You are missing your families from 50 years ago, while my relatives are being killed today".

Similarly, during the course of this research, it was often remarked that considerably more people fell victim to the Stalinist regime, that the deaths of those who died under the dictatorial oppression in Japan have never been investigated, that the investigation of sites of Katyń was long overdue and that the majority of the graves relating to the Spanish Civil War, Turko-Cypriot War or other conflicts during the twentieth century remained unlocated. It was questioned, why did this project not focus on these events instead?

Such reactions highlight several issues with the approach to studies of the material remains of the Holocaust. First of all, it demonstrates that people generally believe that the Holocaust has been studied intensively by historians and question what further information such studies can contribute; thus demonstrating the emphasis placed upon historical enquiry relating to this period and a widespread failure to acknowledge the added value of archaeological investigations. Secondly, it reveals how some believe there has been a saturation of studies relating to the Holocaust in the general field of investigations of twentieth-century conflict (Krondorfer 2008). Indeed, at a recent colloquium considering

remembrance activities with regards to the civilian war dead of World War II, a discussion of the victims of the Holocaust was notably absent, the organisers feeling that to include this would be to dwarf the significance of these smaller scale atrocities (pers. comm. Vinkt Colloquium 2010). Additionally, these approaches further demonstrate the existence of this so-called hierarchy of genocide, in which people place certain values, based for example upon numbers of victims or the length of the regime or war in question, upon the need to investigate sites. Perhaps most significantly, it raises further questions over why it is deemed acceptable to investigate the physical remnants of these conflicts, yet fervent opposition to doing so with regards to the Holocaust has been encountered. Clearly, given recent developments in the identification of mass graves in the Balkans, knowledge of the potential for archaeology to contribute to the investigation of conflict is embedded in public consciousness (ICMP 2011). What is it, therefore, that detaches these events from this line of thought? One possible answer lies in the fact that, as previously noted, in some cases the Holocaust is *not* seen as unique and this is why the study of its physical remains has not been given precedent over other periods.

2.3.2. SOCIETY AND CULTURAL IDENTITY

Building on this idea, it would appear that both in the past and in contemporary society, the feeling that the Holocaust does not, or should not, play a significant part in the cultural identity of communities and individuals has impacted upon the treatment of sites. With reference to this period, such beliefs are two-fold.

Firstly, in the immediate aftermath of the Holocaust, it would appear that the desire of the affected population to move on was prevalent (Bonnard 2009a), a trend which has also been commonly noted in respect to other conflict and mass disaster sites (Perera and Briggs 2008; Tsokos et al 2006; Meng 2010). Communities took responsibility for burying the dead hastily, often in mass graves and without any form of identification (Abzug 1985). Several explanations for this can be cited. Firstly, it was often for practical reasons, such as the prevention of disease and the advancement of decomposition, that there was an immediate need to dispose of the corpses (Abzug 1985). Secondly, it was deemed necessary to ensure that the bodies were given a formal burial and that any remaining chances to uphold religious obligations were acted on (Rzeźniak 2007). Perhaps most notably, there was a desire to turn attention towards the rebuilding of communities that had been savaged by war and violence; as Baker (1988:95) has argued, 'survival came before remembrance'.

For some communities, the physical removal of bodies also appears to have represented a psychological act of burying the past, something which was coupled with the widespread removal of structures and other visible signs of these events (Beder 2002). Although many memorials were subsequently erected, there has been an evident trend since the end of the war that indicates that many communities do not wish to dwell on the past (Meng 2010). Communities do not want their cities, towns and villages to be associated with terror and bloodshed, whilst for others this has been to fears over claims of collaboration with the Nazis (Bunting 1995; Carr 2009; Jacobs 2004).

Secondly, in modern society in particular, people often feel little or no connection to the events or the individuals persecuted. Where individuals live in an area where atrocities occurred, they may feel considerable resentment for the minority groups who may no longer live in the area in question but who may attempt to memorialise the events, a problem that has been noted at many conflict sites from different periods of history (Pullan 2007). As Cohen (2001:234) has argued, 'all over the world, commemorations of atrocities have turned into memory wars, the forces of denial and acknowledgement literally battling it out for territory'. Thus, in general terms, these issues are not unique to the Holocaust and lessons can be learnt from the work of other researchers dealing with these contentious fields of enquiry.

For example, Paperno (2001:107) cites the comments of Maryna Shleimovych, a local resident interviewed in the course of archaeological investigations into the Soviet atrocities during World War II, who stated 'here you are again with your graves! History has stuffed the whole earth with corpses! What do we have to do with this? Yes, I know that they shot people here once upon a time, but this was a long time ago, and I like strolling here'.

This trend can be seen for other conflicts. Papadakis (2007:99) has noted in Cyprus that the preoccupation with the events of the Turko-Cypriot war has made it impossible for certain communities to move on and has caused them to become 'so entrenched in their opposing ideological positions that they can only hear 'echoes from the dead zone' reflecting and reinforcing their own prejudices'. Polonsky and Michlic (2004:2) have argued, 'the traumatic past, whether private or national, exists...like a foreign body of which we cannot rid

ourselves'. Therefore, the conflicting opinions over the treatment of these sites represent an ever-present, even if unspoken, component of society and it seems probable that these opinions will emerge to the surface and be impassionedly vocalised when further work at Holocaust sites is proposed (Harrison and Schofield 2010).

Therefore, the issue of so-called ownership of the past needs to be carefully considered and again comparable examples are well-attested to in the literature pertaining to conflict archaeology. Questions such as: To whom does the past belong? Does direct involvement with the event in question provide guaranteed ownership or does living in an area affected by conflict automatically result in the assimilation of these events into an individual's cultural heritage? Who has the right to make decisions on the future of heritage sites? and the like are constantly debated in both the public and academic arena (Carman 2005; Purbrick et al 2007; Smith and Akagawa 2008). Given the aforementioned number of groups and generations affected by the Holocaust, such ownership issues are exacerbated, the majority of which will have a local or national remit. It would appear that the current condition of sites, and the widespread lack of knowledge that exists concerning the physical evidence of the Holocaust, is a reflection of the struggle between these various groups who have attempted to shape the history and memory of these events to date.

2.3.3. RELIGION AND ETHICS

As well as national issues and diversity, the various different religious and minority groups affected by the Holocaust also presents a unique set of considerations for researchers. Jews (practicing or by relation), Christians, atheists, Sinti, Roma, the disabled, the sick,

homosexuals and perceived political enemies were all persecuted, irrespective of age, social status or gender. Both between, and even within these groups, considerable diversity existed in terms of death and burial in particular, and similarly diverse views are held by subsequent generations with a connection to these events. Several additional groups exist, whose needs must be considered with respect to the establishment of memorial sites, ranging from survivors, those that witnessed the violence who either tried to protect those being persecuted or failed to oppose it, victims of propaganda and families of those who died and survived, through to students, educators, historians and tourists (Field 2007). Similarly, the beliefs, opinions and needs of all of these groups need to be considered when examining and presenting the archaeological remains of this period in order to avoid these sites becoming what Pollard (2007) has alluded to with respect to battlefield sites, that is two-fold contested spaces, upon which battles were fought and then conflict arose whilst attempting to make decisions over how to memorialise them.

2.3.3.1 Mass Graves, Cemeteries and Cremations

In particular, issues arise in relation to the vast amount of mass graves, cemeteries and cremation pits that pertain to the Holocaust, the majority of which remain unmarked. As already noted, the rationale for locating the remains of the victims of other genocides have been well attested to in the literature, inciting the development of new branches of forensic archaeology and anthropology, the creation of standards and guidelines, and a deep-rooted understanding of the personal benefits in terms of mourning a definitive loss (Schmitt 2002; Williams and Crews 2003; Hunter and Simpson 2007). With regards to the victims of the wars of the twentieth century, international thought has centred on the need for 'finding the

fallen' (Moshenska 2008: 167), whilst there has been renewed interest in the form of projects such as that at Fromelles aimed at locating mass graves (CWGC 2009). Similarly, in general archaeological terms there has been widespread interest in finding skeletal remains, with Williams and Williams (2007:52) noting one of the most common questions at excavation sites being 'have you found any bodies?'. The ability of the human remains of our ancestors to foster a sense of identity and increase our understanding of previous cultures is also evident, with the physical existence of a body seemingly encouraging greater empathy with people from the past (Williams and Williams 2007). However, the majority of these instances have dealt with Christian victims and it has generally been accepted that bodies that have been clandestinely buried should be reburied individually (ICMP 2011; BABAO 2008).

Such sentiments have rarely been expressed in relation to the Holocaust. Instead, searches for the bodies of the victims have been largely limited to acknowledging that graves exist as opposed to their detailed investigation (Kola 2000; US Commission 2005). There have been no systematic attempts to create a central record of sites or to develop standards for the examination of remains when they are located, something which has often resulted in their inappropriate treatment when they have been found serendipitously (The Guardian 2009). Additionally, there has even been a notable attempt to avoid acknowledging their very existence, a fact that may stem from a belief that to acknowledge them would be to resurrect painful issues (Schmitt 2002). Similarly, as has been noted by many archaeologists studying indigenous populations, the examination of human remains can expose social, political and religious tensions more readily than other types of evidence (McDavid 2002).

2.3.3.2 Jewish Halacha Law and Archaeology

These approaches to Holocaust sites have, in part, stemmed from the fact that the majority of victims interred in these graves were Jewish. Cohen (1942:9) argues that 'the Jews occupy a unique and unenviable distinction in this war', whilst as Wiesel (1985:1) states, 'not all victims were Jews but all Jews were victims'. Consequently, a consideration of Jewish beliefs with regards to death, burial and memorialisation, and the approaches that have been taken by other groups and nations to remembering these victims, should be central to all studies of heritage and archaeology of this period. To date, there have been few attempts to do this and the majority of Jewish sites across Europe are neglected and vandalised (Gruber and Myers 1995; Cesarani 2005). This often reflects current attitudes towards this group in a given area. As only limited numbers of Jews have remained in countries such as Poland since the end of the war, they have little direct control over the management of their cultural heritage (Gruber and Myers 1995; Jacobs 2004).

Jewish religious law, or Halacha, provides guidance for practicing Jews and makes several observations concerning death, the treatment of human remains and commemoration (Rosenbaum 1976). The methods of extermination and disposal of victims by the Nazis, and the 'indignity of mass death', denied the international Jewish community the ability to bury and commemorate the dead according to these traditional principles (Smith 2007:59). In particular, the cremation of the bodies of the Jews represented the highest level of profanity towards the deceased given that the Torah and Talmud proclaim it a disgrace to burn a body and a restriction upon the resurrection of the individual (Melmed LeHoil, Yoreh Deah 114:2

(Rabbi Dovid Tzvi Hoffman, Germany 1843-1921); Achiezer (Rabbi Chaim Ozer Grodzinsky, Dayan of Vilna 1863-1940).

Additionally, further adaptations to the traditional burial and commemoration processes were made during the Holocaust via She'elah, which were questions asked of those deemed to be suitably qualified Rabbis under the rules of Halacha (Rosenbaum 1976). As such, there was great diversity in thought and action. This makes it difficult to consider all of the different approaches to both disposing of the dead (where the Jewish community had a direct role to play in this) and attempts at unofficial mourning, commemoration and memorialisation (Rosenbaum 1976). What has remained largely consistent, however, is the notion that the disturbance of human remains is forbidden, thus restricting the actions of archaeologists in terms of the ability to excavate Holocaust sites where human remains are suspected (Rosensaft 1979). As Rabbi Moses Feinstein argued 'the dead rest in their place of burial. Not only is it forbidden to exhume the bodies but even to open the graves is strictly prohibited' (Feinstein in Rosensaft 1979:164). The comments of the Chief Rabbi of the Jewsbury excavations in York highlight the position of the Jewry with regards to the scientific investigation of human remains:

'whatever the scientific and historical loss, I hope that you and the general public will appreciate our paramount concern for the reverence due to the mortal remains which once bore the incomparable hallmark of the Divine image and which, we believe, have an inalienable right to rest undisturbed. We are convinced that the dignity shown to humans even centuries after their death can contribute more than any scientific enquiry to the

advancement of human civilisation and the enhancement of the respect in which humans hold each other' (cited in Rahtz 1995:197).

This statement highlights several important issues. Firstly it demonstrates that, even though the remains have not been afforded the dignity of burial according to Jewish burial law, they will not be exhumed to facilitate this; thus the belief that the dead should rest where they lie overrides the need for traditional burial rites. Similarly, the Rabbinical authorities proclaim that a lack of intrusive investigation at these sites will actually facilitate greater peace and understanding than if such work was allowed to go ahead and the bodies were removed for reburial (Rahtz 1995). Whilst it is not the place of the archaeologist to question this ideology, clearly this raises important considerations regarding the role of archaeological research, particularly as the commemorative and humanitarian rationale usually associated with its application in conflict or atrocity situations have been muted by religious objection.

Therefore, this dictates that archaeological investigations involving burials must revolve around a methodology which accounts for Halacha Law; thus being non-invasive in its approach, ethical and respectful in its undertaking, and valid in its commemorative and heritage function. Indeed, archaeology can make a considerable contribution to Jewish studies with respect both to the Holocaust and other sites at which human remains are located, in that various methods are available that preclude the need for ground disturbance (Chapter 3). The additional information generated about the sites in question can contribute to the memorialisation of the victims and foster the Jewish tradition of remembering the past (Young 1994). Whilst at known sites, specific information about the exact locations of

graves, cremation pits and other features connected with the deaths of the victims can be derived and will contribute to the process of 'sacred memorialisation' already in place, the location of previously unidentified sites can ensure that Halachic traditions based on the need for the dead to have a known and marked grave can be upheld (Jacobs 2004:311).

The development of such a methodology appears even more important owing to the fact that it would appear that in the majority of cases, the current treatment of these sites contravenes the treatment of the dead according to Halacha. Many attempts at archaeological investigation have, to date, failed to consider the stipulations regarding a lack of disturbance of human remains; despite Kola's claim at Belżeć to be examining 'the topography of the former camp, so as to exclude areas with human remnants', the coring method employed did precisely the opposite, whilst the majority of other investigations have centered solely around excavations (Kola 2000:3). González-Ruibal (2008:248) has argued that 'in many cases, mass graves are excavated because of a need for restitution which is the need for presence, not meaning' and this certainly seem so have been the case with previously invasive examinations of Holocaust sites. However, although such examinations have confirmed the existence of remains, thus allowing them to be appropriately marked in many cases, it would seem more appropriate to devise a search methodology that removes the need for any kind of disturbance.

2.3.2.3. Approaches to Death and Burial

Several important questions arise with regards to the beliefs of the different groups affected by the Holocaust, in particular the treatment of the dead and memorialisation. For example, if a grave is located serendipitously, do we adhere to modern opinions on burials or those held by people in the past? Should the current local inhabitants be allowed to select commemoration methods or does historical precedent dictate that this should fall on the ethnic or religious group to whom the victims are located? Should national or religious opinion take priority? (Payne 2009; Lilley et al 1994).

Perhaps most pertinent are questions surrounding the religious affiliations of the victims. Should graves believed to contain the bodies of individuals from different religious backgrounds be memorialised according to the traditions of all religions represented or the one to which the majority of victims are thought to belong? Issues with this have already been noted at existing Holocaust sites. For example, the erection of crosses at Auschwitz sparked outrage among the Jewish community (Smith 2007; Zubrzycki 2006). Similarly, whilst the national heritage bodies in Poland stipulate that the hair from the victims of the Holocaust can be displayed in museums, the Jewish community believe it should be buried according to Halachic traditions (Auschwitz-Birkenau Memorial and Museum 2010; Lisle 2007). Even within the same religious group, different branches will have differing opinions. Similarly, is it ethical that we assume that all victims considered to be Jewish were actually practicing Jews and that they would have wanted to be buried or memorialised according to these traditions? For example, a number of Jews reportedly converted to Christianity; how should they be commemorated (Garber 1994; Levy 1992)? Additionally, whilst the Jewish

community have a memorial tradition that encourages remembrance, gypsies have 'contributed to... forgetting, because they have chosen not to differentiate within nor dwell on their long history of persecution' (Clendinnen 1999:8.; Fonseca 1995). Is emphasising the persecution of these individuals against the will of their descendents ethical?

Of course considerable difficulty surrounds answering these questions, given that modern opinions regarding ethics, religion and commemoration will impact upon decisions made. Additionally, the information regarding an individual's circumstances will rarely be available and if it is, the sheer number of victims would make it impossible to make such decisions on an individual basis. Indeed, this is exacerbated further where no excavation and identification of the remains is carried out; one must assume, albeit based on historical evidence, who may be buried in the grave in question and, therefore, what methods of commemoration are most appropriate.

As Moshenska (2008: 161) has stated, 'issues such as respect for the dead are arguably of greater ethical significance in the communication of research findings than the research itself'. Arguably, with regards to the Holocaust, without a thorough understanding of the need for the respectful and appropriate treatment of the dead in terms of religious and ethical principles, such research findings could not even be derived. Without having unequivocally demonstrated that these issues have been considered during the development of a methodology, there is a risk that researchers will be granted permission to examine Holocaust sites. Perhaps limited attempts to examine the sites have resulted from the ethical and moral dilemmas posed as a result of the diversity of nations, groups and individuals affected.

2.4. NUMBER OF SITES

The number of camps, ghettos, structures and massacre sites connected to the Holocaust, located across such a broad geographical area, make it unprecedented in scale. Just as historians noted how it altered the nature of their discourse, coordinated efforts to examine the physical remains would do the same for archaeology (Lang 1999). Considerable challenges will be posed in terms of the diversity in site types, geology, climate and the local environment across different regions and nations. Similarly, different attitudes towards heritage management and varied policies for applying for permissions will be encountered between states (Marquez Grant and Fibiger 2010; German Commission for UNESCO 1980). Indeed, archaeology as a discipline will be regarded differently in different countries; for example, whilst in the United Kingdom, geophysical survey is widely used, in many European countries it is seen as either a separate discipline (Gaffney and Gater 2003). Considerable difficulties may be posed for foreign researchers attempting to conduct fieldwork abroad where such differences in approaches exist and the probable language barrier, which can cause problems both during fieldwork and when applying for permission, needs to be considered from the outset.

2.5. CONCLUSION

González-Ruibal (2008:248) has highlighted three scenarios in which archaeologists can have the greatest impact in terms of revealing new insights into past events: '1. genocides and political killings, 2. wars...of which the memories are highly contentious, 3. the subconscious or unconscious in culture'. The Holocaust and its aftermath represents all of these categories, thus the study of its archaeological remains should, according to González-

Ruibal's theory considerably alter public perceptions of these events and supplement its known history. However, it is perhaps the fact that the Holocaust falls into all of these areas that has resulted in restricted analysis of its archaeological record and has led to further practical problems that may impede further research.

Irrespective of whether the Holocaust represents a unique event in world history, many of the responses that have been generated by it and its investigation by scholars are without rival. The key issue to be derived from the above discussion is that in many ways the Holocaust is similar to many other genocides and violent acts, in terms of its potential to be investigated archaeologically and the various issues surrounding this. However, the fact that the level of investigation of this conflict is not comparable with these other events indicates that further factors have influenced the extent to which it has been studied. This undoubtedly stems from the vast number of countries, groups and individuals affected, something which presents archaeologists wishing to consider this period with considerable challenges, not least of all the fact that their work will often defy the accepted histories of this period.

Additionally, given the fact that the Holocaust represents an event that sits between history and memory, as Komar and Buikstra (2008:249) have argued, 'humanitarian efforts concentrate primarily on the needs of the living, even when dealing with the dead'. Whilst this has usually been taken in the context of locating victims, this statement also holds true regarding the approaches that should be taken towards dealing with the thoughts and concerns of both living family members and local communities when addressing conflict.

Given the vast number of political, social, religious and ethical issues involved in the study of the Holocaust, this is particularly pertinent and there is an ethical responsibility of archaeologists to ensure that surveys are carried out respectfully and in such a way as to contribute to the memory of the victims (Moshenska 2008). Indeed, perhaps as Moshenska (2008:168) has argued, it is better to approach these sites with a 'do not disturb' attitude in order that we are forced to directly consider the ethical demands that we should adhere to as professional researchers addressing conflict. Also, it would appear, in light of the various issues faced by archaeologists in the past, that future research will not be possible without a consideration of these deep-rooted issues; irrespective of the theoretical scientific capabilities and advances, it would appear that the practicalities of their implementation will be influenced by ritual beliefs associated with death and burial, and the ever-changing political and societal approaches to this period (Golbert 2004; Wilson 2007; Lang 1999).

3. METHODOLOGY

3.1. INTRODUCTION

The events of the Holocaust had a dramatic impact upon the landscape. At macro level, transport infrastructures were altered and constructed, previously unassuming villages were transformed by the presence of the vast number of extermination and labour camps that were built, factories and fortifications were constructed to support to war effort and the fields of Europe became burial grounds for millions of people. Long after these sites were destroyed or became dilapidated, traces of them remain; some in the form of visible structural remains but, less acknowledged, as earthworks, vegetation change, topographic indicators and other taphonomic markers. These micro level changes have been shown to survive for archaeological sites that are thousands of years old and also in longer-term criminal investigations (Hunter and Cox 2005; Sturdy 2007). Consequently, in order to fully understand the landscapes in which Holocaust sites lie and to aid identification, particularly when intrusive activity is not permitted, a study of both large-scale and discrete features was central to the methodology employed.

This methodology, set out below, reflects the need to define and record the archaeological remains pertaining to the Holocaust, whilst also considering the variety of external issues affecting the study of this period. An interdisciplinary approach was devised that allowed the sensitivities involved in the study of this period to be compensated for. Whilst, in the first instance this facilitated detailed site investigation that adhered to the principal of Halacha

Law (non-disturbance of potential burial sites), as will be shown in Chapters 4-6, a non-invasive methodology can offer other advantages over excavation in the areas of public engagement, collaboration with local authorities and other sociological aspects.

In recent years, forensic archaeologists in particular have advocated the use of an interdisciplinary approach to site evaluation on the basis that 'there is no single *perfect* method' that will reveal the extent and nature of a site (Hunter and Cox 2005:27; France et al 1997). By utilising a range of different techniques, many of which have been borrowed from history, forensic science, geography and social anthropology, the methodology can 'be appropriately matched with both archaeological and logistical demands of the project' and a variety of aspects of the landscape can be recorded (English Heritage 1995:4). Additionally, the limitations of one method can be compensated for by another, thus ensuring as much as possible can be derived about the archaeological remains.

3.2. METHODOLOGICAL STAGES

As noted in Chapter 1, the aims of the project were:

AIM 1: To analyse the variety of social, political, ethical and religious factors impacting upon successful archaeological investigations of Holocaust sites;

Aim 2: To devise a suitable interdisciplinary methodology based on these factors and recent advances within forensic and conflict archaeology, and heritage studies;

AIM 3: To apply this methodology at selected sites in order to demonstrate its potential to contribute to our understanding of Holocaust landscapes, both in terms of their contemporary and post-abandonment histories;

AIM 4: To demonstrate the diversity of the physical remains of the Holocaust throughout Europe and to highlight the forgotten narratives of this period.

In order to achieve these aims, the methodology centres on four specific tasks - research into post-abandonment history and cultural memory; historical review; archaeological data collection; data assimilation and interpretation. The tasks are outlined in Tables 3.1-3.4, along with the methods, equipment and sources used to achieve them, and the outputs produced as a result. The methods and equipment used as part of these tasks are then discussed in full in sections 3.2.1-3.2.4 in order to outline their theoretical basis, any practical restrictions upon their use and the reasons why they form part of this methodology.

3.2.1. TASK 1: POST-ABANDONMENT HISTORY AND CULTURAL MEMORY

As discussed in Chapter 2, the history of the Holocaust did not conclude at the end of the Second World War in 1945. Its legacy has been far-reaching and has not remained static, having diversified according to political and social change differentially throughout Europe. An examination of these changes is crucial in order to understand the extent and nature of the landscapes examined as part of this study. Therefore, both prior to and during in-field survey, the various factors that have contributed, both physically and metaphorically, to their formation were examined using the methodology outlined in Table 3.1.

Task 1: Research into the political, social, religious and commemorative approaches to the case study sites

Aims addressed: Aim 1 and Aim 2

Rationale:

- To ensure an understanding of the issues surrounding examinations of the case study sites;
- To facilitate Aim 2 (to develop a suitable methodology for examination of the sites);
- To facilitate permission for fieldwork;
- To facilitate cross-site comparisons.

Methods/Techniques Used	Sources Used	Outputs
(a) Interviews and discussions with affected groups and individuals;	(a) Oral and written communication.	(a) Information concerning the site histories of the case study sites;
(b) Documentary research;	(a) Historical records including but not limited to witness accounts, administrative documents, letters, and scholarly research.	(b) Identification of potential inhibitors to fieldwork at the case study sites(c) Information concerning the impact of archaeological study at the case study sites

Table 3.1. Task 1 undertaken as part of the methodology in order to achieve the aims of this research

The rationale for such analysis is based on several factors. Firstly, a study of such issues will contribute to the development of site histories, as the treatment of the sites since their abandonment is inextricably linked to the perceptions of them; thus this aspect cannot be separated from the archaeological methodology. In many cases, the dilapidated nature of a site is a physical manifestation of the societal tensions and divisions which may relate to perceptions of the Holocaust and the groups involved, or problems that have evolved in the years following the war. Indeed, a theoretical approach to landscape archaeology was taken, whereby the landscapes were viewed as 'interactive platforms for human experience' (Chapman 2003:20). As Boyd (2012:15) has noted 'unless these interests, landscapes and relationships are fully understood, the cultural heritage management of each site will be founded only on partial understanding of the site, and will result in unsatisfactory solutions to management issues'. An understanding of these issues is synonymous to an understanding of the reasons for, and nature of, landscape change, degradation, damage and, in some cases, the total eradication of the above-ground traces of a site. Similarly, it can provide an explanation for the content of official histories and historical narratives.

Secondly, understanding issues relating to the ownership of sites is also imperative. Such issues have been hotly debated in relation to public archaeology and it has been demonstrated that an understanding of cognitive ownership can highlight spiritual, familial, intellectual and cultural links, and associations that individuals and communities can have to sites (Boyd 2012). McManamon (1991:121) has highlighted the importance of understanding the 'many publics' affected by archaeological work whose opinions, needs and interests may

vary considerably. As such, this methodology included an assessment of the various groups specific to each case study examined.

Given that these publics have likely changed over time, as people move, die or for whatever reason no longer have connections to an area, the claims of ownership will equally alter. In turn, the landscapes themselves are modified, doing so 'under the influence of many social and cultural parameters' (Boyd 2012:9). Similarly the landscape will alter communities, particularly in situations that are as significant as the Holocaust and, as Knapp and Ashmore (1999:16, 20-21) have argued, 'landscape is neither exclusively natural nor totally cultural; it is a mediation between the two and an integral part of...the routine social practices within which people experience the world around them'. Thus, it is crucial that this interaction is understood.

Thirdly, as has already been demonstrated, whilst it may be practically possible to apply archaeological methods to Holocaust sites, there has been only limited investigations undertaken and archaeological approaches to these landscapes have not become widely accepted (Chapter 1). The social, political, ethical and religious issues involved in studies of this period have undoubtedly been the major contributing factor to this situation. Therefore, it was vital to understand the context in which the archaeological work was being undertaken; permissions needed to be sought, local tensions compensated for and any inhibiting factors to the fieldwork addressed. Although some general themes have been addressed in Chapter 2, the issues involved in the examination of the individual sites are likely to differ according to the national, regional and local context.

Finally, as Moshenska (2009) has argued, methodologies of community archaeology are commonly practiced in conflict archaeology but are rarely discussed. This represents a real problem for researchers wishing to undertaken such work and seeking examples of comparable situations. Instead of seeing this kind of engagement as something that is simply done and as something quite separate from the main methodology of archaeological projects addressing conflict sites, for the reasons cited in this section and in Chapter 2, it is imperative that this is integrated into project designs. Again to cite Moshenska (2009:73), 'archaeology of modern conflict is most effective when conducted as community archaeology and conversely the most effective form of community archaeology is the archaeology of modern conflict'. By considering these issues and involving these groups, archaeological sites can become forums for education, debate and remembrance, as well as provide opportunities to address and overcome conflict between divergent parties (Wainright 2009; Moshenska 2009).

Following the examination of the individual sites in Chapters 4 and 5, a comparison of them will follow in Chapter 6. The investigation of each site included a review of its history and treatment since the war, as well as consultation with local communities, heritage professionals and other affected individuals and groups in order to assess the variety of issues that needed to be considered in advance of fieldwork. Oral accounts were collected, first hand where possible, and a variety of legislation, archival material and secondary literature were studied. Similarly, consultation with affected groups and individuals was maintained both throughout and following the fieldwork seasons in order to ensure that

heritage and educational outputs could be identified which would be of greatest value to relevant parties.

3.2.2. TASK 2: HISTORICAL REVIEW

A review, which utilized a range of documentary, cartographic and photographic evidence as well as witness accounts, was undertaken for all of the sites examined as part of this study to ensure that the historical background could be fully realised (Table 3.2).

Task 2. To undertake a historical review of material relating to the case study sites				
Aims addressed: Aims 2 and 3				
Rationale:				
This task will allow the following	g to be derived:			
- Material concerning the exten	t and nature of the case study	sites;		
- Material that can be compare	d to archaeological data;			
- Information concerning the kn	own or "official" histories of th	ie case study sites.		
Methods/Techniques Used	Sources Used	Outputs		
(a) Documentary research	(a) Historical records	(a) Analysis and presentation of		
	including but not limited to	primary research material;		
	witness accounts, site and	comparisons of witness plans;		
	feature plans;	cross-reference key dates and		
	administrative documents,	information with aerial		
		1		

	including but not limited to witness accounts, site and feature plans; administrative documents, letters, scholarly research.	comparisons of witness plans; cross-reference key dates and information with aerial photographic analysis (below).
(b) Cartographic analysis	(b) Maps (contemporary and modern).	(b) Georectification of maps with other data types (historical and archaeological); map regressions
(c) Photographic analysis	(c) Aerial reconnaissance (contemporary and modern); satellite imagery; ground-based photography.	(c) Dataset of georectified aerial images (contemporary and modern); annotated aerial images; annotated satellite imagery; 3D visualisations of ground-based imagery and aerial images (using Google SketchUp).

Table 3.2. Task 2 undertaken as part of the methodology in order to achieve the aims of this research

3.2.2.1. Documentary Review and Cartographic Data

Documentary evidence pertaining to the Holocaust comes in a variety of forms, including administrative documents, letters, underground and government intelligence reports, witness accounts, court transcripts, plans and maps, all of which have the potential to reveal important information about the nature of the events themselves and the alterations to the landscape that occurred. Material from numerous global archives has been consulted, which include, but are not limited to, the United States Holocaust Museum, Yad Vashem, the Ghetto Fighter's House, National Archives at Kew, The Imperial War Museum, Commonwealth War Graves Commission, Volksbund Deutsche Kriegsgräberfürsorge, the Bundesarchiv, the Moscow Archives, US National Archives, Muzeum Walki I Męczeństwa w Treblince, The National Aerial Reconnaissance Archive (TARA), Jersey Heritage Trust, Island Archives (Guernsey), Alderney Museum archives, the RAF archive and various worldwide media repositories.

3.2.2.2. Reconnaissance Data

'Time spent in reconnaissance is seldom wasted' is an adage that has become well-established in military operations (Price 2003:7). However, this notion is also true when researching the archaeology of conflict on two levels. Firstly, as will be shown throughout this thesis, detailed intelligence gathering, as well as remote and ground reconnaissance allows us to build up a complex picture of the archaeology relating to the Holocaust and Nazi Occupation of Europe. Secondly, the material to which Price (2003) refers (military intelligence data obtained during times of conflict) not only represented time well spent with regards to its capacity to provide strategic data for the armed forces, but it has

secondary benefit in terms of the information it can provide years later with respect to structures, fortifications and other sites connected with the war. The untapped potential of reconnaissance material, which includes aerial photographs, reports from spies, witness accounts and intelligence data, to reveal information about recent archaeological sites has only recently been identified, in light of the declassification of much of this material in recent years (Price 2003).

In particular, aerial photographs pertaining to the Second World War and subsequent conflicts have the potential to make a significant contribution to the identification of archaeological sites relating to the Holocaust. Whilst modern aerial images have long been used in archaeological contexts (Killam 1990; Hunter and Ralston 2006), until recently the use of military aerial imagery has been predominantly restricted to use by military historians attempting to identify fortifications or bomb damage, or by post-war investigators locating unexploded ordinance (Ferguson 2008). Yet, aerial images of this type offer the opportunity, through shadow, vegetation and lighting conditions at the time the photographs were taken, to identify landscape features largely invisible from the ground (Hunter and Cox 2005; Appendix 3.2). These features might include building foundations, tracks and roads, pits and disturbances such as mass graves.

Additionally, the recent availability of satellite and shuttle data has the potential to provide information about the nature of archaeological remains in a given area (USGS 2010; Parcak 2009; Trier et al 2009; Kouchoukos 2001). Preliminary site investigation data is easily accessible, given that, as Myers (2010:456) states 'the introduction of Google Earth has

shifted the relationship between archaeologists and remotely sensed data'. This freely available data, along with other national datasets such as Geoportal for Poland and Géoportail for France, provide opportunities for landscape analysis in advance of fieldwork; surviving archaeological remains visible from the air can be assessed, historical imagery can be examined in order to monitor man-made and natural landscape change, and images can be used as base maps for G.I.S packages (Myers 2010). The use of such data for assessing conflict and internment sites has been demonstrated in recent years (Hritz 2008; Stone 2008a; Stone 2008b; Thomas et al 2008) and this data was used as part of this methodology. Additionally, higher resolution aerial imagery, taken by various private organisations was utilised, when available.

3.2.2.3. Historical Review Conclusions

The majority of the maps, plans and documents that have been utilised in this study have not been published and, when historical information is considered from an archaeological perspective, new questions are asked of old material; thus resulting in new insights into the events that took place. Not only has this material assisted in the identification of the likely archaeological signatures of the surviving camp structures, but it has also allowed site histories to be created. Additionally, given the considerable increase in the declassification of documents and the digitisation of archives in recent years, new material is being made available for study. From an archaeological perspective, these documents not only reveal interesting insights into the changing attitudes towards the physical remains of the Holocaust and Nazi Occupation of Europe, and the subsequent heritage, cultural memory

and identity that emerged, but they also provide a comprehensive record of how the sites are likely to have changed over time, thus shaping the proposed fieldwork methodology.

3.2.3. TASK 3: ARCHAEOLOGICAL DATA COLLECTION

A non-invasive archaeological methodology was devised in order to record above- and below-ground physical evidence relating to the case study sites, a summary of which is provided in Table 3.3, followed by a discussion of the specific techniques applied.

Task 3. Archaeologica	l data collec	tion at the case	study sites
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Aims Addressed: Aims 2 and 3

Rationale:

This task will facilitate:

- The collection of data relating to above- and below-ground physical evidence of the sites during the Holocaust and Nazi Occupation of Europe;
- The collection of data relating to above- and below-ground physical evidence of the sites from its abandonment by the Nazis to the modern period.

Methods Used	Equipment Used	Outputs
(a) Walkover survey	(a) Digital cameras; DGPS; Total Station; Hand-held GPS.	(a) Database of sites recorded to include site and feature descriptions, images of features and positional data relating to the location of features; Record of taphonomic indicators, such as vegetation change and depressions.
(b) Topographic survey	(b) DGPS; Total Station.	(b) Digital Terrain Models (DTMs); Positional data relating to the location of features.
(c) Geophysical survey	(c) Resistance survey; electrical imaging; GPR.	(c) Image plots (2D and 3D) of subterranean features

Table 3.3. Task 3 undertaken as part of the methodology in order to achieve the aims of this research

3.2.3.1. Walkover Survey

In order to assess the extent and nature of sites for survey, and to conduct archaeological reconnaissance in line with the standards defined by the IfA (2010) and English Heritage (2007), walkover surveys were carried out in advance of all other in-field survey methods. This allowed databases of GPS locations, dimensions, descriptions of above-ground features, taphonomic indicators (see below) and present land-use details to be recorded within the defined search areas. This information not only provides a detailed overview of the features relating to the Occupation, but in the case of Alderney, it can also be easily integrated into the local Sites and Monuments Record (SMR).

Throughout this thesis, the Holocaust is viewed as a crime and, whilst it may be considerably larger in scale than those most commonly encountered by forensic archaeologists, many of the principles of offender and burial scenario profiling can still be employed (Rossmo 2000; Sturdy 2007). It is argued that aspects of the behaviour of those who perpetrated these crimes, although possibly masked through deliberate, natural or man-made landscape change, can still be derived from an assessment of the landscape. Although it is not possible to excavate the graves being sought, their likely construction, the motivations for the different ways that this was undertaken and how this was based on the appearance of the wartime landscape was assessed in order to derive information about burial and disposal patterns and further assess the diversity of actions and experiences of the victims and perpetrators, as reflected by the equally diverse archaeological record associated with them.

3.2.3.2. Forensic Taphonomy

Since the phrase taphonomy was first developed by Efremov (1940) in relation to 'the study of the transition, in all its details, of organic remains from the biosphere to the lithosphere', the understanding of the interaction between materials and the environment has dramatically increased. However, it has only been in recent years that the potential applications of the study of taphonomy has been realised within the field of forensic science (Haglund and Sorg 1997; Haglund and Sorg 2002). Nonetheless, despite its implications for revealing valuable information about the nature of buried remains, taphonomic approaches to archaeological environments have not been widely reported on in the literature.

Hochrein (2002:46-47) has identified six main 'areas or aspects of the burial environment: stratification; tool marks; bioturbation; sedimentation; compression-depression and internal compaction' with respect to buried human remains. However, these indicators can occur as a result of other forms of ground disturbance including the presence of buried structures and other features below the subsurface. Of these, the last four will be relevant to the non-invasive studies conducted at the case study sites and, thus, further clarity of these phenomena and the potential methods used to detect them are provided below. It should be noted that these features were observed during walkover survey but they were also recorded as part of the analysis of aerial imagery.

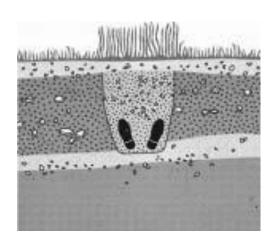
Bioturbation

The burial of a body, a number of bodies or other forms of ground disturbance will have a direct impact upon the flora and fauna growing in the area, as shown in Figure 3.1 (Hunter

and Cox 2005). The abundance of particular plant species in a given area or a lack of growth can be indicative of disturbance to the subsurface, the extent of which will be affected by the nature of the buried remains and the effect that they have on the nutrients in the soil (Hochrein 2002). As Hunter and Cox (2005:31-32) argued 'when a grave is dug, the soil is aerated, looser and will have more moisture in it and this may result in vegetation changes and a higher level of growth but if the body is placed in a bag or the grave filled with solid matter, growth may be inhibited'. Buried cremated remains are also likely to have an inhibitive affect on vegetation, given that the burning process removes all moisture and nutrients from bone (Fairgreave 2008). Similarly, if structural remains are present, dependent upon the nature of the material from which they are constructed, the vegetation will most likely be inhibited, whilst the presence of an in-filled pit or dug-out building foundations, containing more moisture, will likely facilitate growth (Haglund and Sorg 2002).

Additionally, a number of stress-tolerant ruderals have been noted to colonise on both individual and mass graves, which can aid the identification of such features during visual site inspection (Plate 3.1). Where this vegetation change takes place over a large area, it is also possible to identify it from the air, in both aerial photographs and, more recently, in satellite images, although like site inspections, this will be affected by season and light (Hunter 1996). Additionally, bioturbation includes the effects of animal burrows and manmade activity, such as ploughing, on the landscape, factors which can both aid and hinder the identification of archaeological features and graves (Hochrein 2002).

Subsequently, it is essential for archaeologists to have a thorough understanding of the nature of vegetation in the survey area, as well as knowledge of local animals and other potential sources of landscape change (Hunter 1996). This can be obtained through the acquisition of historic maps, aerial and ground level photography as well as ecological literature and data, and documentation from the planning process.



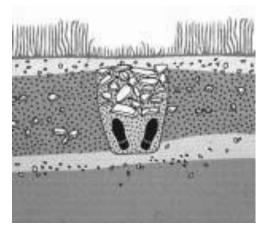


Figure 3.1. The potential effects of burial upon vegetation (after Hunter and Cox 2005:31)



Plate 3.1. Stress tolerant ruderals (in this case nettles), which are characteristic of ground disturbance (author's own photograph)

Sedimentation

This is also affected by the amount of moisture in the soil around buried features, with a lack of water potentially resulting in the drying or cracking of their edges (Hochrein 2002; Plate 3.2). This effect may once again be seasonal and so the ability to detect this indicator will be largely dependent upon the time of year that the survey takes place or the weather conditions.

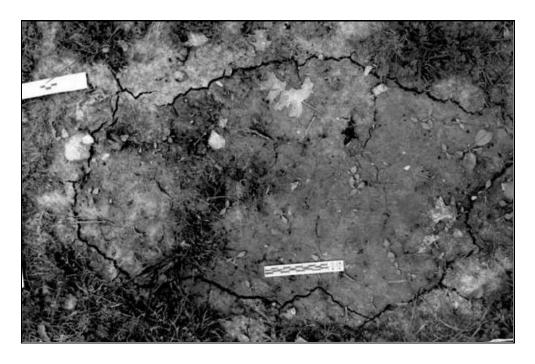


Plate 3.2. Sedimentation around a potential grave site, caused by a lack of moisture in the soil (after Hochrein 2002).

Compression/depression and internal compaction

Hochrein (2002:60-61) has identified two levels of compression and depression: the first when 'freshly dug fill settles in a grave' and the second, known as internal compaction, when a body decomposes and the cavity collapses. These effects are likely to be exacerbated in mass grave scenarios and will vary, based upon the condition of the remains upon burial (Hunter 1996). Again these depressions may be detected through systematic ground searches, aerial imagery or, using more recently developed technologies, such as digital kinematic GPS systems, capable of detecting sub-centre microtopographic change (see below; Hunter and Cox 2005). Additionally, given the changes to the properties in the soil, it is possible, aside from visual identification, to detect taphonomic change using an array of geophysical techniques (Nobes 2000; Buck 2003; Pye 2004).

However, taphonomic indicators themselves can both mask and highlight the locations of buried features, depending upon the nature of the landscape, the time elapsed and subsequent man-made and natural landscape change that has occurred (Killam 1990). Archaeologists attempting to examine taphonomic indicators, in both historic and forensic examples, must combat these issues by undertaking a detailed desk-based assessment, site reconnaissance and a detailed understanding of the events that may have led to landscape change. Such a methodology was adopted as part of this study.

In the field, these indicators were recorded through systematic walkover survey, with their outlines being surveyed using a Total Station or GPS. Similarly, where depressions or sedimentation occurred, detailed topographic survey was undertaken using a Leica GPS500 with kinematic survey capabilities (see below) to record these features in three dimensions. All of these methods allowed the integration of digital data pertaining to the taphonomy of the site to be integrated with cartographic, photographic and other archaeological data to correlate the recorded responses with this material in order to determine its extent, nature and the buried features it potentially represented.

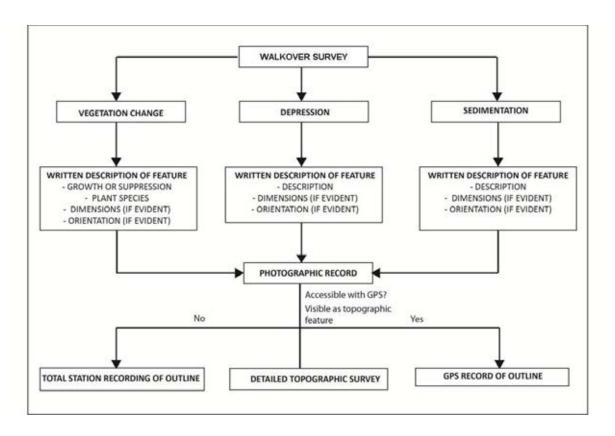


Figure 3.2: Methodology for recording taphonomic indicators

3.2.3.3. Topographic Survey

Over the last 20 years landscape survey has developed exponentially from the use of tape measures, fixed reference points, laborious hachure plans and manual plane table surveying (Ainsworth and Thomason 2003). Archaeologists now have at their disposal a number of current sophisticated survey methods, such as Total Stations and Kinematic Digital GPS, which are capable of mapping sites to sub-centimetre accuracy. As Howard (2007:13) has argued, 'the aim in surveying is to take a series of measurements to define an object whose shape and size are initially unknown', but these methods facilitate a much deeper analysis of sites in both two and three dimensions, individually and spatially. The speed and accuracy of these methods allow much larger areas to be covered in much greater detail, and the digital

data collection permits the integration of different survey data types and the creation of digital terrain models (DTMs) (Bowden 1999).

Digital Kinematic GPS Survey (DGPS)

Ainsworth and Thomason (2003:1) have argued that Global Positioning Systems (GPS) have now become an 'everyday tool' in the world of professional surveying. Several grades of GPS are now available to archaeologists which are capable of providing different levels of accuracy and detail, the selection of which will be largely dependent upon the aims of the survey (Royal Geographical Society 2005).

Differential Kinematic GPS (DGPS) was primarily utilised during this project, on the basis that it provides the greatest level of accuracy and detail, being able to record microtopographic change to sub-centimetre level, and facilitating the production of three dimensional Digital Terrain Models (DTMs). This system uses Differential GPS (DGPS) to record data in real-time, at the speed walked by the surveyor (Real Time Kinematic - RTK) (Leica 2002). It comprises of a 'space segment (the satellites), the control segment (ground stations), and the user segment (the instruments used by surveyors)' (Howard 2007:73; Plate 3.3). Range-finding triangulation is applied to data sent from available satellites to a roving unit, in order to generate geodetic positional data (Royal Geographical Society 2005). This rover constantly receives correctional data from the 'control segment' or base station in order to plot the XYZ data that is required to create DTMs (Howard 2007:24; Chapman 2003).

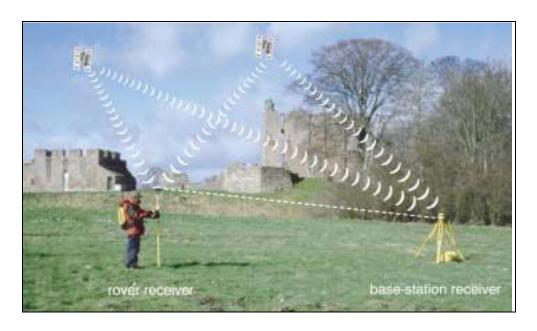


Plate 3.3. Illustration of the operation of a Digital Kinematic GPS System (after Ainsworth and Thomason 2003:9).

DGPS can have multiple uses and benefits as part of an archaeological survey. It is capable of recording isolated points, the outlines of notable features, creating site plans, plotting in and establishing survey grids, collecting broad topographic data and recording microtopographic data, which may reveal subsurface change consistent with buried remains (English Heritage 2007; Royal Geographical Society 2005). It is also capable of locating 'observed features accurately from sources such as historic maps, air photographs or geophysical surveys, but which are not otherwise visible in the landscape' (Ainsworth and Thomason 2003:11). Van Leusen et al (1999:401) have argued that the, 'rapid uptake [of GPS] within the survey world has been largely due to the facility with which stations can be established where required, and with no consideration for intervisibility to the traditional triangulated primary control stations', thus increasing the speed and ease of survey. All of these functions were essential in the survey work undertaken as part of this project. Both sites had very little or local mapping data available in digital form and none had detailed digital terrain models into

which the detailed survey data could be integrated; thus it was important to create such datasets for each site. The use of this equipment facilitated more accurate walkover survey and taphonomic mapping, and permitted the collection of data that could be used to create the first accurate site plans of many of the areas examined. Similarly, it allowed microtopographic change consistent with buried structures, such as camp buildings and mass graves, to be modelled before geophysical survey took place.

Although DGPS can have many benefits, it is also important to be aware of potential problems that may affect its level of accuracy. The Royal Geographical Society (2005:88) have argued that both 'local and atmospheric effects' can impact upon its success with local effects being 'detrimental conditions on the ground near the receiver or in the receiver's software' while atmospheric effects can include 'problems with the medium through which the signal passes'. A detailed list of these potential problems and solutions is provided in Appendix 3.1. Generally, however, most of these problems can be avoided; 'best practice with receivers involves using them in areas where their view of the sky is unobstructed, buildings or other corner reflectors are not present and that data is only recorded when the satellite geometry is of an acceptably high standard' (Royal Geographical Society 2005:89). Consequently, as part of this research, the base station was always located in an area where the highest number of satellites could be locked onto and the acceptable accuracy level at which the rover would take a reading in both manual and auto modes was set to 0.06m as a standard at all sites surveyed (Ainsworth and Thomason 2003).

Although not as accurate as the DGPS, a handheld GPS was also utilised on Alderney to facilitate rapid survey of the large number of fortification sites by several surveyors (BAJR 2004). A description of the site, including its dimensions, orientation and distinguishing features, was recorded and photographs taken to allow a site database to be compiled. This database was created to facilitate the collection of information for the local Sites and Monuments Record and its subsequent integration with publically accessible platforms such as Google Earth.

Total Station

As a result of the aforementioned issues with GPS, and due to the fact that 'GPS equipment is only one of the tools in the surveyor's cupboard' (Ainsworth and Thomason 2003:13), Total Station recording was also undertaken at both sites (Plate 3.4). This equipment 'incorporates distance measuring using a laser or infrared beam, along with internal/external electronic data logging' in order to measure the position of features selected by the surveyor relative to the Total Station (Royal Geographical Society 2005:182). Consequently, it can be used to conduct a subjective survey of specific features, resulting in the production of a plan view of the points logged, which can then be integrated with other survey data (Kvamme 2006). Feature coding was used in order to assist with post-processing and, in particular, the drawings that needed to be produced in AutoCAD (Ainsworth and Thomason 2003). Additionally, elevation data was also recorded for inclusion in DTMs. Whilst the Total Station is not generally suitable for large-scale detailed recording due to its laborious nature, it facilitated the completion of the topographic models where GPS lock could not be acquired

e.g. in the forest at Treblinka, as it is only reliant on a line of site between the prism and the Total Station (English Heritage 2007).



Plate 3.4. A Total Station survey (author's own photograph)

3.2.3.4. Field Survey Conclusions

The combined use of DGPS and Total Station survey ensured that the shortcomings of one method could be compensated for by another, thus resulting in a detailed, highly accurate dataset for even difficult to access parts of the sites examined. For example, whilst DGPS facilitated faster surveys over larger areas, the Total Station permitted targeted, detailed survey in areas that the DGPS could not be used due to poor satellite coverage (English Heritage 1995:1). Additionally, as was the case at Wroxeter in the United Kingdom, the two methods were used as a 'control check' against each other to ensure assess the accuracy of

data collection (Barratt et al 2000). The data provided by these methods not only provided independent information about the nature and extent of topographic and taphonomic features but they also presented a framework into which the next stage of the non-invasive methodology, geophysical survey, was placed.

3.2.3.5. Geophysical Survey

The use of geophysical methods for the detection of buried remains first occurred in the 1940s but, as English Heritage (1995:1) have argued, 'their routine application has only lately become commonplace'. Greene (1993:48-49) has argued that geophysical survey 'is often used within known sites to suggest areas where excavation may be most profitable'. However, since then, the use of geophysics in archaeology has not only increased considerably but it has also come to represent much more than simply a precursor to excavation (Gaffney and Gater 2003). Additionally, the potential for geophysics to contribute to studies of conflict has only recently been realised, with Gaffney et al (2004: 121) highlighting the irony that 'although such techniques are increasingly used to identify the unwanted legacy of modern warfare, such as unexploded ordnances or mass burials, they have not been used to investigate the archaeology of such conflict'. The studies that have taken place over the last decade have, however, demonstrated the considerable potential of such applications. For example, a recent study at Puits d'Herode, a German defensive position in Normandy, revealed important information about field defences, concrete bunkers, a mine field and a network of trenches through the combined use of magnetometry, resistance survey and GPR (Gaffney et al 2004:121). A similar study at Stalag Luft assisted in the identification of further tunnels constructed as part of the well-known

'Great Escape' (Pringle et al 2007). Given that excavation may not be possible at some sites, it is particularly important that the potential of geophysical techniques for identifying buried archaeological remains, in conjunction with other methods, be examined further.

It is of course important to stress that no geophysical method will reveal conclusively what is below the soil; buried features are represented as anomalies that must be interpreted (Cheetham 2005). This will be based on knowledge about the site gained through the deskbased assessment process and the experience of the geophysicist. As Cheetham (2005) has argued, the detection of archaeological features is also based on there being a contrast between the latter and the surrounding subsurface; thus if this contrast is not detectable to the method being used, it may appear that no features are present. This can be compensated for by the use of multiple geophysical techniques because, as Kvamme (2003:439) argues, 'surveys with multiple methods offer greater insight because buried cultural features not revealed by one may be made visible by another'. A consideration of the current land use, geology, the likely size of the target, its physical properties and its likely depth as well as vegetation and pedology should all be made prior to the commencement of the survey and when selecting appropriate equipment to use (Gaffney and Gater 2003; Fenning and Donnelley 2004). This is important as choosing inappropriate methods can result in an apparent lack of archaeological remains, where in fact it has just been missed through human error.

In light of the above discussion, the following combination of geophysical methods were utilised as appropriate at the sites examined as part of this study.

• Ground Penetrating Radar (GPR)

Having been described as the 'most flexible and potentially most effective' geophysical technique, ground penetrating radar (GPR) has often been seen as the 'defacto' non-invasive technique in both archaeological and forensic contexts (Cheetham 2005:85-86; Plate 3.5). Much of this has stemmed from its use in famous murder investigations, such as the Fred and Rosemary West case, and its ability, unlike other geophysical techniques to view data in real-time (Hunter and Cox 2005; Cheetham 2005). GPR is based on recording the reflections or attenuations of electromagnetic signals that are continuously emitted from a roving antenna (Davenport 2001). These reflections or attenuations are affected by the physical properties of the subsurface and any buried features within it; 'the stronger the differences between the electrical properties of two materials, the stronger the reflected signal in the GPR profile', and the time that it takes these signals to travel is measured in nanoseconds (Watters and Hunter 2004:22-24). In order to highlight the contrast between potential archaeological features and the surrounding geology, it is imperative that the Relative Dielectric Permittivity (RDP) or dielectric constant, which 'is a measure of the ability of a material to store a charge from an applied electromagnetic field and then transmit that energy', of the latter has been determined prior to the survey (Conyers and Goodman 2004:45; Appendix 3.4). The dielectric constant 'reflects the velocity that radar energy can move through a material and will vary according the composition of the stratigraphic layers and buried features through which it moves (GSSI 2003:13).



Plate 3.5. Ground Penetrating Radar (GPR) (author's own photograph)

By surveying a number of transects over a given area, it is possible to create both reflection traces and 3D profiles of the subsurface, which offers the largest advantage over other geophysical methods (Conyers and Goodman 2004). Additionally, the recording of the two-way travel time of the reflected signals - that is the time it takes for a pulse to be transmitted and reflected back to the antenna - facilitates approximate depth analysis allowing potential features to be located in both the horizontal and vertical planes (Conyers and Goodman 2004).

The type of antenna chosen is perhaps one of the most important decisions of any for GPR survey. Whilst higher frequency antennas are capable of achieving greater depths (up to 20m), lower frequency antennas provide better resolution over a shallower area. Within the discipline of forensic archaeology, 400-500 MHz antennas are deemed most appropriate

owing to the fact that 'they provide an excellent compromise between depth of penetration and vertical resolution of subsurface features' (Schultz 2007:21). Subsequently, a 400 MHz antenna was selected for use in this study, permitting survey to a maximum depth of 5m, dependent upon the underlying geology, and providing ample resolution of subsurface features in this area. Parallel traverses were undertaken to increase the accuracy of the survey (Figure 3.3). Given the availability of this equipment and the fact that the terrain on Longy Common on Alderney was too undulating to facilitate the use of GPR, this method was only employed at Treblinka.

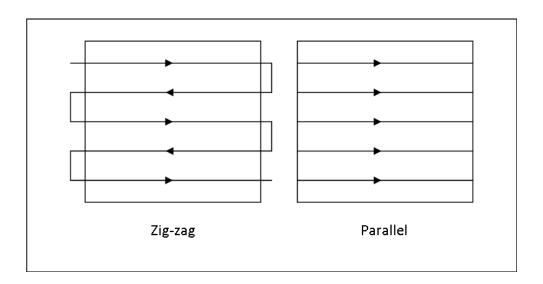


Figure 3.3. Traverse methods for geophysical survey

Resistance Survey

Described as 'the most popular resistivity method in archaeology', the twin-probe resistance meter functions on the principle that, when an electrical current is passed through the ground, different soils and different materials buried within it will have varied resistance (Clark 1991: Gaffney and Gater 2003). This is based on the equation R=V/I where R = resistance, V = voltage and I = current (Gaffney and Gater 2003). Although the degree of

resistance will vary based on the 'interaction of the composition and geometry of features, electrode configurations and climatic variations', generally speaking, solid features such as walls will exhibit high resistance whilst water-rich features such as ditches will be low resistance features (Clark 1991:37). Once again, resistance highlights the contrast between the surrounding subsoil and buried features: 'by taking a number of readings across the surface of an area, it is possible to map subsurface structures that are more conducting or less conducting that the material in which they lie' (Cheetham 2005:69; Figure 3.4).

The TR RM15 metre was used at both case study sites. The combination of the mobile and remote probes allows for zig-zag traversing, making the Twin Probe array suitable for relatively quick and easy data collection (Paradopoulos et al 2006:164). This allowed large-scale survey to be undertaken rapidly, thus providing an overview of the site being investigated and also highlighting the presence, or lack of, anomalies before other more detailed and laborious methods were applied to targeted areas (Scott and Hunter 2004). Although this method can only achieve shallow depth analysis, it is capable of defining both large and discrete features within this range and its potential at both forensic and archaeological sites has been repeatedly demonstrated (Hunter and Watters 2004). As Paradopoulos et al (2006:164) has argued, the twin probe array 'gives a strong and clear response over archaeological features, that is easy to interpret'.

The use of a remote pair of probes, located at least 15m away from the mobile frame, both limits the effects of background noise and defines the contrast between the natural geology and any archaeological features (Clark 1991). It must be borne in mind that these

background levels will vary according to season and weather conditions during the survey (BAJR 2008; Gaffney and Gater 2003). In accordance with English Heritage's (1995) maximum acceptable electrode spacing interval, the maximum traverse and sample intervals used as part of this survey was one metre, with marked ropes being used to guide the surveyor. Although it is recognized that a smaller traverse interval would increase the resolution, whilst increased electrode spacing would allow deeper ground penetration, the values chosen represent a compromise between these two factors (Clark 1991). Half-metre intervals were used over a targeted area on Longy Common, given the need to better define the nature of a feature noted in the one-metre interval survey (Appendix 5.1).

The use of resistance survey in the field can be limited by a number of factors. Firstly, the area needs to be free of obstructive vegetation and it must be possible for the current to pass through the ground surface, thus precluding its use in very dry soils, waterlogged or frozen areas and on solid materials such as concrete (Cheetham 2005). Secondly, whilst the resistance range of some features can be estimated, for example walls will display high resistance, the resistance of other features is not always consistent (Killam 1990). To cite one important example relevant to this study, several forensic archaeologists have noted that, whilst graves are generally displayed as low resistance anomalies, owing to the aeration of the soil caused by the burial process, often high resistance readings also occur, given the impact of the decay dynamic, the presence of large body masses and even the season in which the survey has been undertaken (Cheetham 2005; ICMP 2006; Killam 1990). Subsequently, such issues were considered during post-processing and particularly when classifying features.

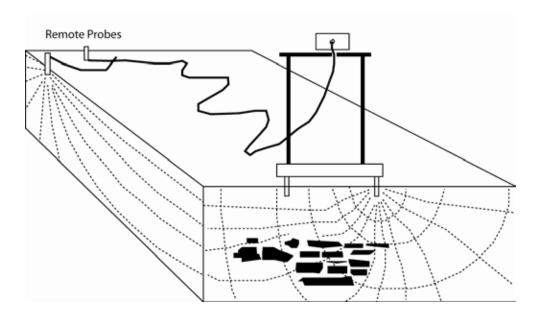
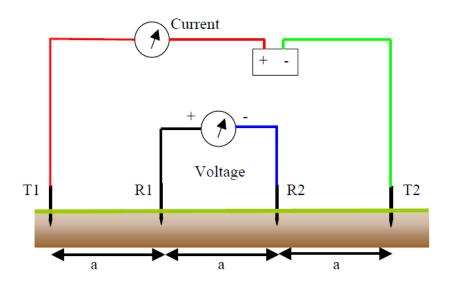


Figure 3.4. The principals of resistance survey

Electrical Imaging

Although not suitable for use over large areas, given its laborious nature, electrical imaging can provide detailed resistance information and allow pseudosections to be recorded through a feature of interest (Tonkov and Loke 2006). A twenty-probe, Wenner array configuration using the electrical imaging extension kit for the TR RM15 Resistivity Meter was employed during this survey. The Wenner array provides 'high sensitivity making it less susceptible to noise interference' and permits 57 readings to be taken along a 20m line, thus it was capable of recording to a maximum depth of 3m (TR Systems 2007:4; Figure 3.5). A probe spacing of 1m was used for each survey line and readings were taken by moving the cables at 1m, 2m, 3m, 4m, 5m and 6m spacing. This method achieves greater depth penetration than the resistance meter, thus providing additional information about the construction and form of buried features (Gaffney and Gater 2003:35). Its success with

respect to mass grave investigation has been demonstrated in Bosnia, through work undertaken for the International Commission on Missing Persons (ICMP 2007; pers. comm. John Hunter). Consequently, at both Treblinka and Alderney, this method was used at two suspected grave sites identified in the resistance data to further clarify their extent and nature (Appendix 4.1; Appendix 5.1). Cross sections, comprising of several overlapping survey lines, were surveyed across these features in order to allow the feature edges to be examined in full and to determine their construction quickly and effectively.



The Wenner (alpha) array, note separation (a) is always equal.

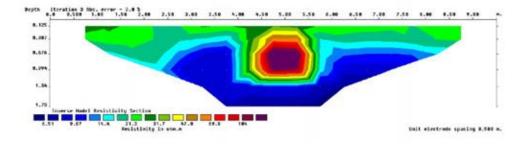


Figure 3.5. The operational procedure of electrical imaging (top) and an example of a pseudosection produced over a brick culvert (bottom) (after TR Systems 2007)

Within the remit of this research it was not possible to apply all of the geophysical methods available to archaeologists. Thus, the suite of methods selected represent those that were deemed most appropriate given the anticipated remains at the sites being examined. The large amount of anticipated buried metal objects at Treblinka and also the presence of modern metal fences at Norderney meant that the methods above were selected over magnetometry. Similarly, it has been observed of this technique that 'it is not very often good at locating graves as these tend to the backfilled with the same material from which they were dug - unlike ditches which tend to silt up more gradually and thus acquire fills with different magnetic properties to the surrounding soil' (BAJR 2008:5). Similarly, magnetic susceptibility only has a depth range of 150mm, thus negating the recording of buried remains at greater depths (BAJR 2008). That is not to say that these methods would definitely not be effective at the sites in question, nor at other sites pertaining to the Holocaust. Indeed, as a part of a larger research project by the author these methods will be used in order to determine the possibilities and limitations of their application.

3.2.4. TASK 4: DATA ASSIMILATION AND INTERPRETATION

Having completed tasks 1-3, the data collected needed to be assimilated to facilitate interpretation of the case study sites. This was achieved using the methodology set out in Table 3.4.

Task 4: Data assimilation and interpretation

Aims Addressed: Aims 2, 3 and 4.

Rationale:

This task will permit:

- Characterisation of above-ground and buried features;
- Reinterpretation of the case study sites in terms of surviving remains and layout;
- A consideration of the value of the assembled data in public education, heritage management and commemoration.

Methods Used	Equipment Used	Data Outputs
(a) Processing and	(a) Leica Geo Office; Geosite	(a) As for task 3; interpretation
visualisation of topographic	Office; AutoCAD, ArcGIS and	plots showing features
survey data	Surfer.	identified.
(b) Processing and		(b) As for task 3; interpretation
visualisation of the	(b) Resistivity software for	plots showing features
geophysical survey data	resistance survey data;	identified.
	Res2DInv for electrical	
	imaging data; Radan for GPR	
	data; ArcGIS and Surfer to	
	assimilate all data types.	
(c) Assimilation of historical		(c) Interpretation plots and site
and archaeological data (as	(c) ArcGIS; Adobe Illustrator.	plans.
collected during tasks 2 and		
3)		

Table 3.4. Task 4 undertaken as part of the methodology in order to achieve the aims of this research

Following processing in the appropriate equipment-specific software, all of the data compiled for the case study sites was assimilated into a Geographical Information System (G.I.S.). Georectification of aerial images, cartographic data and site plans was also completed to identify correlations between the datasets. The use of this system essentially provided a digital database of the data collected, thus facilitating an analysis of spatial relationships and the creation of digital representations appropriate for dissemination (Chapman 2003; Neubauer 2004). A variety of complementary software, such as AutoCAD,

Adobe Illustrator and Surfer were also used to aid data presentation. Three-dimensional visualizations of selected areas were also produced using Google SketchUp to demonstrate one possible method of dissemination. These visualisations will be utilised in developing education, heritage and commemoration strategies appropriate for the sites being considered in the future. Through these processes of data analysis and representation, as Nolan (2009:81) has noted, 'the resulting analysis paints a clearer picture of historic events than either history or archaeology individually'. Therefore, the methodology employed demonstrates that archaeological and historical data should not be seen as independent but instead as complementary sources that can provide a richer narrative of events.

Although individual features have been considered, rather than examining these and the sites in which they are located solely as isolated entities, their broader landscape context and their place as part of a European-level conflict landscape were considered. Such an approach was aimed at facilitating deeper understanding of their nature, extent and implications for European history and society.

Therefore, in scientific terms, the integration of written sources, witness accounts, maps, satellite data and aerial photographs with archaeologically derived topographic and geophysical data allowed:

- Detailed spatial analysis;
- Identification of archaeological remains;
- The archaeological remains to be placed in their wider context for enhanced site interpretation.

3.3. METHOD SELECTION

With respect to the case studies surveyed as part of this thesis, the methods discussed above were utilised as appropriate and different levels of survey undertaken according to the nature of the remains being targeted (English Heritage 2007; RCHME 1999; Appendix 3.1). Historical reviews were undertaken for both sites, although the nature of the sources varied according to the existence of archive material. With regards to field techniques, following preliminary site inspections, the methods used were selected based on their suitability for the terrain (Bowden 1999), the likely nature of the archaeological features present and their availability from Birmingham Archaeology at the University of Birmingham. Not all of the methods were employed at each site, owing to a range of factors which are discussed in more detail within the individual site chapters.

It is acknowledged that higher grade integrated survey and geophysical systems are available that would have provided increased speed and resolution, whilst higher resolution satellite and LIDAR data could have facilitated greater remote sensing capabilities. Such methods were not available as part of this project but offer potential for future research.

3.4. IMPACT

As previously mentioned, the combination of methods not only allows multiple aspects of the landscape to be recorded but it facilitates a methodology that reflects the complexities involved in the study of recent landscapes of conflict. Drawing on lessons learnt from archaeological, forensic, historical and ethical studies of other conflicts both pre- and post-

dating the Holocaust, this research aims to demonstrate the potential issues that may divide the practical and theoretical applications of archaeological methods and how these can be overcome. The comparison of historical evidence with the archaeological findings was intended to allow the variety of political, social, religious and other factors that have shaped the sites' development to be derived. Also, through examining attitudes towards the proposed fieldwork and reactions to it, the most up-to-date information concerning the role of the sites in contemporary society was considered and a unique record of the cultural memory associated with them was created.

The majority of the methods employed have been successfully used in archaeological (Gaffney and Gater 2003, Conyers and Goodman 2004) and forensic archaeological (Pye 2004, Cheetham 2005) scenarios and, as such, it was not the aim of this study to develop new equipment but to demonstrate the suitability of a combination of these up-to-date methods in new environments. Firstly, the non-invasive nature of this work will emphasise the importance of moving away from the notion that archaeology is only a destructive process centred on excavation, thus opening up new research avenues (Hunter and Cox 2005). This is particularly relevant in countries such as Poland where currently archaeological work centres around excavation, and field survey and geophysics are not widely employed; thus this work offers a new, alternative methodology for the future investigation of such sites. This will provide the opportunity to gain substantial information about buried features of the Holocaust, and facilitate commemoration and preservation of the sites examined, without the need for ground disturbance. Thus the main innovation of this methodology, in light of the discussion above concerning the variety of ethical, religious, political and social

factors relating to this period, is that it ensured that the sites examined are not only addressed in terms of their scientific and historical value, but also as places of remembrance and religious significance.

The two case studies to which this methodology has been applied will now be discussed in Chapters 4 and 5.

4. CASE STUDY: TREBLINKA, POLAND

'Human reason will never make peace with the reality of Treblinka' (Donat 1979:9)

4.1. INTRODUCTION

Described as the most 'perfected' of the Operation Reinhard death camps, Treblinka in Poland became the massacre site of over 800,000 European Jews, Poles and gypsies during the Holocaust (Arad 1987:37). Located 108km from Warsaw, in the north-east portion of the General Government, this remote, previously unassuming area of forest adjacent to the River Bug housed an extermination centre (Treblinka II), comprising of a complex of gas chambers, barracks, mass graves and, later, cremation pyres, that at its peak was capable of 'processing' between 10-12,000 people each day (Wiernik 1944; Figure 4.1). Constructed in 1942, it was argued at Nuremberg that 'the erection of this camp was closely connected with the German plans aimed at a complete destruction of the Jewish population in Poland, which necessitated the creation of a machinery by means of which the Polish Jews could be killed in large numbers' (IMTN 1947(3):567-568). Additionally, the existence of a forced labour camp at the site (Treblinka I), which was operational from 1940 until almost a year after Treblinka II had closed, facilitated the implementation of the Nazi 'death through work' policy for thousands more so-called enemies of the Reich (Muzeum Walki i Męczeństwa w Treblince 2011; Figure 4.2).

However, despite Treblinka's significance in the implementation of the Final Solution, Operation Reinhard and the history of the Holocaust as a whole, knowledge of the site's former function has faded from general public consciousness and there has never been an attempt to consider the potential archaeological remains pertaining to it. Indeed, survivor Richard Glazar (1999:vii) has identified a well-known reference work that cited an incorrect location for Treblinka, indicating 'how much we have forgotten about the history of this camp'. This is echoed by the number of people who, when questioned during this research, were unsure where the site is situated. Additionally, the limited information at the site concerning its layout is indicative of how little is understood about its extent, whilst the somewhat abstract symbolic memorial alludes little to its former function. Considerably less attention has been paid to recounting the history of Treblinka after World War II, something which has important implications for understanding the cultural memory and attitudes that have shaped current perceptions of the site.

Therefore, this chapter will seek to collate and combine historical and archaeological data relating to the extermination camp, Treblinka II. In order to do so, the known history of the camp, previous investigations of the physical evidence pertaining to it and memorialisation of the site will first be outlined. Based on a consideration of the information and issues highlighted as part of this reassessment, a methodology, based on the tasks and techniques outlined in Chapter 3, will be devised. This will facilitate the recording and reinterpretation of the surviving remains of camp structures, burial sites and infrastructure, as well as a consideration of post-war activities, both at the site itself and with regards to the cultural memory relating to it.



Figure 4.1. Location plan of Treblinka

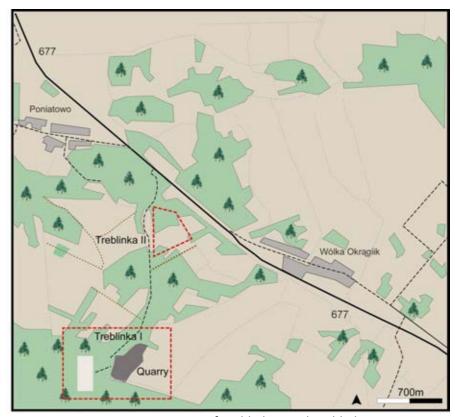


Figure 4.2. Locations of Treblinka I and Treblinka II

4.2. HISTORICAL BACKGROUND

Prior to a reassessment of the evidence pertaining to Treblinka, an overview of the known history of the site is presented to allow the following discussion to be contextualised.

4.2.1. BEFORE THE DEATH CAMP

Although named after the nearby village of Treblinka, the area that would contain the two camps is in fact located in an area bounded by Poniatowo to the north-west and Wólka Ogrąglik to the south-east (Figure 4.2). Pre-war maps demonstrate that the area containing the extermination camp was an area of open grassland, bounded only to the north and east by forest, whilst the area of Treblinka I was also devoid of trees (Figure 4.3).

In 1941, in order to exploit the local quarry for materials to be used in the construction of fortifications, a labour camp known as Treblinka I was constructed (Arad 1987). Initially, this so-called 'Workers Educational Camp' occupied utility rooms located near the gravel quarry and railway ramp, and only a small number of dissident Poles were sent to the site (Muzeum Walki I Męczeństwa w Treblince 2011). Between June and September 1941, a purpose-built camp was constructed, covering approximately seventeen hectares and surrounded by a barbed wire fence (Muzeum Walki I Męczeństwa w Treblince 2011). Following the completion of the building work, Jews began to be deported to Treblinka I and Arad (1987) estimates that 1000-2000 Jews and Poles undertook forced labour at the nearby gravel pit, the railway station at Małkinia and at an irrigation site near the River Bug in this early period of operation. These Arbeitsjuden (Jewish workers) were also later responsible for constructing and maintaining Treblinka II, located to the north (Sereny 1995). In November

1941, the District Governor of Warsaw, Dr. Fisher, announced that Treblinka I would be used to house Poles from the entire Warsaw district who refused to serve the Third Reich and a directive was issued that bought the penal labour camp, officially known as 'Der SS- und Polizeiführer im Distrikt Warschau Arbeitslager Treblinka', into force (IMTN 1947(3)). It has been noted that 'both the rotation and mortality rate at Treblinka I were quite high' and that, by the time the camp was liquidated at the end of July 1944, it is estimated that 20,000 inmates had been housed there, over half of whom died or were executed (Muzeum Walki I Męczeństwa w Treblince 2011).

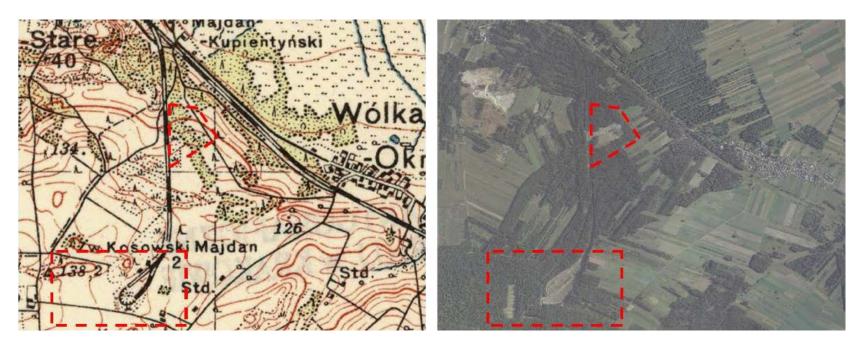


Figure 4.3. Historic map from 1936 (after Wojskowy Instytut Geograficzny 1936) and a modern SPOT satellite image showing the forestation that has occurred around the Treblinka camps since the end of the war (after Geoportal 2010)

4.2.2. THE CONSTRUCTION OF TREBLINKA II

The decision taken at the Wannsee Conference to carry out the Final Solution, commonly defined as the plan to annihilate Jews across Europe, facilitated the need for mass extermination centres, which would be under the control of Operation Reinhard staff (Baxter 2010). In Spring 1942, SS Hauptsturmführer Herman Höfle was sent to find suitable locations for the Operation Reinhard camps which, as Arad (1987) states, were selected according to three criteria:

- their proximity to railway lines, to enable the transportation of the victims to the death camps;
- 2. their remoteness, to ensure that the true purpose of the camps was not revealed;
- their proximity to the occupied territories of the Soviet Union, to ensure that the victims believed they were being transported to the East.

Additionally, the camps had to be close to Lublin, as this was where the headquarters of Operation Reinhard were located (Muzeum Walki i Męczeństwa w Treblince 2011). Located in an area adjacent to the Warsaw to Białystok railway line, the site chosen for Treblinka II fulfilled these criteria (Młynarczyk 2004; Figure 4.2). The existence of Treblinka I in this area also made it a suitable location.

Treblinka II was constructed much later than the other death camps, once it became apparent that Sobibor and Bełżec were unable to cope with the large number of victims

being deported (Central Commission for the Investigation of German Crimes in Poland 1946). Its construction sparked a series of rumours regarding its purpose: 'it was said that it was to be another labour camp, a camp for Jews who would work on damming the River Bug, a military installation, a staging or control area for a new secret military weapon' (Zabecki 1977). The reality, however, was that Treblinka II was to become 'just a place of mass execution' and this was reflected by the fact that the camp had no accommodation for the prisoners 'because those that arrived were immediately exterminated' (Central Commission for the Investigation of German Crimes in Poland 1946:102; Malagon 1979).

The construction of Treblinka II was two-fold. Many authors have noted that it was modelled on Sobibor, having been constructed by the same team of contractors, Schönbronn of Leipzig and Schmidt-Münstermann, and supervised by Obersturmführer Richard Thomalla who had also overseen the work there (Arad 1987; Chrostowski 2004; Figure 4.4). Additionally, many of the methods of transporting, processing and exterminating the victims had been tested at Belzec and Sobibor and, consequently, information about these sites can be used to supplement and complement what is known about Treblinka II when attempting to reconstruct the appearance and functionality of the site (Suchomel 1967; Arad 1987). However, modifications and improvements were also made to the layout of Treblinka II based on the lessons learnt from the other Operation Reinhard camps; thus Treblinka II has been described as 'the biggest and most efficient Action Reinhard centre in the General Government designed for the mass murder of Jews' (Młynarczyk 2004:1).

THE SOBIBOR DEATH CAMP

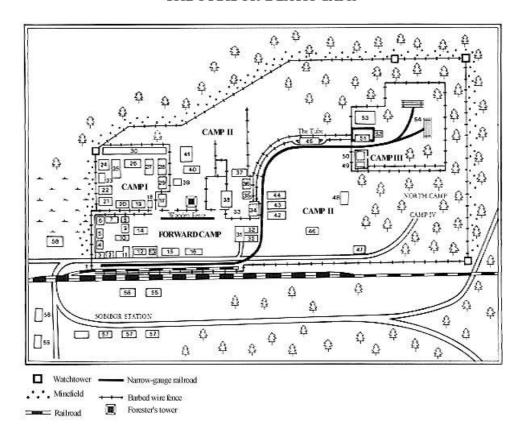


Figure 4.4. Plan of Sobibor camp, upon which Treblinka II was reportedly based (after Arad 1996)

A special building crew from SS-Bauleitung in Lublin, Jews transported from nearby areas and Polish labourers from Treblinka I were tasked with building the camp in April 1942 (Młynarczyk 2004). Just as the location of the camp had been selected on the basis of the local environment, its construction also utilised local materials such as wood from the local pine forests and stone from the nearby quarry (Chrostowski 2004). The staff were recruited from the T4 euthanasia programme and 1000 inmates were divided into kommandos, each of which were assigned tasks which would ensure the efficient running of the camp (Muzeum Walki i Męczeństwa w Treblince 2011; Table 4.1).

Kommando Unit	Function
Tarnungskommando	Camouflage
Kommando Rot	Sorted belongings
Yellow/Szmaciarze* commando	Processed clothing
* polish for rag)	
Blue commando	Cleaning platforms and trains
Goldjuden	Sorted and assessed valuables
Desinfektionskommando	Disinfected hair and clothing

Table 4.1. Kommando units active in Treblinka II and their functions (based on Muzeum Walki i Męczeństwa w Treblince 2011)

As detailed in a letter written by the first camp commander Dr Eberl, the building work was completed in July 1942 and, on the 23rd of that month, the first transport arrived at the camp from the Warsaw ghetto (Młynarczyk 2004). The majority of the victims were sent to the camp by rail, with the occasional transport of gypsies or local Jews being sent by road in large trucks (Chrostowski 2004). Arad (1987) has argued that, in this early period that lasted until mid-August, between 5,000 and 7,000 people were sent to the camp each day, under the illusion that it was a transit camp. However, by the end of August 1942, it was reported that the death toll in the camp had reached 10,000 to 12,000 people a day, yet only three gas chambers existed (Baxter 2010). This led to an alteration in the treatment of prisoners, with random shootings, beatings and corpses littering the railway platform becoming common (Arad 1987; Rajzman 1979; Pfoch 1994). Therefore, during this period, the camp was far from an ordered 'production line of death', as is often assumed (Młynarczyk 2004:3).

Similarly, although information produced by the Muzeum Walki i Męczeństwa w Treblince (2011) states that the camp was reorganised in September/October 1942 because 'the chambers turned out to be draughty and the corpses' removal too time-consuming', the reality of the situation in the camp at this time was more serious. Owing to the large number of people being sent there, and the inexperience of the administration, 'in Treblinka everything was in a state of collapse...Many corpses of Jews were lying inside the camp. These corpses were already bloated' (Arad 1987:89). This resulted in Eberl being removed from his post and a new system of extermination being implemented (Suchomel 1967; Spiess in Lanzmann 2005).

Franz Stangl took over as Camp Commander, with Kurt Franz as his deputy, and temporarily suspended transports to the camp between the 28th August and the 3rd September to clear the backlog of corpses (Chrostowski 2004; Suchomel 1967). These changes necessitated the second phase of construction within the camp; new gas chambers were constructed, the "tube" was relocated and new kommandos were established to dispose of the corpses, with all members of the earlier Death Camp working group being exterminated upon Wirth's order (Baxter 2010). A kommando unit was established to bury the bodies of those who had died in the cattle cars and this new system meant that 52,000 Jews from Warsaw were murdered in the first two weeks of September (Arad 1987). Consequently, the period from the end of August until December 1942 was described as 'the most active period' in the extermination process at Treblinka II by the Central Commission for the Investigation of German Crimes in Poland (1946:103). Additionally, from November 1942, some of the corpses of those sent to the camp were cremated but it was not until Himmler's visit in

February 1943, that cremation reportedly became the main method of disposal alongside the exhumation of those already buried in mass graves (Glazar 1999). Himmler announced that, once this was completed, the Operation Reinhard camps would close, as they had fulfilled their function (Arad 1987). From January to March 1943, when fewer transports were arriving in the camp, the prisoners planned a revolt which took place on the 2nd August 1943 (Glazar in Lanzmann 2005). Of approximately 850 inmates, only 200 managed to escape, with even less surviving the rest of the war (Muzeum Walki i Męczeństwa w Treblince 2011).

By the time Treblinka II closed in August 1943, hundreds of thousands of people had been murdered there. The exact number will probably never be known, owing to the disposal of the corpses of the victims through various means. Estimates based on transport lists, records kept by a local railway worker and witness testimonies have varied from 700,000 up to 1.2 million (Friedman 1982:161; IMTN 1947(8):329; Chrostowski 2004:99-101; Sereny 1995:250; Rajzman 1979:296;), with the widely accepted figure being around 800,000 people (Muzeum Walki i Męczeństwa w Treblince 2008). The Central Commission for the Investigation of German Crimes in Poland (1946:104) stated that 'it was mostly Jews and Polish citizens from the central parts of the country (Warsaw, Radom, Częstochowa, Kielce and Siedlce) who were killed at Treblinka II; though there were Jews from the vicinity of Bialystok, Grodno and Wolkowysk; German, Austrian, Czech and Belgian Jews from the west, and Greek Jews from the south'. In addition, Arad's (1987) comprehensive review of the death toll also demonstrates that Jews from Yugoslavia and gypsies were transported to the camp.

4.2.3. THE LAYOUT OF TREBLINKA II

A variety of witness plans, historical documents and photographs have been used by scholars to attempt to reconstruct the layout of Treblinka II (Appendix 4.1). Whilst historians have not reached a total consensus, an examination of the literature reveals several areas of agreement concerning the camp's development and function.

Witnesses generally agree that the camp was surrounded by an outer boundary, which was camouflaged by brushwood and that, internally, it was divided into several inner compounds; the Reception Camp, the Death Camp (also known as the Upper Camp) and the Living Camp (Sereny 1995; Laponder 2000; Rajzman 1979; Młynarczyk 2004). The Reception Camp housed sorting barracks for the victims' belongings and undressing barracks close to the area where the prisoners would disembark from the trains (Wiernik 1944). From the outset, mass graves were also located in the southern part this area (Bomba 1990). The Himmelfahrestrasse or Schlauch (the road to the gas chambers) led from the reception area into the Death Camp (Sereny 1995; Willenberg 1989; Weinstein 2002). The Death Camp reportedly contained the gas chambers, the majority of mass graves and cremation pits in which the victims were disposed, and barracks for the body disposal and camouflage commandos (Muzeum Walki i Męczeństwa w Treblince 2011; Yeger 1948; Arad 1987; Glazar 1999; Sereny 1995). The Living Camp was located in the northern portion of the camp, in an area that is now dense forest, and comprised of two areas: the largest containing the Camp Adminstration, Ukrainians' and SS' living quarters along with a farm, bakery and workshops, whilst a smaller fenced-off area was reserved for the Arbeitsjuden (work Jews) (Sereny 1995; Laponder 2000).

However, within these areas, historical sources demonstrate that, in terms of the construction, the appearance of Treblinka II was far from static, and it can be seen to have developed throughout its existence, in accordance with the number of transports being sent to the camp and, subsequently, the scale of killing and disposal (Laponder 2000). In particular, scholars and witnesses alike have made a distinction between the camp's layout and function pre-November 1942 - when the majority of victims were believed to have been buried in mass graves and the methods of extermination were still being tested - and the period after November 1942 - when new buildings, including ten new gas chambers, were constructed reflecting the vast number of victims being sent there (Młynarczyk 2004; Laponder 2000). In particular, the Living Camp was expanded to include more facilities for the camp administration, including exercise and relaxation areas as well as a zoo, which is believed to have been built before April 1943 (Sereny 1995; Plate 4.1). A Tyrolean guard tower and new camp gate were also constructed (H.E.A.R.T. 2009; Plate 4.2).

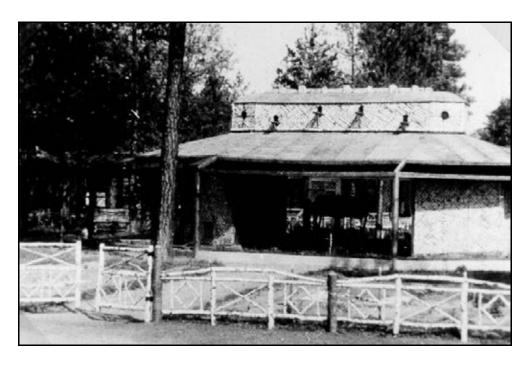


Plate 4.1. The zoo located within the Living Camp at Treblinka II (YV 1448a)



Plate 4.2. The Tyrolean guard tower constructed near the camp gate at Treblinka II after April 1943 (H.E.A.R.T. 2007)

The living quarters of the Jewish workers was also expanded, reportedly forming a U-shape and comprising of several workshops, adjacent to a roll-call square (Arad 1987; Muzeum Walki i Męczeństwa w Treblince 2011). As the camp developed, in the reception area, the Nazis attempted to disguise the fate of the victims by constructing an artificial railway station with ticketing windows and signage, as well as a so-called field hospital or Lazarett, which even displayed the Red Cross flag (Leleko 1945). As shown in the above plates, many of these buildings were photographed by Kurt Franz and were included in an album that was recovered after the war, entitled 'Good Times'.

As mentioned above, given the diversity in witness accounts and the fact that the majority of structures were demolished prior to the end of the war, although there is general agreement that the aforementioned features existed, their exact locations are not known.

4.2.3. THE FINAL STAGES OF TREBLINKA II

The majority of historical texts that discuss the final stages of Treblinka II's existence as an extermination camp allude to the modifications that took place. Initial damage was caused by the revolt by prisoners on 2nd August 1943 which resulted in some buildings being subject to fire damage (Arad 1987; Plate 4.3). Following this, and as a result of the winding down of Operation Reinhard, the last transports to Treblinka II arrived from Białystok on 18th and 19th August (Arad 1987). Following the extermination of the victims on these transports, a small group under the control of Kurt Franz was charged with dismantling the structures on the site, planting pine trees and lupines to disguise the body disposal sites and, as was standard practice at all of the Operation Reinhard camps, a small farmhouse was built which would be

manned by a Ukrainian guard, in case of unwanted interest (Zabecki 1977; Sereny 1995; Plate 4.4). These features have frequently been cited as the only surviving structures immediately after the camp's abandonment, something which has led historians and the public to believe that the rest of the camp was entirely destroyed (Central Commission for the Investigation of German Crimes in Poland 1946). Contemporary photographs demonstrate that these structures were burnt down by residents in 1944 and, therefore, it is often assumed that no trace of these survive either (Wiernik 1944; Plate 4.5). Re-use of the site has complicated interpretation; the area of Treblinka II has been subject to bomb damage, occupation by the Soviet army, post-war looting activity and landscaping as part of the construction of the memorial.



Plate 4.3. A fire at Treblinka II during the revolt on 2nd August 1943 (after Bildarchiv Preussischer Kulturbesitz)

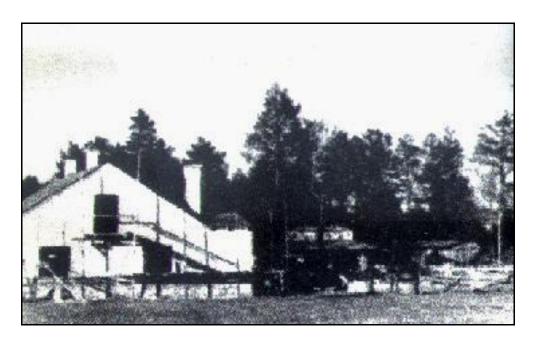


Plate 4.4. The Ukrainian farmhouse constructed at Treblinka II following its abandonment (after Wiernik 1944)



Plate 4.5. The Ukrainian farmhouse after being burnt down in June 1944 at Treblinka II (after Novosty Press 1944)

4.3. PREVIOUS INVESTIGATIONS

Prior to examining Treblinka II archaeologically, it is important to assess the previous investigations that have taken place. Such an assessment not only reveals information about what is known about the layout of the camp, but it also allows any post-abandonment disturbances at the site to be characterised. Similarly, the level of interest in the site since

the war is indicative of wider attitudes towards it. Thus, this section will provide the basis for further discussion on this topic in section 4.7.

4.3.1. CONTEMPORARY SITE INVESTIGATIONS

A limited number of site investigations took place at Treblinka immediately after the war to determine what physical evidence survived as testament to the crimes that had taken place. The first occurred following the Soviet invasion of the area in August 1944, when an investigation team comprising of army officers questioned witnesses and spent two days examining burial locations in the vicinity of Treblinka I (GARF 7021). Three mass graves, containing 305 bodies and a number of individual graves were exhumed (GARF 7021). The subsequent report that was produced highlighted that, although no invasive work was undertaken at Treblinka II, 'a huge area of the camp was covered with cinders and ashes' whilst the remains of a burnt house, a cattle stall and various pits containing personal belongings were noted (GARF 7021).

After the war, it was decided that 'the Germans committed such unprecedented crimes and in so vast quantity that in order to revive the Polish state it was necessary to create an institution, centralising every effort in the direction of the detection of each of the crimes and the protection of the evidence they perpetrated' (Łukaszkiewicz 1946a:3). Consequently, prompted by the Jewish Historical Commission and the need to collect evidence in the wake of the Nuremberg War Crimes Trials, the Central Commission for the Investigation of German Crimes in Poland (1946) was established. Operating under this auspice, the main investigation began at Treblinka II on the 6th November 1945 by a team comprising of Judge

Łukaszkiewicz, Prosecutor Maciejewski, a licensed surveyor, local officials, Rachel Auerbach and Józef Kermisz from the Central Jewish Historical Commission and four Treblinka II survivors (Łukaszkiewicz 1946a; Auerbach 1979).

Although Auerbach's (1979) report on these investigations sits half way between scientific and theatrical, it offers valuable insights into the nature of the camps at the end of the war and seems to confirm claims made by witnesses, that not all of the bodies at the camp were entirely cremated (section 4.5.4.3). Yet, the documents relating to this early investigation demonstrate that no scientific study was undertaken, and it appears that little site recording was undertaken and the remains were left in situ (Łukaszkiewicz 1946a; Auerbach 1979). Auerbach (1979) did, however, make several further useful observations constructive to forensic archaeologists: the scavenging that had taken place at the site, both by animals and people looking for valuables, was observed; testimonies of witnesses were recorded in relation to the disposal of human remains; the different grave locations used for the various prisoners were discussed. Although somewhat dramatised, descriptions such as this represent one of the few sources that recall the post-war condition of the sites, thus making an invaluable contribution to site histories and landscape change reconstructions, as will be shown below.

During the period from the 9th-13th November, more invasive work took place at the camp, the results of which were published in a Polish text entitled *Oboz Straceń w Treblince* (The extermination camp in Treblinka) (Łukaszkiewicz 1946a), *Biuletyn Głównej Komisji Badania Zbrodni niemieckich w Polsce* (Łukaszkiewicz 1946b) and in the Nuremberg Trial Records

(IMTN 1947). At this time, the first plan of the camp was created by a professional surveyor, which revealed its purported shape and shows the features still visible on the ground (Figures 4.5 and 4.6).

Plan Treblinka

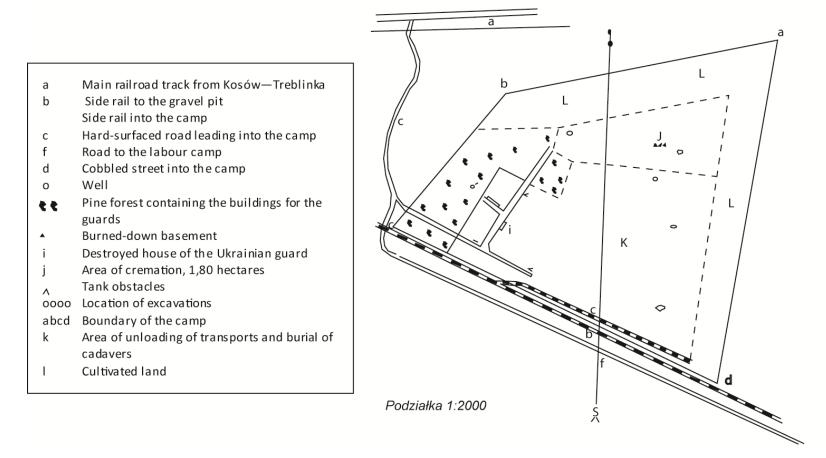


Figure 4.5. Digitized version of the plan of Treblinka II created during the 1945 survey (adapted from Łukaszkiewicz 1946c)

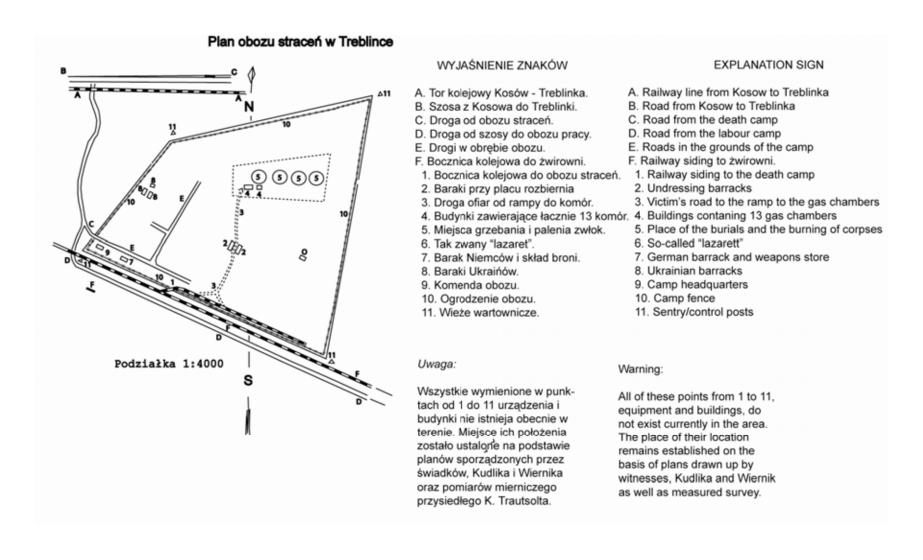


Figure 4.6. Plan of Treblinka II by Kudlik, Wiernik and Trautsolt, drawn as part of the survey led by Łukaszkiewicz (adapted from Łukaszkiewicz 1946a)

This plan also reveals the locations of excavations undertaken by the survey team during this period. Excavations were undertaken near the apparent location of the 'camp hospital', revealing several personal belongings and coins, and test pits were dug in the area thought to contain the gas chambers, although no building foundations were noted (Wojtczak 1975). However, in the latter case it was reported that 'undisturbed layers of earth were uncovered' at a depth of only 1.5m (Wojtczak 1975:184). A large crater was excavated to a depth of 7.5m and 'numerous human remains were found by these excavations, partially still in a state of decomposition', again revealing that not all the bodies were cremated (Wojtczuk 1975:184; IMTN 1947).

However, despite these findings, a statement was issued on the 13th November 1945 terminating the work at Treblinka II, 'in consideration of the oncoming autumn, the present rainfall and the necessity of a rapid conclusion of the judicial preliminary investigations' (Wojtczuk 1975:185). This statement also announced that no mass graves had been found at the site, despite the earlier observations noted regarding the unearthed pit (Wojtczuk 1975). Given the size of the camp and the short period actually spent examining it, it would have been impossible for the investigation team to have conducted enough research to conclusively rule out further burials and certainly it was not in their remit to recover the remains, thus they were left in situ. Additionally, as only limited test-pitting was undertaken, the presence of buried structural remains can also not be ruled out. That said, despite lasting only five days, this survey still represented the most comprehensive examination of the site prior to

this research. Consequently, the majority of Treblinka II has never been examined in detail and the fact that the results have never been widely disseminated may be one reason why knowledge of the site is limited.

Interestingly, Łukaszkiewicz's (1946d) team returned to Treblinka I for two days in August 1946 to conduct investigations into potential further mass graves (Figure 4.7). Although 41 mass graves were identified, 40 had been desecrated, and Łukaszkiewicz (1946d) argued that this made it impossible to determine exactly how many people were buried there, although an estimate of 6500 was provided. However, this once again demonstrates the haste with which such investigations were carried out and the emphasis on determining that remains existed in a given place, as opposed to their detailed investigation, as noted in Chapter 1.

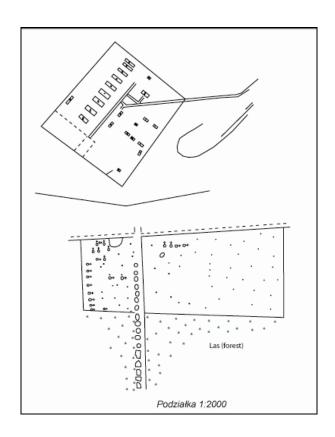


Figure 4.7. Plan of Treblinka I completed during the survey of the site in 1946 (adapted from plan drawn by Trautsolt published in Wojtczak 1975)

4.3.2. MEMORIALISATION

The site remained neglected and subject to looting until 1959, when the decision was taken to construct a memorial (Kopówka and Tołwiński 2007; Muzeum Walki i Męczeństwa w Treblince 2011). Between 1959 and 1961 this monument, designed by Adam Haupt, Franciszek Duszeńko and Franciszek Strynkiewiecz, was constructed, fundamentally altering the landscape at Treblinka II (Radecka 2011; Plate 4.6). This original memorial remains at the site, having been restored in 1995, and since 1983 it has been designated a Polish national monument, housing the Muzeum Walki i Męczeństwa w Treblince (Museum of Fighting and Martyrdom) (Kopówka and Tołwiński 2007). The monument at Treblinka II comprises of 17,000 stones,

symbolising Jewish matvoh (headstones) and represents the towns and villages from which the victims came (Muzeum Walki i Meczeństwa w Treblince 2011). The concrete into which these stones are set is purportedly located over the mass graves and cremation pits (pers. comm. Edward Kopówka). A large obelisk, bearing a relief of tortured souls, a large memorial stone bearing the words 'Nigdy Wiecej' (Never Again) and a symbolic cremation pit were also built, which form the centre of memorial services at the site. A symbolic railway platform, tracks and a gate, along with granite stones which purportedly mark the camp boundary, are the only indicators of the layout of the camp highlighted to visitors. Eleven memorial stones were also constructed adjacent to the symbolic railway platform, acknowledging the various nations from which victim's at Treblinka II came. A small museum also exists at the site, displaying some of the items found at the camp, and limited signage is also located on the approach to the memorial.



Plate 4.6. The memorials at Treblinka II: the memorial in the central area of the former extermination camp (top left), the symbolic cremation pit (top right), the symbolic railway line (bottom left) and the symbolic railway platform (bottom right) (author's own photographs)

Several issues arise in terms of the methods used to determine the location of the monument, the landscape change caused by its installation and its impact upon archaeological surveys of the site in the future. Firstly, in terms of the nature of the investigation undertaken in advance of the memorial's construction, there is only limited information available. Photographs taken in 1960 suggest that the locations of the mass graves were determined based on the presence of lupines, which were purportedly planted by the Nazis to disguise the site's former function (Wiernik 1944; Zabecki 1977; Sereny 1995). It also appears that small test pits were dug throughout the areas thought to contain mass graves and that the concrete memorial was then cited according to these findings (Plates 4.7- 4.9). However, it seems unlikely that these excavations were conducted on a large scale; additionally

most likely they were confirmatory concerning the presence of human remains, as opposed to detailed examination of the graves (Plate 4.10). The presence of skeletalised remains was also recorded, providing further evidence that not all of the victims were cremated (Plate 4.10). However, once again, despite these findings, such assertions still did not enter public consciousness or historical texts.



Plate 4.7. The site of a mass grave recorded in advance of the construction of the memorial at Treblinka II (after YV 3960/11)



Plate 4.8. View of the lupines used as indicators of mass graves by investigators in advance of the construction of the memorial at Treblinka II (after YV 3960/12)



Plate 4.9. An excavation at one of the mass graves in advance of the construction of the memorial at Treblinka II (after YV 3960/19)



Plate 4.10. Human remains found in advance of the construction of the memorial at Treblinka II (after YV 3960/21)

Secondly, the construction of the memorial would have caused considerable ground disturbance and altered the hydrology of the area (Plate 4.11). However, this is difficult to estimate. Contemporary photographs represent the main source of evidence and indicate that a number of temporary structures were installed across the site whilst the memorial was being built (Radecka 2011; Plate 4.12). Similarly, the memorial now masks a large portion of the former Death Camp (pers. comm. Edward Kopówka). This precluded the use of all geophysical techniques in these areas. Although ground penetrating radar (GPR) is capable of passing signals through solid materials, the density of the memorial stones made this largely impossible (Conyers and Goodman 2004).



Plate 4.11. The construction of the monument at Treblinka II (after Radecka 2011)

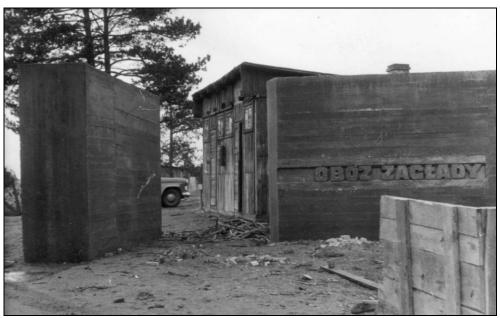


Plate 4.12. One of the temporary structures erected at Treblinka II, located near the symbolic camp gate, during the construction of the memorial (after Radecka 2011)

Finally, it would appear that the belief that nothing survived outside of the areas designated by the memorial has resulted in further landscape modification at the site since the 1960s until the present day. Although a degree of landscape change can be attributed to the Germans, photographs demonstrate that only a small portion of the camp was forested immediately after the war (Sereny 1995:145; Plate 4.13). Following the construction of the memorial further trees were planted, reportedly to demarcate the boundaries of the Death Camp, whilst the area inside these boundaries were sown to grass; indeed it was the intention of the architect that the site would be allowed to become overgrown (Radecka 2011; pers. comm. Edward Kopówka). Indeed, the forestation continued to increase over time, with footage from the film Shoah, filmed in the early 1980s, revealing that the number of trees now present on the site were absent at this time, whilst others have been removed since this date (Lanzmann 2005). Thus the memorial landscape at Treblinka II is constantly changing; whatever the reason for this, it is clear that these modifications have not been based on examinations of any surviving remains.



Plate 4.13. Images of Treblinka II taken in 1960 showing the degree of tree cover at the site (after YV 3960/26 (top) and 3960/26 (bottom)).

4.3.3. CONCLUSIONS

All of the aforementioned investigations at Treblinka took place before archaeological approaches to recent conflict sites were commonplace. However, whilst the other three Operation Reinhard camps, Chelmno, Sobibor and Bełzeć, have all since been examined archaeologically, research by archaeologists has never been undertaken at Treblinka. Additionally, details of a purported GPR and borehole survey by Richard Krege, which has formed the basis of Holocaust revisionist's claims that no mass graves existed at Treblinka II, have saturated the internet (Krege in Irving 2000). Although Krege failed to publish any results, a video showing his team

at the site, and its subsequent discussion on revisionist websites, has led to a situation whereby the majority of information most easily accessible about Treblinka II comes from questionable sources (You Tube 2007). If indeed this survey really was undertaken, it appears that it was carried out without the support of the Conservator of Monuments (pers. comm. Edward Kopówka). Therefore, not only did it defile the memory of the victims at Treblinka and contravene Halacha Law and archaeological ethics by being partially invasive, but it has also resulted in suspicion towards other researchers wanting to carry out work at Holocaust sites.

4.4. RESEARCH QUESTIONS

Therefore, a review of the known history of Treblinka and previous investigations at the site highlighted that questions remained regarding the extent and nature of the camp. Several trends were observed, many of which appear to have influenced popular perceptions of the site, and these provided the impetus for an examination of the site using archaeological techniques:

- The layout of Treblinka II is presented in numerous plans but these have been largely based on witness testimony and historical research, rather than on site investigation;
- Despite suggestions in historical literature to the contrary, a review of the findings of previous investigations demonstrated that Treblinka II was not entirely destroyed

by the Nazis. This suggests that archaeological remains would survive below the ground;

- Given the lack of scientific investigations at Treblinka II in the past, particularly with regards to the burials, the possibility of mass graves and human remains at the site should be reinvestigated;
- It is unclear whether the current memorial and subsequent on site interpretation represents an accurate image of the camp. As such, historical and archaeological data should be collected and compared to the current site layout to clarify the accuracy of current heritage presentation.

A further consideration is the fact that previous investigations have failed to comply with Jewish Halacha Law. In order to prevent unnecessary disturbance to the potential remains at the site in the future, a non-invasive survey was deemed to be required.

4.5. METHODOLOGY

In light of the scale of the site and the fact that built remains are already visible in part at Treblinka I, this research will focus on Treblinka II although the discussion of the cultural memory and issues associated with examining the site encompassed both camps (section 4.7). In order to answer the research questions outlined above the tasks described in section 3.2 will be undertaken.

4.5.1. HISTORICAL REVIEW

Documentary, cartographic and aerial reconnaissance data relating to Treblinka was examined in accordance with the methodology outlined in Chapter 3.2.2. In light of the research questions highlighted above (section 4.4), this review specifically focused on information relating to the camp's layout and development, its abandonment by the Nazis, post-abandonment landscape change, and the nature of burial and disposal. This was aimed towards reviewing the widely known history of the camp by revisiting primary sources, with a view to deriving both historical and archaeological data.

4.5.2. ARCHAEOLOGICAL DATA COLLECTION

The areas targeted for archaeological survey are shown in Figure 4.8. These targeted areas were selected based on their accessibility (in light of the presence of the modern memorial and obstructions caused by vegetation across the camp), the suitability of the terrain for the survey methods available and, most importantly, indications in the historical literature that features such as structures and graves were likely to have been located in these areas.



Figure 4.8. Survey areas examined at Treblinka II

Given that the focus of this thesis lies with demonstrating the potential of archaeological investigations of Holocaust sites, and given the limitations of space, the reader is referred to Chapter 3 for an overview of the interdisciplinary, non-invasive methodology developed as part of this research and Appendix 4.2 for a more detailed account of the survey strategy employed at Treblinka. A summary of the latter is provided here.

To facilitate the production of a digital terrain model (DTM), and to allow microtopographic features and the camp boundary to be recorded, a survey was conducted using a Leica GPS500. Site visits highlighted that the dense tree cover at Treblinka may result in the loss of satellite signal, thus potentially restricting the use of DGPS. As a result of this, topographic data was also collected using a Total Station.

A resistance survey was undertaken using the TR Resistivity Meter with a Twin Probe Array over a total area of 19,600m² across Areas B-E (Figures 4.8 and 4.9). A twenty-probe, Wenner array configuration was employed using the electrical imaging extension kit in order to define feature profiles. A GSSI TerraSIRch SIR System-3000 with a 400MhZ antenna facilitated high resolution subterranean mapping to a maximum depth of 4 metres across an area of 14,400m² in Areas B and C (Figure 4.8 and 4.10).

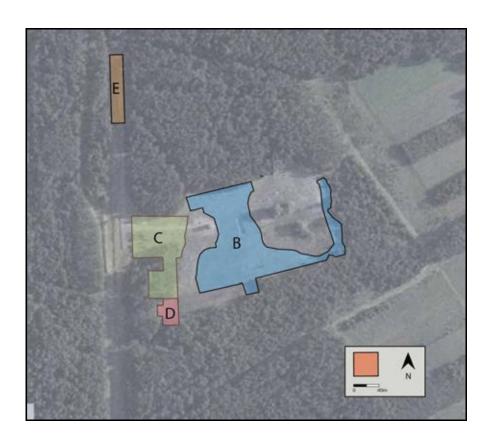


Figure 4.9. Locations of the resistance survey area at Treblinka II



Figure 4.10. Locations of the GPR survey area at Treblinka II

4.5.3. DATA FUSION AND INTERPRETATION

The data derived as part of tasks 2 and 3, was assimilated into ArcGIS for interpretation (see section 3.2.3.5). This facilitated comparison of witness plans, aerial imagery (contemporary, post-abandonment and modern), field survey and geophysical data, and other scholarly work relating to Treblinka (Bay 2003; Laponder 2000).

4.5.4. RESEARCH INTO POST-ABANDONMENT HISTORY AND CULTURAL MEMORY

This task was undertaken based on the methodology outlined in Chapter 3.2.1 and a consideration of the issues raised in Chapter 2. Although the results of this aspect of the research will be presented at the end of this chapter (section 4.7), this task

spanned the full timeframe of the research programme. Firstly, research into the post-abandonment history of Treblinka and attitudes towards the site accompanied a consideration of the permissions that needed to be granted to conduct the fieldwork. Secondly, affected groups were identified and responses to the research before, during and after its completion - were also noted.

4.6. REINTERPRETING TREBLINKA II

The results of the research at Treblinka are presented below. These results will be discussed thematically in relation to the camp layout, the survivability of structural remains associated with it, and burial and disposal of the victims of the crimes perpetrated by the Nazis. This will allow the research questions outlined above to be addressed.

4.6.1. ASSESSING THE CAMP LAYOUT

This following discussion will address the research questions surrounding the layout of the camp and the accuracy of the current modern memorial (section 4.4), through the re-evaluation of historical sources and the collection of archaeological data, derived through field survey.

4.6.1.1. Historical Review

The lack of aerial photographs taken during Treblinka II's period of operation means that an assessment of the camp's layout is dependent upon images taken in 1943 and 1944 after its abandonment, witness plans and in-field survey. Perhaps most

noticeable about the witness plans presented in Appendix 4.1 is the fact that the camp has been represented as being several different shapes. In the literature, the plan by Wiernik and that presented at Franz Stangl's trial are often cited as being very reliable, yet these show the site as rectangular in plan (Appendix 4.1 (b) and (j)). Aerial photographs, taken after the abandonment of the camp in 1944 (Figure 4.9), contrast starkly to this, showing the camp as having been a quadrangle, something which is also reflected in official investigation survey plans (Appendix 4.1 (d), (e) and (f)), and a plan created by witness Samuel Willenberg (Appendix 4.1 (k)). The comparison of these aerial photographs with modern aerial imagery also demonstrates a disparity between the current depiction of the camp layout, both on the ground and on the memorial map on display at the site (Figure 4.11). Such disparities relate in particular to the location of the camp boundaries and entrance, as well as the extent of the railway platform. Indeed, the aerial images suggested that this error extended to the ground-level representation of the boundary and that, additionally, the camp was much larger than is currently depicted on the ground.

The aerial images also differ from the majority of the witness accounts in terms of the camp's inner boundary. It has generally been stated that the inner boundary extended around the site in all directions, with an area of approximately 40 to 50m lying between it and the outer boundary (Rajzman 1979; Wiernik 1944; Glazar 1999; Arad 1987). However, the aerial image appears to suggest that the inner boundary joins the outer boundary along its northern edge, thus there is no inner boundary

adjacent to the Living Camp (Figure 4.11). This would seem logical, owing to the fact that the purpose of the inner boundary was to contain any potential escaping prisoners; the majority of whom would spend time only in the Reception and Death Camp (Arad 1987). Once again, this is not depicted on the modern memorial map (Figure 4.11).

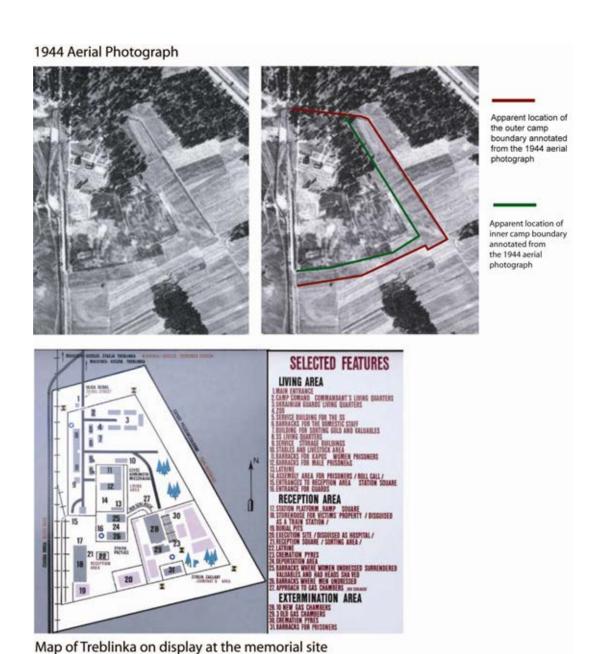


Figure 4.11. An aerial photograph of Treblinka II from 1944 (top left, after United States Holocaust Memorial Museum), the apparent camp boundary seen in the image (top right) and the current map on display at the memorial site (bottom, author's own photograph)

4.6.1.2. Archaeological Data Collection

To test this hypothesis, the current boundary stones were recorded using DGPS and Total Station survey (Appendix 4.3.1) and the data collected was georectified to modern mapping and contemporary aerial imagery (Figure 4.12). Any topographic observed in the immediate vicinity of the modern boundary were also recorded using the Total Station (Figure 4.12).

This survey confirmed that the memorial boundary is incorrectly located. Analysis of vegetation change, which was also recorded using the above methods, allowed the location of the actual northern camp boundary to be determined, approximately 50 metres to the north (Figure 4.12).

Whilst these extra few metres may seem insignificant in the overall interpretation of the camp's function, these findings have important implications in terms of the spatial layout of the camp. The lack of knowledge concerning the true location of the boundary suggests that other features relating to the Living Camp are likely to have been overlooked (see section 4.5.2.2). Similarly, several features identified in close proximity to the boundary existed as substantial, highly visible topographic features, which were rectilinear in plan and comprised of a raised earthwork bank around a central depression (Figure 4.12; F19, F28, F32, F33). These closely correspond to guard towers, as shown in numerous witness accounts (Wiernik 1944; Figure 4.12). Considering the hypothesis stated above, that the actual camp boundary is located

further north than is currently demarcated, it is suggested that features F32 and F33 represent the guard towers at the outer entrance of the camp, at the junction with "Czarny Droga" (The Black Road).

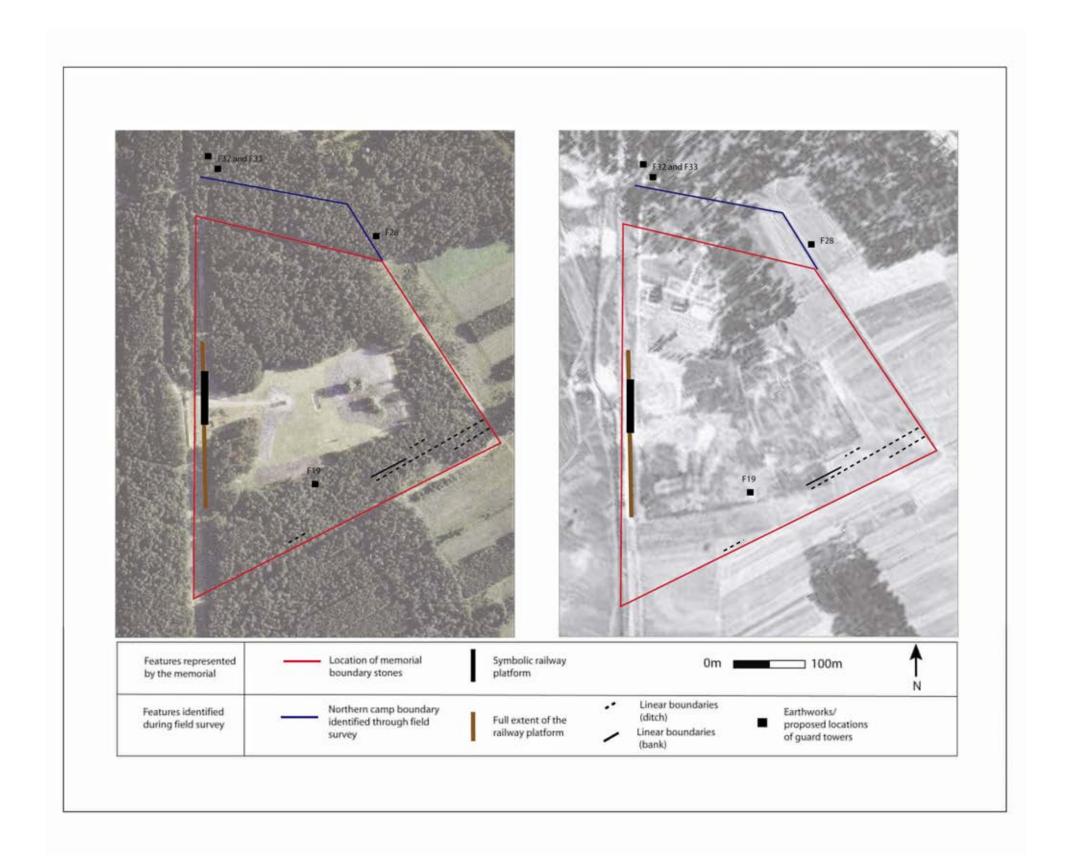


Figure 4.12. Field survey results overlaid onto a modern satellite image (after Geoportal 2010) and a contemporary aerial photograph (after United States Holocaust Memorial Museum), indicating the revised camp layout at Treblinka II

A simple measurement from the georectified aerial image of the camp allowed the exact extent of the railway platform to be determined, which revealed that it was much larger than the current memorial depicts (Figure 4.12). Knowledge of this was essential given that, once again, it had important implications for the location of structures such as the Lazarett and sorting barracks. Additionally, aerial imagery suggested that the southern boundary of the camp is incorrectly marked (Figure 4.11). During walkover survey, a number of linear banks and ditches, all on the same alignment and running parallel to the southern camp boundary, were observed on the east side of the camp (Plate 4.14). These features potentially represent an inner boundary or fence line and correspond to such a feature on the contemporary aerial images (Figure 4.12). Given that no indications of this feature as an earthwork or vegetation change existed on the west side of the camp, as was the case for the northern boundary, locating the end of the railway platform (which corresponded with the inner boundary according to aerial imagery) allowed its position on the ground to be determined (Figure 4.12).



Plate 4.14. One of the linear banks observed in the forest to the south of the area of Treblinka II (author's own photograph)

4.6.2. SURVIVABILITY

A review of historical literature suggests that a popular perception exists that Treblinka II was entirely destroyed and this likely accounts for the lack of investigation of the site to date. As noted above (section 4.4.), primary material relating to previous investigations of the site suggest that this was not the case. In order to confirm this hypothesis, historical sources were reviewed for further evidence that traces of the camp remain and archaeological data was collected to determine whether physical remains of the camp survive.

4.6.2.1. Historical Review

A number of historical sources allude to the fact that the term destroyed misrepresents the reality of Treblinka II after the withdrawal of the Nazi administration. In accounts written by post-war investigators, it would appear that a lack of above-ground structures at the site was deemed to constitute a lack of surviving remains, a trend that appears to have transcended the decades since the war and may offer one explanation for the wider lack of studies of the remains of the Holocaust (Central Commission for the Investigation of German Crimes In Poland 1946; Łukaszkiewicz 1946a and 1946b; Chapter 6). Indeed, in their disregard for other types of remains, many reports by these investigators appear contradictory:

'At the present time no traces of it are left, except for the cellar passage with the protruding remains of burnt posts, the foundations of the administration building, and the old well. Here and there can also be traced the remains of burnt fence posts and pieces of barbed wire, and short sections of paved road. There are also other traces. For example, in the north-eastern part, over a surface covering about 2 ha. (5 acres)' (Central Commission for the Investigation of German Crimes In Poland 1946:97).

Similarly, this investigation team observed that 'the south-western part of the camp site is covered with the remains of all kinds of aluminium, enamel, glass and porcelain vessels, kitchen utensils, trunks, rucksacks, and remnants of clothing.

Almost the whole camp-site is now covered with pits and holes' (Central Commission for the Investigation of German Crimes in Poland 1946:98).

Wassili Grossman who, in 1944, was one of the first people to write an account of Treblinka II and one of the earliest to view the site in the immediate aftermath of its closure, recorded that a considerable number of artefacts, including the personal belongings of the victims and the camp staff, as well as bones and teeth littered the landscape (Grossman 2011:178-179). A number of contemporary photographs also support these conclusions, revealing the presence of kitchen utensils and tools, as well as rubble from the demolished structures (Plate 4.15).



Plate 4.15. Artefacts littering the landscape at Treblinka II in 1944, following the camp's abandonment by the Nazis (Novosty Press 1944)

Analysis of aerial images taken after the abandonment of the camp provide further evidence of the survival of traces of the camp, with probable building foundations and other disturbances being visible from the air (Figures 4.13 - 4.15; Bay 2003). In fact, an image dated the 15th May 1944 shows several structures in the area that witnesses state was the Living Camp, whilst a further building appears to be located on the east side of the camp (Figures 4.13). A further photograph from later that year reveals several rectilinear features most notably in the area that was reported by witnesses to be the reception area and in the region of the Lazarett (Figure 4.14). Several irregular disturbances can also be seen in this area that may be indicative of pits, whilst the area believed to contain the Death Camp is still clearly defined in 1944, by a large area of general localised disturbance (Figure 4.14).

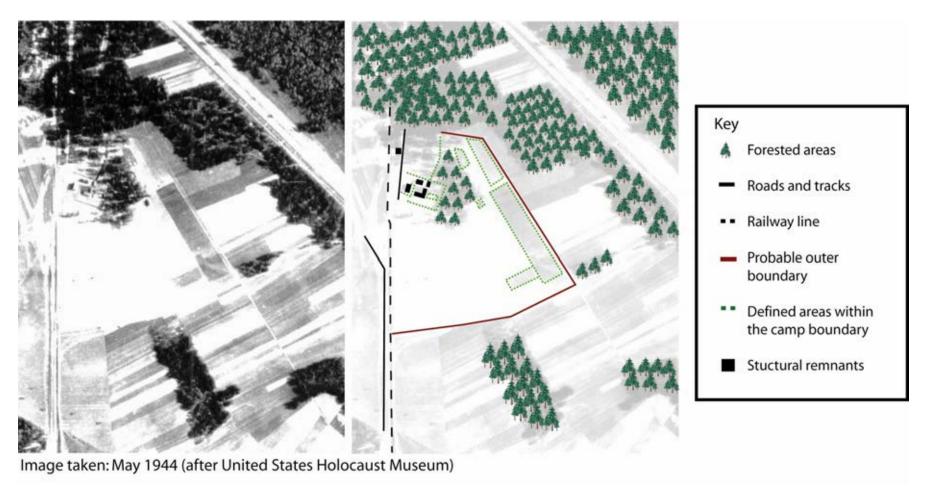


Figure 4.13. Aerial photograph of Treblinka II taken on the 15th May 1944 by the Luftwaffe, showing the surviving buildings in the area of the Living Camp (after United States Holocaust Memorial Museum)



Figure 4.14. An aerial photograph of Treblinka II, taken by the Luftwaffe in late 1944, (left, after United States Holocaust Memorial Museum) and an annotated version of the image demonstrating the features and ground disturbance visible after the site was abandoned by the Nazis



Key

- 1. Ukrainian Barracks
- 2. Ukrainian Barracks-possible day room
- 3. Probable stables
- 4. Barracks or shop
- 5. Zoo
- 6. Zoo decorative fence
- 7. Masonry probable workshop
- 8. Jewish Slave Labour Barracks
- 9. Foundation, possible Gasoline station
- 10.Bakery
- 11.SS Barracks
- 12.Barracks or Administrative/Service
- 13.Barracks or Administrative/Service
- 14.Stone Tower
- 15.Commandant's (Stangl's) House
- 16.Possible foundations, Barracks type
- 17.Miscellaneous Unidentified

Figure 4.15. Annotated aerial image by Bay that shows the scarring relating to the Living Camp structures at Treblinka II (after Bay 2003)

Several further apparent internal boundaries can be seen, whilst the roads and tracks within the camp itself are still clearly visible. These images also suggest that, although the majority of structures were clearly torn down prior to 1944, it is likely that the Nazis did not remove the building foundations or structural debris, but simply levelled the ground to disguise these features. Thus they remained in 1944 as taphonomic indicators, for example as vegetation change, and as ground scarring that was visible from the air. Although some of these features may have been disturbed by the construction of the memorial in the 1960s, it is highly probable that the majority still remain below the ground. Questions need to be asked, therefore, why such sources are not widely cited when discussing the potential survivability of the remains at the site.

It would appear that a history of this site that centres around its total eradication by the Nazis, as well as the total destruction of all of the victims sent there, has been preferred in favour of one that acknowledges the photographs of human bones suggesting that not all victims were cremated (Plate 4.9-4.10; section 4.3.2.1), or one which accepts that the complete removal of all traces of all the of all bricks, concrete, pathways, personal belongings and human remains at the site would not have been physically possible. The Nazis may have destroyed the camp and post-war looting may have taken place but, given the scale of the events, total sterilisation of the archaeological record is simply not viable.

4.6.2.2. Archaeological Data Collection

Indeed, the destruction of buildings in the archaeological record rarely results in the complete removal of all traces of such features. The construction processes involved in the laying of foundations, and the fact that these foundations are often left in situ upon the demolition of the rest of the structure they support, usually results in an identifiable trace centuries later. Given the speed with which the Nazis commonly abandoned Holocaust sites, and the desire to hide the traces of the crimes through the most convenient means, prior to the survey it appeared likely from an archaeological standpoint that traces of the structures would survive. However, as noted, this was not the viewpoint adopted in the historical literature.

A complete tabulated record of the features recorded during the microtopographic survey (using DGPS) is included in Appendix 4.3.2, the resistance and GPR survey in Appendices 4.3.3-4.3.6, and the walkover survey in Appendix 4.3.7. The results will be discussed by survey area (as they relate to the Death Camp, Reception Camp and Living Camp areas) and related data plots are shown in the text below. Due to the limits of space, only those that can be assigned to possible functions will be discussed here. Figure 4.16 shows the locations of all probable structural remains identified through topographic and geophysical survey; the data that facilitated its creation will be discussed in detail below but the figure has been included here to highlight the locations of these features to the reader.

The Death Camp

Witness accounts pertaining to the Death Camp area are limited, owing to the fact that the majority of those who entered this area were either killed immediately or they formed part of the kommando responsible for the disposal of the corpses and were subsequently killed to prevent them from reporting on their experiences (Chrostowski 2004). As survivor Richard Glazar (2005) noted, 'it was normal that for everyone behind whom the gate of Treblinka closed, there was Death, had to be Death, for no one was supposed to be left to bear witness'. The use of heavy machinery in this area, coupled with the exhumations of the corpses by the Nazis and the construction of the cremation pyres has resulted in considerable ground disturbance in this area. Similarly, a large portion of this area is concealed by the memorial and surrounding forest, thus making it difficult to examine these locations archaeologically. However, although these issues mean that a complete reconstruction of this area will never be possible, the combined examination of historical and archaeological information revealed that several features consistent with structural remains do survive and facilitated a comparison with the modern memorial (Figure 4.16).

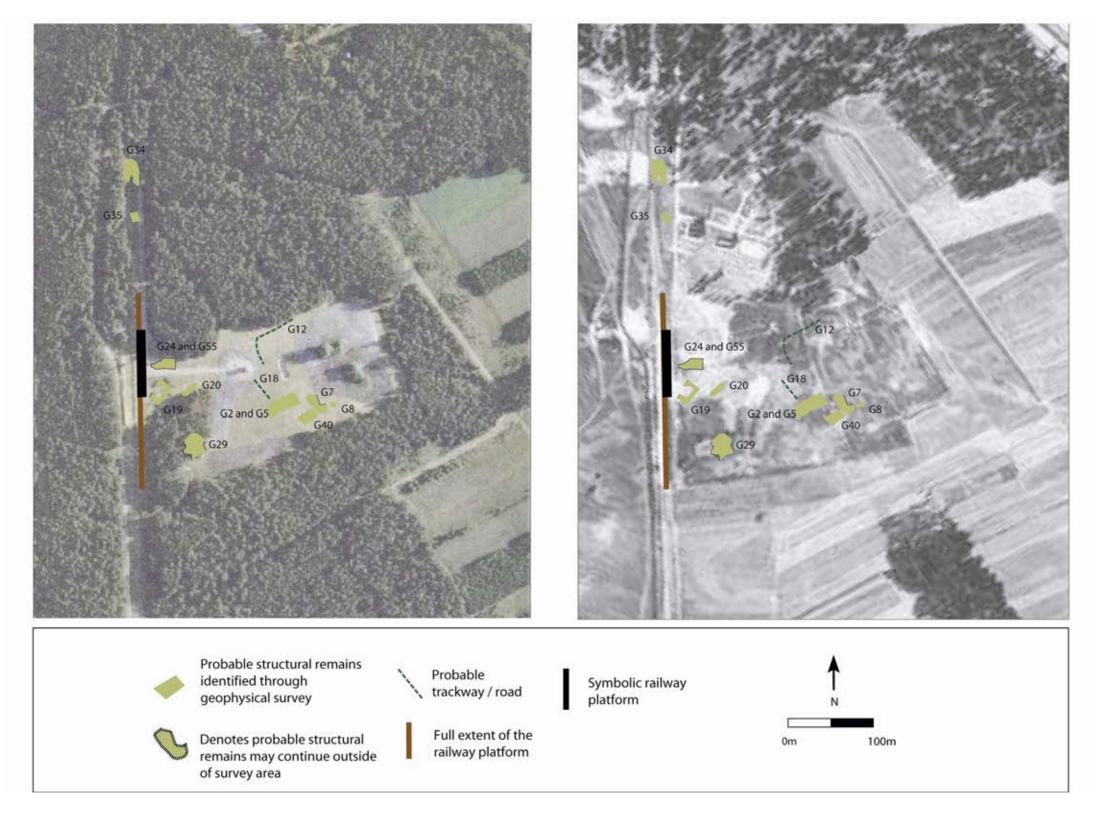


Figure 4.16. Plan of features consistent with structural remains, identified at Treblinka II through geophysical survey. Further key shown in Appendix 4.3.

The modern memorial denotes the so-called location of the Himmelfahrestrasse or Schlauch (the road to the gas chambers) as a cobbled pathway leading from the railway platform to the modern memorial (Figure 4.17). This feature corresponds to a linear feature shown on contemporary aerial images (Figure 4.17). However, the majority of witness plans suggest that the Himmelfahrestrasse was in fact located further north-east and this has also been suggested by Bay (2003) based on further analysis of aerial images (Appendix 4.1; Figure 4.18). However, the feature Bay (2003) highlights bisects the entire Death Camp area and, as such, appears more consistent with a boundary; thus the location of the Himmelfahrestrasse continues to be debated.



Figure 4.17. Annotated aerial photograph (right, after United States Holocaust Memorial Museum) showing the location of a linear feature that is marked as the road to the gas chambers by the modern memorial (left, author's own photograph)



Figure 4.18. Annotated aerial image showing the location of the Himmelfahrestrasse suggested by Bay (2003)

Although the portion of the memorial housing the large obelisk purports to mark the area of the gas chambers, when witness accounts, aerial photographs and the archaeological data are examined, it becomes apparent that they must have been located further to the east (Appendix 4.1). This hypothesis therefore suggests that the road to the gas chambers must have continued further into the camp area.

Although the nature of the linear feature observed in the aerial photographs and discussed in above cannot be confirmed, owing to it being obscured by the modern memorial, it does appear to represent some form of trackway. This is corroborated by

the identification of a further linear feature in the aerial images and geophysical survey which turns south-east and terminates at the remains of several rectilinear anomalies (G18; Figures 4.19). The largest of these features measures 24m x 20m (G2) and is located next to another measuring 20m x 18m (G5), both of which were visible in the resistance and GPR surveys (Figure 4.19-4.20). This area is heavily disturbed and, as such, it is possible that these two anomalies in fact represent one feature or an area of structural debris measuring 44m x 20m. To the immediate south is a third feature which was recorded during topographic survey (T17) (Figure 4.21-4.22). It was also visible as an anomaly, measuring 22m x 15m, in the GPR survey (G40; Figure 4.20). The depth, shape and composition of these features are consistent with structural remains. Witness Jankel Wiernik (1944), whose knowledge of the camp has been deemed amongst the most reliable owing to the amount of time he spent in the camp and his freedom to move around the Death Camp area, has described the gas chambers. He records that the old gas chambers comprised of three rooms measuring 5m x 5m each, housed within a concrete structure with a corridor. The new gas chambers comprised of ten rooms measuring 7m x 7m, each located within a building with a central corridor (Wiernik 1944). Thus, the total minimum areas of the old and new chambers are 15m x 7m and 35 x 16m respectively (allowing two metres for the corridor in each). These features are also located in an area where bricks are visible in the topsoil (Plate 4.16). Witness accounts stipulate that the new gas chambers represented the only structures in the Death Camp that were constructed of brick (pers. comm. Edward Kopówka). The archaeological and historical evidence presents a strong case for the aforementioned features being the remains of the old and new gas chambers.

Other probable structures or debris were located in this area by the geophysical survey that were less well-defined in plan (G7 and G8; Figures 4.19). Witness accounts suggest that the barracks for the workers tasked with disposing of the victim's bodies were located in close proximity to the gas chambers (Central Commission for the Investigation of German Crimes in Poland 1946). Equally, these features may represent further structural debris; it is difficult to assign individual functions to these features without further investigation.

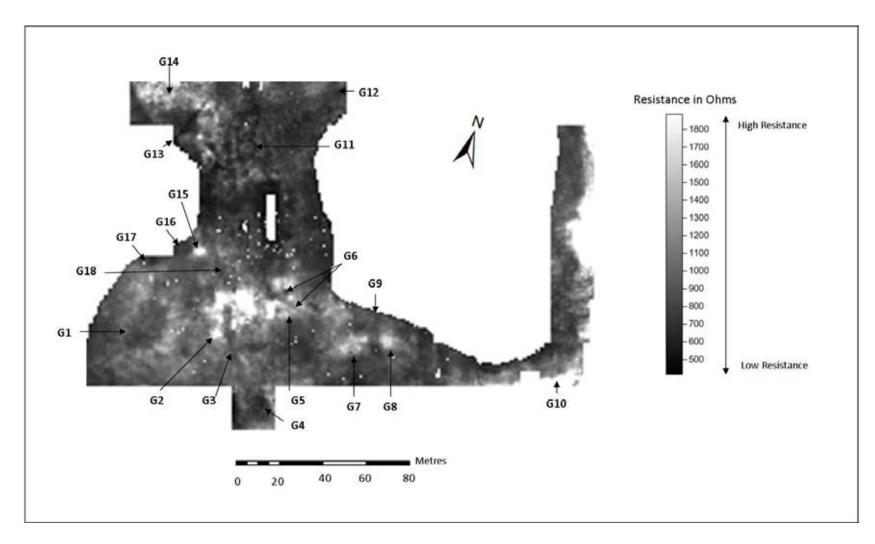


Figure 4.19. Resistance results for the area of the former Death Camp (Area B) at Treblinka II. Further key shown in Appendix 4.3.

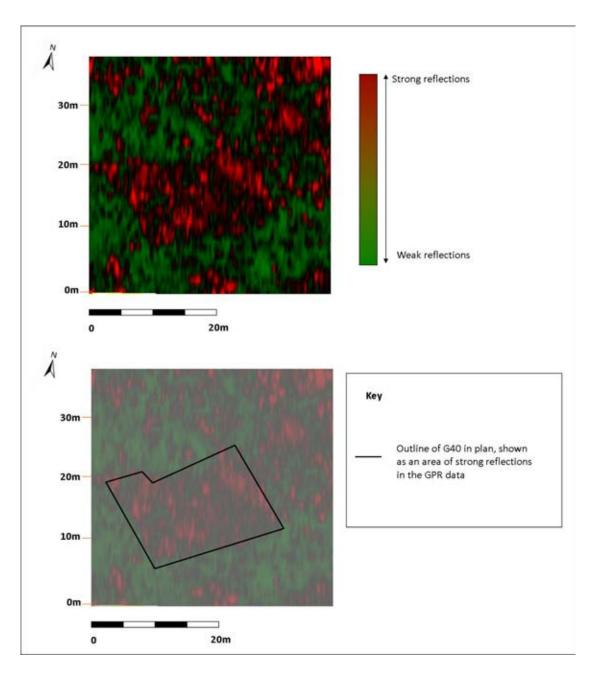


Figure 4.20. Feature G40, identified in the GPR survey at Treblinka II

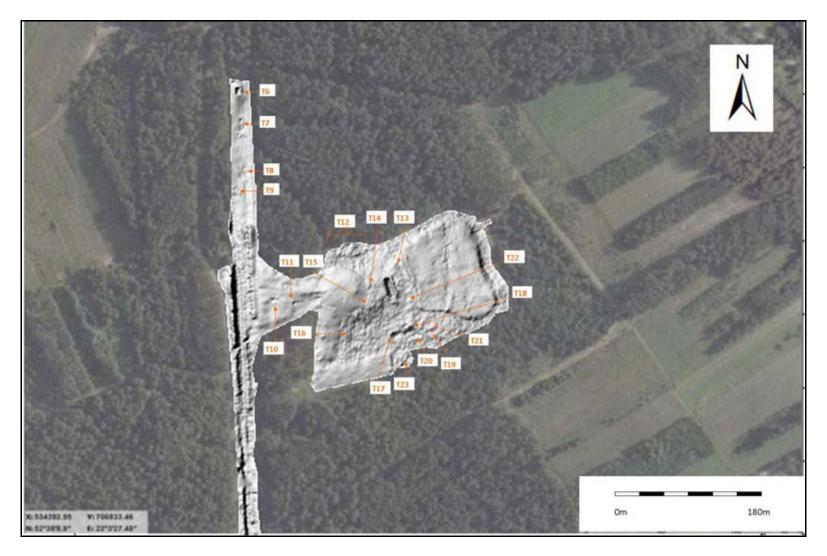


Figure 4.21. Topographic digital terrain model (shaded relief) of the areas surveyed using Differential GPS at Treblinka II

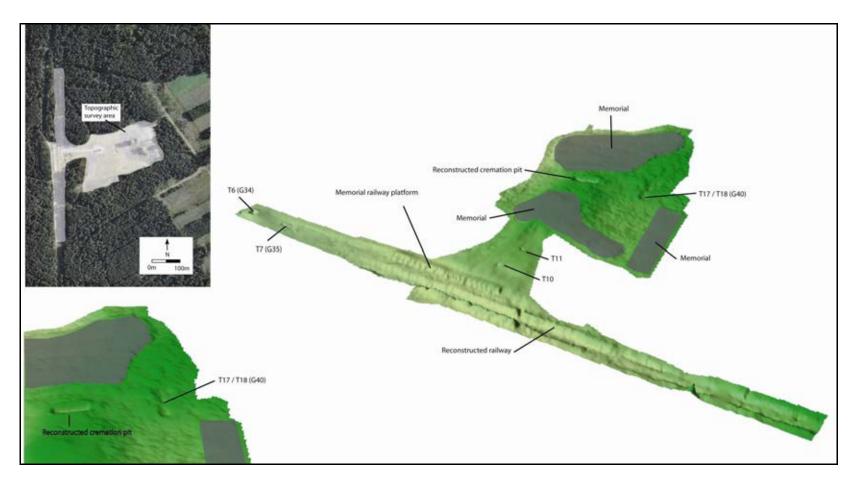


Figure 4.22. Surface models of the DGPS points recorded at Treblinka II. Further key shown in Appendix 4.3.



Plate 4.16. Bricks located in the area believed to contain the gas chambers (author's own photograph)

A further possible boundary or trackway was identified (G12) in the resistance survey, which was orientated north east to south west before turning south towards the putative gas chambers (Figure 4.19). A number of artefacts were also observed in this area, particularly around the symbolic cremation pyre following heavy rain (Plate 4.17). This demonstrates the ability of landscape change to reveal but also to threaten the preservation of the archaeological record at the site.



Plate 4.17. Artefacts observed in the former Death Camp area at Treblinka II following heavy rain (author's own photograph)

Many features were also recorded in the forested areas of the former Death Camp (Figure 4.23; Appendix 4.3.7). Although it was not possible to apply geophysical techniques in these areas, given the obstructions caused by vegetation, walkover survey, which included an analysis of topographic information and taphonomic indicators such as vegetation change, did allow level one survey to undertaken in these areas (English Heritage 2007). This will provide the foundation for further work in the future. Several excavated pits in the south west corner of the camp correspond to areas of disturbance visible in post-abandonment aerial images (F24 and F25; Figure 4.23). Further pits exist to the east of these features (F9, F16-18, F20-22) and evidence of memorialisation, in the form of candles and the placement of stones, was also observed in these areas. These features likely represent post-war activity. Areas of abundant vegetation change, which once again contrast with their immediate surroundings, were also observed and are likely indicative of buried features or ground disturbance (F4, F5, F7, F26 and F27; Figure 4.23; Plate 4.18). Conversely, F26 and F27 are characterised by the fact that they are devoid of trees, despite their location in an

area that is otherwise one of the most heavily forested parts of the former camp. They also represent the only features that appear to span the distance between the proposed inner (F2) and outer boundary of the camp (section 4.5.1.1; Figure 4.9).



Plate 4.18. Defined, distinctive, abundant vegetation observed in the forested areas in survey

Area F (F5) (author's own photograph)

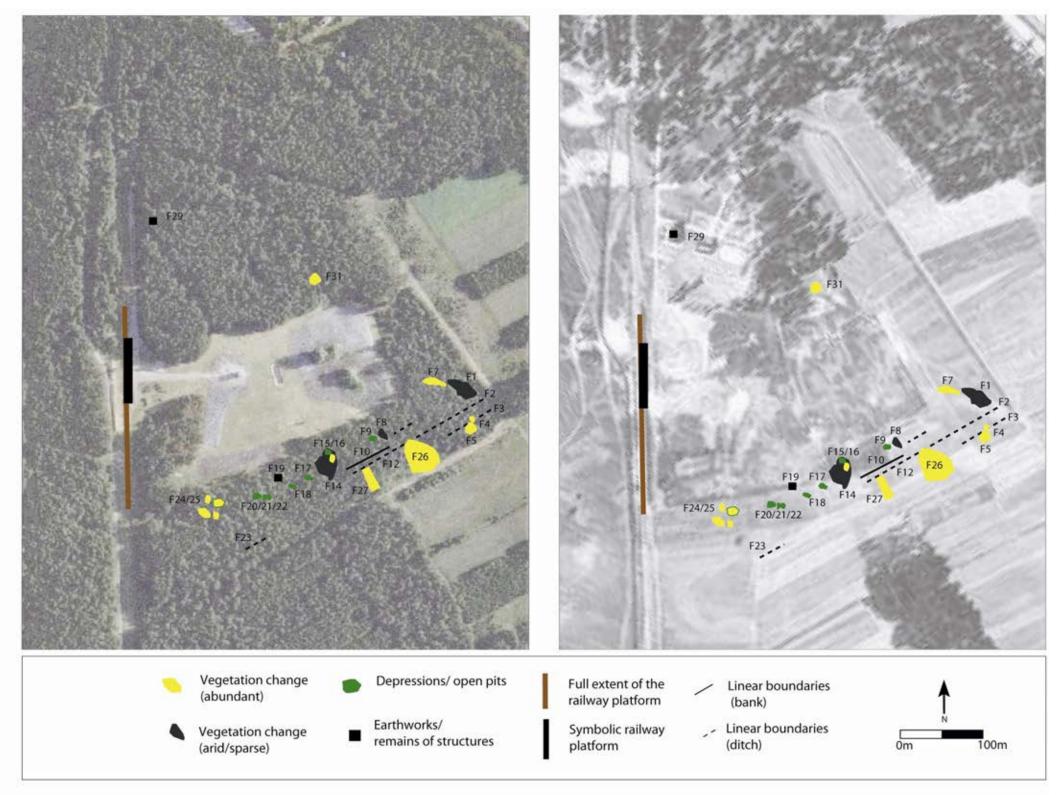


Figure 4.22. Features identified through walkover survey in the forested area of the former Death Camp at Treblinka II. Further key shown in Appendix 4.3.

The Reception Camp

Several anomalies were identified in the area immediately adjacent to the railway platform in the area where it is believed that the some of the Reception Camp structures were located (Figures 4.16 and 4.24).

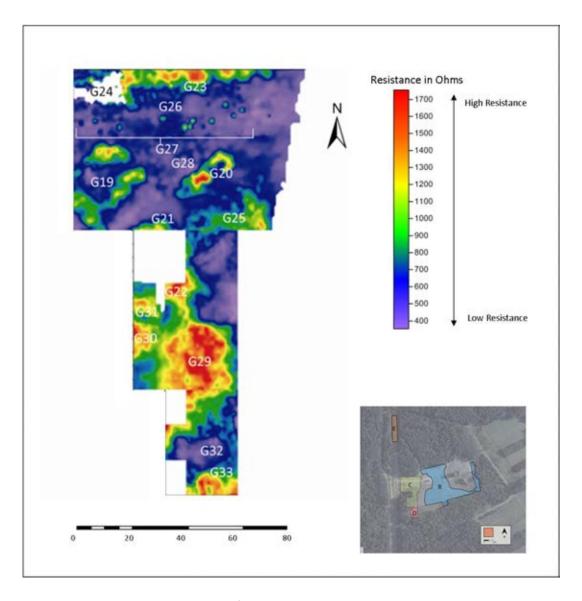


Figure 4.24. Resistance survey results from the area believed to have been the Reception Camp (Areas C and D) at Treblinka II. Further key shown in Appendix 4.3.

Although witnesses claim that the barracks in this area were constructed of wood and were built straight onto the ground surface (pers. comm. Edward Kopówka), two rectilinear features were observed to the south of the memorial path (G19 and G20; Figure 4.16 and 4.24). These features measure 28m x 20m and 19m (possibly extending to 23m) by 7.7m respectively, and are on the same orientation. They are also represented as topographic features (Figure 4.21-4.22; T10 and T11). It is acknowledged that trees had formerly existed in this area (Plate 4.19) but the regularity of the shape of these features in plan and the fact that the anomalies existed as high resistance readings in the resistance data, suggests that they are more likely to represent structural remains.



Plate 4.19. Trees located to the south of the memorial path at Treblinka II (after Budde et al 2009)

Visible as vegetation change on photographs taken after the war and within the GPR and resistance data, another large feature is likely to represent the structural debris associated with one of the sorting barracks (G24/G55; Figure 4.24 and 4.25). The restricted vegetation growth persists and a surface scatter of fragments of artefacts is also visible in this area (Plate 4.20). The feature is also visible in an area containing a rectangular area of ground disturbance in the 1944 aerial images of the camp (Figure 4.14).

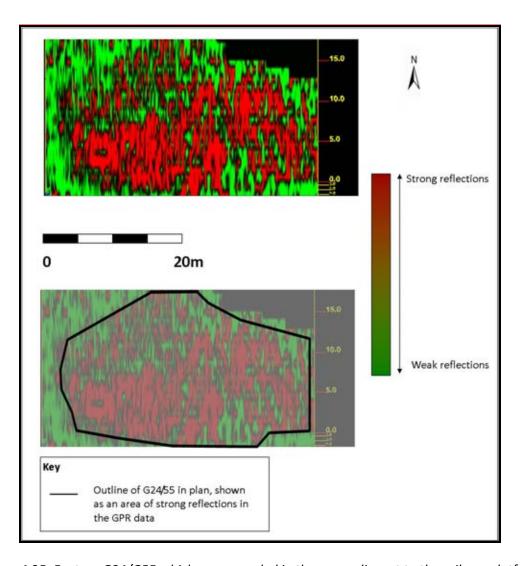


Figure 4.25. Feature G24/G55 which was recorded in the area adjacent to the railway platform (Area C) at Treblinka II

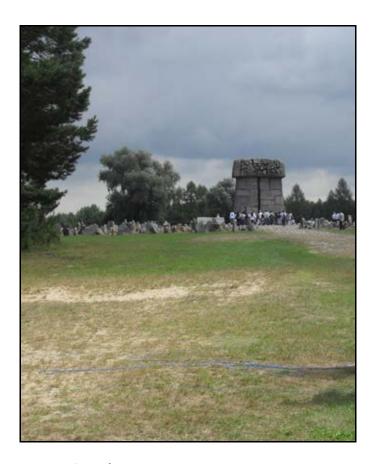


Plate 4.20. The location of G24/G55 showing the restrictive vegetation growth in this area (author's own photograph)

Witness accounts suggest several variations in terms of the layout of structures in this area but they generally agree to the existence of sorting barracks, where the women entering the camp were made to undress and have their heads shaved, storage barracks for the clothing and personal belongings taken from those arriving on the transports, and an artificial railway station building, designed to deceive the victims that they were at a genuine station (Appendix 4.1). Kalman Teigman (2011), one of only three people who survived Treblinka that are still alive, described this area when interviewed as part of this research project:

'there was the first camp into which people came in the wagons. Then the people were taken out of the wagons and sent into a large yard and at the entrance of the yard they separated men from women. And immediately at the entrance to the yard on the left there was a big hut and that is where they sent the women and children'.

It is argued that G24/55 represents the feature that Kalman Teigman describes.

Several other probable areas of structural debris exist in this area, which may also relate to the Reception Camp (G21, G25, G30, G31 and G33; Figure 4.24). However, once again, obstructive vegetation prevented their full investigation.

The Living Camp

Two features were identified in Area E, adjacent to the northern end of the railway platform (Figures 4.16 and 4.26). The first was represented as a square earthwork with banked edges and a central depression (G34, Figure 4.26; T6, Figure 4.21; Plate 4.21). High resistance readings were recorded, suggesting the presence of subsurface structural remains. Witness accounts allude to the presence of the Tyrolean guard tower in this area and a contemporary photograph does suggest it was located adjacent to the railway line, a few metres to the south east of one of the roads into the Living Camp proper (Appendix 4.1; Plate 4.2). A 3D visualisation of the tower has been created based on a contemporary photograph of the site to demonstrate possible uses of visualisation technologies in the presentation of archaeological data (Figure 4.27).



Plate 4.21. Earthwork in Area E at Treblinka II that may represent the Tyrolean guard tower (author's own photograph)

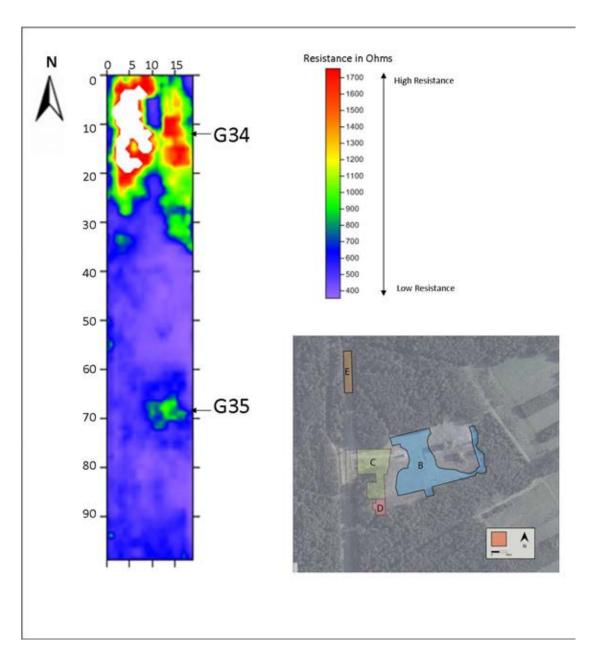


Figure 4.26. Resistance results for Area E. Further key shown in Appendix 4.3.



Figure 4.27. 3D visualisation of the Tyrolean guard tower

Conversely, however, Bay (2003) suggests that the aforementioned location was that of Stangl's quarters and that the tower was located further south. A second geophysical anomaly was identified in the resistance survey in association with apparent demolition debris, and fragments of glass and metal (G35; Figure 4.26). This feature was also visible on the ground as a rectilinear area of defined vegetation (Plate 4.22). Within this area, historical accounts suggest the presence of further structures associated with the SS living quarters (Appendix 4.1). However, post-war photographic evidence also reveals the presence of a wooden structure in this general area that was built around 1960 when the memorial was being constructed

(Plate 4.23). This has highlighted post-abandonment use of the site that has not previously been recorded or mapped, but also indicates the problems caused by such activity, particularly when excavation cannot be carried out to confirm the exact nature of the remains.



Plate 4.22. The vegetation change associated with feature G35, located within Area E at Treblinka II (author's own photograph)

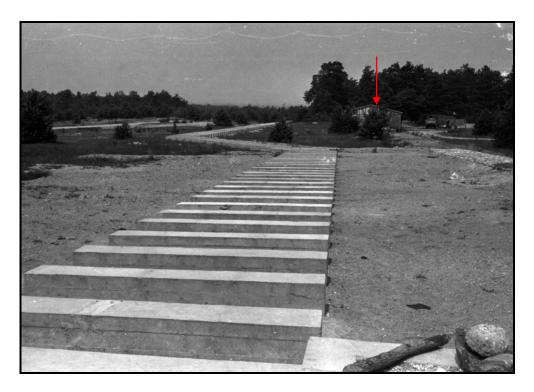


Plate 4.23. Temporary structure located in survey Area E when the memorial was being constructed at Treblinka II (after Radecka 2011)

Elsewhere, even without topographic and geophysical survey, the existence of archaeological features could be noted. When the location of a number of bricks and a defined area of vegetation was recorded using the Total Station and overlaid onto wartime aerial images, it became apparent that these are located in the area of the Ukrainian guardhouse, which was built to mask the former function of the camp (F29, Figure 4.23). This measurement alluded to multiple phases of the camp's preand post-abandonment history; the location of the Ukrainian guardhouse also represented the location of the former camp bakery, whilst the bricks from which it was constructed came from the gas chambers when they were dismantled (Muzeum Walki I Męczeństwa w Treblince 2011). Similarly, these bricks originally came from a

tower in Małkinia, which was demolished by the Nazis to facilitate the gas chambers' construction (YV 1448b; Plate 4.24).



Plate 4.24. Bricks noted in the region believed to have contained the Ukrainian guardhouse (author's own photograph)

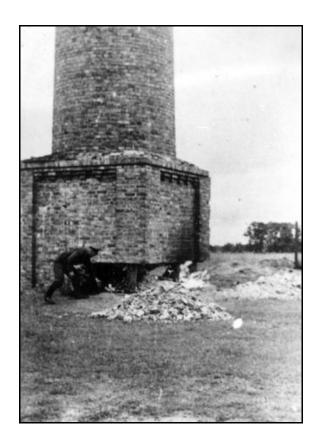


Plate 4.25. A tower in Małkinia being demolished to allow the bricks to be used in the construction of the gas chambers at Treblinka II (after YV 1448b)

Similarly, a large area of defined vegetation, located in the south east corner of what would have been the Living Camp area, which was visible on wartime aerial images, is still evident on the ground (F31; Figure 4.23). Although inaccessible to survey equipment, an inspection of this area revealed a considerable number of artefacts located on the surface, including spoons, mugs and other metal objects, some of which revealed maker's symbols (Plate 4.26; Figure 4.28). This area has been suggested by Laponder (2004) as having been the camp's waste disposal site. In this instance, although representing an obstruction to archaeological work, the vegetation has prevented access and disturbance to this part of the site, which appears to have been protected since the war. These findings also confirm the lack

of a comprehensive site inspection, given that these artefacts remained in situ for almost seventy years despite all of the other developments on the site.



Plate 4.26. Artefacts found in the area of F31 at Treblinka II (author's own photograph)

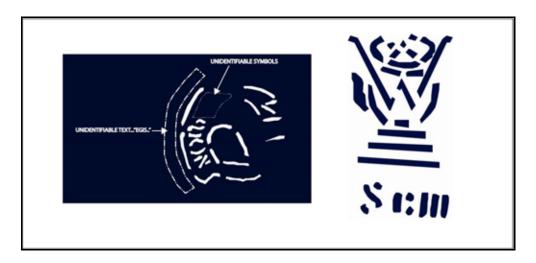


Figure 4.28. Maker's symbols identified on artefacts located in the area of F31 at Treblinka II

4.6.3. BURIAL AND DISPOSAL AT TREBLINKA II

The analysis of historical information, contemporary and modern imagery, and data derived from the non-invasive survey at Treblinka II has allowed a revised interpretation of the methods of killing and disposal at the site to be created. Although analysis of the remains themselves is not possible, owing to the need and desire to respect Halacha Law, the corroboration of witness accounts and survey data has allowed the probable locations of graves to be identified, thus facilitating greater understanding of the mechanisms and spatiality of extermination, as well as providing opportunities for the sites to be appropriately commemorated and protected in the future.

4.6.3.1. Historical Review

Only 300,000 fewer people were killed at Treblinka II, as were at Auschwitz if the official figure is taken to be 800,000. However, the methods of killing and disposal at Treblinka II were not characteristic of the almost factory-like system in place at Auschwitz, but represented a much more primitive set of procedures that developed over time (Iwaszko et al 2000). Treblinka II did not have crematoria and, until November 1942, the victims were disposed of in mass graves located around the camp (Glazar 1999). Although as Sereny (1995:100) argues, 'the killings were organised systematically to achieve the maximum humiliation and dehumanisation of the victims before they died', as will be shown below, the sheer number of people sent to Treblinka II often meant that chaos, necessity or the sadism of the guards

resulted in divergence from a standard method of killing or disposal at various times throughout the camp's operation. Nonetheless, the brutal and large-scale nature of these killings resulted, even without a more formalised procedure, in a considerable number of deaths.

It is widely assumed of many of the extermination camps that the victims were all sent to the gas chambers following which they were initially buried in mass graves until the development of the crematoria, when they were then cremated, with existing graves being exhumed (Yad Vashem 1990). Whilst a chronological trend in the killing methods used at Treblinka II is evident, it will be argued here that the methods of murder and disposal were in fact more closely related to other factors such as the victim's age, gender, health and, subsequently their location within the camp, their race, religion or the crime they were purported to have committed. An analysis of the purported camp layout in association with witness accounts and other documentary evidence reveals that the nature of killing within the camp was closely related to the location in which it was being carried out, with the methods becoming more systematic as the prisoners moved further into the camp compound. This is also reflected in the locations in which their bodies were disposed of. Similarly, as already noted above, despite popular perceptions highlighting Nazi efficiency, the methods employed, whilst aimed at killing the maximum number of individuals, were also closely related to convenience.

Death on Arrival

Given the conditions in the cattle cars that bought the Jews to Treblinka II, many people were dead on arrival at the camp. Indeed, Franz Suchomel, who worked on the ramp during the early phase of the camp's operation under Dr Eberl, estimated that 'when these transports arrived two thirds of those transported were already dead' (Suchomel 1967). Additionally, particularly in the early period of the camp's operation, random shootings of both individuals and, sometimes, even whole transports are reported to have occurred upon disembarkation of the trains (Młynarczyk 2004:4). Rather than transport these victims to the mass graves located at the rear of the Death Camp, their bodies were buried in graves to the south east of the reception area (Krzepicki 1979). Richard Glazar also noted that the 'Treblinka slaves', the workers responsible for burying the corpses, were also eventually shot into one of these pits, which were surrounded by a screen and were 10-12 metres deep, as opposed to being sent to the gas chambers (Lanzmann 2005). It was the responsibility of the Jewish work groups to remove these bodies and bury them in the graves and at Nuremberg it was argued that 'by and by, as new transports arrived, the cemetery grew, extending in an easterly direction' (IMTN 1947(3):567).

The Lazarett

Those victims who were too weak to go down the Himmelfahrestrasse to the Death Camp, or those who had committed an "offence" since arrival, would be taken to the Lazarett which was located adjacent to the railway platform (Auerbach 1979:37-38).

The appearance of the Lazarett was described at Nuremberg: 'this was part of a square which was closed in with a wooden fence... At the gates of this "Lazarett," there was a large Red Cross flag' (IMTN 1947(8):325). Here, the victims were thrown into a pit with an 'eternal flame', into which rubbish was also deposited; sometimes they were shot into the pit, other times they were simply pushed in whilst still alive (Willenberg 1989:40). A sandy rampart had been constructed to disguise this pit and the mass grave that lay adjacent to the area containing the Lazarett, which is reported to have measured 25 metres in length (Glazar 1999). Aleksandr Yegel detailed an incident where 'in the space of three to six 24-hour periods, all the guards of the company of guards took direct part in the extermination of citizens of Jewish nationality and personally shot them', whilst others suggest that the burial of women, children and the elderly in the pits around the Lazarett was a daily occurrence (Yeger 1948).

Witnesses place the Lazarett and associated burial pit in close proximity to the southern end of the railway platform, whilst contemporary aerial images show several linear anomalies in this area (Figure 4.12).

The Main Extermination Area

Those victims who survived this initial entry into the camp were forced to undress in the undressing barracks, reportedly located near to the railway platform, before being transported along the road which has been called the funnel, the Schlauch or the Himmelfahrestrasse (Lanzmann 2005). For this process, women and children were separated from the men and, at Nuremberg, Samuel Rajzman highlighted that:

'the whole process of undressing and the walk down to the gas chambers lasted, for the men 8 or 10 minutes, and for the women some 15 minutes. The women took 15 minutes because they had to have their hair shaved off before they went to the gas chambers' (IMTN 1947(8):325).

In the early part of the camp's existence, given the proximity of the burial pits to the gas chambers, Chrostowski (2004) has argued that within ninety minutes, 2000 people could be killed, searched and buried. Consequently, it appears that in this area, that the process of execution was systematic, if not always efficient:

'When they were sure that all the people in the chamber had died, the chamber was opened on the other side and the "working crew" threw out the bodies which were then loaded on small flatcars and brought to pits prepared for this purpose on the territory of the camp. The pits were fenced in with barbed wire. The bodies were thrown into the pits and lightly covered with earth. When one pit was filled, another was prepared, and so the process of extermination continued on a daily basis' (Yeger 1948).

However, given that few people who survived actually had knowledge of the Death Camp itself, little information is available about the nature of disposal in this area

(Chrostowski 2004). Witnesses allude to the presence of body disposal groups who were, in the early stages of the camp's operation, solely responsible for digging large pits in the south and east portion of the camp (Wiernik 1944; Glazar 1999). However, as more victims were sent to Treblinka II, large 'kopachke' or excavators were bought to the camp to dig larger pits (Apenszlak 1943:143; Plate 4.27). Some witnesses talk of pits as large as 60-70m in length, whilst some allude to the presence of smaller ones, measuring approximately 25m which were either dug in the early phase or still by hand later on (Krzepicki 1979:92). Again, this demonstrates how, just because new systems of disposal were introduced or seemingly systematic processes were employed, alternative means of disposal were being undertaken, whether for convenience, necessity when victim numbers were becoming unmanageable or because isolated killings occurred within the camp itself (Rajzman 1979; IMTN 1947(8)). Witnesses also discuss attempts by the Germans to hide their crimes, which included both above-ground landscape modification, for example the use of a special 'camouflage detail' and the construction of earth embankments to mask the view of the graves, through to below-ground efforts to accelerate decomposition, such as the use of lime to cover the corpses (Auerbach 1979; Krzepicki 1979; Glazar 1999). Therefore, once again, a consideration of these types of landscape change and also other broader issues such as the psychology of hiding a crime had to be considered when undertaking archaeological fieldwork.



Plate 4.27. Excavators or 'kopachke' used to dig some of the graves at Treblinka II (after YV 1448c)

As noted above, partly due to necessity and partly due to developments in the killing techniques being used at Treblinka II, the cremation of the victims started in the winter of 1942 (Glazar 1999; Krzepicki 1979; Kuperhand and Kuperhand 1998). Cremation allowed larger numbers of victims to be disposed of as well as providing a more covert way of hiding the traces of the crimes committed; 'they later figured that burying the victims was not such a good idea, because someday those ditches would be dug up and what had gone on there would be known' (Rajzman 1979:232). Witnesses talk of how Wirth was instrumental in the developments of the cremations and that he bought a cremation specialist from Belzec to examine new ways to dispose of the bodies (Suchomel 1967). Lessons were learnt from other sites; initially, there are reports that the victims were made to line up at the edge of

burning pits, into which they were shot, the success of which had been demonstrated at Stalingrad (Weinstein 2002; Auerbach 1979). It has been argued that the need to develop new ways to hide the traces of the remains stemmed from the discovery of the mass graves at Katyń (Chrostowski 2004). Additionally, existing mass graves were opened and burnt in situ (Leleko 1945). A so-called burning group (Feuerkolonne) was set up and experiments conducted with the use of crude oil and other accelerants whilst systems, such as layering women on the bottom as they burnt faster, were developed (Arad 1987:176).

However, in Spring 1943, cremation pyres, so-called roasts, comprising of iron rails, were constructed and these were capable of holding several hundred bodies (Sereny 1995:220). Most commonly, witnesses refer to the removal of the bodies of the victims from the gas chambers and their alignment on these rails: 'a series of furnaces covered on the top with four rows of rails extended along the entire length of one of the walls of the pit. The bodies were laid on the rails, caught fire from the flames burning in the furnaces and burned. About 1000 bodies were burned simultaneously. The burning process lasted up to five hours' (Leleko 1945). This, Wiernik (1944:30) argues, saw the ability to handle 'the new transports...in a simplified manner'; the cremation followed directly after the gassing. By July 1943, Wiernik (1944) also reported that three quarters of the victims had been cremated and that large excavators had been bought in to exhume them.

Much of the area believed to have contained these pits is now masked by the

modern memorial or by the forest. However, given the observations noted throughout this chapter with regards to the lack of an extensive survey of the site, it was deemed necessary to explore the possibility of further graves. Additionally, whilst it has often been argued that the mass graves themselves were all destroyed when they were exhumed, several important points require consideration. Firstly, although initial attempts were made to mix the ashes with soil, this was quickly abandoned and the cremated remains were put back into the original ditches from which they came; thus if any such remains survived outside of the area of the monument the grave cuts would still be detectable (Arad 1987:176). Secondly, popular misconceptions can be seen to exist regarding cremation, in terms of the belief that a body will be totally reduced to ash. Recent work in forensic cremation demonstrates total eradication of bone requires extremely high temperatures (Thompson 2004) and the observation of burnt bone fragments in the topsoil and in the cracks of the monument itself confirms this hypothesis. As Robert Altschuh stated of Treblinka II 'they are trying to find ways to hide the traces; they are burning the corpses. But they aren't going to find it so easy - even one corpse doesn't burn easily, hundreds of thousands of corpses...?' (Sereny 1995:193).

Finally, considerable evidence exists to suggest that not all of the bodies were exhumed and cremated, thus mass graves are likely to survive. Indeed, despite the order to cremate the corpses in November 1942, there were still reports of mass burials after this date (Krzepicki 1979:90). This seems to be supported by the fact that, in February 1943, Himmler visited Treblinka II and 'discovered that, despite

orders to the contrary, the corpses of all the victims had been buried instead of cremated' (Willenberg 1989:17).

Similarly, although the official line was exhumation and cremation after this time, the impracticalities of digging up all of the corpses and the free will of the task forces ordered to dispose of the victims, meant that it was unlikely that all of the bodies were subject to such practices. Auerbach (1979:69) stated that 'those in the know are aware that not all the dead were cremated and that, aside from those who were buried naked, Jews in some places were buried fully dressed without their pockets being searched'. Abraham Goldfarb (in Arad 1987:176) reported how, even following the orders to exhume and cremate the corpses,

'we secretly placed in the walls of the graves whole skeletons and we wrote on scraps of paper what the Germans were doing at Treblinka. We put the scraps of paper into bottles which we placed next to the skeletons. Our intention was that if one day someone looked for the traces of the Nazis' crimes, they could indeed be found'.

Consistent with these claims, several post-war reports allude to the presence of human bone at the site, some of it still retaining tissue (Central Commission for the Investigation of German Crimes in Poland 1982; Bartoszewski in Willenberg 1989; Muszkat (1948). Indeed Auerbach (1979:71) noted,

'As we moved further into the grounds, we walked over a field which was sown with

human bones...If only we could get an ethnologist to come here! He could have made the most accurate anthropological measurements relating to the racial features of the Jewish people'.

The district attorney is also cited: 'Those aren't just bones...There are still pieces of half-rotted corpses lying there, bunches of intestines' (Auerbach 1979:72). At Eichmann's trial in 1961, Dr Hermann reported upon the scene he had noted during his post-war visit to the site: 'there was a tremendous area many kilometers long and all over this area there were scattered skulls and bones and tens of thousands of pairs of shoes, many of them children's shoes' (Jefferson Tribune 1961). This is also corroborated by post-war photographs, some of which even show that skeletal remains were still present during the construction of the memorial (Plates 4.28-4.29).



Plate 4.28. Bones littering the camp upon the liberation of the area surrounding Treblinka II by the Soviet army (after YV 41EO9)

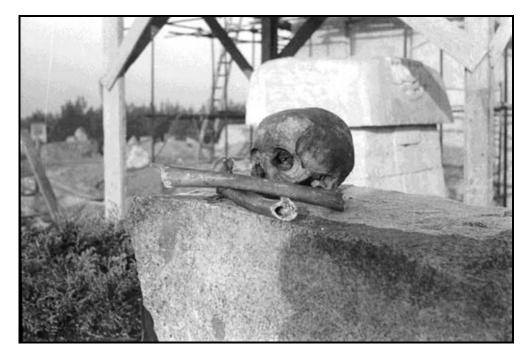


Plate 4.29. Bones located during the construction of the memorial at Treblinka II (after Radecka 2011)

4.6.3.2. Archaeological Data Collection

A complete tabulated record of the features recorded during the microtopographic survey (using DGPS) is included in Appendix 4.3.2, the resistance and GPR survey in Appendices 4.3.3-4.3.6, and the walkover survey in Appendix 4.3.7. The related data plots are shown in the text below and the features are discussed spatially, starting with those closest to the railway platform moving to those in the south-east portion of the Death Camp. Figure 4.29 shows the locations of all probable burial sites identified through topographic and geophysical survey; the data that facilitated its creation will be discussed in detail below but the figure has been included here to highlight the locations of these features to the reader.

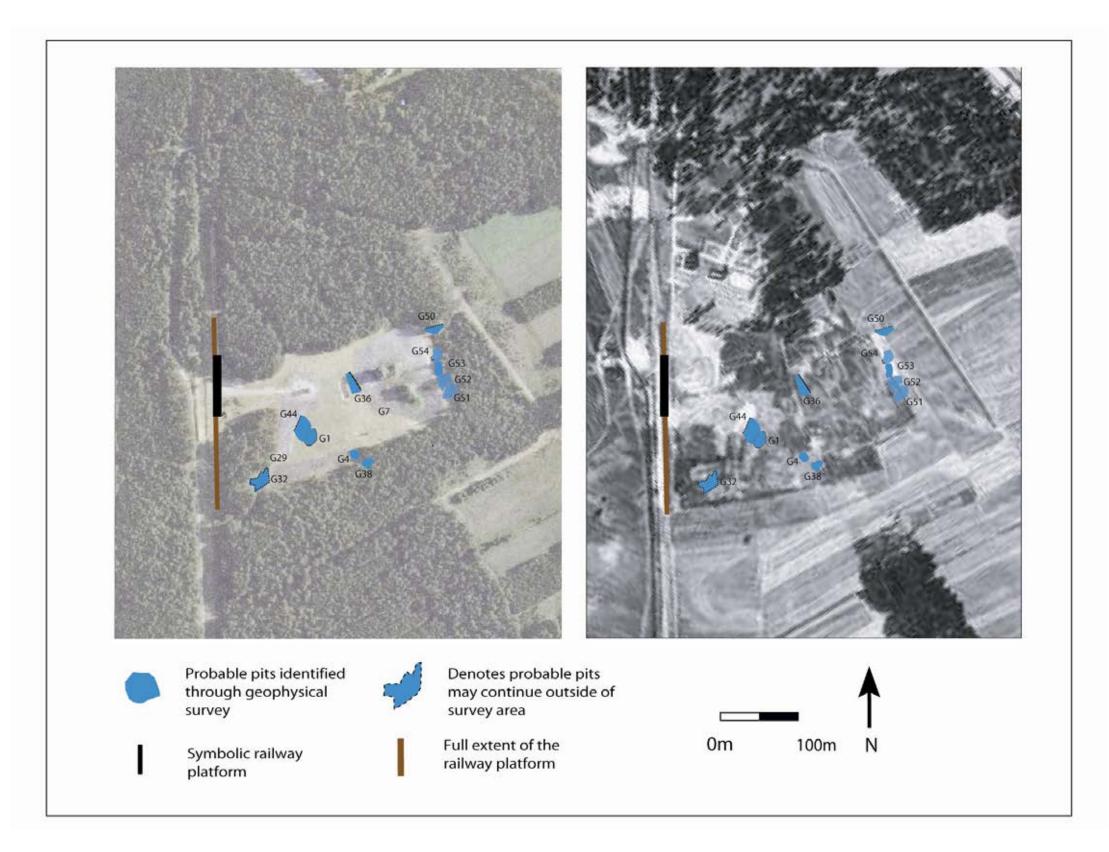


Figure 4.29. Plan of features consistent with burials and disposal pits recorded during geophysical survey at Treblinka II. Further key shown in Appendix 4.3.

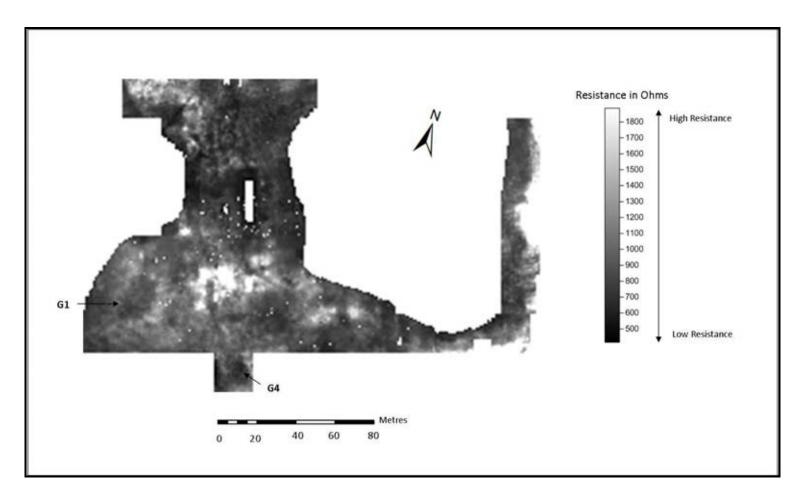


Figure 4.30. Resistance survey results from Area B, showing features G1 and G4. Further key shown in Appendix 4.3.

Closest to the railway platform, analysis of aerial imagery and the results of the geophysical surveys indicates that, although some of the graves in this area are covered by the memorial, several additional features consistent with pits exist (Figures 4.14, 4.29 and 4.30).

The use of electrical imaging in conjunction with resistance and GPR survey allowed the construction of a large pit (26m x 17m) to be determined (G1; Figure 4.31). Although the depth of this feature could not be determined, as it was greater than the three metre range of the electrical imaging and four metre range of the GPR, it was demonstrated that this feature had a ramp at the west end and a vertical edge to the east. This feature is also visible from the air and on the ground as an area of defined vegetation (Plate 4.30).

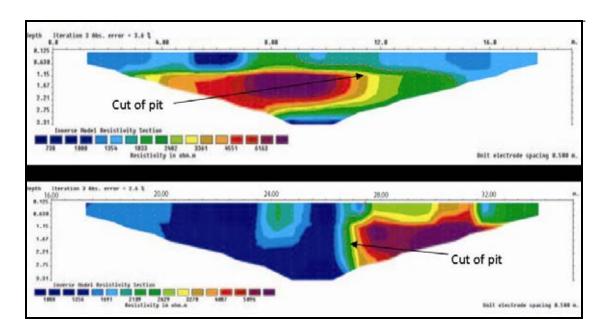


Figure 4.31. Electrical imaging results for the survey of feature G1 at Treblinka II (top, western edge and bottom, eastern edge of feature)



Plate 4.30. Feature G1, identified at Treblinka II, which is visible from the air (top, after Geoportal 2010) and on the ground as vegetation change (bottom, author's own photograph)

Another feature (G44), located adjacent to the memorial in the south west of Area B, represents a substantial anomaly (Figures 4.29 and 4.32). This feature is bisected by the memorial, which was purportedly sited according to the location of mass graves in this part of the camp (Figure 4.29). However, the discovery of this feature raises an important issue; it highlights the fact that a comprehensive examination of subsurface remains must not have been undertaken in advance of the memorial's construction, given that this feature was partially missed. Post-abandonment aerial images confirm the presence of this feature as an area of significant ground disturbance (Figure 4.29).

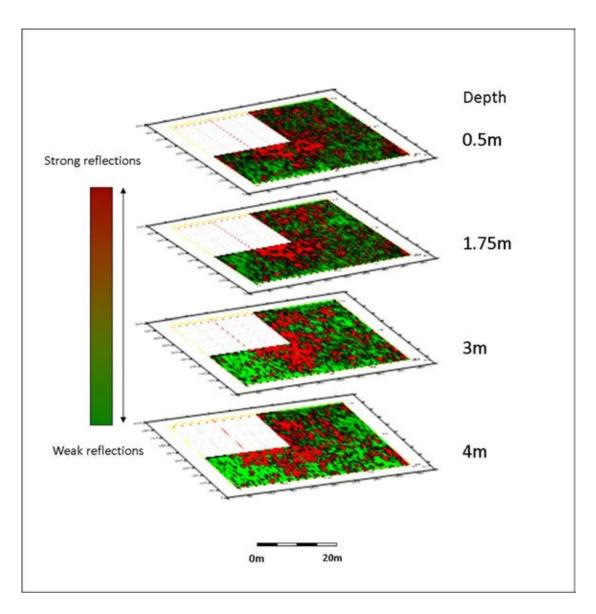


Figure 4.32. GPR time slices of feature G44 (shown in red) identified at Treblinka II in the area of the former Death Camp

Two further anomalies (G29 and G32), one high and one low resistance, were recorded in Area D in an area characterised by distinct vegetation (Figures 4.29 and 4.33).

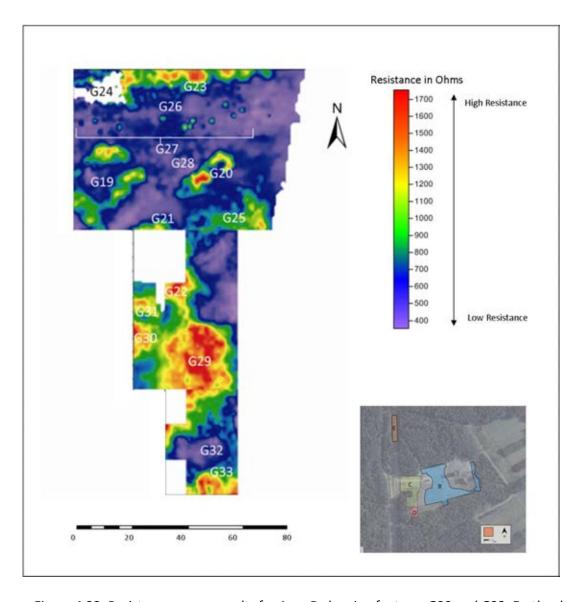


Figure 4.33. Resistance survey results for Area D showing features G29 and G32. Further key shown in Appendix 4.3.

Georectification of these results highlights that they correspond to two considerable areas of ground disturbance in contemporary aerial images (Figure 4.29) and that they are positioned in the location of an excavation carried out by post-war investigators in the area that they believed the Lazarett was located (Łukaszkiewicz 1946a; Figures 4.5 - 4.6). Given the obstructive vegetation in this area, it was not possible to survey these

features using GPR and, therefore, to detail depth information or to identify whether the high resistance feature represents in situ foundations or a generalised area of demolition material. This area in particular demonstrates the problems caused by landscape change and the forestation of the site.

Five pits were located with the GPR (G50-G54) on the eastern side of the Death Camp (Figures 4.29 and 4.34). Although the GPR survey was unable to achieve a large enough depth range to determine the full extent of these pits, it is possible to say that they were all deeper than four metres and that they were all of considerable size in plan (G50 was visible to an extent of $34m \times 12m$, G51- $19m \times 12m$, G52 – $22m \times c.15m$, G53 – $c.18m \times 7m$ and G54 was visible to $20.8m \times c.14m$). Given their location in the area thought to contain most of the mass graves and their proximity to the memorial, there is a strong case for arguing that they represent further disposals. Similarly, they appear too large to be a result of post-war looting activity.

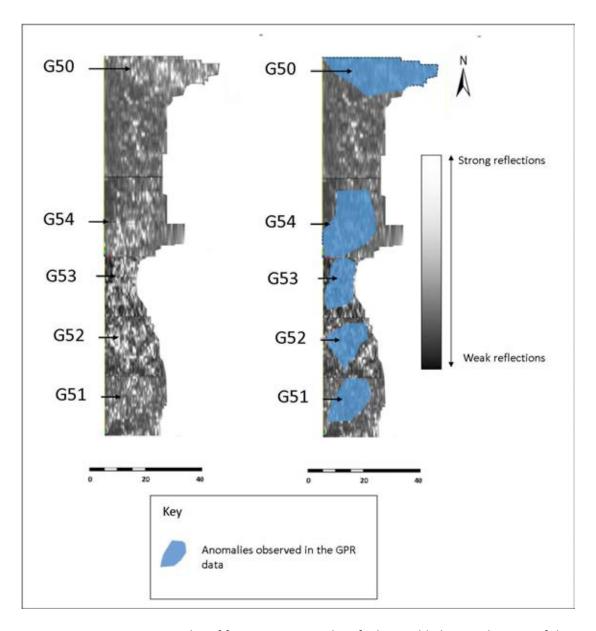


Figure 4.34. A GPR image plot of features G50-54 identified at Treblinka II in the area of the former Death Camp

Similarly, to the west of the memorial in this area a further feature was identified that was also bisected by the concrete (G36). This feature was shown to be rectilinear in plan within the GPR results and is located in the area believed to have contained graves and, as noted by many witnesses, the cremation pyres (Appendix 4.1; Figure 4.29).

Finally, two further features were identified in the former Death Camp area. The first (G4) is visible in the resistance, GPR and topographic survey as being oval in plan (Figures 4.29 and 4.30). The second was identified on the boundary of the woodland and was identified as roughly semi-circular in plan, although it likely continued outside the survey area in an area of obstructive vegetation (G38, Figure 4.29). A profile of one of the cut edges of this feature can be seen in Figure 4.35).

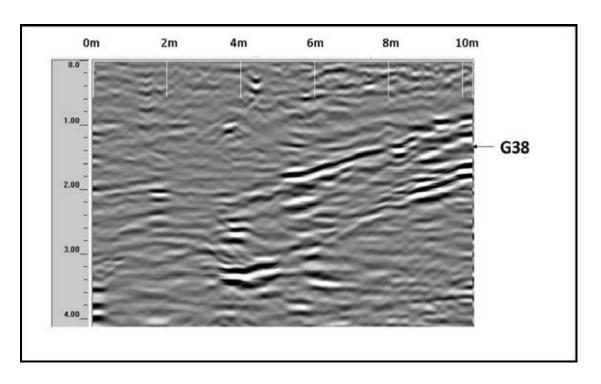


Figure 4.35. A GPR profile showing one of the cut edges of feature G38, identified at Treblinka II in the area of the former Death Camp

Although without intrusive activity (which is not advocated here due to Halacha Law and the ethical issues involved in the disturbance of human remains) it is not possible to conclusively determine the nature of these pits, a strong case can be made for their function based on a comparison with witness plans and accounts, and with similar features at other sites. Additionally, it must be noted that accurate depth measurements for these features cannot be determined in some cases, owing to the fact that they exist to a depth below the range of the GPR antenna used. However, their size would appear to negate them from being evidence of post-war looting. Discrimination between those features that show evidence of burning and those that do not could be achieved through employing magnetometry in future field seasons, which is capable of detecting burning and soil disturbance by recording changes in the earth's magnetic field (Gaffney and Gater 2003).

Finally, three areas of sparse vegetation growth were identified during walkover survey (F1, F8 and F14). The upper soil horizon within these areas consisted of an arid, grey sand which contrasts considerably with the upper strata identified across the rest of the site. These three areas were also distinctive due to low-lying vegetation growth in the form of a lichen, which is not present elsewhere across the site (Plate 4.31). The Central Commission for the Investigation of German Crimes in Poland (1946: 97-98) recorded that 'over a surface covering about 2 ha. (5 acres), there are large quantities of ashes mixed with sand, among which are numerous human bones, often with the remains of decomposing tissues'. The presence of such cremated material mixed with the subsoil would certainly affect the types of vegetation that are capable of growing in a given area (Hunter and Cox 2005).



Plate 4.31. Defined, distinctive, dry vegetation observed in the forested areas in survey area F (author's own photograph)

4.7. ISSUES AND CULTURAL MEMORY AT TREBLINKA

The lack of investigation into the physical remains at Treblinka appears to have arisen as a result of numerous factors, some of which relate to the condition of the site itself and others which stem from the perceptions of it. Additionally, as noted in Chapter 2, there exists a diverse range of political, social, ethical and religious factors associated with the study of Holocaust sites, the examination of which often highlights the need for a unique approach to their investigation in the future. Such issues will be considered here with respect to Treblinka as all had a direct impact on the fieldwork undertaken as part of this study and form part of what can be termed the post-abandonment history of the site.

4.7.1. BETWEEN HISTORY AND MEMORY

Only 70 survivors of Treblinka II are known to have survived the war, the majority of whom escaped during the revolt of August 1943 (Sereny 1995). Of these, only a handful wrote testimonies concerning their experiences and many did so years, and even decades, after the Holocaust (e.g. Glazar 1999; Kuperhand and Kuperhand 1999; Willenberg 1989). Much of the documentation pertaining to the camp was also destroyed by the Nazis (Central Commission on the Investigation of German Crimes in Poland 1946). These facts, coupled with the subsequent reliance on historians to detail the history of the camp, have resulted in a situation whereby the cultural memory of Treblinka comprises largely of second-hand memories. Similarly, as the number of survivors now stands at only two and as the number of others who had

knowledge of the camp dwindles, Treblinka is now literally on the cusp between history and memory.

It would appear that the physical remnants of Treblinka have largely been ignored since the war and it is possible that this relates to the continued sense of unease that this site invokes. In particular, the absence of historical evidence that allude to the likelihood that archaeological remains would survive at Treblinka in the official narratives hints towards this and raises further questions about perceptions of the camp. Does the presentation of the events in a way that suggests all trace was removed allow us to elevate the atrocities of the Holocaust to a level far beyond human capabilities? By believing that the Nazis were capable of completely destroying traces of their crimes and removing all trace of human life at the site, does this facilitate the dehumanization of the events and justify our lack of understanding of them? Indeed, members of the German staff note that Treblinka II was not an organised factory like Auschwitz but that it was chaotic and, as former guard Franz Suchomel notes, 'primitive'; therefore the faults of humankind were actually clearly apparent in its day to day operations. To return again to the points raised in Chapter 2, it is perhaps the fact that the methods show such signs and, in spite of their primitive nature, still facilitated mass execution, that makes them so emotive and contentious.

Examining approaches to Treblinka in the past, it is evident that knowledge of the site has been strongly influenced by political circumstances in Poland. Immediately

after the war, the focus on the suffering of Polish victims was notable, whilst attempts to rebuild the nation took precedent over memorialising the sites in many areas (Wróbel 1997). It is notable that, immediately after the war, Grossman's account detailing the remains still visible at Treblinka was not included in the Black Book of Crimes against the Jews, despite representing the site of the second largest massacre of this group (Moyn 2011). Similarly, the fact that work to memorialise the site did not begin until 1959 demonstrates the tensions that existed between Jewish and Polish groups at this time (Glowacka and Żylińska 2007). Indeed, as Wróbel (1997:1-2) notes, 'many Jews believed that the Poles gladly watched as the Jewish community disappeared from Poland during the war', whilst 'the Poles accused the Jews of enthusiastically supporting the Soviet authorities during the 1939-41 Soviet occupation of eastern Poland and of instigating an anti-Polish atmosphere in the West during the entire war'. Many of these tensions continued for decades, and indeed do still continue, between those for whom the Holocaust was, or is, in living memory.

The impact of the fall of Communism in Poland upon approaches to the site can be clearly seen. Having been designated a national monument in 1993, just three years after the end of Communist rule, the ongoing developments at the museum demonstrates a renewed and sustained commitment to protecting and understanding the site. The acceptance of this research in itself reaffirms that commitment and suggests that addressing the physical remains at this site is being seen as a less controversial and more valuable endeavour. That said, whilst a

willingness to enhance public knowledge about Treblinka has been made at local level, this does not necessarily reflect a national trend. Throughout Poland in general, the post-Communist era has instead seen an increase in Polish national identity and, in particular, anti-Russian sentiments (Polonsky and Michlic 2004). Consequently, there has been an emphasis on sites such as Katyń, alongside increased campaigns to prevent the term 'Polish extermination camps' being misused (The News 2011). This has been coupled with a lack of a widespread acceptance of Holocaust sites as part of Polish national heritage, excepting where Poles themselves were directly affected (Zubrzycki 2006). Therefore, as with many sites located in remote areas of Europe, Treblinka is predominantly visited by those with a personal or religious connection, which raises questions over what will happen in terms of preservation and research of such sites as time since the events passes.

4.7.2. DIVERSITY OF GROUPS AFFECTED

Given the diversity of visitors to Treblinka, and the visible nature of the archaeological fieldwork, public perception of the research had to be thoroughly considered in advance. Important questions were raised over how visitors to the site, who may be local, national or international, Jewish or non-Jewish, Holocaust survivors and family members or general members of the public, with varied levels of knowledge about the events, would react to the work. During the fieldwork itself, the site was visited by Holocaust survivors, relatives of Holocaust victims and survivors, school children, historians, tour guides, tourists, families, couples, locals,

Polish visitors, international visitors, people from various religious and cultural groups, those who specifically visited to commemorate the victims, those who were interested in the history of the site and those simply passing through as part of a walking or cycling trip.

Both prior to and during the fieldwork, divisions between locals and Jewish visitors in particular were notable. It is clear that Treblinka is seen as a Jewish site in a Polish village, something which has led to a degree of territoriality by both groups (Glowacka and Żylińska 2007). For the Jewish community, this has been expressed in public commemorative events and visits. Visitors to the site will note that it has become a place of ceremony and prayer, with members of the international Jewish community far outweighing the number of other visitors. Large groups of Israeli schoolchildren adorned in national flags and religious dress frequent the site on a daily basis, engaging in open air prayers and singing. Similarly the physical representation of the site has been solely influenced by Jewish commemorative beliefs. As Jacobs notes, 'in its memorial restructuring, Treblinka, more so than most other Holocaust sites in Poland, has been reconstituted as a Jewish graveyard', as reflected in the use of memorial stones representing the towns and cities of the victims (Jacobs 2004:314).

Conversely, the expression of territoriality for many in the Polish community, who do not wish for the site to define their region, has been demonstrated through a lack of acknowledgement of the site's function; the area is often passed through as part of

family walks and leisure activities as if it were any other part of the Polish countryside. Given the fact that the site does in fact appear like a country park, it does little to convey the brutality of events that occurred at the site. During the fieldwork, young couples were even picnicking at the site and despite having read the signage at the site detailing that it was an extermination camp, this appears to have caused little more than intrigue for many; how and why such a disregard for the events at Treblinka has come about is unclear. Clearly, however, there is considerable conflict between these individuals and those who visit the site for commemorative purposes.

Indeed, Jacobs (2004:313) cites an example of an encounter between mourners from Israel and a Polish father and son cycling through the park: 'the hostile glances that were exchanged between the two groups of visitors to the park were indicative of the stresses that currently exist in this region of Poland, where much of the surrounding area is covered with the remains of Holocaust atrocities'. These feelings are likely compounded by the lack of a Jewish community in the area around Treblinka and it would appear that the local community not only feel that the site, but also many of the members of the international community who visit it, are occupying and dominating part of their landscape and national heritage (Gruber and Myers 1995).

Interestingly, at the outset of the fieldwork undertaken as part of this study, a local resident of Kosów Lacki asked who the work was being completed for: 'the Jews,

Israel, America or the UK?'. Additionally, several visitors to the site asserted, incorrectly, that to be undertaking the work at Treblinka the author must be Jewish. These statements raise two important issues with regards to archaeological work at the site. Firstly, this question further highlights the issues over ownership of the site and the conflict that exists between residents and the Jewish community. Notably, the possibility of completing the work for academic reasons, which would enhance the knowledge of the public in general, including citizens of Poland who were notably absent from the list, was disregarded by the local resident when suggested. Secondly, these statements implicitly suggest that the archaeological work must have an agenda i.e. it was carried out due to the wishes of a certain racial or religious group. As discussed in Chapter 2, such impressions over the political implications of archaeology must be carefully considered and managed to ensure that such research does not unduly become the basis of propaganda, political strategy or rhetoric (Skinner et al 2002; Pyburn 2009). Additionally, should local communities incorrectly perceive the work as being conducted on behalf of certain groups, when in fact it forms part of a research strategy, this may result in a situation where they are not prepared to accept or engage with the study - further suspicion over the value of archaeology may arise, the findings may be disregarded and even discredited, whilst individuals participating in the work may be alienated.

4.7.3. HALACHA LAW

It has been argued of Treblinka II that 'this camp was created by the Germans with the express purpose of destroying citizens of Jewish nationality', and it is likely that the fact that the victims were predominantly Jewish at Treblinka II has impacted upon the level of study at the site (Malagon 1979). Some of the social reasons for this have already been discussed above but in the main the lack of intrusive activity can be ascribed to the need to comply with Halacha Law. In the absence of options aside from excavation prior to the last decade, no further site surveys were undertaken. Even when non-intrusive methods were proposed as part of this study, the presence of human remains at the site and the various sensitivities involved as a result of this meant that the authorities carefully considered whether or not the benefits of the project justified the disruption that the work may cause (pers. comm. Edward Kopówka). This disruption was viewed to be possible both in terms of the interaction these methods would have with the ground, as well as the emotional impact for visitors that the presence of a field team may have.

Permission for the work was required from both the office of the Chief Rabbi of Poland, who assessed the methodology in terms of its compliance with Halacha Law, and the Conservator of Monuments, who evaluated the proposal based on its scientific value and potential to enhance knowledge of the site. Not only did this present a unique set of challenges in terms of ensuring that the methodology satisfied two different parties but it was also necessary to adequately convey the intentions of the project to non-archaeologists. The caution with which the work was approached, and the lengthy process involved in obtaining permission, were a reflection of the various social, political, religious and ethical issues involved in the study of Holocaust sites, as well as the effect that previous work, which has often

failed to consider these issues, has had on the readiness of the Polish authorities and Jewish community to accept further research applications (pers. comm. Kasia Ober; pers. comm. Edward Kopowka). Similarly, however, it was also important to manage expectations with regards to the equipment being used, to ensure that misconceptions did not arise about its practical application and its capabilities. This was particularly challenging when describing geophysical techniques, given popular misconceptions concerning the ability of these methods to detect bodies, as opposed to the anomalies caused by buried remains (Cheetham 2005).

4.8. CONCLUSION

An investigation of the physical remains at Treblinka II has revealed new insights into both the spatial layout of the camp and its functionality. Whilst it will never be possible to create a definitive plan of the camp - owing to the fact that the camp developed throughout its period of operation, considerable post-war landscape change has taken place, and part of the camp has been obscured by the memorial - a plan has been created that the physical remains that survive in the archaeological record (Figure 4.36). Similarly, a revised interpretation of the layout of some areas of the camp has been presented based on the findings of this research and a working plan has been created to suggest the possible function of some of the features recorded (Figure 4.37). With regards to the research questions outlined in section 4.4, this survey has:

- Been the most detailed site investigation undertaken at Treblinka to date that has considered the physical remnants of the camp infrastructure alongside witness testimony and historical research;
- Demonstrated that Treblinka II was not entirely destroyed by the Nazis and that physical evidence of the camp do survive;
- Confirmed that probable burial sites exist outside the area denoted by the memorial stones and highlighted the diversity of Nazi body disposal methods;
- Demonstrated that the current memorial and subsequent on site interpretation do not represent an accurate image of the camp. It has been highlighted that the boundary of the camp is incorrectly marked, suggestions have been made for the spatial layout of the camp structures and it has been highlighted that further burial sites exist that need to be protected.

The size of the site and the scale of the remains identified, coupled with the difficulties caused by post-abandonment modification, means that this survey represents only the first step in understanding the archaeological record at Treblinka II and this data should be seen as a platform for further research.

At a broader level, the survey has demonstrated the disparity between the 'known' history of the site and the physical reality. Indeed, Treblinka provides a very convincing example in support of Schofield's (2009) theory that we often think we

know the most about the recent past, and for that reason, we often don't, in that the widely held perceptions of the events that have saturated historical sources have been seen as precluding the need for physical evidence (Chapter 1). The existence of the post-war survey and the assertion that the memorial denotes certain features of the camp also appears to have been taken as proof that nothing further exists at the site and that it has been fully investigated. This, coupled with the variety of political, social, ethical and religious issues that have influenced attitudes towards the sites since the war have resulted in a situation whereby its post-abandonment history, although rarely discussed in the literature itself, has shaped its overall historical narrative.

For archaeologists, the existence of remains at the site may come as no surprise but, given the contrast with historical information, the simple statement that remains do survive at Treblinka II will clearly radically alter perceptions of events. These results also raise the question, if we have forgotten, or to date failed to uncover, considerable information about the physical remains of one of the largest Nazi extermination camps, how much are we likely to have forgotten about smaller, less well-known sites pertaining to the Holocaust?

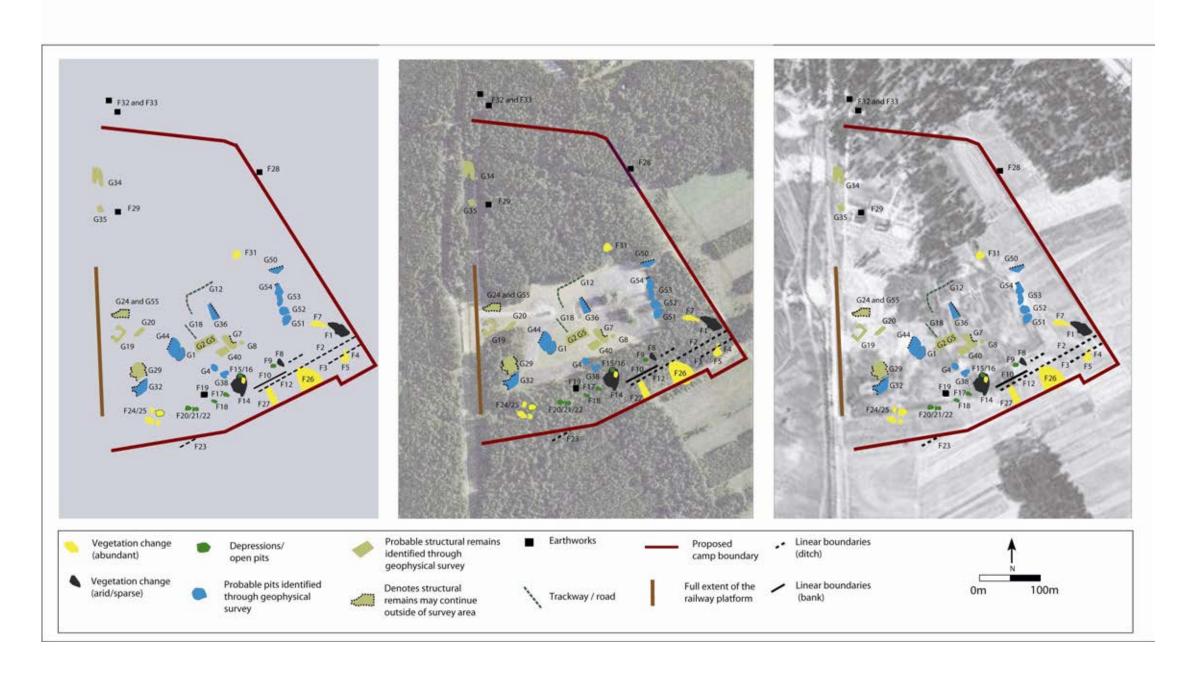


Figure 4.36. Plan of the main features identified during the archaeological survey at Treblinka II. Further key shown in Appendix 4.3.

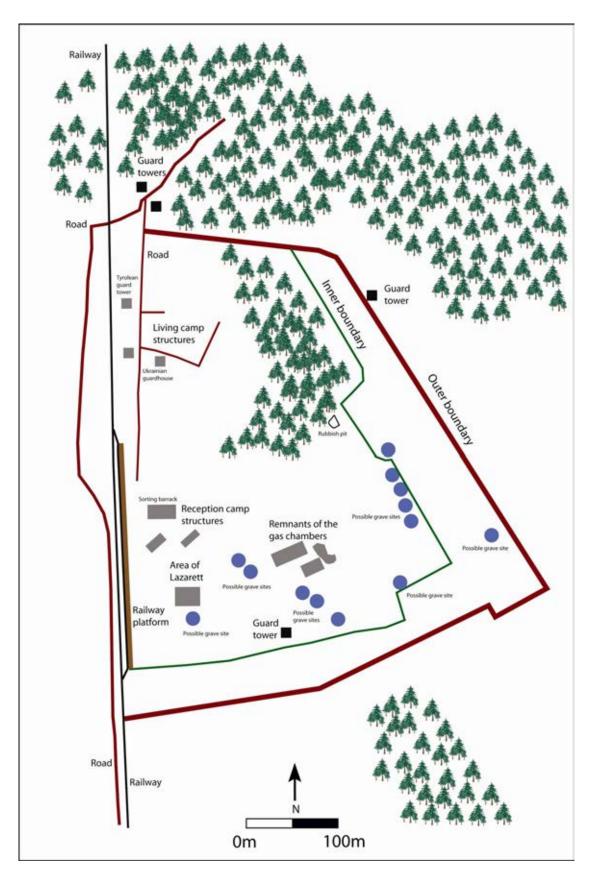


Figure 4.37. Interpretation plan of Treblinka II based on the findings of the archaeological survey

5. CASE STUDY: ALDERNEY, BRITISH CHANNEL ISLANDS

'Oh I do think it's foolish the time they have spent, in fixing barbed wire and in mixing cement, and sometimes I fancy they won't be content, till Alderney's covered with wire and cement' (IWM MISC 2826 189/1-2-a).

5.1. INTRODUCTION

Described as 'the single most significant event in the history of Alderney', the Nazi Occupation of this small island in the British Channel Islands irreversibly altered the landscape and the lives of both the contemporary population and subsequent generations (Kay-Mouat 2009). The evacuation of the island's 1500 inhabitants in June 1940 paved the way for a period of occupation by the Germans which would last until the 16th May 1945 (Saunders 2005; Partridge 1990). Somewhat ironically, having been deemed too difficult to defend by the British, the Channel Islands were to become one of the most heavily fortified parts of Europe under the Nazi Occupation (Wood and Wood 1982). Being only 60 miles off the coast of the United Kingdom and 8 miles from France, Alderney was of great tactical value to the Nazis and has been described as 'the last stepping stone before the conquest of mainland Britain' (Bonnard 1991:synopsis; Figure 5.1). Indeed, the island was transformed into a so-called 'battleship of concrete and steel anchored in front of the Atlantic Wall' (Forty 1999:234) in accordance with Hitler's order on the 20th October 1941 to fortify the Channel Islands and make them an 'impregnable fortress' (Packe and Dreyfus 1990:38). To facilitate such a transformation, thousands of workers were sent to the

island from across Europe and housed in a network of labour camps and the only SS camp on British soil, Lager Sylt (Saunders 2005; Figure 5.2). Having been tasked with the construction of heavy coastal and anti-aircraft batteries, tunnels, bunkers and earthworks (Plate 5.1), these workers were subject to often fatal living conditions, whilst incidents of shooting, hanging and torture have been reported (WO311/11-a).

However, despite the gravity of the events that occurred, as Carel (1967:137) noted 'much of what happened in the island during the war is still veiled in mystery' and, to date, this situation still prevails. Whilst there have been some attempts over the last seventy years to highlight the impact of the Holocaust "on our own doorstep" as it were, even the most vocal have failed to insight a widespread protection and research programme for the remains of the Nazi camps and associated sites on British soil (Saunders 2005; Bunting 1995). Indeed there has never been an archaeological investigation of any of the sites pertaining to the Occupation and the lack of information, particularly at those sites most directly connected to the forced labourers, is indicative of how these events have fallen from public consciousness. Given the fact that the Holocaust is central to the National Curriculum in the United Kingdom, and there has been a keen interest in the archaeological remains of the Second World War in recent years, there is clearly a need to question why the sites on Alderney have not been afforded the same level of attention (Holocaust Task Force 2006).

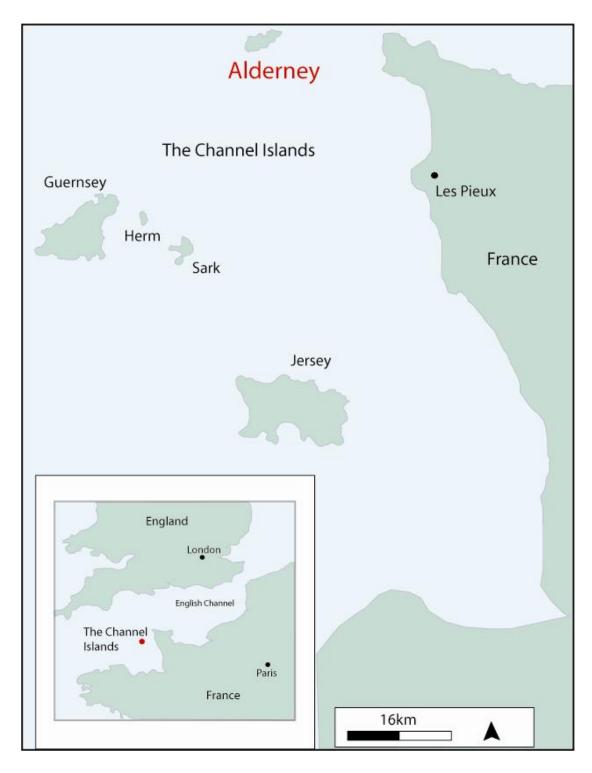


Figure. 5.1. Location plan of Alderney

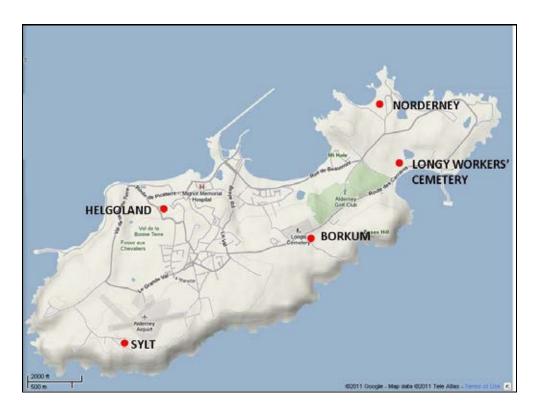


Figure 5.2. Locations of the main camps constructed by the occupying forces on Alderney



Plate 5.1. Examples of the fortifications constructed by the prisoners and labourers sent to Alderney during the Occupation. Camouflaged bunker (top left), machine gun position (top right), emplacement for a 20mm Flak Gun (bottom left), defensive wall (bottom right) (author's own photographs)

Therefore, this chapter will seek to collate and combine historical and archaeological data relating occupation landscape of Alderney. It is reaffirmed here that the slave labour programme in place on the island, coupled with the movement of workers and prisoners between the camps there and mainland Europe, formed part of the Nazi persecution undertaken as part of the Holocaust (section 1.5.1). The known history of the Occupation, previous investigations of the physical evidence pertaining, memorialisation of the site and heritage laws in place on Alderney will first be outlined. Based on a consideration of the information and issues highlighted as part of this reassessment, a methodology, based on the tasks and techniques outlined in Chapter 3, will be devised. This will facilitate the recording and reinterpretation of the surviving remains of camp structures, burial sites, fortifications and infrastructure, as well as a consideration of post-war activities, both at the site itself and with regards to the cultural memory relating to it.

5.2. HISTORICAL BACKGROUND

Prior to a reassessment of the evidence pertaining to Alderney, an overview of the history of the Occupation is presented to allow the following discussion to be contextualised.

5.2.1. A MILITARY LANDSCAPE

Only three and a half miles long by one and half miles wide, Alderney has a rich and diverse history of settlement (Visit Alderney 2010). A handful of archaeological investigations on the island, many of which were undertaken in the early 1900s, revealed the existence of material culture dating from the Late Palaeolithic onwards

and highlighted that the 'continuous occupation and rebuilding has very much mixed the archaeological record' (Migeod 1934:134).

Additionally, the military history of Alderney did not begin with the Second World War and, prior to the Occupation, the island already housed Iron Age and Roman military installations, thirteen Napoleonic and Victorian forts, and Victorian and First World War rifle ranges (Sanders and Watson 2005; Plate 5.2). An analysis of historic mapping reveals that, prior to the war, the landscape was largely arable and that the Occupation considerably increased not only the number of military installations but also the number of dwellings and industrial structures (Figure 5.3 and 5.4).



Plate 5.2. Raz Island Fort, one of the thirteen forts located on Alderney (author's own photograph)



Figure 5.3. German map of Alderney produced in 1941 (after AMA 00/122/10)

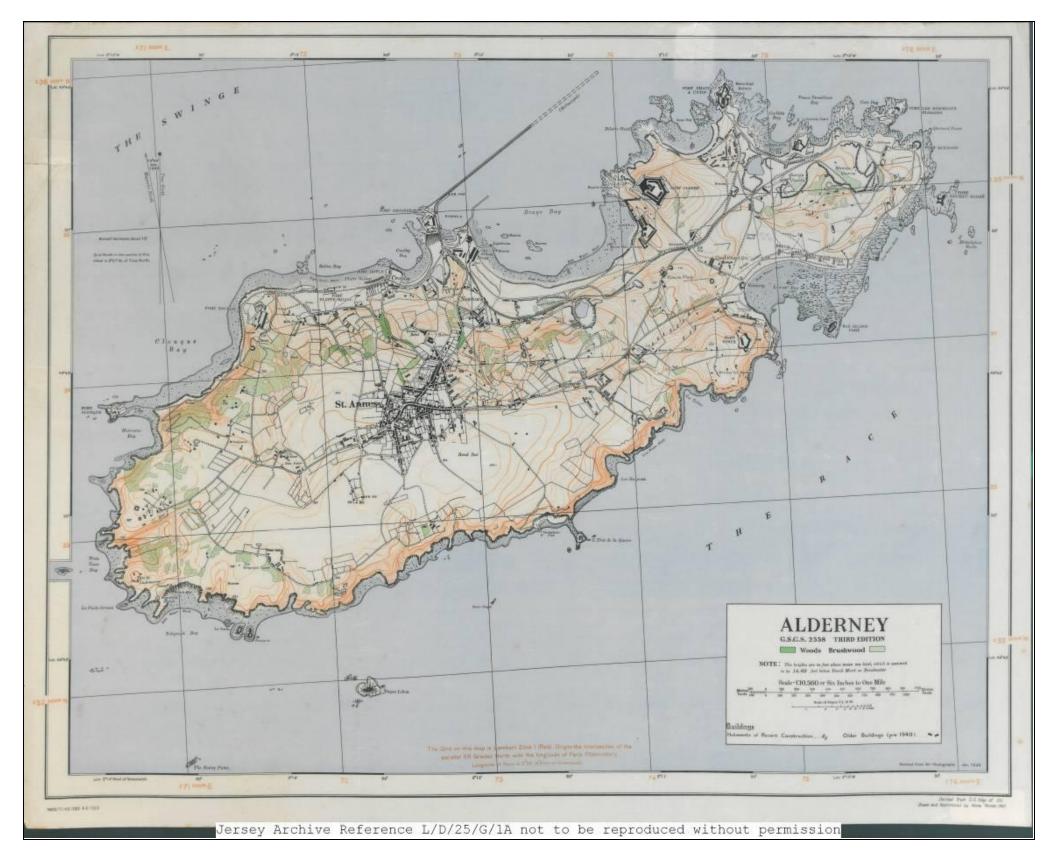


Figure 5.4. Home Forces Map of Aldemey produced in 1943, showing the considerable construction that had already taken place on the island (after JAS L/D/25/G/1A)

5.2.2. THE EVACUATION AND OCCUPATION

Upon the retreat of the British from the island, the population was faced with the real possibility of being occupied by the Germans (Bonnard 2009a). Addressing the islanders on the 23rd June 1940, Judge French urged, 'Men and Women of Alderney, as you value your lives, if the boat comes, you get on it, for it will the last touch at the outside world you will get' and a vote determined that the island would be evacuated (Bonnard 2009a:8). Subsequently, on the same day, the island's 1500 inhabitants were transported by boat to Weymouth, being permitted to pack only one suitcase (Partridge 1990). Reg Blanford, who was sent to Alderney to assist with the evacuation, stated that, following the departure of the inhabitants, the scene in Alderney was one of 'complete devastation', as a result of the hasty retreat and the subsequent looting that occurred (IWM MISC 2826 189/1-2-b). On the 2nd July 1940, the first German planes landed on the island, marking the start of the Occupation (Saunders 2005; Partridge 1990; Plate 5.3).



Plate 5.3. German occupying forces outside branch HQ on Aldemey (after AMA ALNYM 1977/102.48)

5.2.3. PRISONERS, WORKERS AND FORCED LABOURERS

Almost immediately, the Germans began to ship workers to Alderney, initially from Guernsey, for the purpose of killing any remaining livestock and transporting goods (AMA-a; AMA-b). These workers were under the control of the German Civil Affairs Unit (FK515) and multiple newspaper articles demonstrate that there were several calls for workers to be sent to the island until October 1942 (AMA-a; AMA-c; AMA-d). Thousands of workers were also transported there, under the control of Organisation Todt (Plate 5.4), to facilitate the construction of considerable concrete fortifications and, as Graf von Schmettow noted, 'by employing very strong forces and great means they were fortified much stronger and much earlier than the Atlantic Wall' (JAS L/D/25/D1/5/1).



Plate 5.4. Organisation Todt propaganda poster (after AMA-e)

However, whilst some historians have argued that the Occupation of Alderney can be divided into two distinct phases (Ginns 1994; Pantcheff 1981; Packe and Dreyfus 1990) – the initial phase, in which Organisation Todt (OT) workers were employed to enhance the strategic importance of the island, and the second phase, during which Sylt became an SS camp and slave labourers from across Europe were exploited for this purpose - this is to ignore the fact that the deportation of slave labourers appears to have begun early in the war (PRO HO144/22237; PRO WO311/12-a; Saunders 2005). It is true that the workforce was predominantly made up of OT workers from 1940-1942, but Ostarbeiter (Eastern European workers), German political prisoners, Spaniards, Frenchmen, Dutchmen, Jews and other groups were

also present, and came to form the dominant group (PRO WO311/11; PRO WO311/12; PRO WO311/13; Pantcheff 1981). Therefore, as opposed to a chronological divide, a distinction can perhaps be more readily made between "privileged" and "unprivileged" workers given that witness accounts allude to the fact that their experiences varied considerably, dependent upon their status (Plate 5.5). For example, whilst some OT workers were paid a wage and were, in theory at least, volunteers, others were forced to work for twelve hours a day, with poor clothing, little in the way of medical treatment and harsh living conditions (Ginns 1994). Daphne Pope noted of French workers who came to Alderney 'they weren't actually forced labour they were one step ahead, you know volunteer or you will be forced types' (IWM MISC 2826 189/1-2-a). For others, there was no illusion that they were anything other than slave labourers, as reflected by the brutal treatment that resulted in their deaths (PRO WO311/11). Many of this 'vast labour pool' worked for foreign companies, whilst others were sent to work on 'special projects' such as the FK515 farm (Pantcheff 1981:1-7; PRO HO144/22237).

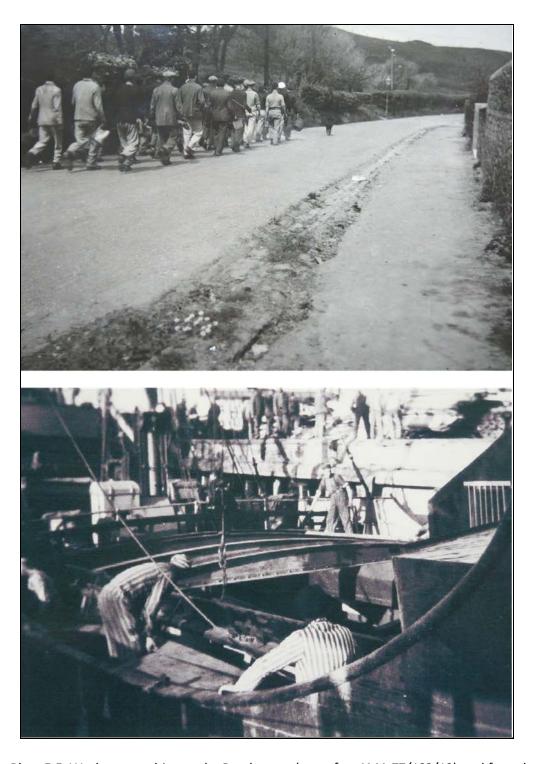


Plate 5.5. Workers marching to the Breakwater (top, after AMA 77/102/10) and forced labourers wearing striped pyjamas (bottom, after AMA 07/726) on Alderney

5.2.4. THE CAMPS

The influx of these workers led to the construction of a series of camps to house them (Figure 5.2). Four camps - Sylt, Nordeney, Helgoland and Borkum - each housed

different groups of workers and slave labourers, and an as yet unlocated camp called Citadella is purported to have been constructed to house Moroccan prisoners (Pantcheff 1981; Steckoll 1982; WO311/11; PRO WO208/3629; Cohen 2000:30). Bell (2000:5) has stressed that by 1943 Alderney was 'a very inhospitable island', with over 4000 prisoners of various nationalities being held in the camps and exploited for labour (Saunders 2005). This number rose again when, in March 1943, Lager Sylt was handed over to commanders of the SS Totenkopfverbank (Death's Head Unit) and the site became a concentration camp (Pantcheff 1981). Consequently, on the 25th February 1943, 1000 prisoners from Sachsenhausen were bought over to Alderney to extend the camp (Steckoll 1982; Cohen 2000). At this time, Sylt also became a satellite camp of Neuengamme and it is reported that prisoners 'no longer of use' on Alderney would be sent back to this German camp for extermination (King 1991; PRO WO235/718). Although there is little evidence to suggest that these camps became anything comparable to the extermination camps in mainland Europe, thousands of prisoners were held in appalling living conditions, beatings and ill-treatment were common and many were literally worked to death (PRO WO311/11; PRO WO311/12). The victims who died on Alderney were buried in cemeteries on Longy Common (Plate 5.6.) and in St Anne's churchyard (Plate 5.7), although several witnesses allude to the presence of burials and alternative disposal methods across the island (PRO WO311/11; Pantcheff 1981).



Plate 5.6. The workers' cemetery on Longy Common (after AMA 97/312.4.21)



Plate 5.7. St Anne's churchyard, where a number of labourers were buried (after AMA 97/312.4.18)

5.2.5. LIBERATION

The Germans continued to transport workers to Alderney until mid-1944, when the gradual deportation and scaling down of the German garrison began (Boot 2004; JAS L/C/14/C/5). Meanwhile, the British forces were formulating Operation Nestegg, the

plan to liberate the islands, and the terms of surrender of the Channel Islands were signed on the 9th May 1945 (Boot 2004; JAS L/C/14/C/5). On the 16th May, Alderney was finally liberated, paving the way for an extensive clean up operation by the Allied Forces (JAS L/C/14/C/5; Plate 5.8). Detailed extensively in the War Diary of Brigadier Snow, this process involved the removal of some 13,753 mines from the island by the 30th June 1945, the deconstruction of obstacles around the coast and the segregation, subsequent transportation and interrogation of both potential perpetrators and witnesses (JAS L/C/14/C/5; JAS L/C/14/C/19). Such processes, in the interests of security, took precedent over mapping the physical changes to the landscape and incited further landscape change; for example, mines were exploded, earthworks were removed and the airport was extended (JAS L/C/14/C/5; IAS BA96-14). Many structures were taken over as lodgings for the soldiers or to house the prisoners of war (JAS L/C/14/C/19). Poor hygiene and significant problems with the disposal of refuse were also noted, resulting in the burial or burning of waste in some areas (JAS L/D/25/A/4; JAS L/C/14/C/16). However, there were procedures in place to collect any surviving German documents (JAS L/C/14/A/5/5). It was some time before the islanders were allowed to return to Alderney, with the first boats arriving from Weymouth at Christmas 1945 (Bonnard 2009b).



Plate 5.8. The liberation concert on Alderney in May 1945 (after AMA 86/107/10)

5.3. PREVIOUS INVESTIGATIONS

In advance of a consideration of the archaeological remains of the slave labour programme in Alderney, it is important to examine the previous investigations of the sites that have taken place. This will not only reveal current perceptions of their nature and extent but it also highlights post-war landscape change that has occurred as a result. Furthermore, perhaps most significantly, this discussion will demonstrate current attitudes towards studies of this period and lay the foundations for further discussion in section 5.7 concerning the various conflicting opinions about how the history of the Occupation should be presented.

5.3.1. EARLY INVESTIGATIONS

A review of archival material revealed that several investigations took place during the war and in its immediate aftermath, which have never been alluded to in their entirety in the history of Alderney. Whilst the specific findings of these investigations will be discussed in more detail in section 5.5 below, it is important to recount them here in brief in order to demonstrate how the history of the Occupation has been sanitised to avoid a focus on the slave labour programme and the physical remains it generated.

Two maps, one produced in 1943 (JAS L/D/25/G/1A; Figure 5.4) and one in 1944 created by M.I.19 with a series of accompanying reports (PRO WO106/5248B; Figure 5.5; Appendix 5.1), reveal that reconnaissance was undertaken by the British government during the war. Although this information was most likely derived to assess the fortification programme, it demonstrates that the government did possess knowledge concerning the camps on the island, despite claims to the contrary in the following years (JAS L/D/25/A/4). These maps provide the most comprehensive assessment of the physical remains of this period to date. Given that the M.I.19 map remained classified until recent years, this resource in particular offers considerable potential to re-evaluate the Occupation landscape (section 5.5).

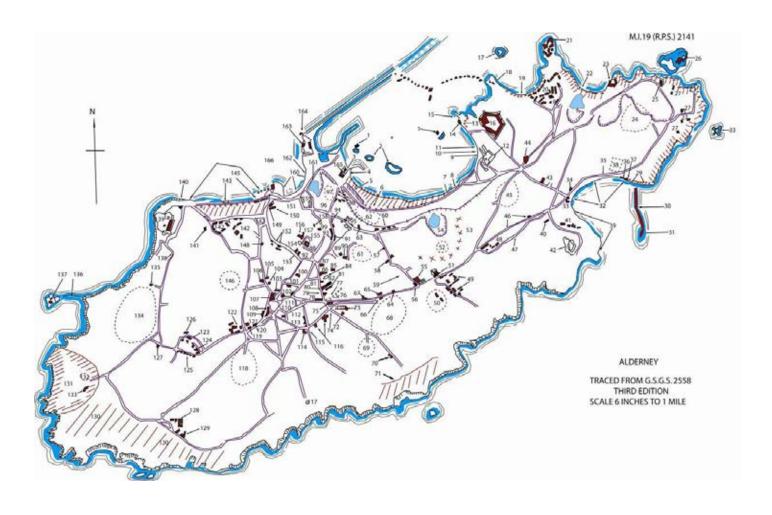


Figure 5.5. Map produced in 1944 by M.I.19 showing the scale of the Occupation sites believed to have existed on Alderney (annotated version by the author based on original in PRO WO106/5248B). See Appendix 5.1 for key.

An investigation by a British team, led by Major Haddock, Major Cotton and Captain Kent, focused on determining the nature of crimes committed by the occupying forces on Alderney, was also pursued immediately after the war (PRO WO311/11-a; IAS AQ875/03-a; IAS AQ875/03-b; IAS AQ875/03-c). An initial report by Haddock on the 21st May 1945 was the first to identify the four main camps by name and alluded to the brutal treatment of the prisoners on the island (PRO WO311/11-a). Additionally, this survey contained in depth information about the deaths of the labourers and their purported burial locations, the details of which were omitted from later accounts (PRO WO311/11-a; PRO WO311/11-b; PRO WO311/11-c; section 5.5.3). During this initial phase of investigation, it appears that the impetus to fully investigate the atrocities, both for the purposes of gathering evidence against the perpetrators and in order to identify the number of victims and their locations, was prevalent. This is supported by two subsequent letters between Haddock and Shapcott dated 26th and 28th May 1945 in which they discuss the collection of evidence to ensure '(a) charges of mal-administration against those Germans in authority who permitted or exercised a policy of systematic cruelty and starvation in the four camps...(b) Charges of assault and in some cases murder against such person' (PRO WO311/11-c; PRO WO311/11-d). However, despite claims that 'it may become desirable to open some graves in Longy Cemetery in order to ascertain numbers buried there', by the 15th June 1945, Haddock stated:

'the investigation of atrocities on that island has been continued by Captain

Pantcheff of M.I.19 who claims to have been briefed by you, and a Major Gruzdev

and Captain Wallis of the Soviet Military Commission...I know nothing of the results

of their investigations and as arranged I am taking no further action at present concerning Alderney' (PRO WO311/11-e).

It is unclear, therefore, whether grave sites were examined and, if so, what was located given the fact that, as Steckoll (1982:181) recalls, the documents relating to these investigations were destroyed by the National Archives to 'make shelf space'.

Another recently declassified account reveals that a Russian investigative team, headed by Major Gruzdev, was also active alongside British investigators and that additional searches were made for the graves of the victims on Alderney (IAS AQ875/03-a; IAS AQ875/03-b; IAS AQ875/03-c). The following tasks are reported to have been completed:

- '1. A total of 202 Soviet Citizens survived and were taken from the islands to a Soviet base.
- 2. All the places where the Soviet citizens worked and lived were investigated, as was the graveyard where the official number of dead were buried.
- 3. Possible burial sites were investigated and five graves were exhumed, as were several supposed burial sites.
- 4. Freed Soviet citizens, local people and the imprisoned German Major Hoffman, one of those responsible for the atrocities on Alderney, were questioned.

- 5. I went through the documents of the investigation produced by the British authorities about Alderney.
- 6. With the help of the English authorities and partially with the help of the liberated Soviet citizens we tidied up the graveyard' (IAS AQ875/03-a).

Additionally, Major Gruzdev claimed in the midst of this investigation that 'according to the testimonies of liberated citizens and also those of German prisoners of war, the bodies of those who died at work were either thrown into the sea or...buried where they fell. Absolutely no one knows where the dead prisoners from the SS camp Sylt are buried'; thus despite the belief by some that further burials did exist, no further enquiries were made (IAS AQ875/03-a). Indeed, Gruzdev noted that the British War Office representative 'refused to sign a document about the opening of graves, which took place on Alderney in his presence', which again raises issues with the methods used to investigate these sites (IAS AQ875/03-a). This report corroborates Haddock's early enquires that suggested that multiple disposal techniques may have been employed and shows that many unanswered questions remain about the burials on the island (IAS AQ875/03-a; IAS AQ875/03-c; IAS AQ875/03-d).

Consequently despite the fact, or perhaps because of the fact, that these early investigations uncovered significant information concerning the events on the island, in particular the potentially diverse nature of the disposal of remains, their findings

were not made public and were kept hidden for over forty years. Even when some of the letters written by Haddock were published in a British newspaper in 1992, this failed to change the nature of official histories which had become well-established over time (Bunting 1995:281). Had this information been widely known at an earlier stage, the image of the Occupation of Alderney now widely held would likely have differed considerably. Instead, the nature of the investigation changed considerably, with humanitarian concerns and war crimes prosecutions taking second place to creating an image of a 'model occupation' (Bunting 1995).

5.3.2. MAJOR PANTCHEFF'S INVESTIGATION AND THE OFFICIAL HISTORY

Following initial recognition that 'crimes of a systematically brutal and callous nature were committed on British soil', Major Pantcheff was tasked with investigating the events of the Occupation (PRO WO311/13-a). On the 23rd June 1945 in the first of several documents entitled 'Periodical Report on Atrocities Committed in Alderney', Pantcheff vowed that his visit to the island represented only 'the preliminary stage of what will be a lengthy and complicated investigation', the aims of which were:.

- '1) to obtain a general picture and background of conditions in ALDERNEY for the last four years, against which individual incidents should be judged in perspective;
- 2) to screen all PW in the islands, with a view to discovering witnesses and potential accused persons;
- 3) to take signed statements from as many witnesses as possible;

- 4) to select for detailed interrogation in the UK a number of potential witnesses;
- 5) to make a personal reconnaissance of the ground, where all these incidents took place' (PRO WO311/13-a).

In these initial stages, these reports do indicate that the above aims were achieved. Site visits to the cemeteries and camps, interviews with witnesses and a review of the surviving documentation led Pantcheff to make assertions regarding the nature of the camps, the treatment of the prisoners and labourers held in them, and the nationalities of those killed (WO311/13-b; WO311/13-c; WO311/13-d; WO311/13-e).

However, it would appear that once it became clear to the UK government that they may be forced to pursue war crimes trials, a conscious effort was made to play down the atrocities and to suggest that all of the victims were Russian: 'so far as I can trace all the inmates of these camps were Russian workers who were treated as volunteers...there is no evidence to show that the concentration camp held other non-German nationals while the Russians were there' (Pantcheff 1981:9; WO311/11-f-j). Therefore, despite the fact that twenty seven different nationalities had been recorded in earlier reports (PRO HO144/22237; King 1991; Bonnard 1991), war crimes investigations were referred to the Russian government who, engaged in larger trials elsewhere in Europe, failed to pursue a significant number of prosecutions or further examinations of the physical evidence. Indeed, the British

government, when petitioned for information about the crimes on the island only a few years after the war, claimed that they only knew that 'Russians were treated with great cruelty' and the cemetery at Longy Common became known as the 'Russian cemetery' (Bunting 1995:297). The impression of a 'model occupation' and the suggestion that the victims were either volunteers or individuals who were not being interred as a result of their religion, likely offers one reason why Alderney has become detached from discussions concerning the Holocaust (Chapter 6; Cruickshank 1975; Wood and Wood 1982). Similarly, whilst witnesses have claimed that acts of brutality were carried out and further victims bodies were disposed of in the sea and in mass graves, such claims were dismissed in favour of this ostensibly sanitised version of events (Steckoll 1982; Dalmau 1945; Font 2009; HO144/22237). Additionally, seemingly in order to diminish the severity of the crimes, as a further means of justifying the lack of war crimes trials, no further attempts were made to explore the possibility of clandestine burials (PRO WO311/106). Even Pantcheff (1981), in a book published about his investigation, failed to allude to some of the evidence discussed in his early periodical reports that directly dealt with the severity of the treatment of the slave workers.

Indeed, such an approach has ultimately led to the creation of a so-called official history centred around the fortifications and the plight of the evacuated islanders, cemented by the publication of a State-sponsored book claiming to be such by Charles Cruikshank (1975). Numerous articles written by the Alderney Society and in the Channel Island's Occupation Review, as well as Davenport's (2003) *Festung Alderney* aim to provide a comprehensive overview of the military landscape.

However, whilst such texts are clearly important additions to knowledge about the Occupation, the absence of discussion regarding the slave labourers is notable. Despite claims in a letter to survivor Francisco Font that 'if the official history of the Channel Islands during the occupation is to be properly balanced it must pay due attention to the plight of the slave workers' (JAS L/F/64/A/9), Cruikshank (1975) dedicated only four pages to the camps on Alderney and only refers to the OT workers, as opposed to slave workers and prisoners.

5.3.3. VOLKSBUND DEUTSCHE KRIEGSGRÄBERFÜRSORGE (GERMAN WAR GRAVES COMMISSION) EXHUMATIONS

When the deceased are discussed, the official number of graves on the island is derived from the exhumation of the burials on Longy Common and in St Anne's churchyard by the Volksbund Deutsche Kriegsgräberfürsorge (German War Graves Commission) in 1961 (Guernsey Evening Press 1961; Guernsey Star 1961a; Guernsey Star 1961b; Guernsey Star 1961c; CWGC-a). These exhumations saw, somewhat controversially, both the German soldiers and forced labourers that died on the island being classed as 'German War Dead' and being moved to the German War Cemetery at Mont de Huisnes in Normandy, France in accordance with the Anglo-German War Graves Agreement (Ramsey 1981; Forty 1999; PRO DO35/6145; PRO HO284/84).

The figures from the exhumations demonstrate that a total of 386 bodies were recovered: 326 from Longy Common and 60 from St Anne's (WO311/11-k). In addition, four more graves at St Anne's were found to contain no remains (Pantcheff

1981:72; CWGC-a). As well as the bodies in marked graves on Longy Common, a further 65 bodies were found. With regards to the marked burials, more than one body was found in some of the graves in rows six and seven but the graves:bodies ratio was equal for all other rows (WO311/11-k; Bonnard 1991:43). The fact that more than one body was not found in multiple graves has often been cited as evidence that this was not common practice, as was previously suggested in witness accounts (Pantcheff 1981).

However, several problems remain with the results of these exhumations. Firstly, a query of the German War Graves Commission database reveals that they only possess information about 96 of the 386 bodies recovered and all are marked as 'Unknown' (pers. comm. Volksbund Deutsche Kriegsgräberfürsorge). This is despite the fact that several burial lists exist in other archives which were compiled by the liberating forces and the Commonwealth War Graves Commission in the 1950s (CWGC-a; PRO FO371/100916; Appendix 5.2). Additionally, no report detailing the actual excavation procedures is available (pers. comm. Volksbund Deutsche Kriegsgräberfürsorge). The only details of the processes employed by the Volksbund Deutsche Kriegsgräberfürsorge are contained within a report written by the Officer of Health, based on sites throughout the United Kingdom:

'the bones were hacked out with small hand tool, any soft parts scrapped off and the bones put in a plastic container. The discarded remains and the coffin were thus left in the grave' (PRO HO282/21).

Clearly, if such procedures were employed in Alderney, this raises significant questions over the thoroughness of the exhumation procedure. For example, if more that one body existed within a grave, how would this have been detected if only the bones were 'hacked out' (PRO HO282/21)? Additionally, these exhumations were limited to the two known burial sites, thus questions still remain about the existence of further clandestine burials elsewhere on the island.

5.3.4. "SENSATIONALIST" APPROACHES

As a direct response to what has been termed an 'unspoken conspiracy of silence', and the declassification of documents relating to the Occupation, since the 1980s there has emerged a handful of publications which discussed contentious issues such as burials, slave labour, the nature of the camps and the presence of Jewish prisoners in the Channel Islands (Bunting 1995; Cohen 2000; Fraser 2000; Saunders 2005; Freedman-Keel 1995). Whilst none centred on the physical remains specifically, many such texts sought to demonstrate the complexity of the forced labour programme and its built infrastructure (Steckoll 1982). Alongside these texts, claims about 'a little Auschwitz on British soil' and mass executions emerged, as a direct response to a lack of knowledge about these events by the general public and limited investigations by the authorities, (Steckoll 1982:16). This, coupled with an abundance of newspaper reports centred upon such notions, has resulted in a situation whereby the term sensationalist has come to be applied to all subsequent researchers who challenge the official history (Knowles Smith 2007; Figure 5.6); for example, one book located in the Alderney archive possessed a cover note stating that it was not of interest as it contains information about 'the bad and brutal way

that the German army did things' (Nebel 1942). In turn, this retaliation by the local community has often been seen by many as a further sign of conspiracy to underplay the events, thus resulting in a constant cycle of defence and attack, suppression and exposure. Therefore, breaking this cycle and overcoming the perception of non-islanders 'passing judgment', appears to pose the greatest challenge to future researchers (Bunting 2004).



Figure 5.6. Newspaper account regarding the atrocities on Alderney (after Observer 1981)

Through their fervent efforts to shape the history and memory of the Occupation, such authors have come to form part of the history of the legacy of this period themselves. It is important to note that, whilst the means in which the evidence relating to the slave labourers was presented by some authors was sometimes melodramatic and intended to invoke scandal, the importance of the primary

evidence on which they were based should not be underplayed (Steckoll 1982; Freedman-Keel 1995).

5.3.5. MEMORIALISATION

Since the war, there have been few attempts to memorialize the events that occurred on Alderney. As Otto Spehr, a former worker on Alderney, pointed out 'in Germany...the sites of the SS camps have become carefully tended gardens of remembrance, often with well funded museums and archives attached. But the site of the SS Sylt camp on Alderney is a wasteland covered with brambles' (Bunting 1995:323-324). This seems particularly inappropriate given the aforementioned attention given to Nazi camps in Europe by British academics, researchers and, indeed, tourists. The plaque recently erected upon one of the surviving gate posts at Lager Sylt represents the only marker at any of the camp sites, having been arranged by former prisoner, Sylvester Kukula, in 2008 (Bonnard 2009a; Plate 5.9). Additionally, given the lack of heritage provision on the island, the sites have all taken on alternative functions; Sylt now lies in wasteland next to the airport (Plate 5.10); the gate posts of Helgoland have been incorporated into the gateway of a private property, the rest of the camp having been lost in the development (Plate 5.11; see section 5.4.6); Borkum now stands in the island's refuse depot (Plate 5.12); Norderney is now a holiday camp site (Pantcheff 1981; Ramsey 1981; Plate 5.13). The potential fifth camp at Citadella has never been definitively identified and, subsequently, is not marked (Ginns 1994; Carr 2007). Additionally, the house of the Camp Commandant Maximillian List has been moved and is now used as a private residence, with no indication of its former function, whilst many of the fortifications

are being used for storage and recreational purposes, with one even being converted into a pub (pers. comm. Mel Broadhurst; Plate 5.14). Ramsey (1981) reports that during research for his work, The War in the Channel Islands: Then and Now, he witnessed a historian taking one of the beach obstacles from part of the Nordeney camp to use as a doorstop. More recently, the Alderney General Services Committee refused to provide funds for the maintenance of a bunker located in private land that was threatened by vandalism and water leaks (Alderney General Services Committee 2009). Thus, the sites are under considerable threat from natural and man-made landscape change, whilst little evidence of their former functions has been retained or recorded. The presence of the other camps is acknowledged on a plaque on the wall of the local museum but their boundaries are not demarcated on the ground (Plate 5.15). Similarly, their locations were only added to the Ordnance Survey maps in 1980 and only one memorial, the privately funded Hammond Memorial, acknowledges the slave labourers sent to the island (Carr 2007:95; Pantcheff 1981; Plate 5.16).



Plate 5.9. The plaque commemorating the victims who died in Lager Sylt, erected in 2008 on the surviving gate posts at the camp (author's own photograph)



Plate 5.10. The current condition of Lager Sylt (author's own photograph)



Plate 5.11. The current condition of Lager Helgoland (author's own photograph)



Plate 5.12. The current condition of Lager Borkum (author's own photograph)



Plate 5.13. The current condition of Lager Nordemey (author's own photograph)



Plate 5.14. Maximillian List's house, located at Sylt, (top, AMA 93/129) and its current condition after being moved to Longy Common (bottom, author's own photograph)



Plate 5.15. A plaque showing the locations of the camps on the wall of Alderney Museum (author's own photograph)



Plate 5.16. The Hammond Memorial, commemorating the victims of various nationalities on Alderney (author's own photograph)

An analysis of archival material also reveals a confused sense of responsibility concerning the memorialisation of the victims interred on Alderney during the war and this seems to have persisted in modern society. In the fifteen years that followed the war, prior to the exhumation of remains in the 1960s, British government files reveal that both the islanders and national authorities deemed it the responsibility of the Russian government to fund memorials and their maintenance but they believed they would show little interest; 'I assume that these Russian workers were deported to the Channel Islands by the Germans. The Soviet authorities are not therefore likely to have much of an interest in them' (PRO FO 371/100916). When funding was finally received for restoration of Longy Cemetery, reports suggest the work was not completed satisfactorily and there were concerns over its future maintenance (PRO FO371/106597; PRO FO371/111797; CWGC-b). Interestingly, once the bodies of the workers were exhumed, no markers were left to indicate the position of this cemetery but the marker stone for the cemetery in which German soldiers were buried does survive to date (Plate 5.17). Other problems emerged given the fact that the graves were initially on War Department land and, as such, the States would not take responsibility for commemoration; again this appears to have been upheld, even once the land returned to State ownership (CWGC-c). As noted above, the majority of memorials on the island have since been erected by private individuals, as opposed to the States of Alderney. It appears likely that this reflects both a lack of affiliation to the events in question, and thus a lack of a sense of responsibility to commemorate them, as well as a desire to mask certain aspects of the history of this period.



Plate 5.17. Surviving monument from the cemetery of German soldiers who died on Aldemey (author's own photograph)

5.3.6. HERITAGE LAWS

The unique legal status of Alderney has also impacted upon the preservation of its archaeological heritage and this is not limited to that relating to the Occupation alone. The requirement of local councils in the United Kingdom to maintain Sites and Monuments Records (SMRs)/Historic Environment Records (HERs) does not extend to the Channel Islands; thus a public record of local heritage sites that serves to 'integrate archaeology within the planning process' does not exist to the same extent (Hunter and Ralston 2006; Lang 1990:14). In 2007, the Alderney Wildlife

Trust, funded by the Alderney Society, began to digitise the SMR and integrate it into a Digimap system (States of Alderney 2007). The current record contains 163 sites, only six of which date to the Second World War (Appendix 5.3). However, no site specific information is given about these features, many of which are listed only in relation to other earlier sites. For example, a 'collection of German World War Two military structures, bunkers and AA gun sites', 'World War Two German military sites and restored Telephone Building' and 'possible archaeological sites among many WW2 structures on Bibette Head' are recorded (see records 99/3, 99/18 and 91/22 in Appendix 5.3). Of the sites specifically relating to the prisoners and labourers bought to the island, only Sylt has been included, although it is referred to only as 'gate posts between guards camp and prisoners compound', as opposed to by name or with any reference to the other surviving remains such as hut platforms that can be noted on the ground (see record 07/05 in Appendix 5.3).

With regards to the planning process, the Land Use Plan states that 'if a proposed development is likely to infringe upon a potentially important archaeological site listed within the "Sites and Monuments Record", then the Committee shall seek the advice of an appropriate organisation on how best to proceed' (States of Alderney 2006:12). There are two apparent problems with this approach. Firstly, often this organisation is the Alderney Society which, although knowledgeable about local heritage, comprises of local volunteers who have no training in the management of the historic environment or archaeology. Secondly, this approach relies on sites already being listed within the Sites and Monuments Record which, as has been

demonstrated, is extremely undeveloped and does not adequately represent the number of Occupation sites on the island.

The Land Use Plan does highlight the need to 'to preserve and protect the Island's natural and archaeological heritage' and lists seven areas where future development will not be permitted in light of their archaeological significance (States of Alderney 2006). These include Longy Common, which is described as containing 'the greatest concentration of archaeological finds', the area adjacent to the Coastguards Cottage and Red Tiles, a Neolithic/early Bronze Age grave south of Fort Tourgis, a Bronze Age enclosure north of Mannez House, The Nunnery, Le Petit Blaye and a Mesolithic Settlement north of Val L'Emauve (States of Alderney 2006:11). Therefore, this area has at least been protected from development that may have impacted upon the archaeological remains. Other sites, however, have not and, once again, the lack of control means that there has been considerable landscape change on the island that has the potential to mask or damage archaeological sites.

Interestingly, however, this body of legislation has prevented the protection of many other archaeological remains and historic buildings on the island; the majority of the Napoleonic and Victorian forts on the island are dilapidated or have been converted to alternative uses. Therefore, this suggests that the lack of preservation and recording of the sites pertaining to the Occupation of Alderney does not entirely relate to their contentious nature in local politics and society. Instead it may be due to more general attitudes towards heritage preservation and the reality of the impact, or lack thereof, of governing legislation relating to this.

5.4. RESEARCH QUESTIONS

An examination of previous investigations of the physical remains of the Occupation, revealed that the current conditions of these sites and a lack of knowledge about the physical evidence of the Occupation is a reflection of the ongoing struggle between the various groups who have attempted to shape the history and memory of the site to date. Therefore, this case study demonstrates the importance of understanding the interaction between heritage and archaeology with respect to the Holocaust, and the extent to which even entire landscapes, consisting of potentially hundreds of sites, have been forgotten and neglected in the decades since the war. As already noted, there has never been an archaeological examination of the sites on Alderney.

Several trends were observed following a consideration of the historical background to the Occupation and previous approaches to it, many of which appear to have influenced popular perceptions of the site, and these provided the impetus for an examination using archaeological techniques:

- With the exception of post-war investigations, studies of the sites have been entirely based on historical evidence. Given that this has often been clouded by the aforementioned conflict between the official history and "sensationalists", there is clearly a need for a direct examination of the physical remains and a reassessment of the primary source material from an archaeological perspective;
- An examination of archival material relating to previous investigations has highlighted the existence of maps and aerial images not previously reported on in

the literature. These need to be analysed in order to characterise the Occupation infrastructure and in order to determine the remains that potentially survive;

- The "official history" has focused on the fortifications constructed during the Occupation. Thus it is important to highlight the diversity of sites relating to this period that connect the lives, work and deaths of the prisoners and labourers sent to the island;
- The "official history" of the Occupation states that the camps were destroyed.

 There is a need to conduct archaeological field investigation to confirm or refute this hypothesis;
- In light of sources relating to early previous investigations of burial sites on Alderney, and the lack of any subsequent searches, the issue of further disposal sites needs to be readdressed.

Given the sensitivities involved in examining this period of Alderney's history, a noninvasive methodology was deemed most appropriate.

5.5. METHODOLOGY

Given the volume of documentary evidence pertaining to the Occupation of Alderney, and similarly the scale of archaeological remains, only a sample of sites will be discussed as part of this study. These sites were selected in order to answer the research questions outlined above (section 4.4). Firstly, the diversity of site types will

be demonstrated through a discussion of the breadth of features that can be identified through landscape analysis, aerial imagery and documentary evidence. Secondly, two sites where detailed fieldwork was undertaken will be presented. These sites, the labour camp Lager Norderney and the site of Longy Cemetery, will demonstrate the potential of archaeological fieldwork to answer questions regarding the nature and extent of Nazi persecution of the slave labourers sent to the island (Figure 5.7). Ultimately, these sites will serve as useful examples to confirm or refute the official history of the Occupation. With respect to these sites, the tasks described in section 3.2 will be undertaken.

5.5.1. HISTORICAL REVIEW

Documentary, cartographic and aerial reconnaissance data relating to the island as a whole, Lager Norderney and Longy Common was examined in accordance with the methodology outlined in Chapter 3.2.2. In light of the research questions highlighted above (section 4.4), the survey made use of recently declassified and previously unpublished archival material relating to the Occupation, including maps, plans, official reports and ground-level photographs. Recently catalogued aerial images from over 100 sorties that flew over Alderney during the Second World War allowed the archaeological remains that are likely to survive to be assessed, whilst also facilitating a re-evaluation of the spatiality and history of the sites of the Occupation.

5.5.2. ARCHAEOLOGICAL DATA COLLECTION

The areas targeted for archaeological survey are shown in Figure 5.7. Of the four main camps located on Alderney, Lager Norderney was the most accessible to the field survey equipment and it was also selected based on the fact that historical records indicate that all traces of the camp were destroyed (section 5.5.2). Longy Common represents the area of the former worker's cemetery, where the historical literature suggested mass graves were located (section 5.2.3). This was also considered the main defensive outpost on the island during the Occupation; thus it was known that there was a high concentration of fortifications that were constructed by the prisoners and labourers. However, these features were not included in the Sites and Monument Record nor were they documented on the M.I.19 map shown in section 5.3.1 (Figure 5.5).

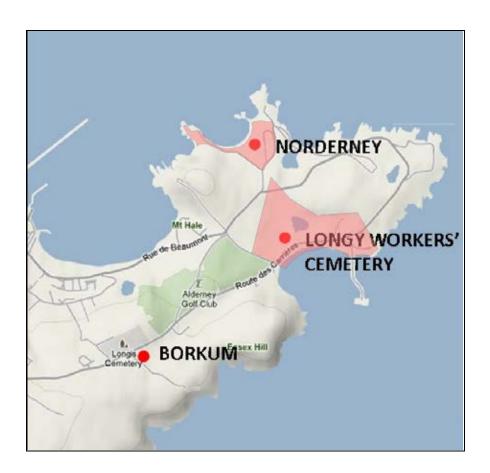


Figure 5.7. Survey areas examined on Alderney (shown in red, base map adapted from Google 2011)

Given that the focus of this thesis lies with demonstrating the potential of archaeological investigations of Holocaust sites, and given the limitations of space, the reader is referred to Chapter 3 for an overview of the interdisciplinary, non-invasive methodology developed as part of this research and Appendix 5.4 for a more detailed account of the survey strategy employed on Alderney. A summary of the latter is provided here.

At Lager Norderney, in order to facilitate the production of a digital terrain model (DTM), and to allow microtopographic features and the camp boundary to be recorded, a survey was conducted using a Leica GPS500. The DGPS and a Total Station were also employed in order to record the positions of any features visible

on the surface in the form of structural remains, vegetation change or earthworks. A resistance survey was undertaken using the TR Resistivity Meter with a Twin Probe Array over a total area of 6200m².

On Longy Common, the DGPS and Total Station were employed as part of a walkover survey aimed at recording the remains of fortifications and other archaeological remnants. A resistance survey, again using the TR Resistivity Meter with a Twin Probe Array, was also undertaken over an area of 6,500m² in order to locate the former worker's cemetery.

5.5.3. DATA FUSION AND INTERPRETATION

The data derived as part of tasks 2 and 3, was assimilated into ArcGIS for interpretation (see section 3.2.3.5). This facilitated comparison of witness plans, aerial imagery (contemporary, post-abandonment and modern), intelligence data, field survey and geophysical data, and other scholarly work relating to the Occupation. The analysis of mapping data and aerial imagery allowed regressions to be completed, thus demonstrating the development of the sites over time. The use of macro- and micro-topographic survey facilitated the creation of the first three-dimensional map of Lager Norderney, whilst georectification of the geophysical survey results from both sites allowed subsurface remains to be defined. The data collected on Longy Common through the walkover survey allowed a site database to be compiled for integration into the Sites and Monuments Record (SMR).

5.5.4. RESEARCH INTO POST-ABANDONMENT HISTORY AND CULTURAL MEMORY

This task was undertaken based on the methodology outlined in Chapter 3.2.1 and a consideration of the issues raised in Chapter 2. Although the results of this aspect of the research will be largely presented at the end of this chapter (section 4.7), this task spanned the full timeframe of the research programme and some findings have already been highlighted in section 5.3 above.

5.6. REINTERPRETING ALDERNEY

The results of the research on Alderney are presented below. The diversity of sites on the island will first be considered, followed by Lager Norderney and Longy Common.

5.6.1. DIVERSITY OF SITES

5.6.1.1. Historical Review

Although it is not possible to examine all of the sites pertaining to the Occupation of Alderney, it is important to demonstrate the diversity of features that exist. In terms of the island as a whole, this diversity is clearly demonstrated by the map and report produced by M.I.19 alluded to in section 5.3.1 (Figure 5.5), and can be confirmed by comparisons with other mapping data and contemporary aerial images. This data reveals that, in addition to the five camps alluded to in the literature, a number of other sites existed that housed workers during the Occupation (PRO HO144/22237; Figure 5.8). When the aforementioned map is compared to contemporary aerial images, its accuracy concerning the existence of these features is confirmed. It is also

evident that some of these sites were camps comprising of barracks, whilst others consisted of houses that were fenced off to accommodate specific groups e.g. Moroccan prisoners (PRO HO144/22237). A review of historical documentation suggests that the functions of these camps, and the larger camps on the island, was closely related to the logistical demands of the construction programme and the personal characteristics of the prisoners and labourers e.g. which camp individuals were housed in depended in part upon their race, religion or the crimes they were perceived to have committed.

With reference to the location of camp Citadella, Ginns (1994) has argued that the most likely location for the camp is what is now the States Dairy on Le Val. However, the M.I.19 report suggests that the structures in this area were an 'open ended barn full of German straw', 'two German buildings. The one parallel to the road is the new slaughter house which is not yet finished. The one at the right angle to the road is the Marketenderei' and a 'house taken over by the German officers. Name on board in front in Luftraum' (PRO HO144/22237). Aerial photographs confirm the existence of a series of structures on La Vallée, in an area which is now a holiday chalet park (Plate 5.18), which are referred to in the M.I.19 report as an O.T. camp (Figure 5.7). This location is suggested as the actual location of Citadella. These findings highlight the importance of the report by M.I.19 as a basis for future archaeological investigations, as well as the capability of the contemporary aerial images to highlight previously undiscovered information about the history of this period.

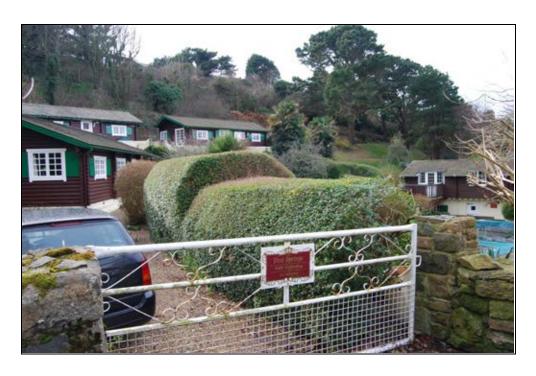


Plate 5.18. The suggested location of Citadella camp (author's own photograph)

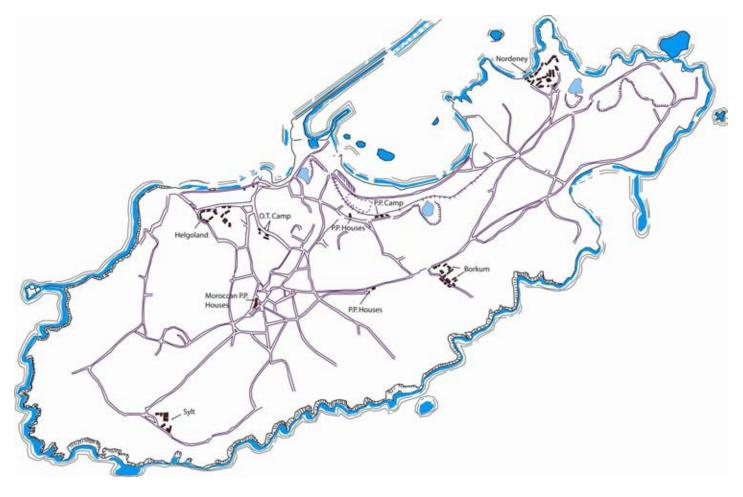


Figure 5.8. Camps located on Aldemey according to a survey by M.I.19 carried out in 1944 (annotated version by the author based on original in PRO WO106/5248B)

As shown in Figure 5.9, map regressions, involving the comparison of pre-war, German and Home Forces maps with modern data, demonstrate that a number of existing buildings were taken over by the Germans for the purpose of administering the slave labour programme and defending the island. These included houses, forts, commercial buildings and farms - for example Saye Farm became the Camp Commandant's headquarters at Norderney (Plate 5.19), Lloyds Bank was used as the HQ of FK515 Civil Affairs Unit and St Anne's church became a store (Plate 5.20). These structures and others constructed by the Germans have survived and taken on alternative functions.

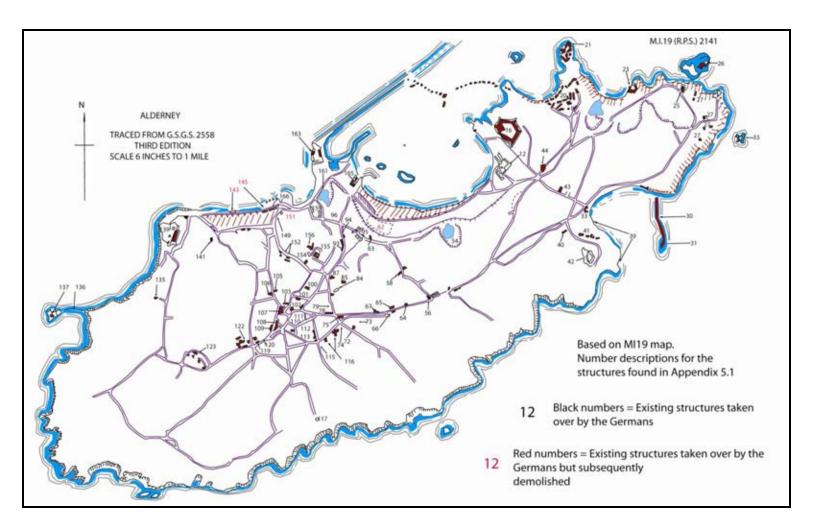


Figure 5.9. Structures located on Alderney that were taken over by the Germans as part of the Occupation infrastructure (based on a comparison of historic maps and a survey by M.I.19 carried out in 1944; annotated version by the author based on original in PRO WO106/5248B). See Appendix 5.1 for the key



Plate 5.19. Saye Farm House, now a private residence, which was used as the Commandant's HQ at Lager Norderney (author's own photograph)



Plate 5.20. St Anne's Church which was used as a store (author's own photograph)

5.6.1.2. Archaeological Data Collection

Seventy six sites were recorded on Longy Common as part of the walkover survey. These can be broadly divided into military fortifications, military earthworks, boundary features, vegetation change and archaeological monuments (Figure 5.10; Appendix 5.5) Those relating to the Occupation, included tank traps, the largest defensive wall on the island, bunkers, personnel shelters, machine gun posts, trench systems, tunnels and bomb craters (Figure 5.10; Plates 5.21-5.23; Appendix 5.5). Although a number of find spots are marked on the Sites and Monuments Record for this area, only two of the features recorded as part of this survey had been previously acknowledged.

Whilst this area represent only a small portion of Alderney's land mass, the features recorded clearly demonstrate the multiplicity of fortifications on the island, the majority of which were constructed by the slave labourers (Figure 5.10). Given that this area was one of the three main defensive positions on the island, and thus one of the main areas where the slave labourers were engaged in construction work, an examination of these features highlights the nature of various aspects of the Occupation (Bonnard 1991). In fact, the intensity of construction work in this area led to it being branded by the workers as 'inevitable death' and, as such, this area should be seen as a significant location in the 'death through work' policy employed by the Nazis (Bonnard 1991:49-50). Certainly the scale of the features recorded allude to the intensity of the defensive infrastructure across Longy Bay.

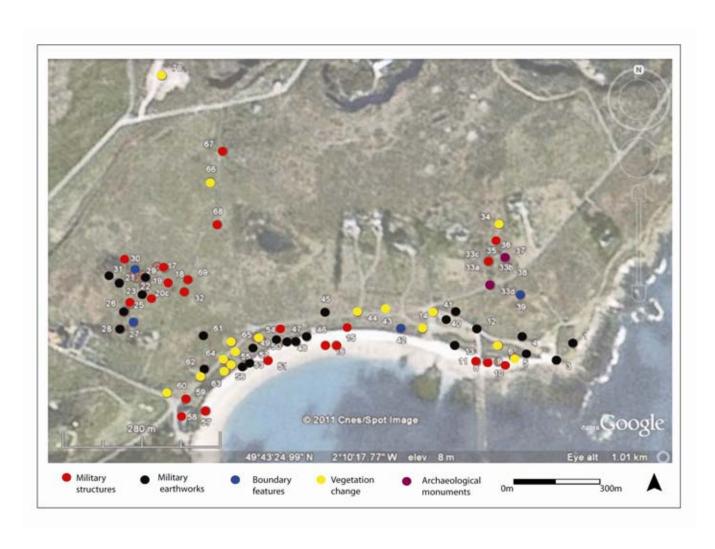


Figure 5.10. Sites recorded during walkover survey on Longy Common



Plate 5.21. Partially buried machine gun position on Longy Common (author's own photograph)



Plate 5.22 Part of a complex of machine gun positions and underground dug-outs connected by trenches, located to the east of Longy Common (author's own photograph)



Plate 5.23. One of the Tobruk pits located on Longy Common (author's own photograph)

A number of pre-war military features were also recorded (Features 4 and 5; Figure 5.10), thus demonstrating Longy Common's historical significance in the defence of the island, whilst several pre-war non-military features, including fallen megaliths and boundary walls (Features 35 and 33d; Figure 5.10), were also recorded that provide secondary information for inclusion in the island's SMR (Plates 5.24-5.25).



Plate 5.24. Fallen megaliths identified on Longy Common (author's own photograph)



Plate 5.25. Rifle range on Longy Common (author's own photograph)

5.6.2. LAGER NORDERNEY

5.6.2.1. Historical Review

Located in the north eastern corner of Alderney, the site of the former labour camp Lager Norderney is bounded by Saye Bay and Chateau L'Etoc to the north, Corblett's Bay to the east and Fort Albert to the west (Figures 5.2 and 5.8). Although over 1000 people of various nationalities were interred in the camp and subjected to forced labour, poor living conditions and harsh treatment, very little has been written about the history of the site and public knowledge concerning its role in the Holocaust is limited (PRO WO311/12-b). Where it has been referred to, this has often been as part of a general description of all of the camps - 'each consisted of wooden huts, erected by a volunteer force of French workmen'- or a few lines detailing the approximate number and nationalities of people sent there (Pantcheff 1981:6; PRO WO311/11; PRO WO311/12; PRO WO311/13). Thus a review of historical and archaeological evidence pertaining to the camp is provided below.

Norderney's Role in the Slave Labour Programme

Initially the camp housed French workers and was used as the living quarters for workers of Sager and Wörner of Munich (Pantcheff 1981). Later, it was reported that mostly 'Russians from the Ukraine' were housed in the camp (PRO WO311/11-a; PRO WO311/11-b; Pantcheff 1981). Death certificates in the Guernsey archive also reveal that Poles, Russians and Dutch labourers were housed there whilst other documentary evidence refers to the presence of Moroccans in 1944, along with German volunteers and political prisoners (IAS FK31/11; Pantcheff 1981). Around

300 Jews are reported to have been interred, with 250 arriving in October 1943 as a replacement for the loss of labour as a result of the closure of Helgoland (Pantcheff 1981; IAS AQ875/03-d). However, despite the fact that the Judge Advocate General assured the Foreign Office that the French Jews sent to Alderney 'were treated better than others working for the Germans', many witnesses refer to brutal attacks against these prisoners (Bunting 1995:296).

The prisoner population in Norderney was far from static throughout the Occupation, as a result of deaths, re-assignments and the acquisition of prisoners when other camps were closed (PRO WO311/11; WO311/13-f). The existence of a hospital at Norderney meant that ill workers would often be sent there and Hoffmann, camp commandant at Helgoland, reported that the whereabouts of these prisoners was difficult to determine when this occurred, as some prisoners died, whilst others were sent back to the other camps (PRO WO311/11). Others were assigned to work in Norderney (WO311/13-f). Nine hundred prisoners in Norderney were reported to have been housed there in January 1943 (Pantcheff 1981).

The fact that Norderney has been presented as a labour camp has often resulted in its role in the slave labour programme being played down. However, in its layout and scale it was designed to house thousands of prisoners and Ginns (1994) has suggested that it may have been run by the SS. A review of historical material demonstrates that the 'destruction through work' policy employed elsewhere in Europe was adopted with regards to those housed at this site, whilst brutal treatment was commonplace (Piper 2000:65). Many of these reports actually came

as from former prisoners. Szulc claimed that 'anything up to 15 men a day were beaten in Norderney camp' (PRO WO311/12-c), whilst Pantcheff concluded that 'the attitude towards the workers was atrocious' (IAS AQ875/03-d). Ted Misiewicz, the only prisoner to escape from Alderney, reported that the more senior inmates were encouraged to beat others (Bunting 1995).

Conditions in the camp appear to have been at their worst up to early 1943, particularly when the camp was under the control of Dietz, with Norbert Beermart reporting that 'every day you saw perhaps as many as five people die. At the beginning of 1943, ten people were dying in Nordeney daily' (Pantcheff 1981; Bunting 1995:182). Witnesses refer to a black man employed by Dietz who repeatedly beat prisoners (PRO WO311/12-c) after which other members of the German staff would 'carry the prostrate body away' (PRO WO311/12-d). One inmate from Norderney reported that 'at the time of our arrival we had all been in normal health, but constant beatings and starvation diet had reduced us to an extremely feeble condition' (Jersey Heritage Trust 2009). In his second Periodical Report, Pantcheff reported that workers were issued with only 200-250kg of bread, 15-20kg of butter plus coffee for breakfast and a litre of thin soup for dinner yet they were made to work for up to twelve hours a day, seven days a week (PRO WO311/13-c). The conditions in the camp appear to have improved following an inspection at the end of 1942 which was carried out by the Island's Medical officer, military police soldiers and officers in light of reports of the harsh treatment of prisoners (PRO WO311/12-e. WO311/13-c).

Assessing the Camp Layout

Many discussions of Norderney, and indeed the other camps on the island, have relied heavily on aerial photographs taken after demolition or on the observations made by post-war investigators (Davenport 2003; Pantcheff 1981; Figure 5.11). Whilst the former presents only a snapshot of the camp's history and reveals the extent of the site following attempts to mask its former function by the Nazis, the latter failed to focus on determining the specific details concerning the camp layout and often focused on standing structures alone. Significantly, what a review of archival material also reveals is the fact that, despite the fact that no plan of Norderney has ever been disseminated, one was possessed by the British government in 1943, whilst M.I.19 also had knowledge of the site's layout (Figure 5.12). Despite this, information concerning its nature and extent has not entered public consciousness. A considerable number of aerial images of Norderney are included in the recently re-catalogued TARA repository and, coupled with these wartime maps and archaeological survey, they have allowed the layout of the camp to be reinterpreted (RCAHMS 2010; Figure 5.13).

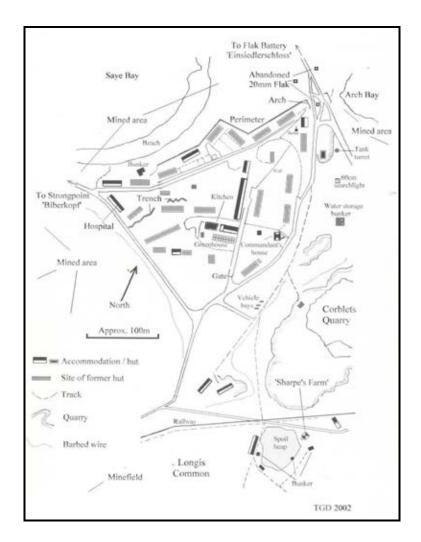


Figure 5.11. The only plan of Lager Nordemey that has been published to date, based on post-demolition aerial images (after Davenport 2003:106)

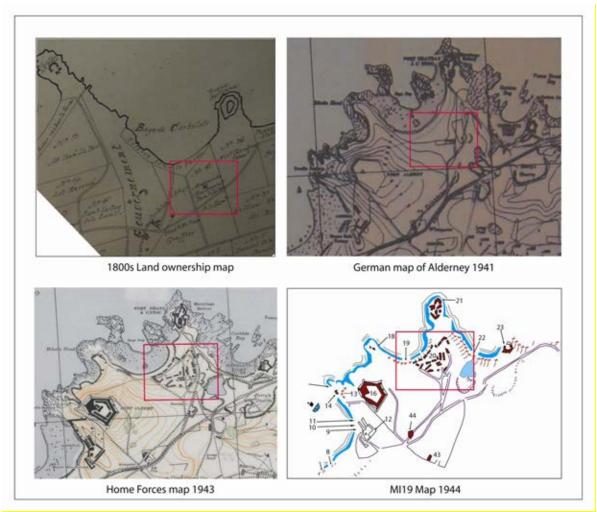


Figure 5.12. Map regression showing the site of Lager Norderney and its environs

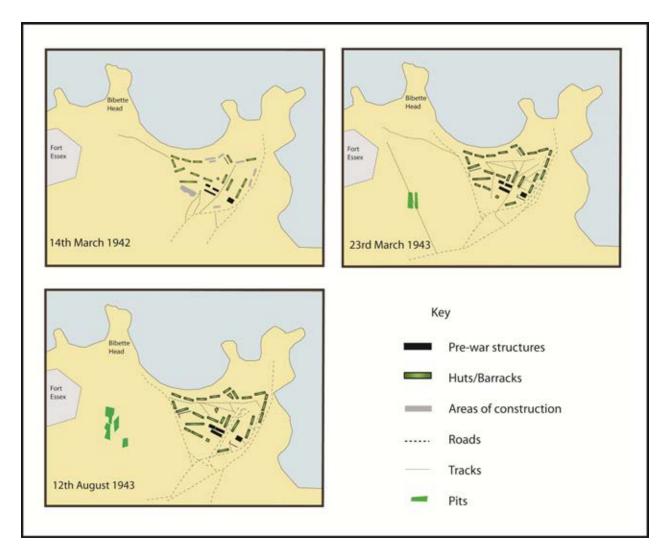


Figure 5.13. Annotations of aerial images showing the development of Lager Norderney (based on ACIU MF C0809; ACIU MF C0813; ACIU MF C1479)

Prior to the war, the area was open grassland and only Saye farmhouse, two stone outbuildings and a glasshouse existed on the site (AMA 00/122/10; Figure 5.12). These buildings were incorporated into the camp, with the farmhouse being used as the camp commandant's headquarters and the outbuildings being used as accommodation by the German staff and the camp kitchen (Davenport 2003).

Although Bonnard (2009a) states that the camp was constructed in 1941, wartime aerial photographs show no extant remains on the site until 1942, aside from those pre-war buildings alluded to above (ACIU MF C0809). By March 1942 a considerable number of structures had been erected and several more were in the process of being built (Figure 5.13). The camp boundaries made use of the natural topography: fence lines were added alongside existing roads to the south and east, and sand dunes and a raised plateau to the north (AMA 00/122/10; ACIU MF C0792; Figure 5.12). The construction of a road to the west of the camp, which would come to form part of the boundary, occurred to facilitate access to Bibette Head where the construction of considerable fortifications began in June 1942 (Figure 5.12; ACIU MF C0766; ACIU MF C0809; ACIU MF C0913). An internal road bisected the camp, likely dividing the administrative buildings from the prisoner's barracks. The existence of these separate zones is further supported by tracks shown in contemporary aerial imagery (Figure 5.13). Excepting a few minor additions and changes to the appearance of internal trackways between structures, the site retained this layout throughout its period of operation.

Although for the most part, the analysis of wartime aerial imagery corroborated with the post-liberation plan created by Davenport (Figure 5.11), a few differences were observed. Three structures were identified in the wartime images in the north-east corner of the camp, whilst the post-liberation images suggest only two were present (Plate 5.26). Conversely, Davenport identifies three probable structures on the same orientation in the south west of the camp, whilst only two can be seen to have existed in earlier images, and two buildings were observed in the south east corner, where only one exists (Plate 5.26).

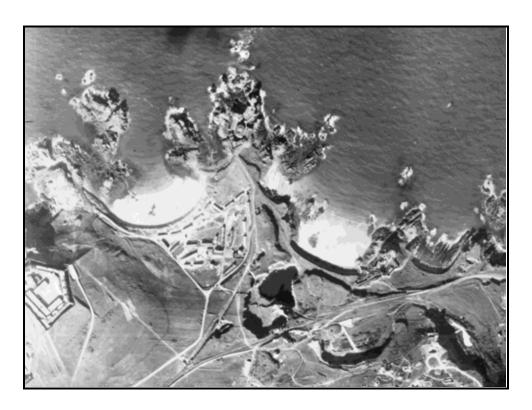


Plate 5.26. Aerial photograph of Norderney taken on 23rd January 1943 showing the full extent of the camp (after RCAHMS: National Collection of Aerial Photography / aerial.rcahms.gov.uk)

Pantcheff (1981) cites the Normandy landings of June 1944 as the catalyst for the withdrawal of the Jewish, French and Moroccan inmates and the destruction of Norderney in July 1944. However, contemporary aerial images demonstrate that the

camp buildings to the north of the farmhouse had been removed in March 1944, whilst some of the huts in the main camp compound had also been destroyed in May 1944 (ACIU MF C1978; ACIU MF C2208). By the time the liberating forces arrived in May 1945, they commented that Norderney was 'dissolved...some time ago', although aerial images demonstrate that some structures remained intact and the outlines of other buildings were still visible (PRO WO311/11-b). Post-war witness accounts and further aerial images suggest that the eastern portion of site was levelled by the liberating forces, with some alluding to the presence of a bull-dozer (Packe and Dreyfus 1990; pers. comm. Barney Winder). Aerial images taken in May 1966 and post-war photographs, demonstrate that this area had certainly been levelled by this time (Plates 5.27 and 5.28).



Plate 5.27. Aerial photograph of Lager Norderney taken in May 1966 showing the surviving structures and levelling that had taken place post-war (after AMA V58RAF7366)



Plate 5.28. Post-war photographs of Lager Norderney (top, after Ramsey 1981:100; bottom, AMA 07/433)

5.6.2.2. Archaeological Data Collection

Davenport (2003:107) is not alone in arguing that 'apart from a few hut slabs and the half-buried bunker in the sand dunes, there is little evidence that this area was the site of a forced labour camp'. Two important lines of argument can be made with regards to this statement. Firstly, even when the aforementioned remains are considered, it is unlikely that the majority of people who pass through the site would recognise these as labour camp features, owing to the fact that in their current state they are barely distinguishable from other concrete remains of the Occupation. The use of the area as a camp site and the overgrown nature of those features that have been recorded in historical literature means that these remains are likely to go unnoticed to the majority of visitors; indeed, the site actually looks less affected by the Occupation than many other sites on the island (Plate 5.28). Secondly, contrary to the belief that little survives of the camp, analysis of aerial images taken throughout the war and archaeological site investigation as part of this study demonstrated that numerous features pertaining to the camp do exist, both buried below the ground and disguised by obstructive vegetation.

A full list of the features located through a walkover survey is provided in Appendix 5.6 and their locations are shown in Figures 5.14 and 5.15. The resistance survey results are shown in Figures 5.16-5.18.



Plate 5.28. Modern photograph of the area of Lager Norderney (author's own photograph)

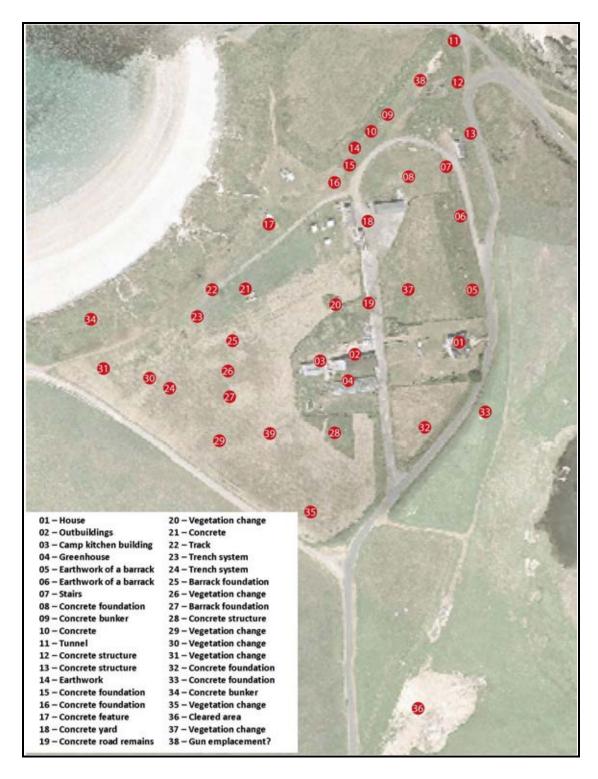


Figure 5.14. Plan of features identified during the survey of Lager Norderney, overlaid onto a modern aerial photograph (after Alderney Wildlife Trust)

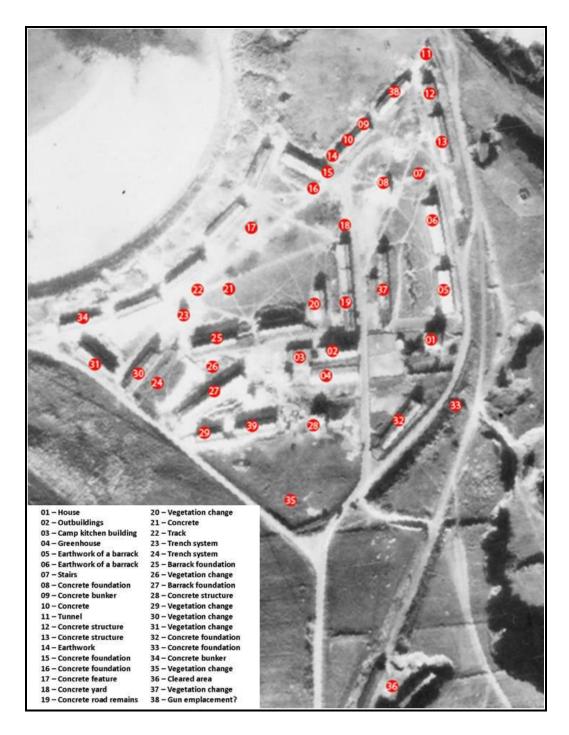


Figure 5.15. Plan of features identified during the survey of Lager Norderney, overlaid onto a contemporary aerial photograph (after RCAHMS: National Collection of Aerial Photography / aerial.rcahms.gov.uk)

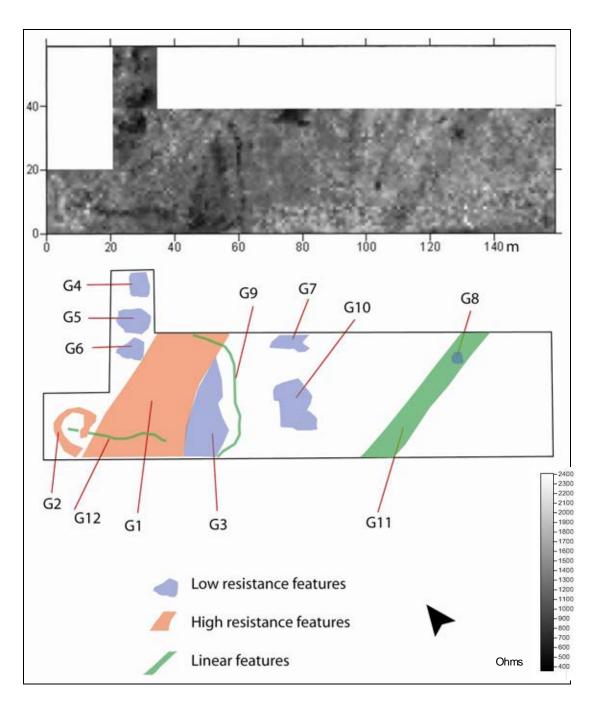


Figure 5.16. Resistance survey data for Lager Nordemey

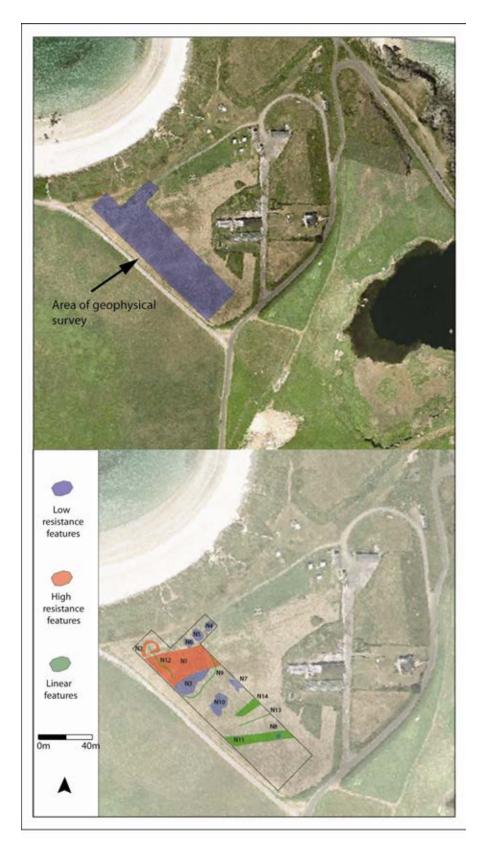


Figure 5.17. The location of the resistance survey at Lager Nordemey, (top) and the interpretation plan of the results (bottom) overlaid onto a modem aerial image (after Alderney Wildlife Trust)

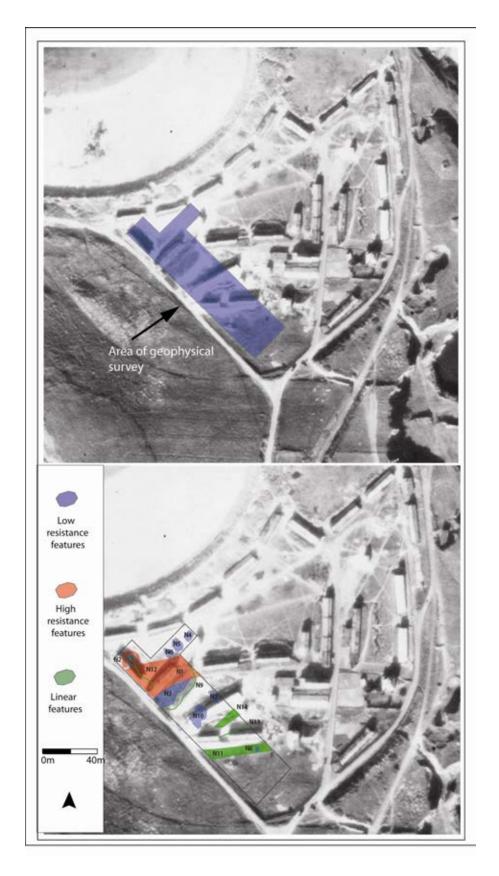


Figure 5.18. The location of the resistance survey at Lager Nordemey, (top) and the interpretation plan of the results (bottom) overlaid onto a contemporary aerial photograph taken in 1943 (after after RCAHMS: National Collection of Aerial Photography / aerial.rcahms.gov.uk)

An analysis of this data demonstrates several important points relevant to an understanding the layout of the site, what remains of it and, consequently, the postwar processes that have shaped its current state. The combined use of aerial images, topographic survey, walkover survey and geophysics demonstrated that indicators, be they vegetation change, geophysical responses, topographic change or visible remains on the surface, exist for the majority of structures visible in contemporary aerial imagery. Only the location of five barracks along the northern camp boundary, which are now masked by the sand dunes (Figure 5.19), and a further structure, which actually survived after the war but which is now located in an area heavily disturbed by the construction of the modern campsite buildings (Plate 5.28), could not be located.

Part of the eastern boundary survives, close to Saye farmhouse, as a concrete wall with remnants of the metal posts that would have been located along its top (Plate 5.29). Steps recorded during walkover survey (N07; Appendix 5.6) that provided access to the eastern road support the theory regarding separate camp areas alluded to above (section 5.6.2.1). Such access was unlikely to have been afforded to prisoners and, as such, it is probable that they were housed in the west area of the camp.



Plate 5.29. Surviving portion of the eastern boundary at Lager Norderney (author's own photograph)



Figure 5.19. Contemporary aerial image of Norderney overlaid onto a modern aerial photograph (aerial images used with permission of Aldemey Wildlife Trust and RCAHMS: National Collection of Aerial Photography / aerial.rcahms.gov.uk)

A number of barrack foundations (N05, N06, N08, N10, N14, N15, N16, N20, N25, N27, N29, N32, N37, N39) were identified within the camp boundaries, several of which were visible as concrete remains on the surface (Figure 5.14-5.15; Appendix 5.6).

A feature visible as vegetation change and as an area of high resistance (N31, Figure 5.14; G1 and G2, Figure 5.17) is reported in the literature to have been the hospital barrack (WO311/13-c; Freidman 1963). N30 was identified as an anomaly in the resistance survey (G1), with the trench adjacent to it also being visible (G9, Figures 5.14 and 5.15; N24, Figure 5.15). The use of the resistance meter at the site proved extremely difficult, owing to the presence of an apparently solid surface only a few centimetres below the ground and the extremely dry conditions during the survey. Therefore, a number of null readings had to be entered; however, these difficulties actually provided evidence of the existence of features. The presence of such a surface and the aforementioned foundations indicates that both the demolition of the camp by the Nazis and post-war activities resulted in the removal of the wooden barracks alone (Packe and Dreyfus 1990:122). The foundations and concrete structures remained intact, with the sand, overburden and vegetation that they would become disguised in actually serving to protect them from further demolition. The presence of subterranean features close to the surface was further confirmed by service excavations (water) undertaken at the site during the survey, which revealed that the road that ran across the northern edge of the camp still exists and comprises of cobbles. Indeed, whilst post-war levelling activity has prevented the detection of the majority of structures using micro-topographic analysis (Figure 5.20), it has not affected the differential vegetation growth at the site as a result of the presence of these remains (Figures 5.14 and 5.15; Appendix 5.6).

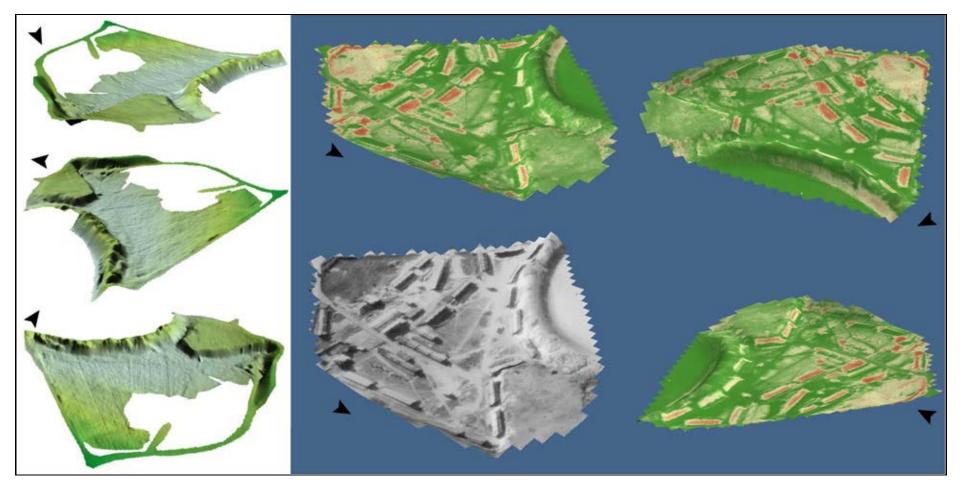


Figure 5.20. Digital Terrain Models of Lager Nordemey based on DGPS elevation data (left) and an aerial image of the site, taken on the 21st January 1943, overlaid onto the Digital Terrain Model (right; after RCAHMS: National Collection of Aerial Photography / aerial.rcahms.gov.uk)

Perhaps most significant is the fact that, although the pre-war buildings that still exist on the site are often described as the only standing remains, the discovery of several partially buried bunkers and concrete structures reveals this to be false. Similarly, this demonstrates that the notion often expressed in historical literature, that excepting the post-war buildings the entire camp comprised of Belgian sectional huts, does not accurately convey the complexity of the site (Bonnard 2009a:64).

Indeed, it appears that a number of defensive structures were present within the camp (N09, 34 and 38, Figures 5.14 and 5.15; Appendix 5.6). It is possible that feature N09 is the machine gun post referred to by witnesses as being located near to the tunnel (N11) that lead to Corblett's Bay (Knowles Smith 2007, Steckoll 1982; Bloch in Jersey Heritage 2009). This tunnel was often referred to as a 'death tunnel' where inmates were to be sent should the British invade the island (Knowles Smith 2007, Steckoll 1982). Dr Bloch stated:

'They put us into the tunnel and hermetically sealed the doors and air vents. This tunnel was about 20m long and 5m wide. Eight hundred of us were forced into it. In front of the entrance to the tunnel, a German sat manning a machine gun. It is certain that had we been kept inside for a few hours, most of us would have died. We were kept there for 15 or 20 minutes and many became ill' (Jersey Heritage 2009).

Similarly Dr Uzan also reported that 'Evers told us that we were being put in the tunnel for our own safety because the Allies had mounted a sea-borne invasion on

Alderney. But the machine gun at the entrance to the tunnel was not aimed towards the sea against the so called aggressor. It was aimed at us' (Uzan in Jersey Heritage 2009). The location of this gun emplacement (N38) and a concrete bunker (N34) within the camp, also raises questions over the purpose of such features (Figure 5.15; Appendix 5.6); indeed, their locations, being bounded by the sand dunes on one side and the camp barracks on the other, indicates they would have been of little use in defending against aerial or sea-borne attacks and, thus they are more likely to have been guard positions for monitoring those interred in the camp.

A number of other concrete structures were also recorded that have not previously been alluded to in the literature as having survived after the war (N12, N17 and N28, Figures 5.14 and 5.15; Appendix 5.6). Probable doorways and dividing walls of subterranean features were observed for features N12 and N28 when obstructive vegetation was removed, as shown in Plates 5.30 and 5.31, and Figures 5.19 and 5.21. This not only demonstrates the presence of buried structures within the camp, but it reveals that features which historians believed to be the foundations of structures that were demolished, actually represent the roofs or upper floors of previously unidentified features. This clearly shows the lack of investigation of the physical remains that has been carried out in the past and demonstrates how noninvasive methods and the simple act of clearing obstructive vegetation can provide new insights into neglected areas. The nature of these features has also not been noted in the past where wartime aerial imagery has been the sole source. Although clearly extremely useful for locating features, the characterisation of structures using this data alone is often difficult for those that are discrete or camouflaged when

viewed from the air. Therefore, such analysis should be coupled with on-site investigation which, in this case, has allowed surviving features to be located and defined in terms of their extent and nature.

The identification of these features raises important questions over their function within the camp. Georgi Kondakov, a former inmate on Alderney, suggested that N12 was the toilet block of the camp, which may be supported by the existence of apparent drainage holes (Bonnard 1991). However, the subterranean features on the south side of this feature indicate an additional function. Informants interviewed by M.I.19 suggested that an underground Benzine dump, and shower and bathing facilities existed in this area and it is possible that N12 could be the latter (PRO HO144/22237; Figure 5.21).

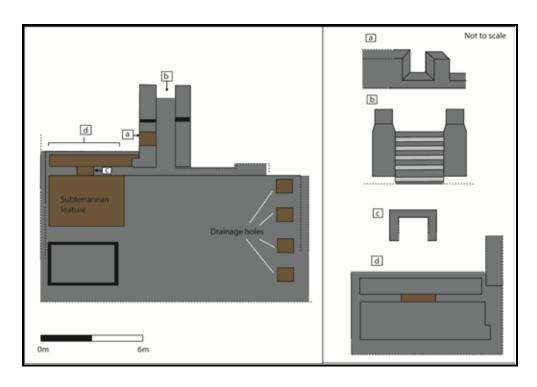


Figure 5.21. Plan of N12, located within Lager Nordemey



Plate 5.30. N12 located at Lager Nordemey (author's own photograph)

The existence of the buried structure N28 in the area that housed the majority of prisoners and labourers is particularly difficult to explain without further intrusive

activity (Plate 5.31). Aerial photographs demonstrate that this structure was not fenced off with the pre-war buildings inhabited by the camp administration and was in fact located inside the main camp area (Figure 5.13). This structure comprises of partially buried doorways and internal walls at its northern end, where the height of the ceiling appears to have been level with the current ground surface, whilst the southern end comprises of solid concrete with possible holes for plumbing (Figure 5.22). On the one hand, the appearance of this structure once again suggests an underground storage facility or personnel shelter. However, as with structure N13, would the camp administration have risked housing materials, particularly fuel or ammunition, so close to the living quarters of the prisoners and labourers? The other possibility is that N28 was used for defence purposes and the existence of other bunkers around the camp perimeter suggests that there was a desire to patrol the area. Once again, questions remain about whether such a feature was in place to defend against enemy attacks or maintain control over the camp's population. Comparison with a review of the fortifications on Alderney conducted by Davenport (2003) and other Atlantic Wall structures demonstrates that what can be seen of this structure is similar to flak gun positions or personnel shelters, particularly given its split levels (Fuhrmeister 2009; Plate 5.32). Given the fact that the majority of these features are buried, further evidence aimed at answering these questions can only be gained through excavation to determine their full extent and the presence of any artefacts, a process which it is hoped will take place in the future (section 5.8).



Plate 5.31. Buried structure (N28) located at Lager Nordemey (author's own photograph)

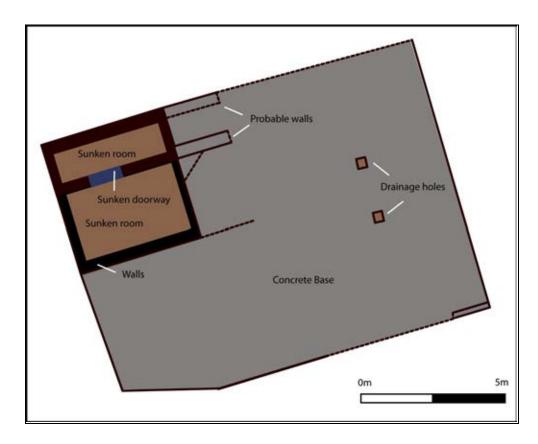


Figure 5.22. Plan of buried structure N28 (EDM data)



Plate 5.32. A camouflaged and partly buried military installation typical of those found along the Atlantic Wall (after Fuhmeister 2009:47)

Whatever the function of these structures, their existence in the bracken and the fact that they have not been noted in any of the literature concerning the camp, once again reveals important information concerning attitudes to this site.

5.6.2.3. Assessing the Wider Landscape

The survey also permitted the identification of further features in the immediate vicinity of the camp, which can be seen to have formed part of its wider landscape; indeed an examination of camps pertaining to this period should not be restricted to the physical boundaries denoted by fences. Some significant examples are discussed here to demonstrate the potential of wider landscape analysis. Barrack foundations were identified both to the east (N33), in the form of concrete visible on the surface, and the south (N36), in the form of vegetation change (Figures 5.14 and 5.15;

Appendix 5.6). These barracks were likely to have functioned as temporary accommodation or storage for labourers working in the nearby quarry. Finally, a track leading to what appears to be a series of linear pits on the hillside on the west side of the camp can first be seen in aerial images dating to March 1942 (Figure 5.13; ACIU MF C0809). Further tracks appear to have led from Fort Albert to the west. By July 1942, it appears that these pits had been backfilled (ACIU MF C0979) and they continue to be visible as vegetation change until June 1944, when they seem to have been partially reopened (ACIU MF C0704). It is interesting that the use of these pits appears to coincide with the construction and demolition phases of the camp's operation. However, their location, upon a difficult to access part of the hillside, raises questions over their function and prevented access with geophysical survey equipment.

Although Lager Sylt is often referred to as the main camp on Alderney, the survey has revealed that Norderney was actually the largest labour camp on the island, both in terms of the number of buildings on the site and the number of prisoners and labourers sent there (Pantcheff 1981). The combined use of survey and research methods has allowed a comprehensive overview of the surviving extent of the camp to be provided and has demonstrated attitudes towards the site that have emerged since the war. Similarly, the combined analysis of historical and archaeological data has facilitated the development of a three dimensional model of the site which will act as a heritage and education tool to enhance understanding of the site (Figure 5.23).



Figure 5.23. 3D visualisation of Lager Norderney based on historical and archaeological data

5.6.3. LONGY CEMETERY - BURIALS AND DISPOSAL ON ALDERNEY

5.6.3.1. Historical Review

The burials of the slave labourers sent to Alderney are perhaps the most debated topic with regards to the history of the Occupation. Along with St Anne's cemetery, the cemetery for foreign labourers located on Longy Common has often been cited as proof by historians writing the official history of the Occupation that an ordered and systematic burial system was in place (Cruikshank 1975; Pantcheff 1981). For example, Cruickshank (1975:204) argued, 'even if ten times as many OT workers had died they [the Germans] would have produced death certificates for them, secure in the belief that they would have to answer to the world for their deaths'. This contrasts with the views of others, in particular witnesses, who allude to a chaotic and often opportunistic system, whereby victims were disposed of in the sea, in quarries and in the fortifications, buried where they fell or concealed in mass graves (PRO WO311/12-f; PRO WO311/13-g). The exhumations in the 1960s, in particular those at Longy Common where information on the 326 bodies recovered has been lost, have complicated rather than clarified information concerning the nature of disposal and the number of victims (pers. comm. Volksbund Deutsche Kriegsgräberfürsorge; section 5.3.3). In order to strip away the myth and conjecture surrounding this subject and in order to begin to reassess the burial procedures, archival research has been undertaken alongside a geophysical survey of the area of the former cemetery on Longy Common.

A Burial System?

Plans and photographs of Longy Cemetery often suggest an ordered, clearly marked burial site, where six rows of crosses denoted the slave labourers graves and individual plaques marked the graves of French Jews on the southern boundary (Plates 5.33 and 5.34)



Plate 5.33. The crosses marking the six rows of graves in Longy Cemetery (after AMA 79/024.4)

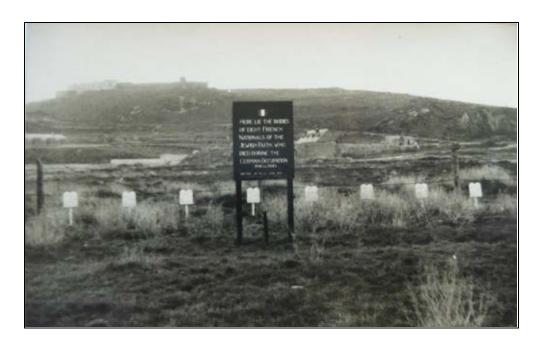


Plate 5.34. The plaques marking the graves of French Jews buried in Longy Cemetery (after 97/312.4.20)

However, a review of burial lists compiled by the Commonwealth War Graves Commission and the post-war investigation teams reveals a chaotically laid out site, out of chronological order, where the names of more than one victim appeared on some crosses (CWGC-a; Figure 5.24; Appendix 5.2). If the dates on the crosses were correct, then this would mean that burials between February and September 1942 onwards were randomly dispersed, with the areas in between later being filled with graves in 1944 and 1945 (Figure 5.24). Similarly, some victims also had graves in St Anne's cemetery, whilst other graves were shown upon exhumation not to be marked at all (CWGC-a; CWGC-d; CWGC-e). Disparities between the various burial lists compiled after the war also suggests that the lack of attention to ensuring that the victim's names were visible and accurate extended beyond the Occupation (CWGC-f; Guernsey Star 1947). Potential explanations for this disorder can be found in archival resources and offer an insight into the reality of burial procedures, the

various sites at which the bodies may have been located before disposal and, finally, the true nature of their final resting place (PRO WO 311/11; PRO WO311/12).

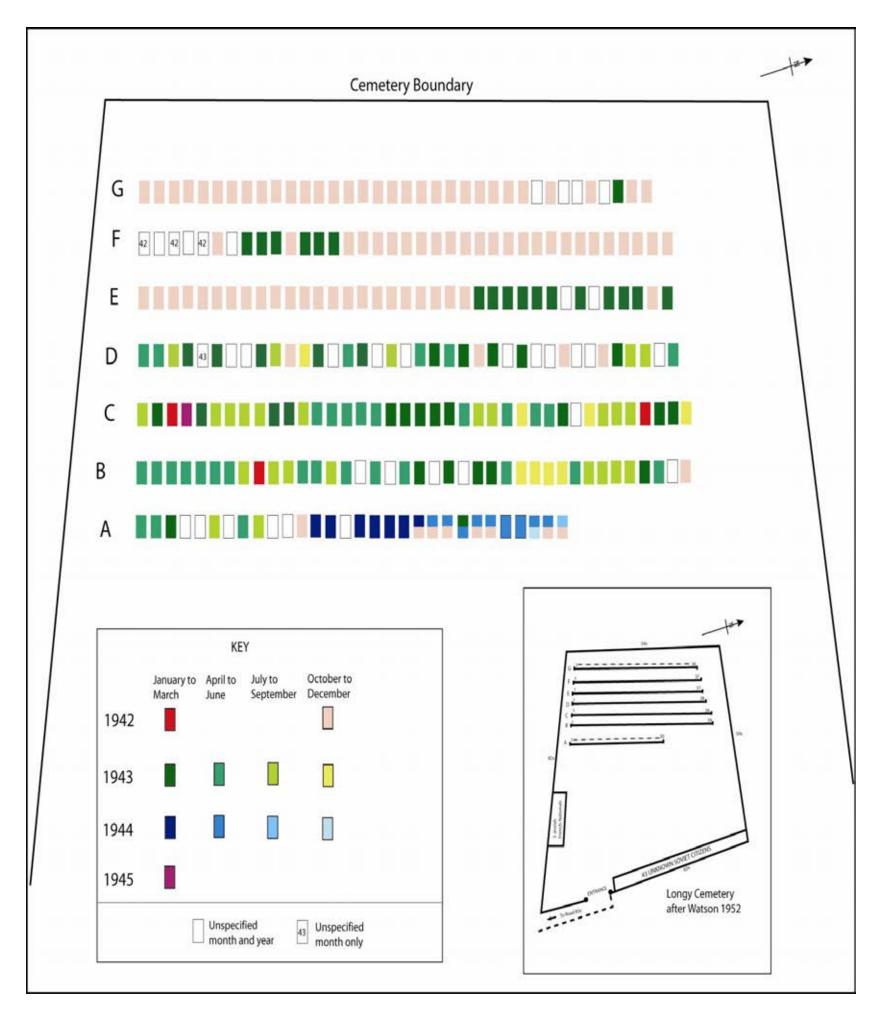


Figure 5.24. Dates of burials in Longy Cemetery (based on CWGC-a)

The official procedure following death, as reported by Russian prisoners after the war, was that the bodies of the deceased would be sent to the camp hospital, where notifications which 'amplified the death certificate' would be prepared (Cruickshank 1975:204). As this example from Norderney demonstrates, this certificate often bore a standard text:

'the dead man was brought from the Nordeney camp to the cemetery at St. Anne in a lorry and was carried by his comrades to his grave. A cross prepared by his firm was set up. The dead man left no personal effects' (Cruickshank 1975:204).

Following this, in theory a system was in place whereby ambulance drivers and a one-eyed gravedigger would collect the corpses for burial (PRO WO311/12-e; WO311/12-h; WO311/11-l; PRO WO311/11-m). Some witnesses refer to a false-bottomed coffin, which was discovered after the war, in which bodies would be transported and then tipped into the grave so that the coffin could be re-used (Bonnard 1991:53; IWM MISC 2826 189/1-2-c; Plate 5.35). Crosses bearing their names were then supposed to be inscribed and erected immediately (Bonnard 2009a).



Plate 5.35. The false-bottomed coffin found after the war, which was used to tip the corpses into the graves on Longy Common (after RAF PC98/173/6057/6)

However, whilst such a procedure did occur in some cases, considerable evidence exists that suggests a less regulated approach. The documentation concerning the burials on the island reveals that, although varied over time, the system in essence remained chaotic and inconsistent. For example, 'in the early days — mid 1942 — the procedure was not too strict and higher authority was not usually informed of the cause of death' (Pantcheff 1981:64-65). Later, when a more ordered system was supposed to be in place, as Pantcheff (1981:64) reports 'as with the rations, so with the death certificates; what happened in theory and on paper was not always what happened on the ground'. Even as late as 1944, by which time the system of burial should have been well established, a contemporary report states that 'the military graves officer has given instructions that in the case of such bodies grave reports

should not be made in every individual case but a collective report should be submitted from time to time' (PRO WO311/13-e). Indeed, doctors did not always see the dead, despite claims that they had certified death (WO311/13-a). Perhaps the chaotic nature of certification of death and arrangement for burial is best demonstrated by the fact that accounts exist where victims were collected by the lorry and transported for burial when they were still alive – 'I could not get up and that is why I was put into the lorry, as if I were dead. When they wanted to drop me into the pit, my fellow countryman Nikolai Rjantzev (he was in another camp, and they had dug this pit) suddenly noticed that I was alive' (Bonnard 1991:52). Thus it is evident that there was little in the way of regulation of deaths and, therefore, most likely burials.

Numerous accounts suggest that bodies were rarely collected promptly: the dead 'were left lying on the ground for a day and a half and then some other prisoners carried the bodies off in a wheelbarrow and buried them' and that bodies were frequently discovered weeks after death, having become concealed in ditches or even in the road, covered with leaves (PRO WO311/12-b; PRO WO311/11-n, PRO WO311/12-e; PRO WO311/11-m; PRO WO311/11-o). This is supported by a batch of death certificates now housed in the Guernsey Archive, which show that, although the average time before burial was between one and three days, some people were not buried for between a week and ten days (IAS FK31/11; Appendix 5.7). Some witnesses also report seeing two or three bodies tipped into the same grave on Longy Common (PRO WO311/11-k; Pantcheff 1981:71-72; PRO WO311/12-i; PRO WO311/12-j). As greater numbers of labourers died, the process became even

slower. What can loosely be termed temporary mortuary facilities were created across the island in huts, garages and other buildings (PRO WO311/11-I). In some cases, even the huts housing the workers were subdivided and used to store corpses (Bonnard 1991). Numerous individuals are referred to by witnesses who have no known grave on the island (PRO WO311/12-c; PRO WO311/12-m; Pantcheff 1981).

Concerning the marking of burials, following a visit to inspect the graves on Longy Common in 1945, even the German administration themselves commented on the disorganised system in place: 'I was struck by the disorder [in the cemetery] and marked lack of dignity with which the corpses had been buried ... I am extremely doubtful if the names on the individual graves were correct' (PRO WO311/13-h). Johann Hoffmann also reported that some of the crosses had been removed and the names re-inscribed on them, which subsequently led to them being re-erected in the wrong location, whilst Sonderführer Wilhelm Richter stated:

'I went to the cemetery and found the last seven had no crosses. I saw a heap of crosses there, nearly all had names on them. I used them for the last seven graves. All the other graves had crosses. I do not know in which graves the people whose name appeared on the crosses were buried. ...I cannot explain where the people are buried whose names appear on the reverse side of eight of the crosses in the ['Russian'] cemetery. I cannot understand why the graves have crosses which are not in chronological order of death' (PRO WO311/13-f; PRO WO311/12-k).

Similarly, Obergerfreiter Kraus recorded how Richter ordered staff 'to level a number of graves on the Russian cemetery remarking, the cemetery was too big. He ordered, too, that a cartload of crosses with names on them were brought to the farm from the cemetery and burnt there in the kitchen', following the invasion of France by the British in 1944 (PRO WO311/12-I). This may offer one potential explanation for the fact that a number of graves located during the exhumations in the 1960s had not previously been identified in the post-war surveys. Similarly, it goes some way to explaining the disorganised nature of the marked burials in the cemetery, as observed in Figure 5.24 above.

Finally, previously classified archival material also refers to a Berlin Commission that visited the island in December 1942 to inspect the camps and burial sites (PRO WO311/11-a; PRO WO311/13c; PRO WO311/13-f; PRO WO311/13-i). In particular, this Commission was tasked with determining why there had been so many deaths in the early part of the Occupation (PRO WO311/11-b). The reports suggest that this Commission removed documents from the island which contained information about these earlier killings. Two key points emerge from this. Firstly, the removal of these documents severely limits what is known about these early deaths and secondly, if the authorities were keen to cover up these killings, it seems plausible that they would have also been keen to disguise the disposal of the victims. Indeed, Haddock notes that burials marked by crosses were only implemented after this Commission had been to the island, a full three months after the first known burial in Longy Cemetery, thus providing further evidence for unmarked burial sites and further explaining the disordered nature of the cemetery layout (PRO WO311/11-a).

Additionally, this pattern of disorganised killings and disposals in the early period of German control is consistent with trends noted during the Holocaust across Europe as discussed in Chapter 6.

Assessing the Cemetery Layout on Longy Common

Aerial images can be used alongside the burial lists to demonstrate the development of the cemetery during its period of use. The images reveal no signs of ground disturbance on the 30th September 1942 despite the fact that cemetery records based on the dates inscribed on the crosses suggest that the first burial in the cemetery was the 26th February 1942 (ACIU MF C1090). On 23rd January 1943 a large area of disturbance is clearly visible (Figure 5.25) but the absence of images in the intervening period makes pinpointing the exact date of its creation difficult. However, it is interesting to note the existence of the cemetery in January 1943, shortly after the visit by the aforementioned Berlin Commission.

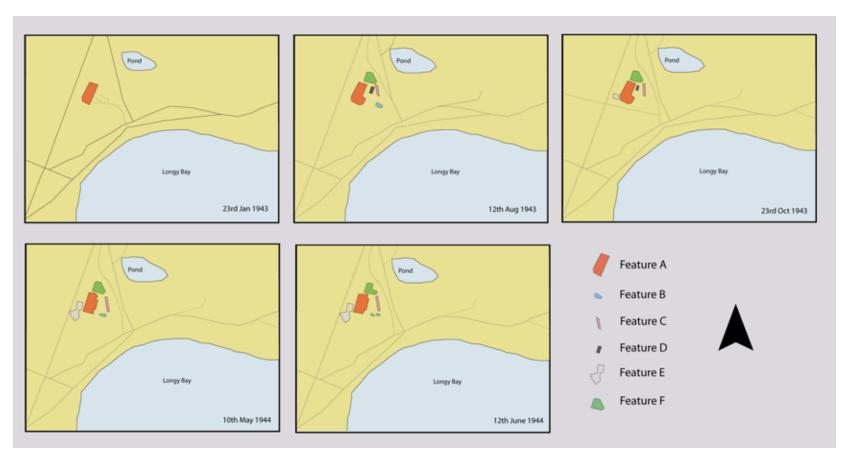


Figure 5.25. Annotations of aerial images of Longy Cemetery (based on ACIU MF C1183; ACIU MF C1479; ACIU MF C1563; ACIU MF C2208; ACIU MF C0704).

¹ These annotations are based on aerial photographs taken by the RAF. Various other features exist in the vicinity of the cemetery that have not been annotated given that the intention of this figure is only to demonstrate the development of the cemetery over time. These images should not, therefore, be taken as an accurate representation of the whole area; for this, the reader is referred to the original aerial images.

In its first months of existence, the cemetery did not have clear boundaries but the graves appear to have been confined to the west of what would later become its area (Feature A; Figure 5.25). Tracks can clearly be seen that reveal the routes taken to transport the bodies to the graves (Figure 5.25). By October 1943, the cemetery has very clear boundaries, which from ground level photographs and surviving earthworks can be seen to have been a raised earth embankment upon which fence posts were placed (Figure 5.25). The growth of the cemetery can be clearly seen over time in the aerial images, with almost a daily record of the burials being provided during 1944 when reconnaissance efforts were increased due to events in France (pers. comm. RCAHMS).

Evidence of Further Burials

As noted, there have been few attempts to determine whether further burials exist on Alderney and much of the documentary evidence and witness testimony has been downplayed, overlooked or, in some cases, ignored (section 5.3). Documents located in the National Archives, uncovered by the author and never before reported on in the literature, reveal that, despite countless records that deny that any evidence of mass graves was ever found, what was believed by the authorities to be a mass grave was marked within Longy Cemetery until at least the early 1950s (FO 371/100916; CWGC-I; WO311/13-a). Photographs reveal a large wooden cross adjacent to the eastern boundary, which was erected by the British liberating forces in 1945 (FO 371/100916; Plate 5.36). Significantly, the grave was alluded to in both a report prepared by the Imperial War Graves Commission (IWGC) on the 25th June

1945 and in one of Pantcheff's previously classified Periodical Reports on Atrocities Committed in Alderney, yet it has never been referred to as a mass grave in any subsequent publications, including those by the latter author himself (CWGC-g; WO311/13-a).



Plate 5.36. A cross marking the communal grave of 43 unknown Russians, taken by Watson in the early 1950s (after PRO FO 371/100916)

A survey in 1952 by Watson, a representative for the Imperial War Graves Commission, and subsequent correspondence regarding his report provide the greatest insight into the nature of the potential grave (PRO FO 371/100916). A plan showing the location of the purported mass grave in relation to the other marked burials on Longy Common was created (Figure 5.26), whilst it was noted that 'the communal grave in which 43 unknown Russians are buried is marked by a wooden cross 5ft. high, surrounded by a single strand wire running through wooden posts

about 1ft. high. The cross and posts are now very dilapidated' (PRO FO 371/100916).

Other independent reports, such as the following from the South West Regional Inspector for the Imperial War Graves Commission, also allude to the grave:

'You refer to a large common grave which I take to be a communal or trench grave on the east side of the Cemetery, in which 43 Unknown Russians were buried. Our record of this grave is that it was roughly level turfed and about 40 yards long, I believe the only high mound covered with stones is the heap around the wooden cross erected by our Military Authorities after the re-occupation' (CWGC-h).

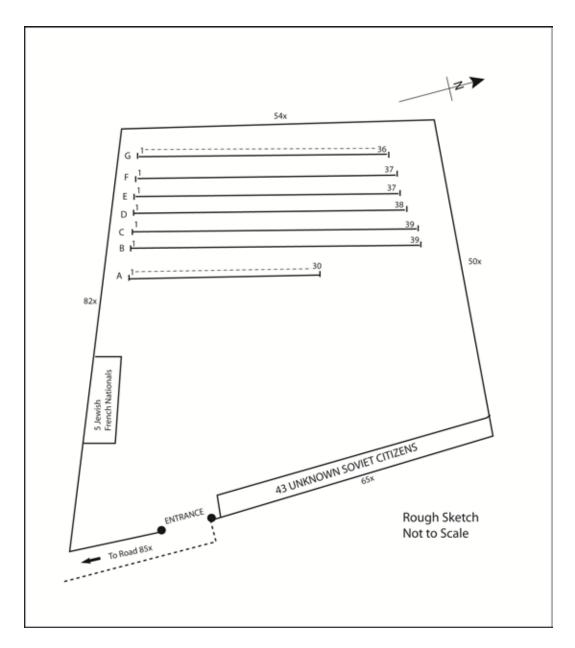


Figure 5.26. Copy of a plan of the cemetery on Longy Common created by Watson in the early 1950s, showing the mass grave (annotated by the author based on PRO FO 371/100916)

A series of modifications were also made to the cemetery following Watson's survey which may account in part for the lack of knowledge of the mass grave's existence. Following consultation with the Garrison Engineer, Watson recommended the erection of a bronze plaque in the centre of the grave, which would display 'in memory of 43 unknown Russian citizens, who died during the German Occupation 1941-45' and the outline of the grave was to be marked with concrete posts (PRO FO

371/100916). Notably, Watson recorded how the States of Alderney did not want markers at the site of unmarked burials in St Anne's churchyard 'as there is no guarantee whatsoever that the remains are actually buried in the particular space indicated' (PRO FO 371/100916). This would suggest that, as they saw fit to mark it, they must have had evidence that confirmed that the 43 Russians were buried in the mass grave in Longy Cemetery.

However, problems with funding and liaising with the Russian government, coupled with unsatisfactory work at the site meant that progress erecting the memorial was slow (PRO FO371/100916; PRO FO371/111797; PRO FO371/106597). A document held in the Commonwealth War Graves Commission archive states:

'the concrete post and wire fence erected by the States as agent for the Commission (at Russian expense) has been put up in a very indifferent manner and I have arranged for it to be straightened and strengthened where necessary. The bronze plaques recently erected are fixed to low level concrete pillars' (CWGC-i).

Further complaint letters about the state of the cemetery also exist, ranging from letters from war graves inspectors through to one written by a member of the public who had recently spent her holidays on the island (CWGC-b; CWGC-j; CWGC-k). However, a graves registration form held by IWGC states of the mass grave that the

'outline of this grave is marked by 6 concrete markers and a bronze plaque has been fixed to a concrete block in the centre of the grave',

thus suggesting that at least some of the work was undertaken (CWGC-I; CWGC-m).

However, it is unclear whether the work was ever entirely completed, as negotiations for what was to become the Anglo-German Agreement on German War Graves in the United Kingdom Territory (1959) began in 1956 (PRO DO35/6145; PRO HO284/84). Perhaps this work, where the grave was unmarked for some time, explains in part why knowledge of it has been lost.

A burial list located in the Commonwealth War Graves Commission archive reveals that 43 unknown individuals were listed as having been exhumed in 1961 (CWGC-a). The fact that this number is identical to the number listed on the aforementioned memorial suggests that these individuals were interred in the purported mass grave.

The evidence presented by the aforementioned historical sources regarding the extent and nature of the cemetery, and the possibility of further burials is convincing. However, in the past, many allegations regarding these issues have been discounted in light of a lack of physical evidence; indeed as Bob le Sueur has argued '[it] is not to say there was no truth whatever to these stories, it is simply that we were unable to establish any' (Le Sueur 1993; Knowles Smith 2007). Therefore, archaeological survey, including the analysis of contemporary aerial photographs and resistance survey data, was deemed essential in order to attempt to determine whether physical evidence could be provided to confirm or refute such claims.

5.6.3.2. Archaeological Data Collection

The results of the resistance survey undertaken at Longy Common are shown in Figures 5.27 and an interpretation plot is provide in Figure 5.28. These results highlight that, despite being neglected since the 1960s, the overall shape of the cemetery survives (L1) and the rows of the former graves are clearly visible (L9). Additionally, the excavated area that contained eight Jewish graves, prior to their exhumation and subsequent repatriation to France in 1949 and 1961, can be observed (L10; Pantcheff 1981).

Resistance survey undertaken at the cemetery confirmed the existence of a low resistance feature consistent with a pit, measuring approximately 40m x 20m, in the area believed to have been the mass grave (L6, Figure 5.28). A linear disturbance in the area suggested by the sources outlined in section 5.5.3.1 is visible in aerial imagery from August 1943 onwards (Feature C, Figure 5.28). However, the lack of aerial images between January 1943 and August makes pinpointing the exact date of burial impossible. However, unlike the linear feature depicted in the aerial images, in the resistance survey data this feature is irregular in plan, suggesting that it has been disturbed. This would be consistent with the grave having been excavated in the 1960s. Comparison with the geophysical response of the excavated rows of graves also reveals a distinct difference, suggesting that the purported mass grave did not transpire to be individual unmarked intermments.

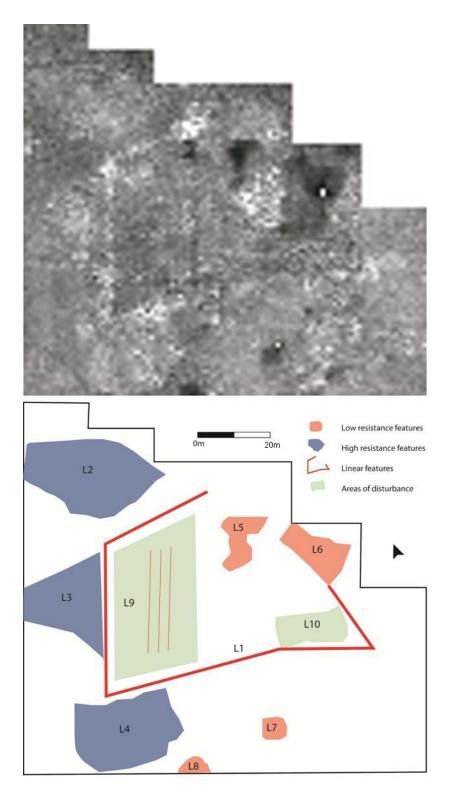


Figure 5.27. Resistance survey results for Longy Common, Alderney

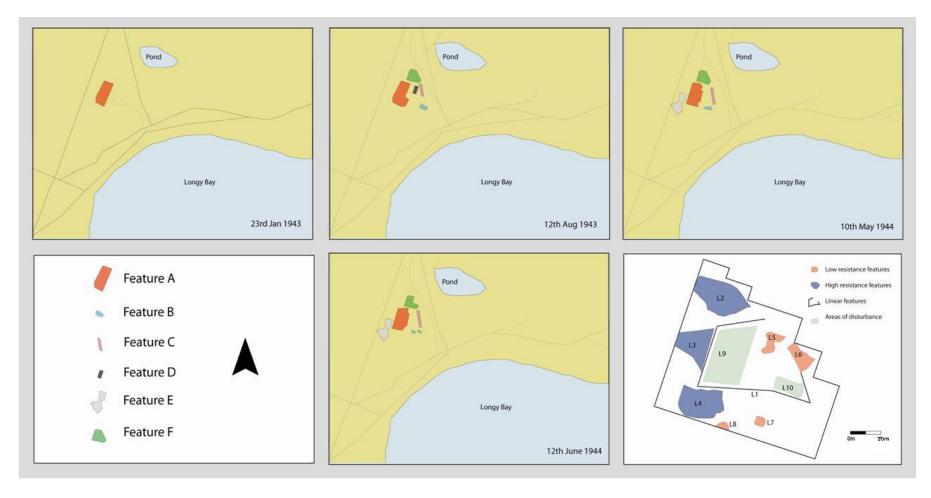


Figure 5.28. Annotated resistance survey results for Longy Common compared to annotations of contemporary aerial images (based on ACIU MF C1183; ACIU MF C1563; ACIU MF C0704)

A further disturbance can be seen to the east of the rows of individual marked graves (L5) in the same location as a disturbance observed in aerial images dating to August and October 1943 (Feature D, Figure 5.27). The absence of this feature on the plans created by post-war investigators suggest that this was the location of the additional graves located during the exhumations (CWGC-a).

Such information raises several questions. Firstly, why have the majority of investigators and authors writing about Alderney continually made claims over the last sixty years that 'it is impossible, however, to substantiate claims that...[slave labourers were] buried in mass graves' when there is clear evidence that it was believed one had been identified as early as May 1945 (Cruickshank 1975:201)? Secondly, for the British forces to have so accurately marked the number of dead interred in this area with the aforementioned memorial, it seems almost certain that excavations must have been carried out by Haddock's team and that information on this has since been destroyed, as suggested by Steckoll (1993).

The aerial images also reveal further disturbances that appear identical in appearance to the areas known to contain graves (Features E and F, Figure 5.28). It is possible that both of these disturbances represent further graves which were likely overlooked by post-war investigators, owing to their location outside of the cemetery boundary. Indeed, at other sites throughout Europe, the Nazis did use marked cemeteries to give a sense of legitimacy to their actions, and to disguise the fact that more burials existed elsewhere (Batawia 1982; section 6.2.6). The first feature can be seen at the eastern end of the northern boundary in images dating to

August 1943 (Feature E, Figure 5.28). A high resistance anomaly was recorded in this general area and continued to the west (L2, Figure 5.27). Unfortunately, obstructive vegetation prevented access to the east and, as such, the area where Feature E was located. Therefore, the full extent of this feature, as well as whether L2 forms part of it, could not be determined. Further investigation of this feature is a priority for future work. From October 1943 a disturbance adjacent to the southern corner of the western boundary is visible and this had more than trebled in size by June 1944 (Feature F, Figure 5.27). Although high resistance disturbances were recorded to the north (L3) and east (L4), an anomaly was not recorded in the resistance survey in this area. This could be due to either the feature having been backfilled with material indistinguishable from its surrounding geology or its existence at a greater depth than resistance survey is capable of recording.

Therefore, as well as providing a number of new insights into the nature of this site, the archaeological research has produced a number of new questions. This is perhaps to be expected when fieldwork highlights aspects of site histories that have been suppressed in the narratives of the site in question. Indeed, the case of Longy Common in particular demonstrates the ability of archaeological investigations to provide an insight into both the physical remains themselves and the approaches to them in the past.

5.7. ISSUES AND CULTURAL MEMORY ON ALDERNEY

As noted above, the history of the Occupation did not end with the liberation of the island and, since 1945, various social and political changes have impacted upon narratives of the period. Central to the methodology employed as part of this study was research into these historical developments since the war and a thorough understanding of the various groups who stood to be affected by the survey. This revealed that the current conditions of these sites and a lack of knowledge with regards to the material evidence of the Occupation is a physical manifestation of the ongoing struggle between these groups. An analysis of these factors also offered several explanations for the lack of study of these sites in the past compared to others pertaining to this period in the United Kingdom. Many trends regarding the attitudes towards this period in Alderney's history have already been discussed above. Some of the reasons for such attitudes will now be considered in order to highlight further issues that were prevalent during the survey and which have implications for heritage management.

5.7.1. BETWEEN HISTORY AND MEMORY

The long-lasting impact of the Occupation of Alderney and its continued resonance in modern society likely offers one explanation for the lack of interest in the physical remnants of this period. Although the number of people who lived through the Second World War is diminishing, many of the resentments, angers and fears concerning this period are still expressed and have impacted upon subsequent generations; indeed this period remains between history and memory, even where these "memories" are second hand (AMA 08/233; for an example of this in the

Ukraine, see Golbert 2004). The feeling that the British abandoned the island, resulting in the harsh living conditions that followed for many years after the war, has, for example, still been expressed (Partridge 1990). For many, what will be remembered is the fact that 'the island for those returning after the war was an amazing place. The remnants of the German Occupation were everywhere'; homes needed to be rebuilt, German modifications to structures removed, mines had to be lifted and debris cleared (Kay-Mouat 1998). It was the suffering of those who had lost land, their homes and property, and who faced hunger with which many inhabitants were confronted and which they recall as having the greatest impact upon their lives (Bonnard 2009a). For people in this situation, there was no time nor desire to dwell on the past but only a need to take steps to ensure that the future restored order to the island. For many, it seems likely that the acknowledgement that brutal crimes existed on their land and in their homes, coupled with the painful memories of their own losses has resulted in a desire by many not to look back to this period even decades on. Indeed it remains true that 'Alderney has found it hard to comprehend the evil that was brought to the Island (Kay-Mouat 1998).

5.7.2. DIVERSITY OF GROUPS AFFECTED

Many of the sentiments expressed in the official history have come to be reflected in the opinions articulated by members of the local community, in particular those connected to the local government, museum or historical society. There is an apparent desire to detract from the physical remains of the Occupation sites, in particular the camps and former burial locations, and to diminish the brutality of events. Interestingly, however, this has not taken the form of the physical

destruction of the sites in most cases, merely their neglect. A recent study by Carr (2009:18) questions 'one might ask why these structures have not been removed if they act as reminders of such a bitter and difficult period of starvation, shortages, oppression and restrictions? The answer gives an insight into the identity of the islanders themselves'. It has been suggested that this implies that the islanders are not yet comfortable with how the events of the Occupation define this identity, thus they do not actively seek to destroy the remains but, given that these events are still 'today's news' on the island, they are not yet ready to actively preserve them either (Carr 2009:20; Carr 2007). Whilst this may be true for some individuals, this interpretation assumes that all of the islanders possess a deep awareness of their identity and, in some cases, perhaps over-complicates the reasons for the current condition of the sites. The costs, logistics and public outcry that would accompany the large-scale destruction of the fortifications are perhaps more preventative.

This apparent conflict with the past raises important issues over the function of heritage management strategies in respect to social, political and economic issues. As noted throughout this thesis, whilst structural and physical remains can attract visitors to a site and give a more profound sense of place, to those who have to live in the vicinity of such remains, particularly on a small island, they can serve as a daily reminder of events they would rather forget. An article in the Sunday Times stated that, 'the honour and courage of this tiny outpost of Britain has been tainted by stories of Jerrybags and collaborators' (Dalrymple 1992:11). Indeed, the dilapidated nature of the remains on Alderney appears to serve as one of many tools which seem to be aimed at discouraging visitors. Those that do attempt to explore the sites

are faced with a distinct lack of tourist information, whilst many of the fortification sites are unsafe to enter. Even in difficult economic times, the islanders do not want to enter the realms of so-called 'dark-tourism', to increase visitor numbers (Lennon and Foley 2000). That said, the provision of information that could be used in the Sites and Monuments Record, and which related to other periods of the island's history, was welcomed by various community groups; thus the act of conducting archaeological work can also act as a reconciliatory tool.

Whilst some individuals appear to have made a conscious effort to suppress the memory of the Occupation, for others it is the case that they simply do not feel a connection to the events in question. For those who were not alive around the time of the Occupation or in its immediate aftermath, the constant reminder of a history to which they feel little or no connection may lead to them viewing the physical remains as an annoyance, as opposed to an important part of their heritage which should be preserved (Carr 2007; Carr 2009). Of course there are others who are interested in the archaeological remains on the island, irrespective of what period they pertain to and during the fieldwork undertaken for this research, several members of the local community expressed an interest in the work. Indeed, one gentleman even invited the field team to survey the remains in his garden. These responses suggest that the official view does not accurately reflect the diversity of the views of the general population, who largely found the fieldwork interesting, sometimes slightly curious but not generally a hindrance to their everyday lives.

To return again to the issue of the limited degree of knowledge of the Occupation on Alderney, it is also important to acknowledge that this may in part stem from a lack of exposure to information dealing with certain aspects. Firstly, for example, the significance of passing on cultural memory from one generation to another cannot be ignored and it is possible that some individuals have simply been exposed to the official history, which they have little reason to doubt, for their entire lives. Secondly, given that the majority of material relating to these sensitive aspects of the Occupation was classified until at least the 1980s, and the fact that little information exists in the local archives, it can also be assumed that many people will be unaware of the considerably different events presented in these materials.

Discussions as part of this research indicated that a kind of collective misinformation does seem to exist on the island, as even the local expert had not seen the vast amount of recently declassified material held in the National Archives. Therefore, as Lennon and Foley have argued, 'currently what exists is a selective perception and level of interpretation that is, at best, misguided and, at worst, deceptive' (Lennon and Foley 2000:16).

Perhaps most ironic about the current situation in Alderney is the fact that it is the current islanders who perhaps have the least claim on this aspect of the cultural heritage of the island. The most staunch defenders of the island's official history are actually non-natives to the island, whilst others are several generations later than those actually resident on the island at the time. The Occupation of Alderney in fact forms a greater part of the heritage of some citizens of Russia, Germany, Poland, the

Ukraine, France, Belgium, and the Jewish community who were interred there than it does the current residents. However, various factors have affected their involvement in the legacy of this period, not least of all the fact that descendants of these groups are geographically removed from the island. Excepting the aforementioned memorialisation attempts and a handful of published survivor testimonies, in fact, many survivors of Alderney remain unaware of the location of the island where they were interred and so were unable to visit the sites (Boot 2004). The case of Georgi Kondakov clearly demonstrates this point, given that he only obtained knowledge about Alderney following an article in a Russian newspaper in the 1990s and subsequent contact with a local historian on the island (Bonnard 1991). Additionally, the majority of survivors were killed in the death camps in the east or have passed on since; consequently there were few calls from the survivor community to protect the sites, possibly further explaining their dilapidated state.

5.7.3. HALACHA LAW

At most Holocaust sites across Europe, the emphasis is often placed upon the Jewish experience and the lost heritage as a result of the Nazi persecution (see Chapter 2), given that, as Cohen (1942:9) states 'the Jews occupy a unique and unenviable distinction in this war'. However, Alderney perhaps represents the one place where the opposite is true in that it gained a Jewish heritage during the Occupation as a result of the Jewish forced labourers sent to the island. However, the Jewish heritage associated with the Occupation has almost been forgotten, with only two texts on the Channel Islands focusing on the Jewish deportees to the area (Cohen 2000; Fraser 2000). As Bunting (2004) notes 'Jersey, Guernsey and Alderney had each

adopted a different strategy to deal with the awkward Jewish question'; whilst Jersey has unveiled a monument, wrote about documents and taught schoolchildren about the events, Alderney still struggles to address this difficult period of its history. The small numbers of Jews interred in the camps compared to elsewhere in Europe offers one potential reason why this aspect of the Occupation has been played down. Additionally, once again, the Jewish community have not widely discussed their experiences on Alderney, being geographically removed and, in some cases, it has been reported, due to concerns over anti-Semitic reprisals (Steckoll 1982:14-18).

5.7.4. HISTORICAL PRECEDENT

The trends described above are seemingly due to historical precedent and Knowles Smith (2007:209-210) has argued 'over the last 60 years, the apparent struggle for control over what features should be allowed to dominate the public face of the forced workers' war has changed little'. Many of the sentiments expressed in the so-called official history appear to have stemmed from the immediate post-war period and many of the actions of the local authorities to date have mirrored such well-established mechanisms. Indeed, the suggestion of an archaeological project relating to the Occupation sparked local political debate and resurrected political issues that have continually re-emerged since the war.

For example, following the war, the British government failed to pursue war crimes investigations, suppressing the significance of the events in Alderney given the gravity of the crimes that occurred elsewhere in Europe. This attitude seems to have transcended the decades since the war and has served as a useful tool in shaping the

official history of this period, with the local population being keen to detach the Occupation from the events of the Holocaust. It has been observed that some individuals and community groups are keen to highlight that it was Germans and not Nazis who occupied the island and to diminish the number of Jews sent there, given the obvious association of this group with the Shoah, something which has been upheld since the war. Additionally, it seems that Pantcheff was determined to maintain many of the so-called "facts" that he was encouraged to present by the British government during his post-war investigations, over forty years on, when he asserted that there was a 'normal camp where chaps who were glaziers, carpenters and whatever were accommodated and nothing happened there at all' and in the other camps the majority of people died from malnutrition and exposure; thus appearing to downplay the claims of atrocities on the island, as dictated by the official political dogma (IWM MISC 2826 189/1-2-d). Given the fact that the majority of literature and heritage sites are controlled by those intent on maintaining the official history, to date, it appears that this selective memory of the Occupation has transcended into the widely accepted collective memory on the island, throughout the Channel Islands and in public knowledge as a whole.

5.7.5. RESPONSES IN THE UNITED KINGDOM

Many of these perceptions potentially stem from the fact that a distinct image of the events of the Second World War has been developed in the United Kingdom in general. This image is one of the home nation battling Nazi aggressors, one where the majority of the native population suffer on the Home Front, given the bombing raids by the Germans, and one where the sacrifices of the Allied armed forces are

emphasized. Indeed, there has been a fascination with the events of this period in recent years, with a well-established discipline of conflict archaeology that considers sites pertaining to it having emerged (Dobinson 1998; Schofield 1998; English Heritage 2003; Schofield 2004). Again, however, the emphasis in Holocaust education has been placed on the weapons of war and the atrocities committed by the Nazis elsewhere in Europe. This certainly seems to echo the sentiments on Alderney, where it has been deemed acceptable to write about the engineering behind the fortifications and the plight of the evacuated islanders but not the deaths that occurred (Ginns 1994; Carel 1967). To focus on the darker, less comfortable aspects contrasts with the common image of the British experience of the Second World War.

Ironically of course, UK scholars are frequently engaged in research and, often heated, debates over the nature and future of Holocaust sites. It is also true that the events of the Holocaust and the Second World War in general form an integral part of the National Curriculum. However, the focus in both of these areas has often lay in portraying war and violence that occurred in "the East", a remote location with a social basis far-removed from our own. Indeed we are quick to criticise the approaches taken to heritage management at Auschwitz or the inadequate treatment of human remains in the Ukraine and Poland for example. Yet this approach appears somewhat hypocritical in light of the fact that there is little mention of the numerous camps, fortifications, massacre sites and other associated remains that litter the Western European landscape and, whilst for example French and British organisations fund heritage work in the East, Holocaust sites in the West

are little considered. Such widespread misrepresentation has even resulted in the Holocaust Task Force (2006:7-8) failing to acknowledge the significance, and even the existence, of all of the sites on Alderney:

'The case for the UK is different to the majority of our European partners, in that there are no authentic sites relating to the Holocaust in the UK. The UK was not occupied and remained fighting against Nazi Germany throughout the Second World War. There was a labour camp at Alderney on the Channel Islands. However, this has not been developed to a sufficient level for students to visit. Any students wishing to visit a site must travel to another country'.

It is interesting to note that considerable research has been completed at PoW camps in England (Thomas 2003), aircraft crash sites (English Heritage 2003 and 2002) and other militarised landscapes (Saunders 1998; Schofield 2004; Forbes et al 2009;), yet the sites in the Channel Islands have not received the same attention. Therefore, even in a country with a strong archaeological discipline, democracy and good Holocaust education, certain contentious aspects of this period are still allowed to be suppressed and go unnoticed.

5.8. CONCLUSION

An examination of this small sample of sites on Alderney reveals a unique landscape of occupation and persecution. With regards to the research questions outlined in section 5.4, this survey has:

- Re-evaluated primary source material from an archaeological perspective, thus demonstrating suppressed and forgotten narratives of this period;
- Presented maps and aerial images not previously reported on in the literature. This has allowed complex site histories to be documented and feature locations to be determined;
- Demonstrated the diversity of sites relating to this period that connect the lives, work and deaths of the prisoners and labourers sent to the island;
- Confirmed that, contrary to the "official history" of the Occupation, the physical remains camps were not destroyed;
- Highlighted the complexity of the burial practices undertaken on Alderney and demonstrated that a mass grave was known to exist on the island.

The labour camps and cemeteries reveal information about the lives, work and deaths of those sent to the island, whilst also highlighting the actions of the occupying forces. The diverse array of sites, ranging from concrete fortifications, trench systems, tunnels, hospitals and other structures reveal the extent to which the slave labourers were used as a resource in order to fortify the island, and offer an insight into the Atlantic Wall construction programme.

In terms of the post-war histories of these sites, their examination archaeologically has also revealed considerable information about how their form, function and surviving extent have all been impacted upon by various attitudes towards this period. On the one hand, the survey at Norderney revealed that remains thought destroyed actually do survive below the ground under obstructive vegetation, but perceptions of demolition processes and an apparent desire to mask the former function of the site meant that its true extent had never been formerly revealed. On the other, Longy Common represents a site that was technically destroyed during the exhumations in the 1960s and, along with it so too was the site's complex history. However, archaeological work has allowed such information to be rediscovered and the extent of the remains to be confirmed.

Overall, these remains demonstrate the diversity of sites of the Holocaust, thus moving away from the notion that all sites conformed to the nature and function of Auschwitz. The complex landscape identified on Alderney reveals the breadth of Nazi persecution, in terms of both its nature, and the historical and physical evidence that it has left behind.

6. DISCUSSION

6.1. DISCUSSION FORMATION

This research sought to highlight how the application of archaeological methods can enhance our knowledge of the Holocaust and allow sites of memory to be recorded, and subsequently commemorated (Chapter 1). In order to address Aim 1, Chapter 2 explored the variety of social, political, religious and ethical issues that surround the cultural memory associated with this period. This facilitated the development of a non-invasive archaeological methodology, with such issues at its core (Aim 2). The previous two chapters have shown how this methodology was applied at two case study sites (Aim 3) and presented revised interpretations of Treblinka and Alderney (Aim 4), thus demonstrating the benefits of such an approach. In order to further highlight the forgotten narratives of this period and to demonstrate the diversity of the physical evidence pertaining to it (Aim 4), comparisons between the two sites will be made supported by additional examples highlighted as part of this research effort. This chapter will also aim to further demonstrate the potential of archaeological approaches and to set a precedent for the consideration of the wider European Holocaust landscape.

This discussion will comprise of three strands. It is argued here that the first two strands should be viewed as strata, both physical and metaphorical, which make up the history of each of the sites and which have contributed to their formation. The first will involve the comparison of the case studies in terms of the physical nature of the remains uncovered by the survey and, thus, their capacity to reveal information about the specific events of the

Holocaust. The second will address the layers of post-war history, including politics, social trends and landscape change, the ways in which these issues have physically manifested themselves in the landscape and the impact this had upon archaeological research. This will also include a discussion of responses to archaeological fieldwork. Finally, the third strand will consider the question 'why archaeology?', highlighting the potential of the discipline and the issues involved with the study of this period.

As noted in section 1.5.1, Treblinka¹ and Alderney were selected as case studies given that they were not completely understood, they demonstrate the diversity of site types and attitudes towards them across Europe, they were known about to differing extents and both were believed to have been destroyed by the Nazis upon abandonment. Therefore, although this discussion will use the case studies as a basis, the overall aim will be to demonstrate trends that are likely to be relevant to the study of other Holocaust sites in the future.

6.2. COMPARING THE ARCHAEOLOGICAL RECORD

6.2.1. SITE DIVERSITY

To date, as has already been noted, the public impression of the Holocaust is centred on Auschwitz - the crematoria, the systematic and industrialised killing of victims (Zubrzycki 2006; Hayes 2003). This has led to Hayes (2003:331) branding it the 'capital of the Holocaust...the place most indelibly linked with all of its multiple dimensions'. However, an examination of Treblinka and Alderney has demonstrated the further diversity that exists in

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¹ In this chapter, the name Treblinka refers to the site in its entirety, whilst Treblinka I and Treblinka II are used when discussing the labour and extermination camps respectively.

terms of the extent and nature of sites pertaining to this period and that to focus solely on Auschwitz is to ignore the diverse array of experiences elsewhere in Europe. As noted above, Treblinka and Alderney were chosen as case studies given that they could be perceived as the two extremes of the spectrum in terms of Holocaust sites; Treblinka being one of the main extermination centres in the country perceived as being most widely affected by the Nazi annihilation programme, Alderney being one of the smallest locations occupied by the Nazis and being positioned in the United Kingdom, where it often claimed that such events did not reach (Gilbert 2002; Holocaust Task Force 2006). However, although the two sites may differ in the specific details of their operation, they can be seen to be similar in the themes concerning the Holocaust that can be derived from them.

At macro-level, an extermination camp, labour camps, burial sites and fortifications were recorded, all of which allude to the multiplicity of features and the complex infrastructure of the Nazi occupation and persecution of Europe. At micro level, the diverse range of individual features that have been identified further confirm the complexity of these landscapes; hut platforms, probable foundations of gas chambers, buried concrete structures, bunkers, defensive walls, trench systems, earthworks, administrative buildings and graves all allude to more specific aspects of the functionality of the sites. It is important, however, to view these remnants as much more than simply structural ruins. In order to consider the variety of sites in their totality, it is important to recognise that they represent an equally diverse range of experiences. The structural remains on Alderney, for example, offer an insight into the Nazis' plans to fortify the island, the Channel Islands and the Atlantic Wall, but they also allude to the plight of the slave labourers and prisoners who built them.

This aspect is often considered to a much lesser extent, if at all, yet to not do so is to ignore the human suffering associated with these structures. At Treblinka II, the structural remains of the gas chambers represent the actions of those involved in the Nazi extermination process, including individuals not stationed at Treblinka II but who ordered the killings, and also of course the places of extermination of the victims sent there. The undressing barracks and storage facilities for victims' property represent sites of repression, theft and economic exchange but also places of work for those assigned to kommandos. An examination of the remains of the burial sites alluded to the fate of the deceased, the murderous acts of the living and often the experiences of those who disposed of the dead.

Additionally, instead of viewing the sites as isolated entities, viewing them in their broader landscape context further confirms the intricacy of the archaeological record and, thus, the events it represents (Boyd 2012). This approach acknowledges the connections between sites through the transportation of prisoners, the movement of individuals or groups of Nazi soldiers and Commandants, the shipping of personal belongings and products of the labour programme. Treblinka II, for example, forms part of a landscape with Treblinka I; the hundreds of places from which these victims were rounded up; and the Umschlagpatz in Warsaw, where the victims boarded the train to the camp, to name but a few locations (Plate 6.1). Far from being an isolated island 'laboratory' (Saunders 2005:191), Alderney formed part of the wider landscape of the Channel Islands, with Sachsenhausen and Neuengamme, of which it was a sub-"camp", and with the various sites from which victims were deported (Plate 6.2). Therefore, although surviving and accessible to differing extents, various archaeologies of the Holocaust can also be identified. From the perspective of the

victims, the landscapes are ones of suffering, extermination, internment, loss and fear, whilst Theune (2011) has argued of the camps and the material culture found in them represent an archaeology of powerlessness. Additionally, through features such as the Star of David carved into the rock in Alderney (Cohen 2000), the unburnt bodies buried in cremation pits (Goldfarb 1987) and the impact of the Treblinka Revolt (Weinstein 2002), an archaeology of defiance and resistance can be noted. The actions of the perpetrators can also be seen and, thus, the landscapes can be seen as ones of control, oppression, desecration, murder and conflict (Bernbeck and Pollack 2007), whilst even the physical architecture of the camps allude to the deception, in the form of camouflage and oppression taking place there (section 6.2.6).



Plate 6.1. Part of the Holocaust landscape of Treblinka, including Skopje in Yugoslavia, one of the many train stations from which the victims were deported to the camp (top left, after USHMM), the Umschlagplatz from where they would then be transported to Treblinka (top right), Treblinka I (bottom left) and Treblinka II (bottom right) (author's own photographs)



Plate 6.2. Part of the Holocaust landscape of Alderney, including the camps Sylt (top left, author's own photograph), the fortifications (top right, author's own photograph), Neuengamme (bottom left, after KZ Neuengamme 2010) and Sachsenhausen (bottom right, Rettschlag 2009)

For those who survived the Holocaust and for the relatives of the victims who died, the sites and the material remains that survive represent landscapes of memory, mourning, commemoration, individual and collective stories and journeys, homelands, foreign lands and religious centres. Both within their boundaries and outside, they represent scenes of crimes, occupied territories and war zones but also sites of courage and, in the case of those locations where victims were hidden from the Nazis, of kindness and sanctuary (Kopówka and Rytel-Andrianik 2011). In order to understand and learn from the history of this period, it is important that it is acknowledged for all of its aspects, many of which are reflected in physical form. Of course, where excavation can be carried out, this will provide further evidence to these trends in terms of the material culture associated with victims and

perpetrators alike, whilst also revealing the physical layers of activities such as the Treblinka Revolt and the clean-up operation on Alderney.

6.2.2. JUXTAPOSITION OF LIFE, WORK AND DEATH

Writing about the narratives of Auschwitz, Huener (2003:13-14) states that they 'should not overlook an element of Auschwitz's history that sets it apart from other camps: the variety of ways in which registered prisoners lived, worked and died there...[the] wide diversity of prisoners, complicated administrative structure, brutally harsh conditions - are all aspects of Auschwitz that render it unique among Nazi concentration camps and extermination centers'. These statements not only once again attempt to justify Auschwitz's position as the main Holocaust site, but they can be seen to be inaccurate based on the similarly diverse circumstances and built infrastructures highlighted in both Treblinka and Alderney. Indeed, it is crucial to move away from discussions concerning the comparative severity of Holocaust sites, as will be discussed in section 6.3.6 below. To do so is to ignore the fact that all of these sites resulted in loss of life and that they did so through a variety of means.

An understanding of the spatiality of the case study sites and the identification of individual features allude in particular to the juxtaposition of life, work and death, the lines between which were often blurred. On Alderney, an examination of the fortifications in the vicinity of Norderney demonstrated how the camp supported the defence programme, whilst the presence of defensive structures within the camp itself raises important questions over whether the workforce was being protected or threatened (section 5.6.2.2). When Treblinka is considered as a landscape, the differing modus operandis of Treblinka I and Treblinka II, in

terms of both the Final Solution and the fates of those individuals interred within them, can be seen through the presence and absence of living quarters in each camp respectively, and the position of the former in relation to the quarry where the prisoners worked.

During the Nuremberg Trials it was noted that 'usually the concentration camps of German fascism can be divided into two groups: the labor concentration camps and the extermination camps. It seems to me that such a differentiation is not quite correct, because the labor camps also served the purpose of extermination' (IMTN 1947(7):576). Such an assertion can be seen to be true for certain prisoner groups on Alderney and those housed in the labour camp, Treblinka I. Additionally, this trend can be seen to work in reverse given that some prisoner groups carried out labour at Treblinka II, an extermination camp, being tasked with the disposal of the corpses. Such labour then came full circle and resulted in extermination, owing to the fact that the Nazis did not wish anyone to remain who could testify to their crimes (Chrostowski 2004). Therefore, in the archaeological record, evidence of both extermination and labour can, in the case of the mass graves and cremation pits, be seen as one and the same.

The layout of the camps also reflected the diversity of the experiences of the various 'grades' of victims, prisoners, labourers and camp administration. At Treblinka II, the spatiality of the killing and burial process, according to the victims' age, gender and health reveals how this grading of individuals even extended to determining the nature of their deaths (section 4.8.3). On Alderney, this is reflected by the assignment of different labour and prisoner

groups to work at various sites around the island, each with varying mortality rates (section 5.6.1).

At both sites the designation of specific areas for various different groups was evident. At Treblinka II, the presence of the Living Camp, designated areas for working Jews and areas containing no living accommodation alludes to the camp hierarchy and, in the case of the latter and penultimate areas, highlights the progression towards extermination (Central Commission for the Investigation of German Crimes in Poland 1946; section 4.2.3). In Norderney, the presence of a separate area for Jews, the workers and the camp administration, as well as the fact that the surviving structures allude to the different degrees of freedom of movement within the camp, also reveals a hierarchy (section 5.6.2.1).

6.2.3. THE "PRODUCTS" OF SLAVE LABOUR

Although using non-invasive methods it has not been possible to examine surviving artefacts from the Holocaust, excepting those recovered from the topsoil at Treblinka II, it is still possible to make observations concerning the products of slave labour at both sites. The products, although differing in nature, were all as a result of the oppression, exploitation and persecution of those interred at the sites. Perhaps the most visible product is represented by the fortifications on Alderney. This building programme resulted in the deaths of the individuals building them; thus they also became a product of slave labour. Similarly, although Treblinka II was not a slave labour site in the same sense as Alderney, the treatment of the victims was, in part, geared towards the acquisition of products in the form of belongings, gold fillings and hair (Wiernik 1944). Although most of these, along with the

stone quarried by those interred in Treblinka I, were transported away from the camp, evidence presented in Chapter 4 does indicate some of the former at least could survive in the archaeological record (section 4.6.2.2). Finally, the camps themselves can be seen, at both sites, to be the product of slave labour, given that they were constructed by workers under the orders of the Reich (Chrostowski 2004; Pantcheff 1981).

6.2.4. INTERACTION WITH THE LANDSCAPE

At both Treblinka and Norderney, the interplay between the camps' function and the landscape is apparent. At Treblinka, the selection of the site's location was based on its geography; its road and rail network were essential to its functionality, local resources were utilised in its construction and nature was used to disguise it (section 4.2.2). The layout of Norderney was even more directly influenced by existing landscape features, with the boundaries being dictated by natural landforms or existing roads (section 5.6.2.1). Such trends can be observed at other Holocaust sites. The construction of both the Jasenovac camp in Croatia (H.E.A.R.T. 2008) and Chelmno in Poland was linked to the strengths of the road and rail networks (Central Commission for the Investigation of German Crimes in Poland. Warsaw 1946), whilst the site of Gesiowka camp in Warsaw saw the streets surrounding the prison forming the camp boundaries and part of the former ghetto defining its area (Hirshaut 1982).

The decision concerning where to locate the sites can also be seen to be connected to the prior existence of structures. This not only adds another layer of history to these existing features but also highlights the perceptions of the Nazis with regards to the pre-war history

of sites. On Alderney, the earlier military forts and strongpoints were seen as a useful resource, which were adapted (section 5.6.1.1; Plate 6.3), whilst at Treblinka the existence of the labour camp influenced the decision to construct the extermination camp (section 4.2.2). The selection of sites with existing structures suggests that the Nazis required evidence that locations would be suitable for the construction of additional camps and associated sites. This can be seen elsewhere. At Auschwitz, the presence of existing buildings provided the start of the camp's infrastructure (H.E.A.R.T. 2011), the Starachowice labour camps were built around the factories where the labourers would work (Browning 2004) and Dachau was constructed on the site of an abandoned munitions factory (USHMM 2011).

Therefore, where modern topography remains consistent with that during the Holocaust, or where it is possible to reconstruct that topography based on contemporary mapping, insights into the interaction between the site and the landscape in which it was constructed can be derived. In many cases, it can be observed that where the topography of the camp was dictated by features such as roads or existing brick-built buildings, these features were often retained after the war and can contribute to reconstructions (section 5.6.1 and 5.6.2). Field survey as part of this study allowed both structural and more subtle topographic features that influenced the construction of the sites to be recorded. Therefore, such an approach is advocated in the future, given such a trend can be seen to exist at other sites pertaining to the Holocaust.



Plate 6.3. Fort Albert on Alderney, which was modified by the Germans for defensive purposes (author's own photograph)

6.2.5. DIVERSITY OF BURIAL AND DISPOSAL

Mass graves, cremations and burials are referred to in almost every text concerning the events of the Holocaust. As noted in Chapters 4 and 5, it is often wrongly assumed that the victims of the Holocaust were disposed of in the same way. The cremation of victims or their burial in mass graves have come to be recognised as the main methods used and there have been few attempts to consider in detail the specifics of such practices. Certainly, there has never been an attempt to review the burial and disposal patterns utilised during the Holocaust, particularly those that do not fall into these categories, from a forensic viewpoint; that is to draw on offender profiling, assess the specifics of grave construction and the motivations for the specific ways this was undertaken, and to demonstrate how this varied based on numerous factors. Not only do Treblinka and Alderney represent microcosms of many of the methods purported to have been used across Europe, in terms of

the cremations, mass burials, cemeteries and other clandestine disposal techniques identified, but they are also examples of how diverse these disposal methods were geographically. Thus they reveal that a more complex impression of the fate of Holocaust victims is emerging.

6.2.5.1. Contesting Popular Perceptions

One of the reasons for selecting the sites examined as part of this study is that general statements had been made about the nature of disposal. At Treblinka II, in light of historical accounts detailing that all of the corpses had been exhumed and cremated, it has been argued that there are no remains left to find (most recently Claude Lanzmann in The Guardian 2011). Similarly, on Alderney, the official history dictates that all of the workers were buried in the cemetery and that no mass graves exist (Cruikshank 1975; Pantcheff 1981). However, this study has demonstrated that such generalizations are false for both of the sites examined. A wealth of documentary evidence clearly shows that skeletalised remains existed at Treblinka II, whilst it has been demonstrated that investigations of the physical remains have been limited (section 4.3.1 and 4.6.3). The identification of several pits in the former camp area, many of which are located within areas stated by witnesses to have contained mass graves, suggests that further disposals are likely to exist (section 4.6.3.2). On Alderney, not only has it been demonstrated that a mass grave existed on the island, but further possible burial areas have been identified (section 5.6.3.2). What is perhaps most striking for both sites is that the majority of photographic evidence contravening the official view, which has been confirmed by archaeological survey, is in the public domain, yet its existence has rarely been acknowledged.

At some sites, such as Alderney, this is likely to stem from the fact that the issue of burials is contentious (section 5.6.3.1). At other sites, such as Treblinka II, the main reason for the limited number of investigations of disposal sites seemingly relates to the belief that all of the victims were cremated (section 4.6.3.1). In turn, due to the need to comply with Jewish Halacha Law and the perception of archaeology as invasive, a degree of scepticism can be seen regarding archaeologists' ability to locate the remains from this period (Gilead et al 2009; pers. comm. Beth Shalom).

However, evidence exists to suggest that not all disposals were cremations, whilst not all cremations resulted in the total eradication of the remains. When interrogated, Pfannensteil (in Quinn 2010) stated:

'When the grave [in Bełżeć] was fairly full, petrol – it may have been some other flammable liquid – was poured over the bodies and they were then set alight. I had barely established that the bodies were not completely burned when a layer of earth was thrown over them and then more bodies were put into the same grave'.

Other evidence also suggests that some cremations, particularly those on sites where purpose built crematoria had not been constructed, saw the remains being placed in pits before being burnt or the ashes of the victims collectively buried once cremation was complete, as at Treblinka II (Willenberg 1989; Leleko 1945). Similarly this has been observed in cases where only a small number of people had been killed and Stanislaw Janowski has noted how the Sonderkommando were forced to dig pits solely for the purpose of burning

Hungarian Jews as 'it was not worthwhile to put the gas chamber in action for a smaller number of persons' (Bezwinska 1973:50). Such remains would generate a geophysical response and archaeologists can employ similar methods for these types of disposal as for the identification of mass graves. Additionally, in future surveys methods such as magnetometry, which is able to detect magnetic anomalies caused as a result of burning, will be employed where cremation pits are suspected (BAJR 2008; Wallis et al 2008).

Another common belief, also noted at Treblinka II, was that all of the victims were exhumed and cremated, as a result of an order issued by Himmler, perhaps due to fears after the discovery of graves at Katyń (Chrostowski 2004). However, such activities only took place in certain camps and questions have been raised about the extent to which Himmler's orders were actually carried out in practice (section 4.6.3.1). Similarly, questions need to be asked over the extent to which remains were entirely cremated, particularly in locations like Treblinka II where purpose-built cremation pyres, which were unlikely to achieve the temperatures of crematoria, were utilised. As Fairgreave (2008:37) argues, 'the layman is clearly under the mistaken impression that a body can be easily reduced down to ashes and thus not be recovered from a fire scene'. Results of archaeological work at Bełżec confirms that not all of the bodies of victims were exhumed and cremated, and alludes to the varied nature of disposals within a single grave (Appendix 6.1). O'Neil and Tregenza (2006:5) remark of one grave located at this site that it 'contained a mixture of carbonised wood, fragments of burnt human bones, pieces of skulls with skin and tufts of hair still attached, lumps of greyish human fat, and fragments of unburned human bones', thus demonstrating that earlier graves were re-used and not all of the remains were cremated. Indeed, eleven

out of thirty three graves contained unburnt remains, one of which was the largest grave at this site (Kola 2000). Countless other witnesses allude to a lack of cremations and attempts to attest to the crimes committed by the Nazis: 'I must add that everywhere we worked we tried to leave a fragment of bodies in the mass graves in order that some traces of the people executed by shooting and buried' (Willenberg 1989:192-193); 'according to my orders I should have extended my duties over the entire area occupied by the Einsatzgruppen, but owing to the retreat from Russia I could not carry out my orders completely' (Blobel 1947:473). Similarly, the Polish-Soviet Extraordinary Commission at Majdanek (1944:18) reported that 'judging by the large quantity of bones discovered in all parts of the camp (in pits, vegetable plots and under manure heaps), the Committee of Experts is of the opinion that bones were removed from the furnace before the time necessary for their complete incineration had expired'. Therefore, it is unlikely that the majority of the cremated remains from the Holocaust are ashes in the truest sense of the word and, given the developments in archaeological methods, the potential to examine some of these remains using non-invasive methods exists.

6.2.5.2. Least Effort?

Both sites allude to a diverse range of disposal methods which can be shown to be closely connected to the personal characteristics of the victims themselves e.g. their age, gender, health and their place of work, the nature of their deaths and their location within the site or network of sites in question (section 4.6.3.1 and 5.6.3.1). Often, it has been observed within the arena of forensic archaeology that perpetrators usually operate on the principal of least effort; the minimum amount of time necessary is spent on the construction of the grave or

disposal site and minimum contact with the corpse(s) is maintained in order to reduce the chance of alerting others to the crime committed (Rossmo 2000). It is argued here that at many sites of the Holocaust, such trends can be noted. The use of opportunistic burial sites, that is existing landscape features that could be used to dispose of corpses, can be noted at both sites examined. On Alderney, witnesses allude to the disposal of corpses where they fell, in the fortifications, in the sea and in ravines (WO311/11). Such a trend can be seen at other sites of forced labour and extermination throughout Europe: the corpses in the ravine at Babi Yar (Sereny 1995), the bricked-up quarry tunnel at Stalinsk (IMTN 1947(7)), the antitank ditches in Kislovdosk (IMTN 1947(1):67; Plate 6.4). Similarly, Jewish cemeteries were often used as ad hoc massacre sites; the burial of the victims in mass graves in these areas not only defiled them but also their heritage, as the gravestones were destroyed (Gruber and Myers 1995; Czynska 1982; Plate 6.5). At Treblinka II, the desire for ease when dealing with the dead can be seen through the spatiality of the camp (section 4.6.3). The construction of several graves across the site, in which different victim groups and those who died in different areas of the camp could be disposed of, is testament to this. A similar approach can be seen at Hirschberg camp (Perl 2004). Victims were made to dig a ditch measuring four foot wide and seven foot deep before being made to jump across it, with all those who could not do so being disposed of immediately (Perl 2004). Additionally, human remains were encountered in the back fill of a building plot in the course of excavations at Bełżeć, suggesting that once again traditional graves were not always used (O'Neill 1998). Therefore, just as the methods of killing during the Holocaust were altered according to specific circumstances and to a certain extent perfected over time, so too were the disposal methods; indeed the development of the crematoria was closely aligned to this

development of new methods (Sereny 1995). Such a diverse array of activities call for case by case assessment and require methodologies to be adapted according to the likely nature of the burial sites being sought, when confirmation of their location and extent through archaeological remains is to occur.



Plate 6.4. The ravine at Babi Yar which was used as a killing site by the Nazis (after ARC 2005b)



Plate 6.5. Izbica cemetery in Poland, which was one of thousands of Jewish cemeteries that became execution sites during the Holocaust (author's own photograph)

6.2.5.3. Grave Diggers Not Perpetrators

Of course it is important to acknowledge that, whilst the instructions to dig graves, dispose of bodies and cremate victims came from the Nazi administration, it was rarely these individuals who would actually carry out such tasks (section 4.2 and 4.6.3). There are examples of victims being shot directly into pits by the SS or Wehrmacht, but these pits were usually dug by the victims they would later contain; in the early years of the camp the victims had to 'dig their own graves and take up their position at them, whereupon they were shot one by one... their last duty before dying was to push the body of the preceding victim into its own grave' (IMTN 1947(2):416). At Treblinka II, for the most part, specific workforces comprised of future victims were assembled to dispose of the corpses and different groups were involved in different stages of this process e.g. the removal of the bodies from the gas chambers, the removal of gold fillings, the disposal of the corpses in the

graves, the later exhumation and cremation of these corpses (section 4.2). Such a trend can be seen at all of the other extermination camps, as well as at isolated grave sites in Eastern Europe (Strezelecki 2000; Ancel 1988; Thorne 1972). In Alderney, designated individuals would collect the corpses, whilst others would bury them in the cemetery (section 5.6.3.1). Although these individuals were not slave labourers, they were also not the Nazi administration themselves; thus the offenders rarely physically came into contact with the corpses or their graves.

One of the basic principles of forensic archaeology is that the location, victim and offender all come together at the grave site (Sturdy 2007). Although, in light of the above observation, such a direct connection may be complicated by third-party disposal at Holocaust sites, offender behaviour can still be identified indirectly at the sites being examined.

6.2.5.4. The Number of Victims

One of the main questions asked regarding archaeological investigations is can it be estimated how many victims were buried in a given area? Of course, the key limitations of non-invasive methods is that such figures cannot be definitively stated, given that they are not capable of detecting individual bodies; thus a grave that is technically capable of holding a certain amount of bodies may hold more or less in reality dependent upon the individual circumstances of disposal, something which cannot be confirmed without excavation. However, whilst locating victims is clearly important, it is surely imperative that examinations of Holocaust archaeology moves beyond such an emphasis on numbers. To not do so, once again, suggests that sites assume greater importance where the number killed is

higher or that, somehow, archaeological work is more important at such sites. This is to downplay the importance of other sites and the victims within them, whilst it also ignores vital aspects of the infrastructure of the Holocaust which have the potential to reveal important information about the perpetrators and the mechanisms of persecution.

6.2.6. ATTEMPTS TO HIDE CRIMES

With the identification of surviving remains, and the analysis of historical information concerning the nature of the built environment at the sites in question, also comes the potential to identify attempts to mask their functions, both during their periods of operation and as part of the abandonment process. In a broader military context, Stanley (1998:10) has alluded to three types of activity: camouflage - 'to paint or augment recognisable shapes to distort their recognition characteristics, or to make them blend into the background, thus rendering the subject 'invisible'; concealment - 'hiding an asset so it could not be seen, at least not directly'; deception - 'the positioning or simulation of things or activities to mislead an enemy as to their true location or function, or to mask some imminent course of action'. Evidence for all three was noted during the surveys at Alderney and Treblinka.

In terms of camouflage and concealment, this is perhaps most readily seen in Alderney given the military aspect of the Occupation. The use of local stone to camouflage the fortifications was evident, whilst buried structures were recorded at Norderney; both methods would have served to mask the presence of these structures from the enemy, particularly from the air (Plate 6.6; section 5.6). Of course the latter means that their identification from contemporary aerial imagery may not be possible, thus highlighting the importance of

ground-based survey in associated with a historical review. Although not visible in the landscape since the war, the fences constructed of local materials and camouflaged with foliage also allude to some of the efforts made to disguise the nature of Treblinka (Laponder 2000).

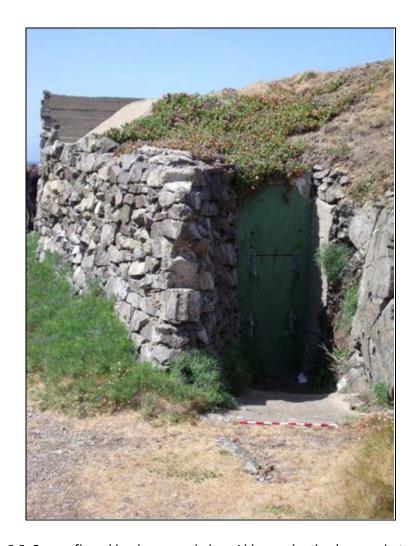


Plate 6.6. Camouflaged bunker recorded on Aldemey (author's own photograph)

As Stanley (1998:10) also notes, 'deception was the most difficult of the three to pull off and was potentially the most profitable' and considerable evidence exists that the Nazis undertook such activities. Much of the evidence for the deception undertaken during the

sites' operation comes from historical sources given the further changes in appearance that have occurred since their abandonment (section 6.3.5).

At both Alderney and Treblinka, attempts by the Nazis to legitimise their activities in the eyes of victims and the outside world, and to detract from the reality of the sites' use were noted. Such attempts were often reflected in the physical fabric of the structures built at the sites. At Treblinka II for example, the mock railway station and Lazarett represent efforts to detract from the fate of those being bought in on the transports. The construction of the Ukranian guardhouse after the closure of the camp demonstrates an ongoing desire to hide the crimes (section 4.2.3). The identification of its location, and of bricks from which it is believed to have been built, not only reveals information about the latter but has also allowed information about multiple phases of activity to be derived, given that the bricks used to construct it were part of several other structures (section 4.6.2.2). The planting of obstructive vegetation was also ordered and subsequently influenced the location of the memorial, once again highlighting the interplay between the site's existence, abandonment and post-war history (section 4.3.2). On Alderney, the existence of the two marked cemeteries and the issuing of death certificates can be viewed as an attempt to legitimise the deaths of the workers, particularly if the assertion in section 5.6.3.1 regarding the presence of more graves outside the boundaries of Longy Cemetery proves to be correct. The exhumation of corpses for cremation, the use of quicklime and the planting of obstructive vegetation over mass graves, and the demolition of buildings each can be seen as attempted deception, all of which pose their own difficulties to archaeologists seeking to locate physical remains (IMTN 1947; Mant 1987). Therefore, thorough research into the

nature of the methods likely employed at the specific site being examined is essential in order to have the best chance at characterising the remains and understanding site formation processes. Similarly, such processes also form an important part of the sites' ongoing history.

Such efforts can be observed at other Holocaust sites across Europe; indeed the Nazis established camouflage units, specifically for the purpose of hiding the physical traces of their crimes (IMTN 1947(7)). Considerable diversity in the methods can be seen to exist according to the evidence being concealed, the local resources available and the time frame in which the camouflaging process was undertaken. At Tworai hospital, families of victims were told they had died and a 'fictitious grave' appeared in the cemetery, whilst the reality was they had been starved to death or 'executed in some solitary place, the traces of the crime being then very carefully obliterated' (Batawia 1982:155). At Ravensbrück the issuing of letters with false causes of death has been observed (Morrison 2000:285), whilst at Auschwitz death certificates were created for a small number of victims to mask the overall total (Central Commission for the Investigation of German War Crimes in Poland 1982). Similarly, Theresienstadt was in fact known as 'the show ghetto' in order 'to mislead public opinion and to fool the Jews in Bohemia Moravia' as to the true function of the camp (Murmelstein 2007).

However, it is important to avoid a situation whereby these perceived attempts to hide the crimes also act as a deterrent to search, based on the aforementioned belief that the Nazis

were capable of destroying all traces of their activities. To do so would be to deny the potential of archaeological methods to reveal new insights into the sites in question.

6.2.7. ASSESSING THE RESOURCE

The benefits of using multiple techniques, as appropriate, was clearly demonstrated at both Treblinka and Alderney. Although in general the methodology employed at both sites progressed from desk-based assessment through to field survey, the actual approach taken and methods used varied at both sites owing to a number of factors.

The large number of witness plans and descriptions of the specific functions of individual buildings within Treblinka II contrasted starkly to the single contemporary plan for Norderney and the brief description often afforded to it in the literature (Appendix 4.1 and 5.6.1.1). However, as Hayes (2003:332) has noted of Holocaust sites in general, 'eyewitness testimony complicates as well as clarifies, since it comes in many languages and from numerous, necessarily partial and time bound perspectives', thus this can impact upon archaeological interpretation. Conversely, the vast number of contemporary aerial images of Alderney, identified as part of this research, provided an accurate impression of the layout of both Longy Cemetery and Norderney, the surviving extent of which could then be confirmed using geophysics and topographic survey (section 5.6.2.1 and 5.6.3.1). The lack of any aerial images of Treblinka from during its time of operation makes interpretation of the site more complex, particularly given the extent of post-abandonment changes to the site (section 4.3.2).

The level of survey undertaken in these early-stage investigations, as defined by English Heritage (2007) and RCHME (1999) (Appendix 3.1), was also dependent upon a number of factors. These included the density of remains within the survey areas, their visibility on the surface, the extent of previous surveys and memorialisation, access and the need to define the wider context of the site. For example, at Treblinka II the contrast between the ease of access to the central monument area and the obstructions caused by the forest that bounds it meant that the level of survey varied within different areas of the camp. Similarly, the fact that only vegetation change remained as a visible indicator in the central area meant that level one survey in this area was brief compared to the forest areas where considerably more features were evident. Level one survey on Alderney was, by contrast, extensive in all areas examined. This mostly stemmed from the visible nature of features in the form of above-ground concrete and the need to survey the fortifications in the immediate vicinity of Norderney in order to provide the relevant context.

The nature and extent of geophysical survey methods also varied between the two sites. The availability of the resistance survey equipment, the belief that it would provide a prompt survey method for remains that were believed to lie just below the surface and, in the case of Longy Common, the unsuitability of the GPR given the rough terrain, meant that it was selected as the sole geophysical method on Alderney. At Treblinka II, none of the above applied for the central death camp area and, as such, the use of multiple methods facilitated comparative datasets. However, the obstructive vegetation at both sites prevented access to some areas, thus demonstrating the difference between the theoretical application of such methods and reality.

Therefore the methods discussed in this study should be viewed as forming part of a toolbox, from which the most appropriate techniques can be selected on a case by case basis. Additionally, this study has drawn on the areas of conflict and forensic archaeology, history, geography, botany, forensic investigation and psychology, social anthropology, heritage, education and cultural memory studies. Therefore, although a sub-discipline of Holocaust archaeology is advocated in this thesis, such a field should refer to the study of the archaeology of the Holocaust as well as the methodology used in its examination, to account for the variety of disciplines required to successfully analyse the landscape.

6.3. POST-ABANDONMENT HISTORIES

The methodology employed as part of this study has demonstrated the potential to derive new evidence concerning the sites examined in terms of their layout, function and surviving extent. In addition to this, this research has yielded considerable information about their post-abandonment histories and the ways in which this has come to bear upon their current appearance and approaches to them. Although valuable research has been completed for both sites by historians, various factors have resulted in what can be termed selective narratives of the sites. These factors will be discussed below, with a view to making comparisons between the two sites and assessing the trends in the cultural memory that has built up around them. This will contribute further to the considerations highlighted in Chapter 2, on the basis that these issues are likely to be prevalent at other sites that may be examined archaeologically in the future.

6.3.1. SURVIVABILITY

Literature and public opinion stated of both sites that they had been demolished, a process which occurred in two stages - upon the abandonment of the sites by the Nazis and in the years since by post-war investigators and the local community (section 4.4 and 5.4). However, the survey results have clearly shown that considerable evidence does survive in the archaeological record, thus contradicting the official histories. The identification of visible concrete remains, including almost complete buried structures, and topographic, taphonomic and geophysical anomalies consistent with subsurface remains at Norderney, demonstrated that the site was demolished to ground level, with hut foundations and concrete features being left in situ (section 5.6.2.2). Similarly, despite the fact that the buildings at Treblinka II bore considerable damage from the Revolt and the removal of structures that followed, the ground was far from sterilised, with evidence of structural remains and debris, as well as pits and artefact scatters being identified (section 4.2.3 and 4.6.2.2). Even the removal of foundations and other buried remains will leave behind some sign of disturbance, be it in the form of the cut of the feature or in the form of the demolition material left behind. Therefore, although structures may not survive, subterranean evidence relating to them have been shown to exist and this is likely to be the case for the majority of sites pertaining to the Holocaust, thus highlighting the untapped resource represented by the archaeological record.

Similarly, the existence of standing structures at sites can detract from subterranean evidence, as can be seen at both Treblinka and Alderney. At the former, the existence of Treblinka I, where foundations and walls of the camp buildings can be seen has stood in

stark contrast to Treblinka II, where no physical remains survive above ground. Similarly, on Alderney, the existence of the fortifications has detracted from the more subtle traces of the camps. As Jasinski (2011) has argued, it is easier to expunge the slave worker camps from the history of the Atlantic Wall, for example, based on the fact that the bunkers and other fortifications were built to last and are, therefore, difficult to erase.

6.3.2. PREVIOUS INVESTIGATIONS

The popular perceptions comprising the official histories of both of the sites examined can be seen to have stemmed directly from post-war investigations and this is a trend that can be observed for other sites from this period. Not only have these investigations often been seen as proof that the physical remnants of these sites had been fully examined, but the terminology that they used can be seen to have placed the emphasis on standing structures as the only valuable source of evidence (Łuskaszkiewicz 1946a; WO311/13-b-e). Such beliefs appear to have transcended the decades and archaeological evidence has, therefore, been overlooked. This has been particularly prevalent at Treblinka and Alderney given that such beliefs have been perpetuated in the literature (section 4.4 and 5.4).

Similarly, the belief that all of the remains of the victims have been located, exhumed or were totally obliterated by the Nazis can also be seen to stem from the assertions of postwar investigations; thus resulting in the view that there is nothing left to find (Piper 2000; Arad 1987; Chrostowski 2004). However, as shown in Chapters 4 and 5, these surveys rarely included the comprehensive examination of burials and, where this did occur, exhumations were rarely complete nor was the entire site surveyed (Central Commission for the

Investigation of German War Crimes in Poland 1946; IMTN 1947(7)). In some cases it was sufficient to acknowledge that a site existed within the remit of legal investigations, a trend that can be seen to have persisted in some searches for modern mass graves (Czynska and Kupsc 1982; Hunter et al forthcoming).

In the case of both Treblinka and Alderney, the lack of archaeological evidence has been used as an evidence of absence in the past. At Treblinka II, this has been two-fold. As mentioned above, the general public and historical literature has taken the view that the evidence has been destroyed (section 4.4). Additionally, Holocaust revisionists have used the lack of studies to suggest that the events reported in the historical literature did not occur (Mattogno and Graf 2004). The approach concerning Alderney has been that the lack of physical evidence means that this evidence does not exist, particularly with regards to the presence of further burials, as set out by those writing the official history (Cruikshank 1975; Pantcheff 1981).

6.3.3. DIVERSITY OF GROUPS AFFECTED

In Chapter 2 it was observed that a diverse number of groups have been, and still are, affected by the events of the Holocaust. Consequently, the impact that archaeological work would have upon these groups was considered an integral part of the research methodology (Chapter 3). However, in addition to the variety of social and religious groups already noted, carrying out the research has allowed the subtleties of these groups to be determined and has identified considerable diversity between the 'communities' and individuals affected at micro level. A discussion of these affected groups is included here in order to demonstrate

their opinions reflect the various attitudes towards the cultural memory and heritage of this period. Although the core of this discussion will be the multiplicity of these groups and the fact that this will be influenced by the specific circumstances of the site being examined, it is argued here that trends relating to the study of Holocaust sites in general, and indeed the study of conflict, can be derived.

6.3.3.1. National Identity and the Holocaust - East vs. West?

Treblinka and Alderney were selected as case studies owing to their geographic positions within Eastern and Western Europe, and one of the main aims was to contrast the different approaches to heritage in these regions. This has allowed observations regarding national identities shaped by the Holocaust to be made and hints towards the diverse forms that such identities are likely to have assumed throughout Europe. Given that many of the sites in Western Europe, including Alderney, relate to the Nazi slave labour programme, there have been few studies that have focused upon their role in Nazi persecution. There has been a tendency to distance such events from those which occurred in the East and the idea of a 'model occupation' has instead been formulated in some places such as France and the Channel Islands (Bunting 1995). As shown in section 5.3, this has even resulted in the erasing of certain features, such as mass graves, from the history of the Occupation on Alderney. Farmer (2002:93) has noted that despite the fact that the massacre of French civilians at Oradour-sur-Glane 'emerged as a national symbol of French experience during the Second World War' the massacre of foreign labour groups in the same area has been ignored. This trend can be noted at other sites in Germany, Norway, The Netherlands and Belgium, and

the alternative focus on the fortifications that has emerged can be seen to almost glorify the Occupation in the west (Schmitt 2001; Hayes 2002; pers. comm. Jasinski).

In the literature, there has been a tendency to focus on the might of the structures, their engineering and the size of their guns (e.g. Ginns 1994, Davenport 2003). Such a trend can be observed at other sites pertaining to the Atlantic Wall, that have often received more attention from bunker enthusiasts than those wishing to commemorate those that suffered and died constructing them (Carr 2011, Jasinski 2011, Rollman 2011; Farmer 2002). Of course, the glorification of structures in particular that have been constructed by slave labour is not limited to the Second World War. Indeed, some of the world's most famous and most frequently visited monuments were built at the expense of thousands of lives; the Pyramids of Giza, the Mayan temples, the Great Wall of China to name but a few. The recent nature of the events of the Holocaust likely account for the response of such individuals seeming even more terrible, yet the exclusion of the less comfortable aspects of the histories of monuments seems endemic in society for all periods.

In part, however, for Alderney at least, this approach appears to stem from the lack of desire for the island to be tarnished by the events of the Occupation, an aspiration to forget the darker parts of its past and to detach from the events of the Holocaust (section 5.7.1). The approach taken by the British government since the war can also be related to a desire to view the Holocaust as an event that occurred 'in the east' and not in the supposedly civilised west (section 5.7).

However, to continue to take an approach that makes a distinction between the events of the Holocaust in the east and west is to ignore the broader themes on which site diversity is truly based, whilst also further defining the hierarchy of sites. The archaeology of the Holocaust must instead be approached from a European perspective that addresses the farreaching nature of these events and demonstrates that discrimination and persecution did occur across Europe's breadth. To continue to view the Holocaust as something that occurred in another time and to social groups aside from our own, in whatever country we may inhabit, is to present an incomplete view of history and limits the ability to learn from these events. Simply because Alderney and Treblinka represent diverse sites in terms of the specifics of their operation, classifying them as separate events altogether is to downplay the racial hatred, lack of social cohesion and disregard for human life that were prevalent.

6.3.3.2. The concept of community

Tully (2007:67) has highlighted the lack of synergy between the theoretical implications of the term community, in that it alludes to 'a sense of cohesion and solidarity created through a common interest in a shared locale', and, often, the reality in the context of public archaeology. Instead the term community itself is misleading, in that many communities and affected groups will have connections and interests, or lack thereof, to the events in question. It is such diversity that leads to sites becoming contested spaces, often culminating in an equally diverse array of historical narratives (Purbrick et al 2007; Pollard 2007). Indeed, it has been argued that conflict will always arise when the issue of heritage is discussed as it 'is multi-faceted, multi-sensual and multi-emotive, with each experience and encounter prompting an array of interpretation, perspectives and responses that both collide and

compete' (Smith and Waterton 2009:57). Where such contestation exists, particularly where it has developed over a long period of time, changing popular perceptions through archaeological research can be even more difficult; it has already been shown that such new approaches can be seen to be sensationalist by those who have maintained the official histories to date (section 5.3.4).

At the broadest level, a distinction can be made between those communities and individuals who are present at the site in question, either temporarily (e.g. visitors) or permanently (e.g. local residents), and those who are geographically removed (e.g. survivors and their families, or descendents of the affected area who no longer live in the locality and do not visit). With regards to the former, the term 'visitor' is equally an oversimplification of individuals that travel to heritage sites and, with respect to the Holocaust, this will include survivors, their relatives and those of the deceased, academics, educational groups, tourists and pilgrims. Thus there will also be variation in terms of those who have a direct connection to the events in question and those who do not.

Indeed, Smith and Waterton (2009) have observed that the positive nature of heritage shared within and between communities has often been emphasised and suggested Holocaust Memorial Day and the commemoration of the British slave trade as counterarguments to this interpretation. Similarly, with respect to the Holocaust, many affected communities are defined by negative experiences; survivor communities and victims' families, whose lives have been shaped by loss. When national or local heritage is also defined in part by atrocity, this can lead to resentment and judgement on both the part

of the community themselves and external parties. Similarly, politics will often dictate whether that heritage presents the community in question as a cohort of victims, perpetrators, observers or a combination of all of these groups.

The case study sites have demonstrated that there is often conflict between visitors and local residents, and also between visitors (section 4.7 and 5.7). The tension between the different visitors to Treblinka for example, alludes to the different perceptions over the existence of the site, as well as to wider societal issues in Poland. Religious tensions in particular were observed, something which is likely prevalent due to the fact that the Holocaust is often considered a Jewish event in a Christian country (Zubrzycki 2006), whilst the differences within the Jewish community have already been observed in section 2.3.3. In Alderney, this tension is more likely to be based on differing views of interested tourists and the local community. It appears to be the conflict between tourists, passive observers e.g. those who pass through the site for leisure purposes not related to their former function, and those who have a direct connection to the events is most common. Particularly if visitors treat heritage as a performance and have the express desire to "feel something" at a site (Smith and Waterton 2009; Baxter 2009), this may be at odds with the more direct feelings experienced by mourners or survivors.

Diversity can also be seen with the visitors to sites who have directly been affected by the Holocaust. Survivors may have been interred at the site being visited or, as was observed at Treblinka during fieldwork, they may have been held prisoner in other camps throughout

Europe. Similarly, descendents who lost loved ones during the Holocaust may visit, whilst those who witnessed the events or aided victims may also be encountered.

At the case study sites, there was a notable lack of local advocacy for preservation and protection at both sites, given that those who experienced the events directly are no longer resident in the areas in question. This is a trend that can also be observed at other sites throughout Europe, given the demographic effects of the Holocaust; death, a lack of knowledge about where they were interred (Bonnard 1991), cost and logistics sit alongside more conscious decisions made by survivors and their descendents not to become involved with their protection, as a result of the difficulties revisiting the sites where they were interred (Brenner 1999) or due to the desire to limit the attention drawn to their religious or cultural group (Fonseca 1995). As such, claims of so-called ownership often emerge from various groups and individuals who have a desire to shape perceptions of events, the majority of whom did not experience the events directly.

One such group that will almost always be influential and will, in turn, impact upon archaeological research is the local community in the vicinity of the site being examined. The diversity between groups and individuals that comprise local communities, and as such their differing views, was also observed on Alderney and at Treblinka. With reference to the former, the current community is made up of descendents but also a large number of incomers. Divisions relating to membership and non-membership of certain groups, such as the Alderney Society, were observed and the differing levels of acceptance of the archaeological work between these two groups was apparent (section 5.7.5). The level of

interest in the Occupation also varies considerably within these groups, ranging from those with strong opinions to those who were indifferent. This, in part, appears to stem from whether or not individuals have a familial connection to this period e.g. whether they or their ancestors experienced these events. At Treblinka, the lack of a local historical group negates the existence of such divisions. However, the "local" community remains diverse. Lacking the geographical restriction of Alderney, this community comprises of those in the immediate environs of the former camp and those from the wider region. Many in these communities descend from individuals who lived in the vicinity during the Holocaust and some likely have never visited the camp, particularly the largely elderly residents in the surrounding villages. It was somewhat ironic, therefore, that a regional newspaper reported that the local community were delighted that this research was taking place (Tygonik Siedlecki 2011). Other people living in the vicinity have been seen to use the site as a leisure facility, whilst a smaller group, mainly from larger towns in the region, are involved with the work of the museum (section 4.7). Given Treblinka's remoteness, but also due to the fact that it is managed by a government department, the opinions of the local community do not seem to have shaped on-site interpretation but the fact that the site has a reasonably low profile compared to other camps to date likely reflects both national trends and the limited local interest in the site.

Smith and Waterton (2009) have noted the importance of considering the differing views of what can be termed sub-communities, citing the example of Hilton of Cadboll, where the views of the local historical society were falsely assumed to represent those of all of the village's inhabitants, thus resulting in misrepresentation of opinions on heritage strategies.

When addressing such an emotive subject as the Holocaust, and in light of the diverse range of groups affected, considering all views is clearly imperative. However, also for these reasons, this perhaps represents one of the greatest challenges to researchers. Similarly, however, considering the opinions of sub-communities can have a positive impact, in terms of identifying individuals who support the research project, as occurred on Alderney (section 5.7.2).

Additionally, the problems with engaging communities in heritage which is viewed as not relating to them or their descendents, for various reasons including class, race, religion and ancestry, have been observed by others engaged in community archaeology (McDavid 2002 and 2007; Alleyne 2002; Marshall 2001; Sen 2001). These problems are exacerbated when addressing what Price (2005) has termed 'orphan heritage', a construct often resulting from war, where events involving foreign nations occurred in a foreign territory with limited or no involvement of the home nation. Price (2005:182) cites the example of the First World War battlefields, where in addition to the heritage associated with the events where French and Belgian troops fought in their own territories, 'cultural ownership of the rest of the heritage lies with various foreign groups and organisations popular and governmental, originating in Germany; Britain and its former colonies and dominions including India, Australia, Canada, and New Zealand; the USA; the French colonies; Russia; Portugal; and Italy'. Given that the Holocaust largely involved crimes being perpetrated against foreigners by foreigners, it can also be seen to fall into this category. At both Treblinka and Alderney this was the case and it has been observed of local residents in the past, particularly those in the immediate postwar period, that they failed to sympathise with the victims, instead focusing on their own

plight as a result of the violence, poor conditions or evacuations that they had to suffer; thus they too wished to be seen as victims (section 5.7). Similarly, the varied jurisdiction of foreign organisations relating to burials, as well as confusion over who should commemorate victims observed on Alderney reflects similar trends at other Holocaust sites throughout Europe, for example the Eastern European workers who died elsewhere along the Atlantic Wall (PRO FO 371/100916).

Similarly, Moeller (2006:110) has argued that in the past 'stories of the Second World War were always told in the context of the ideological conflict that followed' and, as highlighted in Chapter 2 and with regards to the case studies discussed, this is apparent for the events of the Holocaust. In particular, the relationships between nations have strongly influenced approaches to heritage and, as such, the physical representations of sites. This can be seen with respect to the animosity between Russia and Poland (Polonsky and Michlic 2004), the altered relationship between Norway and its allies (Jasinski 2011) and the changing circumstances in the former Eastern bloc (Jambrek 2008). Local and national politics can also be seen to be influential. For example, on Alderney it can be observed that a long-standing political commitment has been made to upholding the official history of the Occupation, the details of which have changed little since the war (Cruikshank 1975). In Poland, the commitment to focusing on crimes against Christian Polish citizens has prevailed over widespread discussion of the crimes committed against other groups (Polonsky and Michlic 2004). Therefore, although the Holocaust itself transcended boundaries and affected a vast number of groups, in both of the case studies examined it was observed that local and national politics ultimately impacted upon attitudes towards, and the presentation of, the

site. Hence, it is the very same politics which will dictate whether archaeological works are to be permitted.

6.3.3.3. Changing Generations

As well as the fact that communities are not 'homogenous and self-referential' (Smith and Waterton 2009:53), 'cultural landscapes are not the product of sedentary urban societies' (Head 2000:64). Therefore, as well as the diverse range of issues that will exist that are specific to each site being examined, archaeologists are faced with the fact that a number of intrinsic factors, such as deaths and relocation, exist alongside extrinsic factors, such as political and economic change, altering the demographic of, and influences upon, communities. Similarly, Carman (2002) alluded to the different types of value placed on heritage and, as with remains relating to other historical periods, the various groups pertaining to the Holocaust have assigned these differentially. This value can also be seen to change over time and will be multi-layered according to specific social and political circumstances.

Such changes can have a positive impact upon approaches to heritage and the acceptance of archaeological work. At Treblinka, for example, considerably greater value has been placed on the site by the current director and his team, as reflected by plans to enhance the memorial and increase the dissemination of information about the site (pers. comm. Edward Kopówka). The issuing of permission for work at the site can also be seen to have been a result of a cultural shift. In Germany, new generations claimed to have 'broke the silence imposed by our fathers and conquered the memory of their crimes' (Friedrich 2004, cited in

Moeller 2006:110), paving the way for the later commitment to examining Holocaust sites to the same extent as other ancient ones, if they come under threat (section 1.3.3; Theune 2010).

Conversely, however, a change of generation can have a negative impact or can continue to perpetuate "facts" about the events in question. Second-, third- and fourth-hand memories can be observed at some sites (Golbert 2004) and, as on Alderney, where the perpetuation of these "facts" is as a result of a long-standing political commitment to maintaining the official history formulated in the immediate post-war period, this can present considerable challenges to archaeologists. Not only does this make distinguishing fact from fiction complex, but it also makes obtaining permission for work more difficult. Similarly, the outward appearance of the sites on Alderney appears to suggest that little value continues to be placed on the remains by successive generations. However, the arguments presented in Chapter 5 suggest the situation is more complex.

6.3.3.4. 'Public' archaeology

Moshenska (2009:73) has noted that 'the 'public' element of public archaeology seldom originates with 'the public' themselves' and this can of course exacerbate feelings of the researcher as an outsider (Merriman 2004). The latter is likely to be particularly true with regards to Holocaust sites, where investigations have seldom been instigated by the public, and of course this represented a real cause for concern in this research project which was advocated by the author. The nature of so-called 'hot heritage' - that is sites connected to conflict, genocide, atrocities or contested space (Uzzell 1989) - means that public

engagement needs to be carefully considered. At both Treblinka and Alderney, concerns were expressed about even simply discussing the research being undertaken with members of the public. At Treblinka, security was one major concern and it was believed that the archaeological work, although non-invasive, had the potential to lead to an upsurge in looting (pers. comm. Edward Kopówka). On Alderney the location of the survey on the island's campsite represented a potentially difficult situation in terms of explaining to holidaymakers exactly what was being surveyed.

In most instances, it will rarely be appropriate to conduct community excavations with respect to Holocaust sites given the nature of the remains being sought. That said, community archaeology, like archaeology itself, should not only be seen as being limited to excavation. Outreach activities - such as on-site tours, lecture programmes, workshops, information boards and the like - can be used to inform the public, disseminate knowledge and, where necessary, to discuss concerns surrounding the work being undertaken. Public engagement at Holocaust sites, where it is possible and ethical, should be encouraged; thus facilitating access for those who wish to learn more about the research being undertaken. It may be appropriate in some instances, to conduct these activities off-site, or at least away from the area where the work is being undertaken, in order to account for issues like security and looting alluded to above. Additionally, this may be more appropriate for sites where visitors wish to commemorate loved ones and where such practices may be disturbed by outreach activities. Thus, as with the nature and application of archaeological methodologies, the concerns of the various groups who will visit the site in question, or be

affected by the work being undertaken, must be central to approaches adopted for public engagement.

6.3.3.5. Ethical Implications

From an ethical standpoint, there is a general agreement in the field of archaeology that we should protect sites for the 'public good', yet given the many publics affected and the sensitive nature of sites relating to the Holocaust, it is unlikely to be possible to satisfy all parties (Carman 2005:81). The initial response to the fieldwork on Alderney by members of the community was one of considerable hostility and, during a lecture presented to the local historical society, it was clear that the prospect of reviving interest in the Occupation was causing angst. During excavations at Bełżeć, it has already been noted that the views of the Jewish community contrasted with those of the authorities commissioning the work (Weiss 2003; Kola 2000). The fact that Holocaust sites can be seen to take on multiple meanings to different groups is also problematic. The complexity of this situation is perhaps best summarised by Zubrzycki's (2006:99) assessment of Auschwitz:

'Whereas "Auschwitz" is, for Jews and the world, the symbol of the Holocaust and now of universal evil, "Oświęcim" is for Poles the symbol of Polish martyrdom. It is also the symbolic terrain where Poles articulate their relationship to various Others: Germans, who created the camp; Russians, who liberated it; and especially Jews, with whom the Poles compete for ownership of the camp as a symbol of their own martyrdom'. Finally, Auschwitz is the dramatization and enactment of nationalist discourses which have shaped — and divided — Polish public life in the last decade'.

The problem with determining which of these groups' opinion is more valid has already been alluded to in Chapter 2. This represents a considerable challenge, particularly when dealing with sites at which people died. Further questions that have emerged as a result of the survey include: Should the wishes of the local community, which in themselves may be diverse, take precedent over those of survivors and their families, or vice versa? Do archaeologists have the right to enforce heritage upon communities who may feel little connection to the events in question? Should international, national or local views take priority? These are complex questions without simple answers and are ones that must be considered on a case-by-case basis when archaeological work is proposed.

6.3.4. RESPONSES TO FIELDWORK

This research project represents another layer in the post-war history of the sites examined, as well as to the history of the Holocaust as a whole. The simple act of 'doing' archaeology allowed the site history of the landscape to be derived but also invoked responses which revealed important information concerning attitudes towards the sites. In the first instance, it was often expressed that archaeology could not in fact contribute to the history of this period. At Treblinka this stemmed from the belief that archaeology was an invasive activity, and was thus not permitted by Halacha Law, and also the aforementioned assertion that nothing survived of the camp. In Alderney, this related to the belief that no further burials existed and that the survey equipment would not work in the island's sandy environment.

Obtaining permission for the work was also complicated by aspects of the postabandonment histories, in particular political, social and religious concerns. Understandably, there was concern about the attention the work would generate, the disturbance it would cause at memorial sites, the implications of the results, and the responsibility of issuing permission (pers. comm. Alderney Society). Each site had its own local systems for obtaining permission and, in addition to the bureaucratic channels, there was a need to consider other individuals and groups; the Office of the Chief Rabbi of Poland, the Museum authorities at various levels and the Conservator of Monuments at Treblinka; the local historical society and museum, landowners and the States on Alderney.

Similar issues will be present at other Holocaust sites, where permission for archaeological work is required, but each country will have its own system and legislation to abide by. Archaeologists may need to obtain permission from, and comply with, national regulatory bodies, religious groups, and site custodians. Ethical or professional standards need to be complied with and, similarly, obtaining the acceptance and trust of the various groups involved must form part of methodologies.

Additionally, genocide and political killings are by their very nature carried out covertly and on a large scale, often resulting in archaeologists facing political problems, potentially unsafe working environments and marginalisation (Hunter and Simpson 2007; Buchli and Lucas 2001). Similar trends can be observed at other Holocaust sites where examinations of the physical remains have been undertaken. This not only demonstrates that the poignancy of these events has not dissipated in many cases despite the passage of time, but also that the experiences of the author with regards to the case studies examined, rather than being isolated occurrences, are indicative of the kinds of responses that will still be generated

when studies of this period are proposed. Since the immediate post-war period, with the opposition to the Mission de Recherché proposals to exhume the Holocaust victims at Belsen (Rosensaft 1979), through to the time pressures and political unrest caused by more recent investigations, such as Wright's excavations at Jedwabne, investigators approaching the material remains of the Holocaust have faced antagonism (Bevan 1994). Additionally, wars about which there are 'contentious' memories present investigators with a number of problems. This may be in the form of the reluctance of witnesses to talk about their experiences, too many witnesses presenting conflicting opinions of the same events (Hayes 2003), sensationalist accounts, as well as the potential for survivors to be 'fired by patterns of suspicion that scholars objectify their many years of agony, pain and torment' (Garber 1994:3). Browning (1993) has commented that the Holocaust is one of the most controversial topics that a historian can address and Moshenska (2008:165) has noted that those who attempt to challenge widely held perceptions of events are often 'attacked, marginalized or deliberately misrepresented'; as the issues faced during this research show, such issues are equally as prevalent for archaeologists (Hunter et al forthcoming). Indeed, in light of the issues discussed above, deciding to pursue archaeological work under the pressures imposed by the existence of these differences in opinion can make for an uncomfortable working environment.

Therefore, what perhaps defines the discipline of Holocaust archaeology is not only the ability of the archaeologist to understand the historical events of this period and the associated material culture that was generated from it, but also the capacity to understand the complex range of issues associated with these events and its aftermath.

6.3.5. PRIVATE RESPONSES

The value of observing individuals and groups at heritage sites has been attested to in the literature (Boyd 2012; Jacobs 2004; Poria et al 2001). This value can be argued with respect to Holocaust sites, given that a number of private responses to Treblinka and Alderney were recorded during the fieldwork undertaken as part of this study. These observations revealed personal stories and acts of commemoration, individual and group responses, religious beliefs, national identities and unwritten additions to the history of the sites all enacted within the space. Such acts often demonstrated the multiple functions and perceptions of the landscapes, which represented and became sites of memory, solace, mourning, reconciliation, conflict and recreation. At Treblinka II, for example, candles left by mourners in pits in the wooded areas of the camp alluded to both the fact that the function of such features during the camp's period of operation was perhaps known (or at least thought to be known) and the function these features have acquired as part of the site's postabandonment history (Plate 6.7). In contrast, the observation of a young couple kissing and picnicking, a family walking in the woods and the limited walk that most visitors took around the monument reveals the loss of meaning that has occurred. In Alderney, the latter can be demonstrated by the number of people who knew nothing of Norderney's former function or the location of the former cemetery, despite frequently passing through the sites. The private responses and unwritten histories to these sites will never be recorded in their entirety, for they are contributed to every day; the landscape constantly takes on new meanings, which are then lost with the departure of the visitor.



Plate 6.7. Candles left in the forest at Treblinka (author's own photograph)

6.3.6. HIERARCHY OF ATROCITY

In Chapter 2, it was observed that a hierarchy of atrocity has often been defined by individuals and nations when the investigation of the physical remains of the Holocaust has been suggested. However, when examining Treblinka and Alderney, it was observed that this hierarchy was not only restricted to perceptions regarding the compared 'importance' of historic events but can also be seen to extend to individual atrocities that occurred during the Holocaust and Nazi Occupation of Europe. For example, during this research, it was often questioned why Alderney was being examined, particularly given the difference in scale with the events that occurred at Treblinka (pers. comm. Alderney Society; pers. comm. European Research Council). Similarly, at inter-site level, the degree of interest in, and representation of, certain groups of labourers e.g. the O.T. workers compared to the slave workers and

prisoners on Alderney, in the literature reveals the further hierarchies that exist with studies of this period (Ginns 1994; Cruikshank 1975). Such trends can be observed for other Holocaust sites: it has been more common to mark the sites of the camps, as opposed to isolated burial sites; local civilian casualties have often been commemorated whilst foreign labour has not; certain sites have entered public consciousness, whilst others have been forgotten.

However, slotting the atrocities perpetrated at each of the sites into a hierarchy of genocide, where one site is deemed to be 'worse' than the other, is also of little value in terms of reassessing the landscapes. To ignore the sites such as Alderney on the basis that they were on a smaller scale or different in nature, and therefore they are deemed to be less significant than those of the Holocaust, is to imply that such events are somehow acceptable. Just because many people died under the auspice of a work program and many as a result of harsh living and working conditions does not alter the fact that they were subjected to intense and often prolonged cruelty. Indeed, few would argue that the deaths in Bergen-Belsen, where many people also died of malnutrition and as a result of poor conditions, should not be classed as atrocities (Reilly et al 1997). Why then should those on Alderney not be classed as such? Instead what these differences should demonstrate is that the Holocaust, and thus the physical remnants that it left behind, was varied and often responded to local conditions, landscape and the need for manpower to aid the war effort. To filter out certain events, and therefore certain groups of people, at site or inter-site level is to misrepresent the history of the period and to fail to uphold humanitarian requirements. Therefore, instead of focusing on numbers and severity ratings, sites and landscapes should

be compared according to prevalent themes. Instead of ranking events according to their differences, emphasis should instead be placed on acknowledging that the diversity of sites of the Holocaust was what made the Nazi Occupation of Europe so complex.

6.3.7. LANDSCAPE CHANGE: ISSUES CAUSED

Landscape change can be a considerable inhibiting factor in the investigation of archaeological sites and its implications for hindering recent searches for human remains in particular have been documented (Sturdy 2007; Hunter et al forthcoming; Nobes 2000). Such landscape change can be intentional, for example that conducted by perpetrators as already discussed, or it may be cultural or natural (Sturdy 2008). When attempting to interpret the field survey and geophysical data from both sites, the effect of all of these types of landscape change became apparent.

With regards to landscape change since the war, factors such as whether a site has been preserved as a monument, its function(s) over the last seven decades, national and local attitudes towards it, and its geographic location can all be identified as impacting upon its extent. Given the fact that Treblinka is preserved as a monument, it has not been subject to residential or commercial development and its grounds are maintained. However, whilst this has prevented certain types of landscape change, it has also incited, and failed to prevent, other types (Huener 2003); as Kaplan (2011:1) notes 'sometimes monumental structures erase rather than commemorate'. For example, the construction of the memorial itself has resulted in the landscape being radically altered from its post-abandonment appearance; the levelling of the site, the erection of the concrete matvoh and the ongoing changes to the

surrounding forest have all impacted upon the archaeological record. This symbolic memorial, although an important part of the commemoration and preservation process, can be seen to be misleading in terms of an understanding of the site's layout and, for visitors, its former function (Huener 2003). It also prevented access to certain areas with survey equipment during the archaeological work. Additionally, the site remained neglected for almost fifteen years after the end of World War II and, even after the memorial was constructed, remained a target for graverobbers and treasure hunters who have dug pits that confuse the interpretation of the site when non-invasive work is undertaken (Auerbach 1979). Indeed, security at the site was a problem that required consideration in advance of the fieldwork undertaken as part of this research, owing to the potential for archaeological investigations to cause a revival in such practices, given the perception of archaeology as looking for buried artefacts (pers. comm. Edward Kopówka).

It has already been noted that none of the sites pertaining to the Occupation of Alderney are protected memorial sites and, as such, they have all been subject to alternative use and, in turn, considerable damage. This damage has varied from total destruction e.g. Helgoland which was razed to make way for a row of houses, through to the existence of coarse vegetation preventing access e.g. at Lager Sylt (section 5.2.4). At Norderney, natural landscape change in the form of movement of the sand dunes can also be seen, whilst the levelling of the site has likely caused some damage to subsurface remains (section 5.6.2). Many of the sites on Alderney also took on alternative functions during the war and in its immediate aftermath; Lager Borkum for example was renamed Minerva and housed British troops, whilst many of the earlier forts became holding camps for the German

administration who were to be interrogated by the investigators tasked by the British government (Carr 2007). These activities have clearly contributed to the archaeological record in their own right (see below) but they also represent landscape change that has the potential to have masked the former functions of these sites. This is a trend that can be seen at countless other sites in Europe, where the legal proceedings and the post-war clean up operation took precedent over examining the physical remains of the Holocaust (Salt 2004; Reinartz and von Krockow 1995; Lattek 1997). Additionally, innumerable examples of sites that have taken on alternative functions since the war can be cited, all of which have clearly been affected by landscape change, albeit to differing degrees; Westerbork in The Netherlands was used as an internment camp and, later, a camp for repatriates from Indonesia before being designated a national monument (Kamp Westerbork 2011); in Norway, Tangen Camp now houses a mobile phone mast, whilst Vevang Fort and PoW camp has been converted into a paintballing centre (Jasinski 2011); Neuengamme in Germany was a prison complex until 2003 (KZ Neuengamme 2010; Plate 6.8). As noted in Chapter 1, whilst it is not suggested that all sites should be preserved, thus inhibiting future developments, the complete history of a site should be recorded and acknowledged; this argument stands for all sites, not just those pertaining to the Holocaust. In order to learn from the past and to ensure that knowledge is not suppressed, this must also include acknowledgement of the "less comfortable" aspects of this history (Logan and Reeves 2009). Many examples could be cited with regards to former Holocaust sites that have, alongside their commemoration of the events of this period, sought to empower youth (Majdanek; Ravensbrück), promote peace (Falstad), and encourage cohesion (International Coalition of Sites of Conscience 2011).

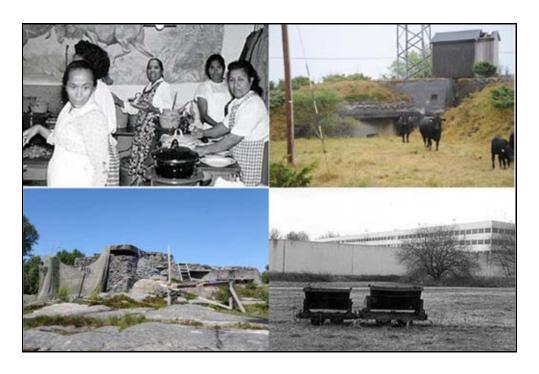


Plate 6.8. Alternative uses of Holocaust sites — the Moluccan camp at Westerbork (after Het Geheugen van Nederland/Koninklijke Bibliotheek - Nationale bibliotheek van Nederland, 2003, top left), Tangen Camp in Norway (after Jasinski 2011, top right), Vevang Fort and PoW camp after Jasinski 2011, bottom left) and the former prison complex at Neuengamme (after, bottom right)

The problem of landscape change is particularly pertinent where a non-invasive methodology is employed, owing to the fact that the findings cannot be ground truthed. This is another justification for the use of an interdisciplinary approach given that a combination of sources can assist in providing complementary datasets in support of the presence of archaeological remains. Thus, a high degree of certainty about the nature of features can be achieved that would not have been obtained had an archaeological approach not been taken.

It is perhaps the more subtle, natural forms of landscape change that present the largest problem to archaeologists wishing to reconstruct the history of the sites. Whereas development or changes in the site's function will usually be recorded and can be identified using maps, government records and photographs, natural landscape change is rarely recorded (Sturdy 2007). Flooding, drought, vegetation growth and wildlife activity all affected the sites examined as part of this study and the extent of the landscape change as a result was not known (Deutsche Welle 2010; Reinartz and von Krokow 1995; Haglund 1997). The season in which the fieldwork is undertaken can of course also dictate the extent to which landscape change affects interpretation; similarly the season in which aerial photographs were taken will be influential. Dense vegetation may die back in winter and allow access, whilst high vegetation in the summer may also act as an indicator of the existence of buried features.

Therefore, some form of landscape change will have taken place at every site pertaining to the Holocaust, given that none have been preserved in their entirety in the form that they held when they were in use. The examples cited above have demonstrated the diverse forms in which this landscape change can be found. Of course the exact nature of this change will vary on a site by site basis but it is hoped that the above discussion will act as a guide to factors to be aware of in the course of future projects examining Holocaust sites.

6.3.8. LANDSCAPE CHANGE AS AN INDICATOR OF CULTURAL MEMORY

Having argued that landscape change represents an issue for archaeologists attempting to examine sites of this period, such change should also be viewed as an important resource in detailing the post-war history of the sites in question. Indeed, an examination of the state of preservation of a site and in many cases the physical layers left by certain actions, can reveal

as much about attitudes towards it and how cultural memory surrounding it has evolved as it can about the extent and nature of the individual features present. This is certainly evident at Treblinka and Alderney, and these examples demonstrate the variety of information that can be derived about a diverse range of social groups.

To take the example of the activities of grave diggers at Treblinka who have continued to dig at the site since the war. On the one hand, these activities allude to the belief that Jewish gold exists at the site, thus demonstrating both how the perceptions of the Jews have changed little and the lack of understanding concerning the reality of the conditions in the camp. On the other, it highlights often unacknowledged social trends pertaining to the immediate post-war period given that many people searching for valuables were doing so due to the desperate economic situation in Poland after liberation (pers. comm. Edward Kopówka). The landscaping at the site, in the form of the efforts in the past to plant trees across the majority of its extent, stemmed from a desire to demarcate, and to provide protection for, the area of the former camp. This also further confirms that it was believed that nothing survived at the site, or alternatively that there was no desire to excavate at Treblinka II at the time, given the obstruction that the trees cause to such an activity.

'On Alderney, the re-use and, in the case of Helgoland, destruction of the camp sites, coupled with the lack of interest in examining whether there is any truth to claims over further mass burials, demonstrates that the desire to suppress the more painful aspects of the island's past has a long history (section 5.7.4). The fact that the sites of the Occupation have become overgrown is a reflection of the lack of resources dedicated to their maintenance but also

perhaps the desire for them to become hidden, given that they remain 'a deliberate architectural intervention constructed in the public realm' (Tzalmona 2011). Similarly, after the war, the fact that the Allies modified the landscape further, using former camps to house prisoners of war and through the hasty burial of the dead, reflects the legal, logistical and medical demands prevalent at the time (Salt 2004; Reinartz and von Krokow 1995).

6.4. WHY ARCHAEOLOGY?

6.4.1. UNRAVELLING THE LAYERS

Hamilakis (2007:24) has argued 'the political ethic puts the archaeological enterprise constantly into doubt, asking always difficult questions, including the most fundamental of all: Why archaeology?' Given the number of issues involved in the examination of the Holocaust and given the need to assess the methodology employed as part of this study, such a question is asked here. What can archaeological methods contribute to the study of this period that cannot be provided by historical research alone? What impact are these results likely to have in terms of public understanding of the events or the future of heritage and education strategies? What are the major benefits of an approach that draws on a variety of disciplines and sub-disciplines?

To consider the first question, it must first be pointed out that the observations made with regards to what history cannot provide are not intended as a criticism of the discipline. Archaeological research is fundamentally dependent upon historical findings for its focus: projects are often devised based on historical knowledge, whilst trench locations, survey

areas and supporting evidence are provided by documentary, oral and photographic sources. Therefore, the two should be seen as interdependent as, in turn, archaeological work can provide the corroboration needed to definitively confirm historical research.

Additionally, there are some areas in which archaeologists are perhaps best placed to contribute. Assessing known historical sources with knowledge of construction and demolition processes, an understanding of stratigraphy and geology, and comprehension of the dynamics of the burial environment can allow new perspectives on archival material to be derived. This has certainly been the case at Treblinka and Alderney; indeed the potential for the projects stemmed from acknowledging that the physical reality of the archaeological record likely differed from popular perceptions presented in historical sources.

There were many findings that could not be derived without a physical assessment of the landscape. The confirmation of the existence of the surviving structures at Norderney and Treblinka would not have been possible without the use of field survey and geophysics. Given the loss of information about the cemetery on Alderney, it would not have been possible to determine whether a pit did exist in the region of the purported mass grave. An understanding of taphonomy allowed previously unidentified features to be acknowledged and the further potential for buried remains to be highlighted. As such, this research can be seen as an important step in moving away from the selective narratives of the sites. This, coupled with the fact that non-invasive methods facilitate the investigation of the sites without disturbing the remains, demonstrates the potential of archaeological surveying

techniques to enhance our knowledge of other similar sites pertaining to the Holocaust, particularly those where a consideration of Jewish Halacha Law is required.

6.4.2. REVISITING THE PAST

The information derived from these surveys was aimed at invoking questions over the need to reconsider the history of the sites in question and the Holocaust as a whole. It could be argued that the physical nature of the archaeological record presents more tangible and poignant reminders of this period. Simple measurements, the examination of vegetation change and topography, the overlaying of maps and aerial images, the identification of artefacts and structural remnants on the surface all represent uncomplicated methods yet have been shown to be capable of revealing considerable information. Perhaps, therefore, the most pertinent element of the archaeological methodology in terms of revealing what has been forgotten or overlooked at the sites examined was not the complex scientific methods, but simply the impetus to look at the landscape. It has been shown that it is not the case - that the remains do not exist, but that they have not been sought. Therefore, the archaeological work has allowed new questions to be asked of old material, as well as new sources of evidence to be revealed. With reference to Treblinka, the survey has demonstrated how much has been forgotten. Equally, Alderney forces us to confront the fact that considerable evidence pertaining to such lesser-known sites also survives and that there is a need to rectify the lack of study.

6.4.3. A FUTURE RESOURCE

Of course, as well as allowing us to revisit aspects of the past, archaeological work presents opportunities to provide a future resource; a number of questions have been answered, whilst others not previously considered have been raised for the future. The passing of time and the associated loss of evidence that has occurred presented a sense of urgency to ask such questions and to provide a new body of material. Not only should this material address heritage and educational needs with respect to the events of the Holocaust itself, but it also offers the potential to highlight the continued relevance of these events in light of ongoing problems with genocide, a lack of social cohesion and racial hatred.

6.4.3.1. Heritage and Education

As Sweibocka (1995) has argued, camps with few or no standing remains attract fewer visitors, whilst the majority of Holocaust sites aside from Auschwitz are visited by those with a personal connection or by those with a keen interest in this period of history. Given the nature of the emotive nature of these sites, the majority of people will not visit several of the camps or memorial sites. Consequently, this raises questions over the future of both Treblinka and the sites on Alderney as time passes. As survivors and their families pass on, the need for development land increases, landscape change takes its toll, and the practical and financial requirements of the site rise, there is a real danger that knowledge of such sites, and those of a similar nature elsewhere in Europe, will be lost.

Therefore, there is clearly a need for a sustainable heritage resource. The increased understanding of the layout of the sites provided by archaeological survey, cartographic data

and historical information provides the opportunity to redevelop the sites. At Treblinka, for example, plans to re-mark the boundary based on the findings of this survey will be realised imminently. The non-invasive approach used has built trust and allowed the areas most likely to contain human remains to be identified, thus plans to excavate the site with a view to redesigning the memorial are being devised. Similarly, the approach of viewing the sites as landscapes, adopted as part of this project, has been taken on by the museum authorities, who are pressing ahead with plans to better integrate Treblinka I and II as a memorial site (pers. comm. Edward Kopówka). It is at this stage that further interdisciplinary aspects need to be introduced to the overall methodology of examining the physical remains; heritage managers, landscape architects, conservators and builders all need to be consulted to ensure that a landscape can be produced that satisfies the religious and commemorative needs of visitors, whilst also remaining true to the newly uncovered inclusive history of the sites in question.

Conversely however, on Alderney, it seems unlikely that the findings will result in modifications to the individual sites; Longy Common is after all no longer a cemetery, whilst the location of Norderney within the island's campsite suggests that it is unlikely to become an officially designated memorial. There is also the practical issue of conserving and designating all of the fortification sites as monuments to slave labour. Similarly, questions do have to be raised over whether, given the lack of desire to increase tourism based on the Occupation sites in the past, the archaeological findings will change the overall perception of this period at local level. Therefore, it would appear that the survey on Alderney has resulted in preservation by record and, as such, alternative heritage and educational resources can be

produced. The digital nature of the data produced during archaeological surveys lends itself to virtual heritage provision, thus allowing it to be used for educational purposes and providing access to it for the general public across the world. The walkover survey data, which centres around a mapping programme, can easily be adapted to include oral testimonies, historical documents and maps, witness plans, contemporary and modern photographs, aerial images and further survey data, thus producing a digital database that can provide the infrastructure for websites or exhibitions. This digital database can of course be easily built upon as future fieldwork is undertaken. The 3D models can also be integrated, offering the opportunity to reconstruct the site but also, for those unable to visit, the prospect of understanding its extent, nature and layout. Educational packs for schools, exhibitions and more traditional means of dissemination, such as books, magazine articles and conference papers, can all allow the archaeological results to be integrated into the history of this period, and can provide a visual resource for future generations (Council for British Archaeology 2002).

6.4.3.2. The continued relevance of the Holocaust

The continued relevance of the Holocaust can be seen on two levels, both of which offer the opportunity to address the lessons that can be learnt from the history of the twentieth century. The first relates to the ongoing interest in this period in the media – the recent trial of John Demjanuk, the exhumation of Rudolf Höss and the reporting of the deaths of Holocaust survivors all attest to this (Evans 2011; BBC 2011d; Jewish Journal 2011). There is a need to ensure that the archaeological record of this period receives equal attention in

order to change perceptions regarding certain aspects of its history, in particular the underrepresentation of certain groups.

Secondly, as noted above, as well as offering the opportunity to develop Holocaust-specific resources, the material generated can be used in educational programmes to highlight ongoing issues in society. In particular, the post-abandonment responses that have emerged since the Holocaust up to present day highlight important trends of modern relevance such as tolerance and racial hatred. Issues such as the persecution and marginalisation of minority groups, disregard for human life, unlawful violent acts and war crimes, are all prevalent; events at the time of writing such as the recent killings in Norway, the situation of the Roma in France, the conflicts in Libya and elsewhere in the Middle East provide but a few of the many examples that attest to this (Meo et al 2011; The Economist 2010; The Telegraph 2011). Questions need to be raised concerning how we are able to move on in progressive European society that claims to be 'civilised' if we are unable to acknowledge the more uncomfortable aspects of the past and the ways in which these have been suppressed. Similarly, there is a need for a more representative view of events, one that no longer focuses solely on what Novick (1999:5) has termed 'vicarious victimhood' or 'passive suffering' (section 2.3.1.1), but one which acknowledges the actions of various individuals and groups.

6.5. CONCLUSION

This chapter has highlighted the diversity of Holocaust sites, commonalities as represented by trends derived from the physical evidence and the various forgotten of this period. In particular, it has been demonstrated that these forgotten narratives extend to the postabandonment history of sites; the later layers of physical evidence and cultural memory represent a timeline of perceptions and can account for the nature of official histories.

This has clearly been demonstrated by the case studies examined as part of this research; the various layers of the history of this period, both physical and metaphorical, have all contributed to the formation of Holocaust landscapes. To fully understand the historical events, it is important to utilise the ability of archaeology to highlight its lesser-known aspects and to provide a tangible record for the future. Although in the first instance, Treblinka and Alderney appear completely different in terms of scale, the level of killings undertaken, their geographic locations and the degree of knowledge about them, this research has demonstrated that it is their diversity that connects them to a distinct archaeology of the Holocaust. Additionally, common themes and issues have been derived that will have relevance for the investigation of other sites throughout Europe. By moving away from a hierarchy of genocide, that seeks to classify sites and the individuals affected by them, a more complex and accurate picture of this period emerges. Landscapes of memory, commemoration, social anxieties, conflict, persecution, reconciliation and resistance to name but a few, can all be seen to culminate in a multifaceted landscape of the Holocaust.

CONCLUSION

'It is the writer's duty to tell the terrible truth, and it is the reader's civic duty to learn this truth. To turn away, to close one's eyes and walk past is to insult the memory of those who have perished' (Grossman 2011:165)

7.1. SUMMARY

The landscapes and material remains of the Holocaust survive in various forms as physical reminders of the suffering and persecution of this period in European history. However, whilst clearly defined historical narratives exist, many of the archaeological remnants of these sites remain ill-defined, unrecorded and even, in some cases, unlocated. Indeed, Pilichowski (1980:49) estimated that there were 1798 labour camps in occupied Poland alone and 5407 more in the Reich and Nazi-occupied Europe. Add these sites to the death camps, concentration camps, ghettos, massacre sites, graves and other sites associated with the Holocaust, what is evident is the vast archaeological resource that pertains to this short period of time. Although there have been a handful of examinations over the last thirty years, such figures highlight the limited number of archaeological investigations that have taken place in proportion to the number of sites in existence (section 1.3.3).

This thesis has demonstrated the untapped potential of the archaeological remains of the Holocaust and has resulted in the development a robust methodology that satisfies the scientific, historical, ethical and commemorative demands of the study of this period (Aims

1, 2 and 3). It has also demonstrated that the history of the Holocaust did not end with the abandonment of sites or the fall of the Third Reich. Conversely, in fact, it has been shown that both the narratives and physical remains pertaining to this period continue to evolve as a result of social and political change (Aim 4). This chapter will draw this thesis to a close by highlighting impact of the work undertaken, major themes that have been addressed and the future of research in this field.

7.2. RATIONALE FOR INVESTIGATION

The examples cited throughout this thesis have confirmed the rationale identified in Chapter 1 for archaeological investigations of Holocaust sites. Analysis of post-war archival material and aerial images compared to the current conditions of sites confirmed that a variety of factors had resulted in their alteration and, usually, degradation. The diminishing number of survivors and other losses of information caused by the passage of time have been acknowledged by other disciplines, sparking a resurgence in interest in collecting witness testimonies (Lang 1999). The recent surge in war crimes trials is a direct response to the fact that Holocaust survivors and perpetrators are fewer in number with each passing year, whilst renewed attempts to fund the Auschwitz memorial site acknowledges the fact that there is a need to ensure that Holocaust education continues in the future (Auschwitz-Birkenau Foundation 2011). However, at the same time, Sobibor museum has been forced to temporarily close due to a lack of funds (Jewish World 2011), whilst thousands of Holocaust sites are neglected across Europe, being utilised as football pitches, prisons and rubbish dumps (Reinartz and von Krockow 1995). The apparent fear about a loss of information about this period and a declining interest in it does not appear to have been felt by the

international public with respect to the physical remains, aside from Auschwitz; continuing on the current path, whereby archaeological approaches to the Holocaust are behind those of other periods, is likely to result in the recognition of the potential of archaeological remains coming too late, after much of the resource is lost. Yet, as has been shown by the surveys undertaken at the case study sites, it is perhaps this resource which has the greatest potential for reinvigorating studies of this period, through the provision of new material for study and a more perceptible body of evidence.

The development of new approaches and techniques that can be borrowed from other fields have also been shown to represent new opportunities for study. This, coupled with changing attitudes with regards to the humanitarian responsibilities of the study of conflict, provide further impetus (Haglund 2002:244). The value of archaeological approaches in both 'remembering' and 'not forgetting' have been demonstrated (Beech 2002:199; section 1.6.2), with the data obtained from both surveys now being utilised by the heritage authorities, in education and as the basis of publications and media programmes.

Similarly, there is a need to align research into the archaeological remains of the Holocaust with that of other periods. It has been demonstrated that, to date, many investigations of the physical remains of this period have been reactive responses to changing circumstances at the site in question (section 1.3.3). Not only are these reactive responses often accompanied by a sense of urgency, but often archaeologists are not asked to assist. The nature of the remains is such that this period cannot simply be allowed to fall victim to the pressures of commercial archaeology; we should not wait until it is necessary to "rescue"

these sites but instead they should be approached proactively with a view to extruding their full value. Clearly, if it had been a case of waiting until development occurred at the sites examined as part of this study, then the probability of archaeological work taking place is very low. On Alderney the lack of planning regulations would likely result in sites going unnoticed, unrecorded and ultimately being destroyed. At Treblinka, the belief that the site had been razed to the ground would likely have meant that no work would likely have been undertaken. However, although the work was not driven by a desire to modify the memorial, the latter will now occur as a result of the research undertaken; thus instead of being seen as a means to an end from the start, the research programme allowed more of the site to be surveyed than would likely have occurred if a memorial plan had already been in place. Therefore, the information derived from this thesis supports the need for a robust research framework and thus provides justification for more work in the future.

7.3. CONTEXTUALISING ARCHAEOLOGICAL APPROACHES

With regards to conflict archaeology in general, Moshenska (2008:159) has noted that:

'little or no explicit effort has been made to examine the ethical challenges presented by archaeological interventions into the resonant remains of modern warfare; these are unquestionably some of the most remarkable, unusual and powerful challenges facing archaeologists of any period, place or subject'.

This thesis has demonstrated that without such an 'effort', archaeological investigations of Holocaust sites are likely to be poorly received, opposed or even prevented (Moshenska

2008:159). Additionally, not to consider the issues involved in the study of this period is to risk omitting important aspects of site histories, both in the physical sense of site formation processes and in terms of approaches to cultural memory and societal development. There has been shown to be a direct interplay between ever-changing contemporary issues, perceptions of Holocaust sites and the ways in which they have been presented and altered over time.

The diversity of the national, social, political and religious groups affected by these events represent important considerations in the course of archaeological work, as do the variety of sub-communities that exist within them (section 6.3). Chapters 2 and 4-6 demonstrated the diverse approaches to cultural memory of the Holocaust, where the remains themselves are seen as places of memory, commemoration, reconciliation, conflict, political centres, social anxieties, religious symbols, inconveniences, unidentified places, family homes (homelands), execution sites and birth places. As Wilson has argued, 'archaeology must situate itself and examine itself within a network of concerns. It must examine how the network functions, and the impact archaeology would have on the way it functions' (Wilson 2007:239). This is particularly pertinent with regards to the study of the Holocaust and this approach must be consciously taken in the future in order to lessen hostility to fieldwork and to ensure the opinions of those affected are given due attention.

There is of course considerable diversity in these issues and approaches between different European countries: whilst in Germany and Austria there is a legally recognised need to examine the physical remains of this period as part of what is known as 'political education'

(Theune 2011), in other countries such as the Netherlands it has taken the existence of one such investigation to inspire others (Schute and Wijnen 2011); in Estonia and other Baltic countries a so-called 'hierarchy of genocide' can be seen to exist that has caused a focus on Russian atrocities as opposed to those committed by the Nazis (section 2.3.1.3), whilst in Poland clusters of investigations have occurred (Kola 2000; Gilead et al 2009); in other countries such as France there is little impetus to openly commemorate sites (Aulich 2007; Golsan 2006), whilst in the Ukraine the missing victims remain a very current issue (Desbois 2008).

However, as has been argued in Chapter 1, the archaeology of the Holocaust can equally have a variety of positive uses in commemoration, religious practice, education, cultural memory and identity, reconciliation and combating prejudice and hatred in the future.

7.4. A UNIQUE APPROACH?

It is important to recognise that, in many ways, the Holocaust is similar to many other genocides and violent acts in terms of its potential to be investigated archaeologically. Indeed researchers wishing to examine this period have much to gain by drawing on the lessons learnt in the investigations of other conflicts. Archaeological investigations have the capacity to analyse the causes of the landscape's formation, build historical narratives, and understand the extent and nature of the site in question for example, just as for any other period of history. Despite beliefs to the contrary, the remains of the Holocaust do survive. This has clearly been demonstrated by the case studies examined as part of this thesis, as well as by other archaeological projects.

It is not, therefore, a lack of remains that prevents the investigation of sites from this period. The barrier to progress is not a physical one in the truest sense, but one that relates to the variety of issues surrounding these events and, in part, the semantics that have built up around the physical remains e.g. the belief that the term destroyed should be taken literally to mean that all remains were completely removed. An examination of any other period in history demonstrates that, despite attempts by perpetrators to remove the physical remnants of war and genocide, it is impossible to do so entirely. Methodologically, there is a need to adapt to account for these issues and to promote the results of these studies to a wider audience than just the archaeological or pedagogical community, thus ensuring that the potential of archaeological research is recognised.

Having said that Holocaust archaeology in its physical sense differs little from that of other periods, it does differ considerably in terms of its status as perhaps the most well-known, far-reaching atrocity in world history. Therefore, whilst the principles of its investigation may be grounded in traditional archaeological thought, approaches to it must draw on a variety of disciplines and understandings to ensure that approaches to it are unique in their methodology.

The consideration of the issues involved in archaeological approaches to the Holocaust undertaken in this thesis represents the first of its kind. As well as being intended to inform future researchers of the potentially inhibiting factors that may impact upon fieldwork, this approach aimed to demonstrate how site histories continue long after the site has lost its original function and how these changes can be reflected in the landscape. Similarly, through

in depth discussion of issues such as Halacha Law, politics and other causes of societal tension, it is hoped that, particularly with respect to burials, where remains are uncovered serendipitously and investigation does occur, this study can act as a reference guide for practitioners to ensure the remains are treated appropriately. This is particularly pertinent when excavation does take place and, given the often ad hoc approach undertaken in the past, there is a need for further guidance on these issues in the future.

7.5. ARCHAEOLOGY AND HISTORY: A SYMBIOTIC APPROACH

Additionally, as well as presenting an alternative archaeological methodology, this thesis has sought to highlight the need to move away from the notion that historical sources can, and have, taught us everything there is to know about the Holocaust (Davidowitz 1990). Archaeological research has the potential to both complement and supplement existing histories of this period; in some cases it will act to reaffirm historical accounts, in others it will reveal information that cannot be derived from documentary evidence; on occasion it may completely alter historical perception, whilst in other instances it will add to knowledge about a particular aspect. Whatever the result, it is not conducive for history and archaeology to be viewed as being competing disciplines; each informs the other and this is particularly important for surveys that focus solely on non-invasive methods. As a general trend in archaeology, the dissipating link with history in favour of an emphasis on scientific methods has been noted (Sauer 2004:1). However, particularly when studying conflict, it is imperative that these subject areas unite, drawing on other areas such as conflict studies, forensic science, forensic psychology, geography and social anthropology, to maximise the information that can be derived about past events.

The identification of buried structures, earthworks, probable graves and other remnants of the Holocaust (Chapters 4 and 5) has demonstrated that, without an examination of the physical remains from this period, only partial site histories can be derived. A review of the issues involved with studies of the Holocaust and examination of the post-war histories of the sites in question demonstrated that a number of common perceptions have emerged concerning these events, often in the form of official histories (section 4.8.3.1 and 5.4.2). In particular, the existence of previous investigations, particularly during the post-war period, has often been cited as a reason that further study is not required (section 6.3.2). Yet approaching the reports of these investigations from an archaeological perspective with knowledge of site formation processes, geology, stratigraphy and the like, it becomes apparent that only superficial and partial examinations of the sites in question were carried out; thus these official histories are incomplete. At both Treblinka and Alderney, there was evidence of how the existence of these commonly accepted historical narratives had actually resulted in the belief that there was no need for further site investigations. Such a trend will undoubtedly be true for the majority of other sites pertaining to this period; at the very least archaeological work should be undertaken with a view to corroborating these accounts.

Of course archaeologists do need to be prepared for situations whereby their findings do not confirm the historical assertions and, as such, the hostility and objection that may follow. In some cases, of course, there will be questions that neither archaeology nor history can answer. However, the lack of physical evidence is more likely to attract Holocaust revisionists; thus practitioners engaged in studies in this area must be prepared for their work to be seized upon in such a way. There may be many reasons why remains are not

located; the inappropriate selection or restrictions of equipment being used, searching in an incorrect location as guided by historical information, not being able to search the entire site (particularly within the time frame of single field seasons), war-time or post-war damage of the particular features being sought, unsuitable ground conditions to name but a few. Such factors, when they do impact upon searches, should be clearly noted.

7.6. EASTERN AND WESTERN EUROPEAN PERSPECTIVES

One of the main aims of the project was to contrast the Eastern and Western experiences in Europe during the Holocaust in order to demonstrate both the diversity and similarities between the events and remains of this period. As Lowenthal (1985) has argued, many people rationalise that 'the past is a foreign country', in order to disassociate themselves from uncomfortable aspects of history. As noted throughout this thesis, for many the Holocaust happened in Poland, whilst for Poland, the events happened in another time for another group of people. Similarly, as Darvill (1995:41) has argued, 'people... associate truth with convenience' and the ability to dehumanize the Holocaust in historical narrative has often allowed society to rationalise the events.

However, the physical remains of the Holocaust confront people with an alternative view: these events affected a diverse range of people and occurred for the whole of Europe 'on our own doorstep' as it were. The atrocities were perpetrated by human beings and archaeological work has an important role to play in preventing the dehumanization of these events, thus assuming a 'not forgetting' function, as set out in Chapter 1 (Beech 2002:199). The examination of the two case study sites in detail and their comparison to others across

Europe has facilitated this and has demonstrated commonalities; whilst the sites may differ in form and function, they ultimately demonstrate a disregard for human life.

7.7. BENEFITS OF A NON-INVASIVE METHODOLOGY

The methodology utilised in this study had many benefits over traditional approaches, both in terms of its overall interdisciplinary stance and the individual methods used. Through the corroboration of historical and archaeological data, it has been possible to suggest the locations of surviving features and comment on their form and function. By systematically working through each level of survey, from the desk-based assessment through to fieldwork, it was ensured that the optimum amount of information was derived about any surviving remains and that complementary datasets could be produced. As standalone methods, each individual technique presented new information about the site in question but it was the assimilation of that information that shaped advanced interpretation. The availability of a complementary suite of methods allowed any environmental or logistical restrictions at the case study sites, as well as limitations in the capabilities of certain equipment, to be compensated for. Additionally, the use of specific methods in combination allowed corroborative evidence to be derived, thus providing a control check for the data collected. For example, examining the historical records from an archaeological perspective allowed new questions to be asked of this material, whilst archival research brought to light unpublished sources that revealed new aspects of the sites' history. The comparison of this information with archaeological survey information allowed the nature of the remains to be derived. The aerial photographs represented an invaluable resource in terms of a visual aid to reconstructing the sites in question, and in some cases providing an almost daily account of changes to the structures and other features, whilst acting as a corroborative resource to the survey data. Of course the availability of the latter resources was influenced by a number of factors, mainly relating to survivability or availability and, as such, their value in site interpretation is likely to be as diverse as their nature.

The complementary use of topographic and geophysical survey facilitated both general landscape survey and detailed feature investigation. The topographic data allowed the geophysical data to be contextualised and demonstrated that subtle indicators of archaeological remains are still visible on the ground at many sites. The geophysical survey using multiple methods represented an invaluable tool in the identification of buried features – structures, wall lines, tracks and graves – which were largely not visible on the present ground surface, and the data derived once again complemented, and was complemented by, aerial imagery and terrestrial survey. The processing and manipulation of these data sets allowed them to be combined to facilitate three-dimensional terrain modelling. This fusion at a site level permitted each site to be visualized in a manner that optimized the information recorded from each source, whilst resulting in the production of visual aids for use in heritage strategies and education. At an inter-site level, using GIS packages, each site can be seen and interrogated within a wider geographical context. Such a system can of course be added to in the future as further sites are examined.

Perhaps what was most notable at the sites examined was the fact that archaeological remains could be noted even without the use of advanced technologies. The visibility of earthworks, vegetation change and even vegetation-covered artefacts and structures on the ground surface demonstrates not only archaeological but also social processes. For example,

the existence of these features demonstrates that they survive and can reveal considerable information about site layouts and functions. However, the fact that they have not previously been acknowledged alludes to the lack of investigation and preservation; this in turn can illustrate attitudes towards the site. Such features have also been noted at other sites in Poland, The Netherlands, Estonia, Greece, France and Belgium which were visited as part of this study, thus demonstrating the un-quantified evidence that survives.

Aside from the type of the information derived, the non-invasive nature of the methodology used had several other benefits with regards to the issues involved in the study of this period. Firstly, it facilitated access to, and detailed recording of, sites where work had not previously been undertaken. No disturbance of the remains being examined occurred, thus they remain in situ, whilst Halacha Law was respected and any human remains present were untouched. Having been confirmed as appropriate for use at Jewish sites by the Office of the Chief Rabbi of Poland, this methodology can now be applied at other sites across Europe where Jewish victims are believed to be buried, thus offering an opportunity to record and commemorate previously un-investigated sites for the first time.

From what could be termed a public archaeology standpoint, the use of a non-invasive methodology has also facilitated reconciliation on various levels. In Treblinka, for example, where the authorities were wary about issuing permission for archaeological work in light of concerns over the disturbance of the site, these methods have indicated the locations of further graves so that they can be protected in the future, and they have facilitated the building of a working relationship between the field team and the authorities. In Alderney,

the non-invasive methods, although not required for religious purposes at this site, served a different purpose, in terms of building up trust and allaying concerns of local people in relation to the work. It would appear that there was less hostility to these methods as they were deemed less intrusive than excavation; they removed the need to both physically and metaphorically dig up painful memories of the past.

Significantly, at both case study sites, the authorities have proposed or failed to object to, plans to excavate the structural remains present. Whether as a result of the establishment of sound working relationships, the realisation of what archaeological methods can contribute to our knowledge of this period or simply sheer curiosity, such an approach would not have emerged without the existence of the non-invasive projects.

7.8. METHODOLOGICAL LIMITATIONS

As noted consistently in the archaeological literature, the practical applications of techniques such as topographic and geophysical survey is likely to differ from the theoretical capabilities described based on optimum conditions, thus the methods used as part of this study were not without their faults (Ainsworth and Thomason 2003; Gaffney and Gater 2003). For example, although GPR offered the best depth potential of all of the geophysical methods, the rough nature of the terrain in some areas inhibited its use. Such uneven landscapes will likely be present at many Holocaust sites, particularly those that have been neglected or subject to destruction/alteration activities, therefore representing an important consideration in advance of method selection. Equally, the presence of memorials, dense vegetation and a variety of man-made obstructions can inhibit equipment use. For example,

the resistance meter cannot be used when probe entry is prevented, the use of GPS systems will be prevented where tree cover reduces the satellite signal, and the Total Station will be redundant where line of sight cannot be achieved. The quality of mapping and satellite data across Europe, the availability of witness testimony and plans, contemporary documents and aerial images, and the extent to which data can be manipulated into useable outputs for heritage and education purposes will vary by site and will likely result in differing interpretation capabilities. However, once again, through considering the use of a suite of methods, these restrictions can hopefully be accounted for without the considerable loss of information.

A consideration of the post-war processes at sites is also imperative and in some cases it was not possible to confirm the function of features using only non-invasive methods. As well as the attempts by the Nazis to hide their crimes, and natural and man-made landscape change, it is also important to consider the activities of the liberating forces or those tasked with 'doing the clean-up work' (Schmitt 2002:2). The importance of acknowledging that the history of sites of this period, as with any other from throughout history, did not end with their abandonment or liberation has repeatedly been stated. Thorough desk-based research regarding their subsequent function can assist in alleviating the problems with distinguishing between features in topographic or geophysical data, whilst also revealing important information about societal approaches to the site in question.

In terms of the assessment of issues surrounding the studies of the Holocaust, although many of those mentioned in Chapters 2 and 4-6 will be relevant in some form at all sites

throughout Europe, the extent to which they are will vary in different countries, and even different regions, due to political and social differences. Therefore, far from representing a definitive list of issues, the points raised in these chapters are intended to inspire a consideration of these general themes on a case by case basis when future investigations are undertaken.

7.9. THE ROLE OF EXCAVATION

As noted in Chapter 1, the purpose of this research was not to suggest that this methodology should replace excavation in all circumstances. As has been clearly demonstrated by work in Germany, Austria and The Netherlands, excavation can confirm the nature of buried remains and can result in the recovery of artefacts that can be used in education and offer a unique insight into the lives of the victims and perpetrators at Holocaust sites (Theune 2010; pers. comm.).

However, where excavation or the redevelopment of a site is not an option, most likely due to religious, social or political restrictions, these methods provide an effective alternative. Indeed many stages of the methodology, such as the desk-based assessment, aerial photographic analysis and remote sensing, can be completed without the need to access sites. Although this is not advocated in the long term, as an understanding of the spatial layout of the landscape can only be truly gained from a site visit and there is a need to ground truth the data to clarify its accuracy, again where access is restricted this approach does provide one mechanism through which to derive information and preserve the sites by way of record. Such an approach has been taken by archaeologists in recent years when

dealing with the remains associated with conflict and internment in unsafe or politically sensitive areas and there is much to be gained from drawing on literature pertaining to these cases where alternative strategies are required with respect to Holocaust sites (Hunter and Simpson 2007; Hritz 2008; Myers 2010).

Similarly, given the lack of studies of Holocaust sites in the past and their vast number across Europe, it will simply not be possible or indeed in some cases valuable to excavate or even conduct detailed on-site investigations. However, even at the most basic level in the form of the creation of a site database through walkover survey, archaeological survey methods offer the potential to record threatened or unknown sites. Similarly, aerial reconnaissance surveys can allow sites to be located, their extent to be mapped, and comments made on their use and condition. In light of the threats posed by man-made and natural landscape change, the benefits of considering the Holocaust landscape across Europe, as well as the need to align studies of the Holocaust with those of other periods, there is a need for projects which take a quantative approach, using fast and reliable survey methods, in conjunction with those that examine sites in more detail.

It is also argued that projects that simply leap straight from desk-based assessments to intrusive activities, such as excavation or coring, result in a loss of valuable contextual information and cause the individual area being dug to become the sole focus of the project; this results in a narrow view of the site where the wider landscape is not considered. Similarly, a study of British Archaeology by Hey and Lacey (2001) revealed that many archaeologists, through habit or the restrictions imposed by commercial archaeology, often

applied the same methods at all of the sites they worked on and took the view that excavation was inevitably the end of the process. However, whilst these methods may be tried and tested as it were, it could be argued that this so-called 'blanket solution' actually limits the amount of information derived about sites and, with regards to the Holocaust, may prevent investigation altogether (Hey and Lacey 2001:61). Ideally, the non-invasive methods utilised as part of this study will be used even where excavation is the primary goal given that, as Hunter and Cox (2005:57) argued with respect to forensic cases, 'moving from non-invasive to invasive techniques...enable[s] the integrity of any data to be maintained'. Similarly, the recent amendments to the European Convention on the Protection of Archaeological Heritage have included the statement that archaeologists should ensure that 'non-destructive methods of investigation are applied wherever possible' (Council of Europe 2010: Article 3). Therefore, the use of a non-invasive approach to Holocaust sites is advocated in the future, at least in the first instance.

7.10. THE ARCHAEOLOGIES OF THE HOLOCAUST

Given the diverse nature of the remains, as demonstrated throughout this thesis, perhaps what should be recognised is the fact that several archaeologies of the Holocaust exist when the evidence is viewed thematically. These archaeologies not only represent physical entities but they also reveal information about the behaviour, attitudes and actions of those involved. Clearly, the remains represent the archaeology of the victims; their deaths, their lives and their work, as well as the archaeology of the perpetrators; the structures they ordered to be built for extermination, their barracks, zoos, brothels, weapons and daily utensils (Bernbeck and Pollack 2007). Expressions of religious beliefs, cultural identity and

personal zeal can be identified in the structures and artefacts, whilst in some cases efforts of economic exchange and daily life can be seen. The diverse nature of oppression, fear, loss, labour, brutality and deception is also evident. In some respects, in support of McGuire (2008) and Baker's (1988) comments concerning the political nature of archaeology, the very act of locating and recording the nature of sites of the Holocaust can be seen as an act of defiance against the will of the Nazis to keep the physical remains, and thus their crimes, hidden from the eyes of the world.

7.11. BEYOND CAMPS?

Studies examining the archaeological remains of the Holocaust to date have in the main focused on the camps. Whilst there is of course a risk here of further heightening the widely held belief by the public that the Holocaust revolved solely around such sites, these examinations are crucial in order to further our understanding of this period. As this study has shown using the example of Treblinka, there is a need for archaeological evidence to complement and supplement existing histories and, in some cases such as this, it is capable of radically altering perceptions regarding the survivability of remains (Chapter 4). The selection of the examples as part of this study was intended to demonstrate how little is currently known about even purportedly 'well known' sites such as Treblinka. Given that Holocaust archaeology has not yet become a recognised subject area in its own right, it is likely that only research at these high profile sites will generate wider interest and demonstrate to a larger audience the potential of archaeological approaches. Similarly, research on Alderney, a lesser known site, was intended to highlight the diversity of sites

and acknowledge that similar trends exist throughout Europe. Again, such revelations are likely to invoke acknowledgement to a larger extent.

However, this thesis has highlighted other possible avenues of research in the form of an examination of the diverse range of other sites, aside from the main camps, associated with the Holocaust. Given the fact that these sites remain as the dominant image of the Holocaust, and the fact that post-war surveys almost exclusively focused on these sites, thousands of smaller camps, ghettos, burial sites (mass graves, cremation pits and cemeteries), prisons, fortifications, execution sites and administrative buildings associated with this period remain unrecorded (Czynska 1982:47-48). In order to move towards developing a discipline of Holocaust archaeology, it is imperative to recognize the fact that numerous other types of sites exist that have equal, if not greater potential in some cases, to reveal information about the past. These sites remain as a testament to the suffering of the victim's of the Third Reich, equal in terms of value but different in terms of the unique, unexplored insight into events that they can provide compared to studies of the death camps. It is perhaps in relation to these sites, where very little is likely to remain above ground and cultural memory relating to them may have been lost, that archaeology can provide a source of evidence that is more perceptible than the written word.

Similarly, given that the subject is in its infancy, examinations to date have largely been undertaken in isolation, focusing almost exclusively on single sites. However, there is a need to facilitate inter-site comparison (Gilbert 1999); if this is not possible on the same project, then at the very least this should take place between individuals and organisations studying

this period. The comparison of two seemingly very different sites as part of this study, and their comparison with other examples throughout Europe, demonstrated similarities and the need to examine Holocaust archaeology in its wider context. Essentially, what is advocated here is that archaeologists move away from simply considering sites as a collection of structures and associated features but begin to recognise their wider landscape context and their inter-connectedness with other sites across Europe. Just as the events of the Holocaust transcended political and geographical boundaries, so too should analyses of the sites relating to it. At micro level, the sites have been shown to sit within an immediate landscape which influenced their location, the ability to conceal the crimes being perpetrated and the ability of the Nazis to carry out extermination and forced labour. At macro level, such trends are also evident but cross-site comparison is also possible, in order to derive wider trends concerning the Nazi occupation of Europe, similarities and differences between nations, and, thus, conceptualise the larger European Holocaust landscape. The results of this thesis, coupled with the potential for a network of practitioners to be created as a result, are the first steps towards such an approach.

In particular, the author intends, using the methodology developed as part of this study, to pursue a project examining the Jewish cemeteries in Poland. These sites were destroyed by the Nazis and were often used as massacre sites, the majority of which are now dilapidated due to the lack of a modern, local Jewish community (Gruber and Myers 1995). Surveys of these sites will allow mass grave sites to be marked to prevent further damage through manmade landscape change and they have the potential to reveal valuable information about Jewish life during the Holocaust, as well as pre-war Jewish communities (Graf

1989:86). Similarly, the author is collaborating with other specialists throughout Europe on a project examining the sites pertaining to Organisation Todt and forced labour programme along the Atlantic Wall. This will allow cross-site comparisons to be made with regards to the treatment of prisoners and labourers, and aims to refocus attention away from the engineering of the Atlantic Wall, in particular its bunkers, and towards the suffering of the individuals involved in its construction. These projects will draw on the lessons learnt as part of this research, in terms of the need to develop a methodology that considers the various political, social, religious and ethical issues surrounding the specific sites addressed.

Thematic projects that consider specific aspects of the Holocaust and which facilitate cross-site comparison are also advocated. For example, over 70,000 people deemed 'unworthy of life' were killed as part of the 'Euthanasia Aktion' or 'T-4' programme throughout Germany and the General Government (Burleigh 1994:101; Evans 2004). Although many of the former hospitals have memorial plaques detailing the events that took place there, as the war progressed many of the killings took place at remote locations in the vicinity of these facilities, and many of these massacre sites remain unmarked and poorly defined (Batawia 1982; Evans 1941). A number of false graveyards were also created to give the illusion to relatives that patients had died of natural causes (Hojan and Webb 2008). An examination of these sites has the potential to demonstrate the geographical and spatial differences in disposal patterns during the 'Euthanasia Aktion', reveal significant information about the development of the Nazi extermination policy and facilitate the appropriate demarcation of the graves of the victims. Other potential research areas include those sites relating to the

activities of the Einsatzgruppen and grave sites of those buried by the liberating forces, many of which still remain unrecorded and unmarked (Evans 2001; Morrison 2000).

7.12. HOLOCAUST ARCHAEOLOGY: THE FUTURE?

As already noted, significant archaeological work has clearly been undertaken at Holocaust sites over the last thirty years, with all projects demonstrating the capabilities of the remains to reveal additional information about the buried past.

There is now a body of archaeological evidence pertaining to the Holocaust that is significantly large enough to facilitate the development of exchanges between researchers However, researchers are only just beginning to talk to each other; differing priorities concerning publications, language differences and the remits of the projects have limited collaborations and, in most cases, have resulted in a situation where each did not know the other existed. The lack of a concise body of literature on the nature and issues involved in Holocaust archaeology, as well as the isolation involved as a result of a lack of interpractitioner exchange can result in individuals involved in the study of this subject feeling that they are progressing through their research with very little in the way of guidance. Thus, a network of researchers is advocated in order to open up lines of communication, devise policy and share experiences, particularly with regards to the issues involved in the study of this period and attitudes to the work. In particular, those who find themselves involved in the examination of Holocaust sites through commercial work or the serendipitous discovery of human remains would benefit from this. It is not suggested that a fixed approach to examining Holocaust sites should be devised by such a group, given the diversity of sites, circumstances and issues identified throughout this thesis. However, there is clearly a need for a consistent approach and a wider recognition of the full value of remains, whilst specific guidance in relation to the religious and ethical issues involved in the examination of Holocaust archaeology, in particular the study of human remains, is required. Such networks have been seen to be successful with respect to the study of other conflicts or aspects of archaeological heritage (e.g. No Man's Land and ESTOC); some have even assisted in the formulation of what are now widely accepted sub-disciplines, such as those in the field of First World War Archaeology.

At the outset of this research project, few active projects were being undertaken in this field. The emergence of several projects in the last six months, for example at Westerbork (The Netherlands), Stutthof (Poland) and Auschwitz (Poland), suggests an increased interest in the archaeological remains from this period and further cements the need for a recognised discipline (pers. comm. Rob van der Laarse and Jacob Wrzosek).

This thesis has demonstrated the potential of such a discipline to contribute to knowledge of this period. The challenge for the future is one of raising awareness; awareness of the value of, and need for, the investigation of the physical remains, in particular the potential of these investigations to contribute to education; awareness of the commemorative value of the remains and the fact that they do survive in various forms; and, finally, awareness that studies which consider the post-abandonment history of the sites in question, when compared to other sites, can reveal the diversity and constantly changing nature of the European Holocaust landscape.

APPENDICES

Appendix 3.1. Levels of survey as defined by English Heritage (2007:23-24)

Level I

Level 1 is mainly a visual record, supplemented by the minimum of information needed to identify the archaeological site's location, possible date and type (Case Studies 1 and 2). This is the least complex record, and will typically be undertaken when the aim is to provide essential core information to agreed standards, including structured indexes of the location, period, condition and type of the monument that, typically, would result from rapid field investigation (see The written account, below: Items 1-5), such as assessments of change to the historic environment, historic landscape characterisation, for an initial assessment determining the scope of a project, or whenever resources are limited and much ground has to be covered in a short time. This would be accompanied by a simplified cartographic record, often at 1:10 000, of the location and extent of the site.

There should be basic consultation of easily available related information sets: these may include field surveys, records of buildings, archives, aerial and ground photography, geophysical survey, field-walking, excavation records and other local sources.

A Level 1 record will typically consist of:

- The core monument record
- The written account: Items 1-5, and 12
- Survey drawings: an annotated 1:10 000 map (either digital or hardcopy),

enhancement will be included in the design of the project or task and will form an integrated part of the resulting record and analysis (rather than being simply an information set that has been consulted, or a separate event). Taken to its logical conclusion, this Level extends to an allinclusive ideal of interdisciplinary investigation.

This record will provide a quality of description, interpretation, graphical depiction and analysis beyond the scope of a Level 2 entry. It must include the core monument data. Level 3 investigation will normally be used only for selected monuments, reflecting their importance, or where a specific management/client need has been identified that makes this level of detail appropriate (eg threat, Scheduling requirement, research, etc). An

indicating location and extent (Item 13) and a cartographic record (Item 14)

Level 2

This is a descriptive record that provides qualitative information beyond the scope of Level 1 inspection (Case Studies 3–5). It may be made of an archaeological site that is judged not to require any fuller record, or it may serve to gather data for a wider project.

A Level 2 record provides a basic descriptive and interpretive record of an archaeological monument or landscape, as a result of field investigation. It is both metrically accurate and analytical, depicting the real landscape context of the archaeological features. The examination of the site will have produced an analysis of its development and use, and the record will include the conclusions reached, but it will not discuss in detail the evidence on which this analysis is based.

This record must include the core monument data. Beyond that, the information provided at Level 2 should be able to satisfy broad academic and management requirements. It will normally include a divorced (ie non-map based) measured survey or an accurately located map-based survey at a scale that will represent the form of the monument. In addition, the location and extent will be indicated on a 1:10 000 index map to ensure consistency with other levels of recording. Some statement of method,

accurately located, measured survey (mapbased or divorced) at an appropriate scale (at 1:1 250 or larger), designed to represent adequately the form and complexity of the monument, will always be part of the record; additional documentary and cartographic material may also be generated as part of the detailed recording and analysis.

To some extent, Level 3 field investigation may be seen as being open ended, with specifications tailored individually to suit a variety of requirements, but it always demands a detailed descriptive and analytical approach, complemented by an accurate measured survey or surveys. A statement of method, of accuracy and of the quality of investigation and survey will always be included. All related and readily accessible information sets should be

accuracy, and of the quality of investigation and survey will normally be included. Related information sets consulted at this Level may include field surveys, records of buildings, archives, aerial and ground photography, geophysical survey, field-walking, excavation records and other local sources.

A Level 2 record will typically consist of:

- · the core monument record
- the written account: Items 1-5, 8-12
- survey drawings: accurate cartographic location and extent of the monument(s) at scales of 1:10 000 and 1:2 500; site plan at a scale of up to 1:2 500. Items 13–14 and 18 (and in exceptional cases Item 15)
- · ground photography: as appropriate

Level 3

A Level 3 record provides an enhanced and integrated, multi-disciplinary record of an archaeological field monument or landscape, resulting from the process of field investigation (Case Studies 6-12). This is often enhanced in one or more ways by additional specialist research or fieldwork such as geophysical survey; aerial survey; field-walking programmes; specialist assessment of artefacts; the analytical recording of standing structures; and excavation. In many cases such enhancements would result from contracted-out arrangements of negotiated partnerships. A distinguishing characteristic of this Level is that the

consulted at this Level. These may include field surveys, records of buildings, unpublished documents, aerial and ground photography, geophysical survey, field-walking, excavation records and other local sources.

A Level 3 record will typically consist of:

- the core monument record
- the written account: Items 1-12
- survey drawings: accurate location of the monument(s) at scales of 1:10 000 and 1:2 500
- site plan at a scale of 1:2 500 or larger.
 Items 13–21
- · ground photography: as appropriate

A guide to potential uses of the Levels is outlined below:

Appendix 3.2. The National Aerial Reconnaissance Archive

The Aerial Reconnaissance Archive, also known as TARA, has recently been acquired by the Royal Commission on Ancient and Historical Monuments in Scotland who are in the process of cataloguing and digitising this untapped aerial imagery resource, which was formally housed at Keele University until 2008 (RCAHMS 2010). The collection houses over ten million Allied and German aerial photographs taken before, during and after the Second World War, thus providing a comprehensive aerial landscape history for Europe and some parts of the Middle East. The TARA repository contains thousands of images of sites relating to the Holocaust and, given the fact that only a small proportion of the material has been catalogued, it represents a previously unexplored resource for archaeologists and historians of this period. Although images have been acquired from the NARA archive, the National Archives at Kew and the Alderney Museum archive, TARA represents the primary aerial imagery resource utilised as part of this research, in order to demonstrate the value of the archive for Holocaust research and in order to utilise photographs that have not previously been published.

Appendix 3.3. Factors that limit the use of GPS (Ainsworth and Thomason 2003:19)

Despite the fact that GPS offers many advantages to the archaeological site or landscape surveyor, there are a number of factors that affect how and where it might be used:

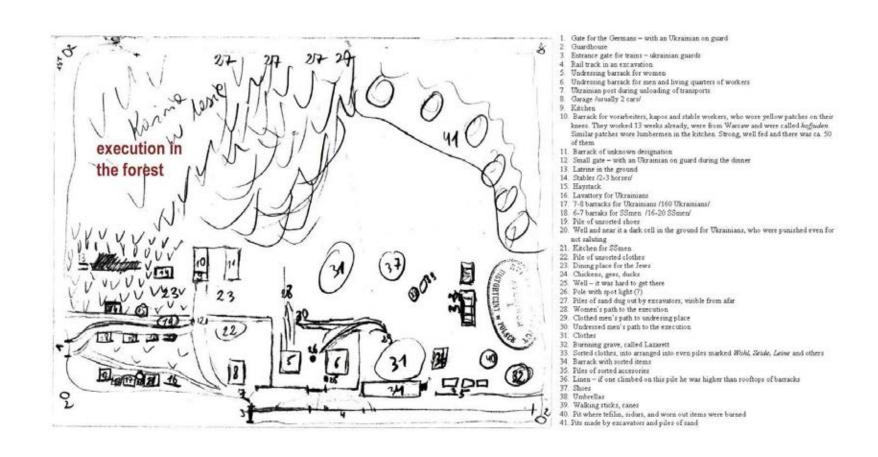
- •GPS signals are weak radio signals that are easily blocked by foliage, buildings or other obstructions. GPS receivers have to be able to 'see' a minimum of four satellites to work, five to work in real-time kinematic mode.
- •Signals might be affected near high-voltage power lines and transmitters and these are best avoided if possible. Problems have also been encountered close to airfields and military establishments.
- The environment can introduce an error source in GPS, for example multipath. Multipath occurs when the signals received by the antenna have not arrived by a direct path but have been reflected off another surface, such as a building, foliage or fencing. Multipath cannot be corrected by differential GPS as it is specific to a site and satellite constellation. The antenna, receiver and post-processing software detect and resolve multipath errors, but it might still introduce errors to a survey.
- •Other major error sources in GPS are due to the troposphere, the ionosphere, the satellite and receiver clocks and the satellite orbits. Careful survey practice together with choice of equipment and software will limit these effects.
- •GPS satellites operate in circular 20,200km orbits, in six orbital planes. Because of the way in which these orbits have been arranged, satellite availability is always biased towards the Equator. Thus in the UK and the rest of the Northern Hemisphere, obstructions to the south of the user, such as steep slopes or buildings, can be a problem.
- •Since GPS reached full operational capability in April 1995 the availability of sufficient satellites for surveying is rarely a problem. Very occasionally, however, satellites are switched off electronically for maintenance, or they become 'unhealthy' because there is a problem with the broadcast signal. Such an occurrence might create troughs follower coverage that cannot be predicted.
- •Real-time kinematic GPS often uses VHF/UHF telemetry to transmit the correction data between the base station and the rover. In the UK the power and frequency of radio transmissions are controlled and they limit the operational range to about 3km. Obstructions such as hills or buildings can also adversely affect radio communications. Real-time surveying systems, however, do allow the collection of data for post-processing if the radio link is lost; this means that the survey can carry on until the link is re-established. This can be a common occurrence in very hilly areas, but is easily overcome by simply moving the base station to a more suitable location or by using repeater stations. Other delivery methods are available, such as the use of mobile phones; this solution, however, incurs higher running costs.

Appendix 3.4. Dielectric permittivity values for some common materials (GSSI 2003)

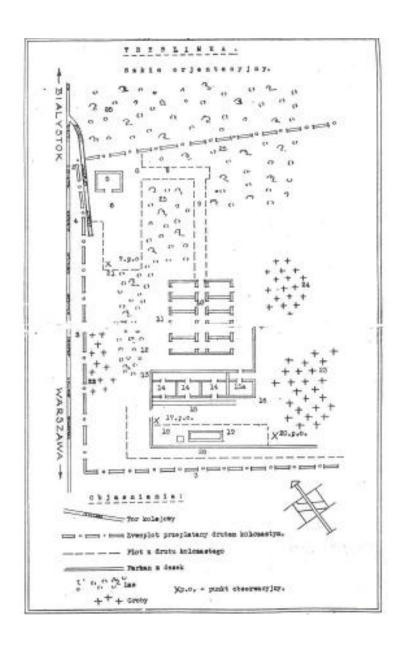
Material	Dielectric	Velocity (mm/ns)	
Air	1	300	
Water (fresh)	81	33	
Water (sea)	81	33	
Polar snow	1.4 – 3	194 - 252	
Polar ice	3 - 3.15	168	
Temperate ice	3.2	167	
Pure ice	3.2	167	
Freshwater lake ice	4	150	
Sea ice	2.5 – 8	78 – 157	
Permafrost	1 – 8	106 – 300	
Coastal sand (dry)	10	95	
Sand (dry)	3 – 6	120 - 170	
Sand (wet)	25 – 30	55 – 60	
Silt (wet)	10	95	

Clay (wet)	8 – 15	86 – 110
Clay soil (dry)	3	173
Marsh	12	86
Agricultural land	15	77
Pastoral land	13	83
"Average soil"	16	75
Granite	5 – 8	106 – 120
Limestone	7 – 9	100 – 113
Dolomite	6.8 – 8	106 – 115
Basalt (wet)	8	106
Shale (wet)	7	113
Sandstone (wet)	6	112
Coal	4 – 5	134 – 150
Quartz	4.3	145
Concrete	5 – 8	55 – 120
Asphalt	3 – 5	134 – 173
PVC	3	173

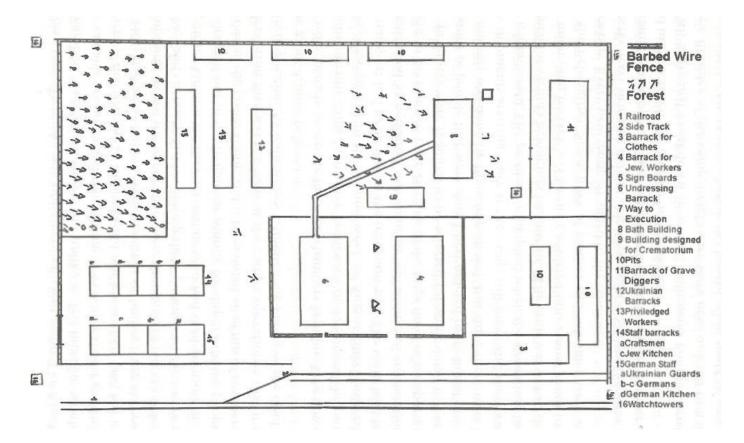
Appendix 4.1. Witness Plans of Treblinka II



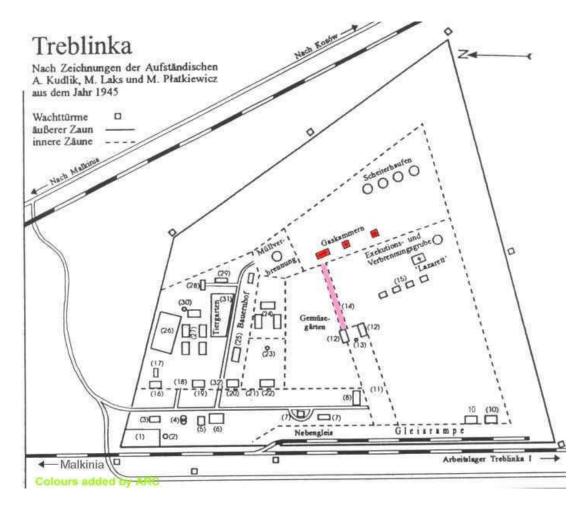
(a) Plan drawn in the Warsaw Ghetto, 1942 (after ARC 2005a)



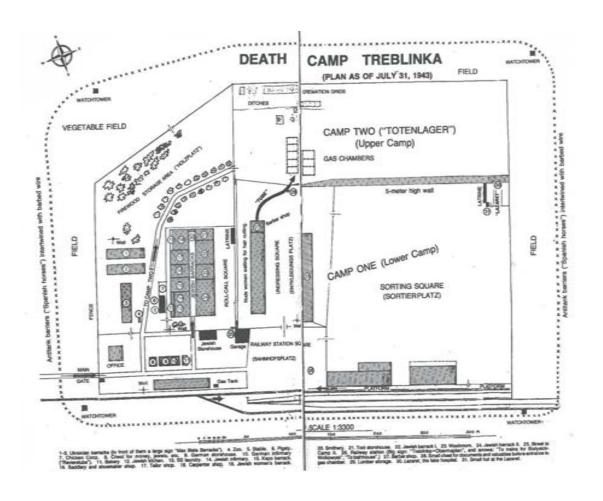
(b) Plan by Jankel Wiernik (after Wiernik 1944)



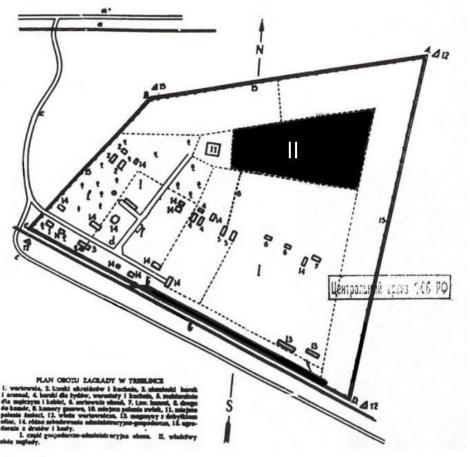
(c)Plan by Krzepicki (after Baxter 2010)



(d) Plan by Kudlik, Laks and Platkiewicz, 1945 (after Kudlik et al 1945 and ARC 2005a)



(e) Plan of Treblinka II 'as of July 31, 1943' (after Donat 1979)

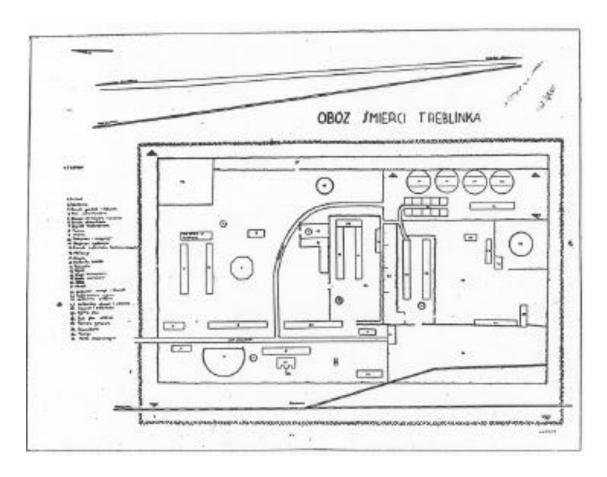


Legend

- 1. Guardhouse
- 2. Ukrainian barracks and kitchen
- 3. German barrack and arsenal
- 4. Barracks for Jews, workshops and kitchen 12. Watchtowers
- 5. Undressing barrack for women and men
- 6. Sorting barrack for clothes 7. "Lazarett"
- 8. Way to the gas chambers
- 9. Gas chambers
- 10.Cremation site
- 11. Place for burning the waste

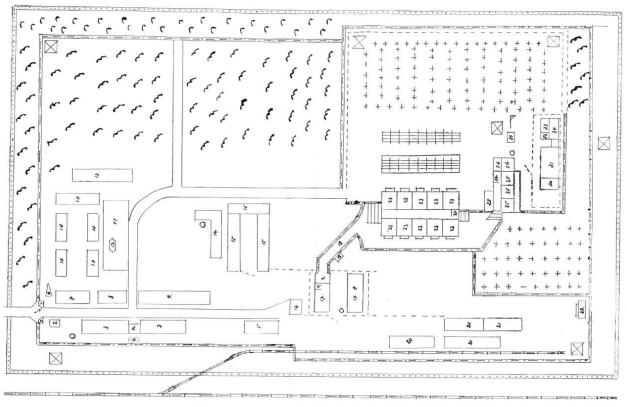
- 13.Warehouse for clothing
 14.Different administration and economic barracks
- 15.Barbed wire fence
- I Administration and economical part of the camp
- II Death camp

(f) Adapted survey plan by Łukaszkiewicz, 1945 (after ARC 2005a)

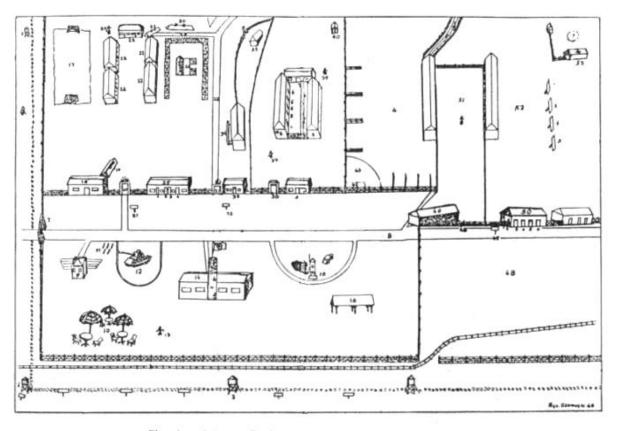


(g) Plan by Kudlik, 1946 (after Kudlik 1946)

Extermination Camp Treblinka - Wiernik's Map from 1946



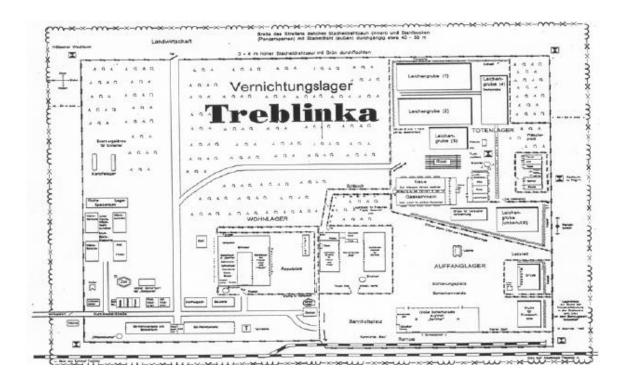
(h) Plan by Jankel Wiernik, 1946 (after Wiernik in Friedman 1946)



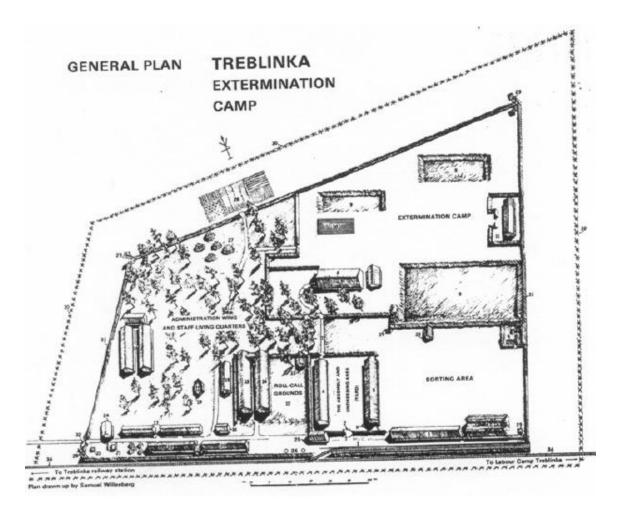
Plan obozu śmierci w Treblince

wg rekonstrukcji b. więźnia M. Laksa, str. 190

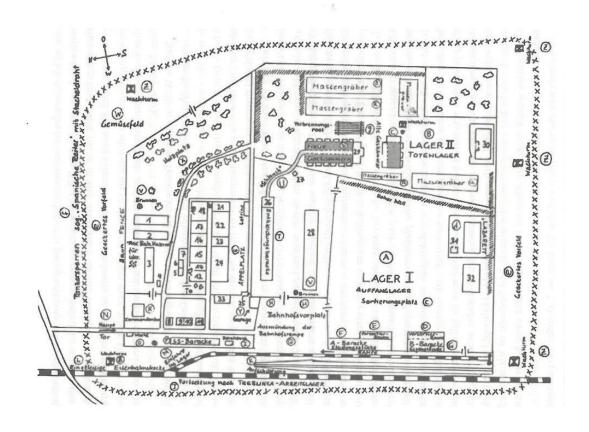
(i) Plan by Mosel Laks, 1946 (after Laks 1946)



(j) Plan presented at Franz Stangl's trial in Dusseldorf, 1962 (after Chrostowski 2004)



(k) Plan by Samuel Willenberg, 1989 (after Willenberg 1989)



(i) Plan by Richard Glazar (after Glazar 1999)

Appendix 4.2. Methodology employed at Treblinka II

1. Equipment Used

1.1 Digital Kinematic GPS (DGPS)

To facilitate the production of the digital terrain model (DTM), a survey was conducted using a Leica GPS500, which combines Differential GPS with Real-Time Kinematic (RTK) survey, thus permitting the collection of coordinate and elevation data to sub-centimetre accuracy at the walking speed of the surveyor (Leica 2002). The data was collected in the Polish '2000' planar coordinate system (Geoida niwelacyjna 2001) recommended for use by the Head Office of Geodesy and Cartography in Poland (pers. comm. Krzysztof Karsznia). A control network of waypoints was established across the site to provide inter-visible stations and backsights for the Total Station (see below), and to provide a framework into which the other survey data could be placed (Bowden 1999).

1.2. Total Station Survey

Site visits had highlighted the density of tree cover at Treblinka which would potentially restrict the use of DGPS, owing to the fact the signal from the equipment to the satellite could be blocked. As a result of this a Total Station survey was also undertaken. Whilst the Total Station is not suitable for detail recording on a large scale, it facilitated the completion of the topographic model at Treblinka in areas inaccessible to the DGPS.

1.3. Geophysical Survey

1.3.1. Resistance Survey

A resistance survey was undertaken using the TR Resistivity Meter with a Twin Probe Array. Although a considerable amount of rain fell over the course of the survey, the high temperatures (30-35 degrees celsius) meant that it was usually possible to edge match the grids effectively on site and obtain consistent ohm ranges across the grids. Readings from 272 to 2179 ohms were recorded across the site, likely as a result of the diversity of remains present and their effects on the underlying geology. In some areas, a considerable number of null readings had to be logged due to high resistance ranges. This was likely due to a considerably disturbed, loose sand layer present in some areas which was later shown with the GPR to overly areas of apparent structural debris.

1.3.2. Electrical Imaging

A twenty-probe, Wenner array configuration was employed using the electrical imaging extension kit for the TR Resistivity Meter.

1.3.3. GPR Survey

The GPR survey was carried out using the GSSI TerraSIRch SIR System-3000 with a 400MhZ antenna, which facilitated high resolution mapping to a maximum depth of 4 metres. Given

the sandy geology and the large amount of rain that had fallen, and continued to fall throughout the survey, the dielectric constant for all grids was set to 8 (GSSI 2003). Initially, the Range was set to 50ns and a Gain of 5 was applied. However, likely given the nature of the geology, this resulted in an inadequate depth reading, a stronger signal attenuation at the deepest extent of the profile and a lack of signal reflection in the first 2m of the subsurface. Subsequently, the settings were altered to a Range of 70ns and a Gain of 4 for all of the grids. Given the size of the area to be surveyed and the likely size of the features being sought, traverses were walked at 1m spacing with 64 scans being recorded per metre. Although zig-zag traversing is faster, parallel traverses were chosen to facilitate more accurate data collection, with one of the grids being surveyed using both traverse methods to demonstrate this. All traverses were collected along a west to east alignment for consistency and for ease of post-processing.

1.3.4. Locating the geophysics grids

The locations of the geophysics grids were determined using a combination of Total Station and tape measures, and their positions were recorded digitally. This ensured that spatial data was obtained, thus allowing grids to be relocated after the survey was completed, and guaranteed the recommended +/- 10cm accuracy rule defined by English Heritage (1995) was adhered to, even where obstacles existed.

2. AREA SURVEY

Owing to the observations made during the desk-based assessment, and in light of the project's aims, Treblinka II was divided into survey areas (Figure 4.3). Plans showing the locations of the resistance and GPR grids within these areas are shown in Figures 4.14 and 4.15.

2.1. TOPOGRAPHIC MODEL

Using the DGPS and Total Station, the accessible areas of Treblinka II were surveyed to provide data for a digital terrain model of the camp. The purpose of this survey was to facilitate the creation of a base map into which the other data could be placed and to record any surviving microtopographic features consistent with archaeological remains. A variety of surface and shaded relief models were produced from this data using Surfer.

2.2. AREA A

This area focused on the currently-marked camp boundary, in order to define the accuracy of the layout that is currently depicted on the ground. Aerial photographs taken in 1944 indicate that the current boundary does not accurately reflect the site's former layout (Figure 4.10) and so alternative potential boundary lines were to be sought and recorded in this area using both the DGPS and Total Station.

2.3. AREA B

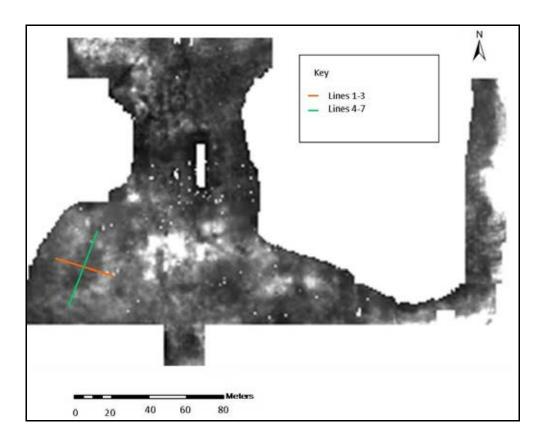
Area B comprised of the central part of the current memorial, which is believed the cover part of the area of the former death camp. The desk-based assessment indicated that, contrary to popular opinion, the site was not entirely destroyed by the Nazis and that the remains of camp structures, mass graves and cremation pits may survive below the ground.

This area chosen was the most accessible, owing to obstructive vegetation across much of this part of the site.

An area covering 19,600m² was surveyed in this area using the resistance meter. This was divided into 20m x 20m grids, which were surveyed using a zig-zag traverse method. Readings were logged every metre.

A total of 14,400m² was surveyed using the GPR. A parallel traverse method was used. Given the limited duration of the survey, not all of the grids surveyed with the resistance meter could be completed using the GPR. However, this represents a priority area for future field seasons.

Having identified a large pit during the resistance survey (G1), further targeted investigation of this feature was required. The location of the feature in question was determined from the resistance data in relation to the grid system laid out across the site. The position of the north, south, east and west extents of the feature were marked on the ground using pegs. Three profile lines were surveyed on a roughly west-east alignment and four survey lines along a south-north alignment. West to east the survey lines measured 35m, as it was known that the feature itself measured 17m. This facilitated the survey of three twentyprobe lines (Line 1 = 0-19m, Line 2 = 8-27m, Line 3 = 16-35m) which overlapped to ensure the edges of the feature would be adequately represented and would lie at the centre of two of the profiles The feature measured approximately 26m from north to south and, subsequently, a line measuring 42m, comprising of four twenty-probe lines (Line 4 = 0-19m, Line 5 = 8-27m, Line 6 = 16-35m, Line 7 = 23-42m) was established on this alignment. The result was a cross section of survey lines through the feature which would reveal information about its length, width, depth and construction. The locations of the survey lines were recorded using the EDM, so facilitate their integration with the other survey data and in order to locate them spatially. A plan showing the locations of the electrical imaging lines, over feature G1, is shown below. A probe spacing of 1m was used for each survey line and readings were taken by moving the cables at 1m, 2m, 3m, 4m, 5m and 6m spacing. Although the optimum range of the electrical imaging is 20 ohms, given the sandy geology, the range had to be set at 2000 ohms (TR Systems 2007).



2.4. AREA C

This area is located to the east of the symbolic railway platform, bisected by the path leading towards the central monument. The desk-based assessment suggested that this is the only openly accessible part of the Reception Camp upon which it will be possible to conduct topographic and geophysical survey. Preliminary site visits and discussions with Edward Kopówka also identified considerable taphonomic change in this area, which may be consistent with surviving structures such as the sorting and undressing barracks. This area was also extended into the forest to the west of the memorial, where possible, in order to connect with Area D.

An area covering 8000m² was surveyed using the resistance meter. In this area, the GPR was also used to target areas where it was not possible to take readings with the resistance meter, to ensure comprehensive coverage. Consequently, two grids were established in Area C, located adjacent to the railway platform.

2.5. AREA D

Area D is located in the south-west corner of the camp and is characterised by distinct, abundant vegetation and a lack of trees, which is likely to be indicative of subsurface remains. The desk-based assessment and research by the Museum Director placed the Lazarett and early grave pits in this area; geophysical methods were employed to examine this theory further.

Due to the density of the vegetation to the south and west of this area, it was only possible to establish three grids (two $20 \times 20 \text{m}$ and one $14 \times 7 \text{m}$) in this area. Additionally, only the

resistance meter could be used, as the density of the woodland prevented topographic survey and the harsh ground cover made it unsuitable for the use of GPR.

2.6. AREA E

This area lies immediately to the south of the purported camp gate and runs along the full extent of the railway line until it passes the currently marked southern boundary of the camp. It is bounded to the west by the track known during the war as the "Black Road", and by main road into the camp (Kurt Seidel Street). This area was targeted due to the visibility of earthworks in this area (noted during earlier site visits) and at the request of the Museum Director. Additionally, the identification of any surviving structures in this area offers the greatest possibility of gaining information about the Living Camp and the camp entrance, given that the remainder of this area is now in the woodland. Grids covering 100m x 20m were established in this area.

2.7. AREA F

Area F is defined as the forested area that now lies within the former camp boundary. Witness accounts suggest that the woodland to the south and east would have contained mass graves, cremation pits, structures, the inner camp boundary and watchtowers, whilst the northern portion covers the former Living Camp. Given its scale and the fact that it is densely forested, only walkover survey was undertaken across the majority of this area, in order to record any taphonomic indicators that may be indicative of buried remains. Also, the search largely focused upon the eastern and southern areas in order to contribute further to knowledge about the Death Camp.

This area was walked in evenly spaced transects by members of the field team and a description, the orientation, approximate dimensions and any taphonomic indicators of any features were recorded in a standardised format. Each feature was assigned a code, photographed and was recorded in plan using the Total Station. Due the density of the forest and the limited time frame of the project, only a limited number of features were recorded in the northern forest, thus this represents an area for further investigation in the future.

2.8. DATA PROCESSING

2.7.1. DGPS

The GPS data was downloaded into Leica Geosite Office, software which is specific to the equipment being used. As no correctional data was used, it was only necessary to download the data from the rover, which was then exported as an ASCII .csv file.

2.7.2. Total Station

The data from the Total Station was downloaded into Geosite Office from which it was exported as an XYZ file into Microsoft Excel and a DWG file for use in AutoCAD. By assigning a different colour to each feature code, and by utilising site drawings and photographs, it was possible to join the survey points in AutoCAD to show the outlines of the features present on the site.

2.7.3. Resistance Data

The resistance data was downloaded into Resistivity, a program specifically designed for the TR Systems machine, and composites formed of the survey grids for each area. Due to the successful normalisation of the probes on site, edge matching was only required in a select number of areas, where considerable changes in weather or obstructions had prevented normalisation in the field. Each data composite was clipped to remove spurious readings and to give greater clarity to more subtle features. The composites were then saved as both DAT (data) files and TXT (text) files so that the results could be processed in a variety of other appropriate software packages.

Given the limited processing capabilities of the Resistivity software, and due to the fact that alternative models of the data can aid interpretation, the resistance results were exported and gridded in Surfer. The Kriging method was applied to interpolate the data and boundary files were then created to mask artificial data and highlight the null readings taken in the field. Image plots of all of the composites were then created. A rainbow colour scale was used for some composites to highlight the subtleties in the data. A number of other plots, such as surface models and shaded relied were also produced to aid data interpretation.

2.7.4. Electrical Imaging

The data was downloaded into Resistivity 2, a software programme specifically developed for the RM15, and each line was saved as an individual DAT file. Each file was then opened and the data resaved as a RES2DINV file. The files were then individually imported into RES2DINV, a software programme specifically designed for the Inversion and display of electrical imaging data. Each was subject to the Least Squares Inversion process to produce the slice profiles. The software produces three data models for each survey line: the Measured Apparent Resistivity Pseudosection, the Calculated Apparent Resistivity Pseudosection and the Inverse Model Resistivity Pseudosection, the latter of which shows the most realistic representation of the data. Given that the aim of the electrical imaging was to define the edges of the feature, a Robust Inversion was applied, as this is recognised as the best method to use where sharp boundaries are likely to be present (Loke et al 2003). The robust model constraint factor for both data and model constraint was set to 0.001, as this is stated to create the most accurate representation of the data. The option to reduce the effect of side blocks in the data was also selected. Additionally, the "Use Model Refinement" option was selected to represent the data with half the spacing between electrodes in order to add greater clarity.

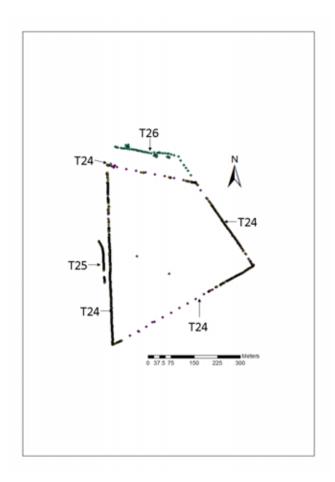
2.7.5. Ground Penetrating Radar

The data was downloaded using Microsoft ActiveSync as DAT files. Each individual line was saved as a separate file. These files were then imported into RADAN software, which is capable of displaying the data in both two and three dimensions, and 3D project file composites were formed for each grid. Each grid was then processed individually, using the Time Zero, High Pass Filter, Range Gain and Migration functions, to correct the position of the data, remove spurious readings and determine the origins of hyperbolas. Super 3D files

were then created for each area, where they contained more than one grid, to allow a composite of each area to be formed.

Appendix 4.3. Survey data from Treblinka II

4.3.1. AREA A - DEFINING THE CAMP BOUNDARY



Key

T24 – Modern camp boundary

T25 - Road

T26 – Probable northern

boundary

This image represents the raw data plot of the DGPS and Total Station survey of the modern memorial boundary and that of the proposed northern camp boundary.

The modern camp boundary (T24) can be seen as forming a quadrangle, whilst the position of the road was also recorded (T25). A clearing noted during walkover survey is marked T26 and can seen to extend from the currently marked northern boundary, and lies on an east-west alignment. When this data was overlaid onto aerial images of the site, both contemporary and modern, it can be seen that the currently marked boundary does not correspond with the boundary apparent in the 1944 aerial imagery on the southern or northern sides, and that T26 likely represents the actual northern boundary.

4.3.2. TOPOGRAPHIC FEATURES, SHOWN IN FIGURES 4.21 AND 4.22

Feature Number	Description	Visible approximate length x width (in metres)	Orientation
Т6	Rectangular feature adjacent to railway spur. Has raised outer edge and is visible as an earthwork	12.6 x 11	NS
T7	Four small depressions	Largest 6 x 4	
T8	Rectilinear depression	21 x 19	
Т9	Area of small, irregular depressions		
T10	Semi-circular feature, cut in centre by a small depression	6 x 3.5	
T11	Narrow, linear feature. Culminates in two small pits (largest 7.5 x 3.5m)		EW
T12	Large irregular area of disturbance	54 x 22	
T13	Large depression. More defined on southern edge	29 x 14.5	NNW-NNE
T14	Small depression. Located adjacent to memorial	9.5 x 5	
T15	Irregular area of disturbance. Probable disturbance due to metal web-cam poles.		
T16	Large, oval depression. Corresponds to vegetation change visible on the surface	26.5 x 18.5	NS
T17	Rectilinear earthwork	16.5 x 8.5	NE-SW
T18	Rectilinear earthwork	16.5 x 8	NE-SW

Feature Number	Description	Visible approximate length x width (in metres)	Orientation
T19	Rectilinear feature	15 x 8	NE-SW
T20	Rectilinear feature		
T21	Irregular depression, adjacent to T20	16.7 x 15	
T22	Raised, linear feature. Lies between T14 and T18	55 x 12.5	NNE-SSW
T23	Linear feature, bounded by the memorial and forest. Likely extends outside the survey area	21 x 3.6	NNE-SSW

4.3.3. FEATURES IDENTIFIED IN AREA B

Feature Number	Topographic Feature Number	Resistan	ce Survey	Ground Penetrating Radar (GPR)	Vegetation change	Shape in Plan	Length of feature (in metres)	Width of feature in metres)	Depth of feature (in metres)	Additional Information
		Low Resistance	High Resistance							
G1	T16	х		Х	Х	Oval	26	17		Probable pit
G2		х	х	х		Rectangular	24	20	c. 0.5-1.8m	Probable structure. Bisected by G3.
G3	T17	х				L-shaped	23 N-S, 17 E-W	4		Possible track
G4	T23	х		x	х	Oval	16	10		Probable pit. May extend beyond the survey area.
G5	Small depression		х	х	Х	Rectangular	20	18	c.0.8 - depth of survey	Probable structure/debris. Bisected by G6.
G6	T21	Х			Х	Linear	20	2.5		
G7			х	х	Х	Irregular		22.5		Probable structure/debris. May extend to the north.
G8			x	х	Х	Irregular	10	9		Probable structure/debris.
G9			х		х	Linear	14 N-S 8m E-W, 8m N-S			
G10			х			Irregular				Continues into the forest.
G11		х	х	x		Circular				Three circular anomalies. Lie adjacent to G12.
G12			Х	X		L-shaped	52 E-W, 37 N-S	3 (maximum)		
G13			X			Linear	34	<1		Extends beyond the survey area. Bisects G14. Probable webcam cable.
G14	T12		х			Irregular				
G15	T15		X		x	Circular	7	5		

Feature Number	Topographic Feature Number	Resista	nce Survey	Ground Penetrating Radar (GPR)	Vegetation change	Shape in Plan	Length of feature (in metres)	Width of feature in metres)	Depth of feature (in metres)	Additional Information
		Low Resistance	High Resistance							
G16		х				Linear				Possibly extends under the monument.
G17		х				Irregular				
G18		х				Linear	39			Extends from the NW cotner of G2 to the edge of the monument.
G38				x	x	Irregular	Visble to 10m	Visble to 10m	0.8m - depth of survey	Probable pit. Cut visible in section from 0.8 - 3.60m. Possibly extends beyond the survey area to the east, west and south.
G39				х			5	2	0.2-1.4m	Probable structure.
G40	T17 and T18			х		Rectangular	22	15	0.4-2m	Probable structure/debris.
G41				х		Rectangular	Visible to c.18	Visible to 8.8m (maximum)	c. 0.8-1.8m	Probable structure/debris.
G42				х		Rectangular	c. 15	c. 9	c. 1-1.5m	Probable structure/debris.
G43				х		Linear	24	c.2m	0.56-1.54m	Probable track
				х		Rectangular	25	19	0.47m – depth of survey	Probable pit. Probably extends under the monument. On NNW-SSE alignment. Possibly same
G44										feature as G16 and G17.
G45						L-shaped	20m N-S, 16m E-W			
G46						Irregular				
G47						Irregular				Considerable feature visible in section
G48						Irregular				
G49				Х		Oval - Curvilinear	15	10	0-1m	In SW corner of grid. NNW-SSE alignment.

Feature Number	Topographic Feature Number	Resistance Survey		Ground Penetrating Radar (GPR)	Vegetation change	Shape in Plan	Length of feature (in metres)	Width of feature in metres)	Depth of feature (in metres)	Additional Information
		Low Resistance	High Resistance							
G50				х		Curvilinear	Visible to 34m	Visible to 12m	0.2m - depth of survey	Probable pit. Possibly extends under the monument to the north and east. Apparent cut visible at 1m-full depth of survey. Sloped edge visible to west in section.
G51				х		Rectangular	19	12	1m-2m	Probable pit. Aligned NE-SW.
G52				Х		Rectangular	22	Visible to 15m	1m - depth of survey	
G53				х		Rectangular	c. 18m	c.7m	1m-2m	Aligned N-S.
G54				х		Rectangular	Visible to 20.5m	c. 14m	1.5m - depth of survey	Probable pit. Aligned NE-SW.

4.3.4. FEATURES IDENTIFIED IN AREA C

Feature Number	Topographic Feature Number	Resistanc	e Survey	Ground Penetrating Radar (GPR)	Vegetation Change	Shape in Plan	Length of feature (in metres)	Width of feature (in metres)	Depth of feature (in metres)	Additional Information
		Low Resistance	High Resistance							
G19	T10	х	х		х	Rectangular	28	20		Probable structure. High resistance around edges and low resistance in the centre.
G20	Adjacent to		х			Rectangular	19 (possibly extends to 23m)	7.7		Probable structure
G21			х		х	Linear	30	13.5		Possible structure. Overall dimensions include its continuation as G22
G22			х			Linear				As above
G23			х			Irregular	53	7		Possible structure. Masked by forest
G24	Adjacent to T5		х		х	Irregular	20	13		Probable structure. Corresponds to an area of exposed sand. Several null readings logged.
G25			х			Irregular	20 (maximum)	13 (maximum)		
G26	T5	х			х	Linear		Extends full width of survey.		Modern pathway.
G27	T5		x		х	Circular				Twelve circular anomalies. Correspond to area of modern pathway.
G28		х			х	Circular	7	5		
G29			x		х	Rectangular	32 (minimum)	28		Probable structure. Extends into Area D and possibly SW outside the survey area.
G30			х		х	Irregular		12		Possibly extends beyond the survey area.

Feature Number	Topographic Feature Number	Resistance Survey		Ground Penetrating Radar (GPR)	Vegetation Change	Shape in Plan	Length of feature (in metres)	Width of feature (in metres)	Depth of feature (in metres)	Additional Information
		Low Resistance	High Resistance							
G31			Х		х	Irregular				May be associated with G20/G21
G55				х	х	Irregular	38	20m (full extent of survey area)	Full depth of survey area	Linear reflections across extent at c.0.4m and 1m. Ground disturbance for full depth of survey

4.3.5. FEATURES IDENTIFIED IN AREA D

Feature Number	Topographic Feature Number	Resistance Survey	Ground Penetrating Radar (GPR)	Vegetation Change	Shape in Plan	Length of feature (in metres)	Width of feature (in metres)	Depth of feature (in metres)	Additional Information
		Low Resistance Hig Resista							
G32		х		х	Irregular	20 (minimum)	16 (minimum)		Probable pit
G33		х			Irregular		Extends the width of the survey grid (20m)		Probably continues to the south.

4.3.6. FEATURES IDENTIFIED IN AREA E

Feature Number	Topographic Feature Number	Resistance Survey		Vegetation Change	Shape in Plan	Length of feature (in metres)	Width of feature (in metres)	Additional Information	
		Low Resistance	High Resistance	Medium Resistance					
G34	T6		X		X	Irregular	25	10	Probable structure. Several null readings logged. Visible as earthwork and exposed sand. May continue to the north.
G36				Х	х	Rectangular	9	6	Probable structure

4.3.7. FEATURES IDENTIFIED IN AREA F

Feature Number	Vegetatio	on change	Shape in Plan	Length of feature (in metres)	Width of feature (in metres)	Additional Information
	Abundant	Restricted Growth		,,		
F1		х	Irregular	c. 40m	18m	
F2	х	х	Linear	c.40m	c. 0.5m	Bank and ditch. Aligned E-W
						Ditch. Similar to F2. Runs parallel to
F3	x	x	Linear	c. 80m	c. 0.5m	outer boundary. Continues to west
						Small pit. c. 1.5m in diameter.
F4			Oval			Possible tree bowl
F5	Х		Rectangular	c. 9m	c. 9m	Close to marked boundary
F6		х	Linear		c. 4m	
F7		х	Irregular	c. 33m	c. 11m	Clearing
						Bank. Runs parallel to outer
F8		х	Linear	c. 20.25		boundary. Continues to west
F9	x		Linear	c.10.6m	c. 10.1m	Similar to F5
F10		×	Linear	c. 26m		Bank. Possible continuation of F2, F3 and F8
F11		X	Irregular	c. 15m	c. 14.5m	and ro
F12		X	Linear	c. 52m	C. 14.5III	Bank. Continuation of F10
						Track leading to clearing of dry
F13		×	Linear	c. 44m	c. 6m	vegetation. Continues to west
F14		×	Linear	35	27	Clearing
F15		х	Oval	7	6.4	Mound of soil, adjacent to F16
F16			Oval	c .10m	c. 9m	Pit. Candles and stones on east edge.
F17			Oval			Pit. c.6.5m in diameter
F18			Oval			Pit. c.7.5m in diameter
F19			Key-hole	c. 10.3m	c. 9m	Earthwork

Feature Number	Vegetation Change		Shape in Plan	Length of feature (in metres)	Width of feature (in metres)	Additional Information	
Teature Number	Abundant	Restricted Growth	Fian	reacure (iii metres)	with or reature (in metres)	Additional mormation	
F20			Oval			Pit. c.11m in diameter. Adjacent to F21 and F22	
F21			Oval			Pit. c. 8m in diameter. Adjacent to F20 and F22	
F22			Oval			Pit. c. 6m in diameter. Adjacent to F20 and F21	
F23			Linear	c. 20m		Bank. Continues to west	
F24	Х		Irregular				
F25	х		Irregular				
F26	х		Oval	48	34	Devoid of large trees	
F27	x		Linear	37	14	Devoid of large trees	
F28			Rectangular	9	7.2	Pit with banked edges	
F29	x		Rectangular			Bricks, one of which bears the lettering 'SZN', were also located in the vicinity	
F30	Х		Irregular			Depression	
						Large area of gorse-like, thick and distinct vegetation but with notable absence of tree growth. Linear edges. Largely impassable. Eventually results in a clearing at its extreme north where several artefacts noted in topsoil and on the surface. Some	
F31	х		Rectangular			recovered, photographed and handed to museum	

		Shape in	Length of			
Feature Number	Vegetation Change	Plan	feature (in metres)	Width of feature (in metres)	Additional Information	
						Pit with banked
F32			Rectangular	6	5	edges
						Pit with banked
						edges. Similar to
						F32. Front side
						recorded but line
						of sight to other
						sides restricted by
F33			Rectangular			trees

Appendix 5.1. Key to map produced by M.I.19 (shown in Figure 5.5)

Tracing of Map of ALDERNEY (G.S.G.S. 2558 Third Edition) with details added with the help of Air Photographs (R.A.819:140 of 3 Oct 1943).

- 1 = Two blank cone buoys to mark rocks put into position by the Germans
- 2 = The beacons on these rocks have gone
- 3 = Trench was at 3 April being dug here by political prisoners. Width 4 ft, depth 8 ft to 10 ft
- 4 = 100 yards of herisson anti-tank obstacles, each touching the next. These close slope up from slip and beach.
- 5 = Site of O.T. timber dumps. This has now been used up and practically cleared.
- 6 = Minefield enclosed by barbed wire front and back. The wire is fixed on angle iron posts with a square flat base welded to the posts. This is buried about 2 ft down leaving 4 ft projecting. The posts are 10-12 ft apart. Each post has a couple of barbed stanchions. The wire between posts is barbed and the strands are 9 inches apart. At intervals there are warning boards with black letters on white fields. There is evidence of trip wires in the mined area. Informants have never seen any Germans attending to tehse mines which were laid before informants came to the island. The angle irons posts of the barbed wire get knocked down occassionally by the sea. The beach in front of this mine belt is not mined. Informants have walked all round BRAYE BAY beach.
- 7 = Here is a gap in the minefield for bathers to get to the beach. They have to walk in single file through the gap which is clearly marked by wire on both sides.
- 8 = Cart ramp to beach blocked by 4-inch II-section iron posts. There are about a dozen to eighteen of these. Pedestrians can walk through them.
- 9 = There is a dump of derelict oars at this corner of the beach. The barbed wire continues up from the minefield behind this oar dump.
- 10 = Up against the wall of the Arsenal is a pill-box surmounted with a transversable turret.
- 11 = At this angle of the Arsenal wall there is always a sentry posted with tommy gun. He stands behind the wall which comes up to his chest.
- 12 = There is barbed wire round the top of the Arsenal wall but informants do not know what happens inside the Arsenal.

- 13 = There is sporadic barbed wire round this rocky promontory.
- 14 = Two German built concrete blockhouses with slits to seaward. Not regularly manned. These measure 12 ft square by 8ft high.
- 15 = A British built pill-box, not used by the Germans.
- 16 = FORT ALBERT. No details but known to be occupied.
- 17 = An old, ball shaped beacon on this rock.
- 18 = From the sea informants have seen a a searchlight raised up on a pedestal. A crew hut is nearby.
- 19 = Barbed wire as at fig. 6 behind this beach. Possibly mines as well.
- 20 = This camp is not visible from seaward as it lies in a hollow. Infomant (s) has seen it from inland but has the impression that it is now empty. The huts are all brown painted.
- 21 = This fort is occupied. Informants have seen a sentry with tommy gun on the walls. There is also possibly a Radar apparatus. This is a 3 ft square frame of pencil thin wire, the flat face towards the sea. The tops of the verticle wires curve outwards.
- 22 = There are more barbed wire and mines behind this bay.
- 23 = CORBLETS Fort. Apparently uninhabited. On each occasion informants have passed here they have seen no sign of life. There is a gap through the mine field, down to the beach, immediately to the west of Fort CORBLETS.
- 24 = In this area there are some heavy A.A. and possibly C.D. defences. Seven to eight weeks ago a Flying Fortress, passing at 1000 ft, was fit by these batteries.
- 25 = QUENARD Lighthouse is occupied by naval and marine personnel. It lights for convoys only.
- 26 = This fort is occupied by about 12 men.
- 27 = Cottages and villas occupied by Germans.
- 28 = Informants have no knowledge of these two forts.
- 29 = Two stretches of A/T herissons on either side of the RAZ ISLAND Causeway.
- 30 = RAZ Island Causeway has been rebuilt by the Germans. It is now 8 ft wide and concreted. Shingle-loaded lorries use it.

- 31 = RAZ ISLAND Fort is being fortified. Informant (a) has seen political prisoners working there with concrete mixers. Informant (b) had the impression that it was used as a firing practice target because he saw gaping holes in the walls.
- 32 = Forro-concrete A/T wall in section as under:-

This anti-tank wall starts right up against the containing wall of the Nunnery.

- 33 = The Nunnery is occupied, and fortified. There have been alteration at the rear and the rear bastions have been pulled down.
- 34 = A short distance from the Nunnery behind the A/T wall has been built a massive bunker. It is as high as the wall and dome-topped. From this blockhouse a 2 ft square loophole has been cut in the A/T wall. The whole bunker is well covered with camouflage netting.
- 35 = Behind the wall at this point is a flat-roofed building containing a gun on wheels (? A/T gun_. The entrance for the gun is at the rear of the building and a loophole for its barrel has been cut in the A/T wall.
- 36 = At this point there is a break in the wall to allow exit onto the beach. The break is covered by a small pill-box built at the end of the wall. Viz in plan : -
- 37 = At this end of the wall and behind it is another concrete shed. Possibly contains a gun as at emplacement at fig. 35
- 38 = Here is a graveyard for several hundred dead Russian prisoners of war. It is not at all kept up or marked with crosses.
- 39 = Between these two arrow-heads there is no way down to the beach. All the coast is closed by barbed wire. In fact the only way down to LONGY BAY beach is through the break in the wall at figure 36.
- 40 = The Germans have excavated a tunnel into the face of this old quarry. It is about 9 ft high and 6 ft wide. Informants have not been inside but think that it is an ammunition dump.
- 41 = All these huts are taken over by the O.T. for drivers. Many lorries are parked around these huts at night. Informants have heard girls say they were going to spend the evening with the N.S.K.K. down LONGY way, so this is probably the N.S.K.K camp.
- 42 = FORT ESSEX is occupied by infantry troops with white shoulder piping. Informants have no more details.
- 43 = Coastguard cottages, occupied.
- 44 = Whitegates, occupied.

- 45 = Informant (b) has seen A.A. guns and building activity in this area, but from a distance only.
- 46 = Under the scrub along the right side of this road going into town are ammunition dumps. The entrance to these underground compartments are in the face of the bank along the roadside. There are 4 entrances each closed by a single leaf iron door 3'6" wide x 4' high. There is a sentry always walking up and down in front of these doors.
- 47 = This is a new, German-built, concrete road wide enough for two lines of traffic.
- 48 = This group of huts is the O.T. Lazarett.
- 49 = BORKUM Camp. Originally a large O.T. camp, but now inhabited by a few French workers only. There is still a guard of German O.T. men armed with long, French type, rifles.
- 50 = In this area several A.A. guns in earth walled pits.
- 51 = Two wooden huts, raised up 4 ft from the ground on brick or concrete piers. Barbed wire coils all round. Germans inside. Opposite these on the other side of the road they are building an underground A.R.F. shelter for 200 men.
- 52 = Another defence position, guns and bunkers seen from a distance only.
- 53 = All round this position the fields are littered with barbed wire entanglements.
- 54 = This is the only quarry now being worked on the island.
- 55 = Behind the new civilian cemetery is a German graveyard, neatly kept with about 200 graves.
- 56 = This house is occupied by Germans.
- 57 = 30-35 telephone lines are carried along the line marked green on the map. They are carried on T posts which are about 3 ft high.
- 58 = They pass behind this house but two lines are detached and lead into the house
- 59 = At this point all the telephone wires enter a vertical pipe and from here are taken underground. Informants do not know where they go to.
- 60 = This camp of beaverboard huts is empty. It is surrounded by barbed wire.
- 61 = There is a battery (? A.A.) hidden in among the scrub on this hill.
- 62 = This was an O.T. saw mill (DEEBAU'S mill phonetic spelling) now dismantled.
- 63 = This hut houses a contingent of political prisoners. Barbed wire all round.

- 64 = Cottages on LONGY Road. Occupied, with rabbit netting at all windows.
- 65 = BALMORAL. Occupied by German officers. A wooden watch tower has been built in among the trees in the garden. It projects above the tree tops. There is a rangefinder on top of this tower.
- 66 = 30 political prisoners in these two houses.
- 67 = Farm buildings occupied by Germans. Six horses in stables.
- 68 = A.A. guns in this area.
- 69 = In this area several bunkers are being built. There is also a Radar installation, a frame 10 'swaure standing about 3 ft abov its turf protected base. It turns round slowly all the time. Politicals are building the bunkers.
- 70 = Two barrack huts lived in by Germans. They are sunk into the ground as that there roofs are level with the earth.
- 71 = At the end of this road informant (b) has seen a line of concertine wire stretching away on both sides with mine warning boards.
- 72 = Power station still working.
- 73 = Well dressed lines of low corrugated iron, semi-circular huts, each about 6 ft high. Informants do not know what is in them.
- 74 = This farm house has Germans upstairs and the Guernseyman WELLHAM and the shephard DEMAREL downstairs. In the outbuildings are a few cattle and sheep in the lambing season.
- 75 = Row of houses, now used for German stores. Informants have seen barbed wire stored inside.
- 76 = One light Flak gun out in the open.
- 77 = This road, marked on the map, does not exist. In the corner at the cross roads is a German office and next to it on the north side of LONGY Road is a 30 ft high, square, concrete watch tower with windows up the walls and with a glass-fronted look-out platform on top. Above the platform is a low-pitched, pyramidical roof which overhangs the tower walls.
- 78 = Cinema.
- 79 = Occupied farmhouse. 3 German lorries in the barn.

- 80 = Two huts. Stores of German bedding, tables and other barrack room furniture.
- 81 = German Carpenter's shop.
- 82 = Coal dump. About 20 tons at 8 April 1944.
- 83 = Germans in this house.
- 84 = Greenshouse adjoining the old slaughter house, which is still being used until the new one is ready.
- 85 = Open ended barn full of German straw.
- 86 = Two German buildings. The one parallel to the road is the new slaughter house which is not yet finished. The one at the right angles to the road is the Marketenderei.
- 87 = House taken over by the German officers. Name on board in front is LUFTRAUM. They are building an underground shelter on the north side of this house.
- 88 = Here the Germans are making an embankment into the gulley. On top of the filled in part is a new road running up the valley into the trees. The embankment is made of excavated rubble.
- 89 = Informant (b) says this building is the new German power house which is nearing completion. Informant (a) is certain that the new power house is immediately to the south of the new embankment at fig. 88.
- 90 = Into the hillside at this point are several tunnels. These are 14 ft high and wide enough for lorries. Informants have seen one opening but were told that there are five in all. The embankment at figure 88 is built out of the eart excavated from these tunnels. The tunnels are always guarded and, although well hideen by trees, their entrances are camouflaged with netting. Informants guess that this is the main ammunition dump of the island.
- 91 = There is an anti-tank gun often mounted here on the right hand side of the road going to the harbour. It stands at the northern extremety of a small copse. It is covered over with canvas and is left unguarded. Next to this, a few yards further down the road is a tank turret mounted at the same side of the road about 13 inches above the road level. As land falls steeply away from the road on the east side the entrance to this turret is from this side at a lower level than the road.
- 92 = In this hut is the main P.O.L. dump. About 200-300 drums of fuel, each drums 50 galls.
- 93 = These houses on the west side of BRAYE Road are lived in by the crews who man the A/T gun and turret at fig. 91.

94 = These houses are lived in by naval personnel, the Hafenschutz boats' crews. The middle house of the five has two wireless masts on the roof and a constant hum of a dynamo coming from inside. A.R.P. shelters in all the back gardens.

95 = NEWTOWN appears derelict and uninhabited. The gas works are abandoned. Only one or two cottages occupied.

96 = House occupied by Klt. GASSMANN, the Hafenkommandant. Behind are wooden huts for other naval personnel. Small A.R.P. bunker built against south wall of GASSMANN's house.

97 = At least 4 A.A. guns on this hill.

98 = The red dots indicate positions of two possible flame throwers. Informants were told by the Irish carpenter that they are land mine positions. They described them as below: - (See overpage)

There us a low cloche roof of corrugated iron with a 3 inch diameter pipe just protruding at one end. The end of the pipe is closed with a red seal.

99 = Camouflaged A.R.P. bunker built close by a disussed sand pit.

100 = ST. ANNES Church. Food store.

101 = Prison and Court House.

102 = Schools. Empty but being repaired and equipped possibly as a kitchen. Clock tower, opposite is derelict.

103 = Convent, now Soldantenhein.

104 = 35 ft high observation tower. Same type as at fig. 77. Always manned.

105 = Stables. There are some horses kept here.

106 = Lived in by lorry drivers. Some lorries kept here.

107 = All this block is devoted to garages and M/T painting shops. The M/T are camouflaged with spray paint here

108 = All the houses in this block are lived in by Moroccan prisoners of war.

109 = MARAIS HALL. Occupied.

110 = The two buildings marked in red here each contain two small tanks.

111 = Feldkommandantr in Lloyds Bank.

- 112 = W.H. repair garage, well equipped with German lathes and machinery.
- 113 = Row of houses occupied by Germans.
- 114 = New German building at corner. Informants do not know its use.
- 115 = This house and the one diagonally opposite on the other corner are occupied and both are German telephone exchanges. Nearby, but not pinpointed, is another watch tower.
- 116 = These two groups of buildings are now sheep and cattle sheds.
- 117 = Informants do not know whethr Mr. ROFER's bungalow is occupied or not.
- 118 = In this area are more A.A. and/or C.D. guns. No details.
- 119 = Occupied house.
- 120 = House occupied. Two W/T pylons and aerials in garden.
- 121 = Large firing bunker being built here by political prisoners.
- 122 = HIGNOT Farm, now the O.T. Farm. Mainly British labour.
- 123 = ROSE Farm, occupied.
- 124 = Three corrugated iron ammunition sheds on the left side of approach road to farm. Entrance to sheds is through high left bank of the road.
- 125 = On the left hand side of this road going west is a row of six small sheds. Under each is a German tank.
- 126 = Here two more tanks are hidden inside an excavated mound.
- 127 = Germans keep there sheep-dogs here.
- 128 = This is the main camp on the island for the Political Prisoners. There are many fewer than there were in 1943, probably because most of the buisding programme is now complete. Round about Christmas 1943 all the politicals were taken off the island by some 1500 (many of them the same ones) came back in January or February 1944.
- 129 = Well built new bungalow, built by the politicals for the S.S. man who is their chief warder.
- 130 = Informant (b) has seen minefields and barbed wire along the south side of this road, apparently stretching to the coast.

- 131 = WEST BATTERIE. Informant has no details about this except that the position is still being given its finishing touches. Camouflage of positions is not complete and the mines to westward were not laid till March 1944.
- 132 = In this area informant has seen a very large, earth covered, personnel shelter. The chief of the guard at the gate of this battery wore military uniform with silver shoulder piping and two silver stars side by side on the epaulette.
- 133 = This building is the workers' canteen.
- 134 = Area of another defence position. Plenty of A.A. No further details.
- 135 = Flat-roofed villa of a doctor, now occupied. The Germans have built a sandbagged emplacement on the roof for a searchlight and a Radar frame. This is similar to the one described at figure 21.
- 136 = This causeway has been reconditioned and is now used by lorries taking shingle and cement to the fort.
- 137 This fort is occupied by a handful of troops.
- 138 = Informant (b) thinks that the Germans have mined this road by now. He overheard two German soldiers discussing this. They were measuring the road at this corner.
- 139 = Fort TOURGIS occupied. Informants have seen A.A. fire from here and a searchlight.
- 140 = A strong firing bunker is being built here on the rocks outside the fort. The bunker is right up against the fort wall. It will cover SALINE BAY from westwards.
- 141 = Mr. OSSELTON's Farmhouse. He is the second remaining Alderneyman who did not leave with the evacuation. (Mr. POPE is the other).
- 142 = HELGOLAND CAMP. This is the main camp for Jewish prisoners. Some French workers live here too. Armed O.T. guards.
- 143 = FORT PLATTE SALINE is in ruins and is not used.
- 144 = There is an 18 inch thick concrete sea wall from FORT TOURGIS to FORT DOYLE. The Germans have taken most of the shingle off PLATE SALINE beach. Behind the wall, which is about four feet high from the beach and only a few inches above the ground level on the inside, tehre is a footpath and then, before reaching the main road, a stretch of mined ground shown in red on this map. This mine belt is bounded by barbed wire like the others. The concrete wall is not itseld continuous but gives way to field boundary walls where they existed.

- 145 = This row of detached houses has been pulled down.
- 146 = Informant (b) has seen some A.A. guns in the distance on this high ground.
- 147 = German pig farm. Only 7 or 8 pigs.
- 148 = On the east side of this path, in a bank about 25 ft away, is a hidden M.G. position. All that is visible is a firing slit in the side of the sloping bank but barbed wire entanglements on wither side of the path would prevent anyone climbing this hill except the path which then comes under fire.
- 149 = R.C. Church. Now a flour store.
- 150 = O.T. shed, full of metal sheeting.
- 151 = These houses have also been pulled down.
- 152 = This camp is now empty. Was formerly an O.T. camp and housed the "DEEBAU" canteen.
- 153 = New German bakery. German bakers; 5 or 6 new electric ovens.
- 154 = Tennis courts of the Grand Hotel.
- 155 = Grand Hotel. Now occupied by Flak troops and officers.
- 156 = Shed for German cars with three sides open. Side towards the sea is closed.
- 157 = 30-35 ft high concrete watch tower similar to the one at fig. 77.
- 158 = Large searchlight with shed nearby for 3 man crew.
- 159 = Two derilict houses.
- 160 = This beach in CRABBY BAY is made of stone dust and granite chips. Recently the Germans have planted in the middle of it two concrete posts 6 ft high by 6" square. Behind this bay and before the road is a mine belt about 30 ft wide with barbed wire on both sides. The road behind the bay is also perpared for mining.
- 161 = In this quarry is a dump of scrap iron which is being taken away to France by the coasters. The warer from quarry appears to be being pumped out for use in the island.
- 162 = At this end of CRABBY BAY is a line of disused Alderney Railway wagons.
- 163 = Where possible the Germans have mined the ground outside the walls of FORT GROSNEZ.

164 = A firing bunker is built here outside the fort walls to cover the outside of the breakwater.

165 = The middle house of this row is the German Feldpostamt. The road in fron leading from the old pier to BRAYE ROAD is prepared for mines (see black dots on map).

166 = Fort DOYLE is occupied. A bunker is being built on the west side, outside the fort walls to enfilade PLATTE SALINE from eastwards. This is complementaty to the bunker at fig. 140.

Appendix 5.2. Burial lists for the slave worker graves on Alderney, compiled by various organisations

(a) IWGC

ID	Surname	First Name	Died	Further Info
1	Kowalschuck	R	17.5.43	
2	Staniczweski	S	1.5.43	
3	Derkatschow	D	28.3.43	
4	Unknown			
5	Unknown			
6	Krupadezow	W	7.7.43	
7	Unknown			
8	Reswij	N	1.5.43	
9	Demetiuk	J	18.6.43	
10	Unknown			
11	Unknown			
12	Ricaux	В	3.12.42	
13	Pawnel	S	7.2.44	
14	Amanij	М	8.2.44	
15	Unknown			
16	Sazepa	А	28.2.44	
17	Korickij	D	26.2.44	
18	Ksenofontow	Р	26.2.44	
19	Brauning	R	26.2.44	
20	Pobrawka	N	29.2.44	(0) Reverse side Masytchu P D 20.11.42
21	Krikun	В	29.2.44	(1) Underneath Bassantetz P D 20.11.42
22	Salisny	W	7.4.44	(2) Reverse side Gubin I D 18.11.42
23	Pledsduk	E	18.4.44	(3) Reverse side Schlehoff H D 6.1.43
24	Bezzapnnij	J	18.4.44	(4) Reverse side Kutzin I D 17.11.42
25	Bernikow	М	28.4.44	(5) Reverse sude Dukow I D 22.11.42
26	Pobereeshnjuk	W	29.4.44	
27	Zalewski	E	7.5.44	
28	Jltschuk	K	11.5.44	(6) Underneath Willcota W D 19.11.44
29	Stushuk	N	18.5.44	(7) Reverse side Kowaltchuk I D 20.11.42
30	Scherhun	Р	16.6.44	(8) Reverse Saikowski E D 17.11.42

	IWGC 1953 Row B				
ID	Surname	First Name	Died		
1	Unknown		15.4.43		
2	Kschevinski	J	18.5.43		
3	Podotoka	J	24.5.43		
4	Krupi	E	3.4.43		
5	Skammenko	M	1.5.43		
6	Unknown		22.4.43		
7	Bokum	I	23.4.43		
8	Fedischenko	M	4.6.43		
9	Melschin	M	29.2.42		
10	Demjanuk	K	4.7.43		
11	Sidcrow	G	2.7.43		
12	Mikantschuki	W	16.4.43		
13	Kowal	M	25.5.43		
14	Eschke	F	28.6.43		
15	Kogutschuk	J	22.4.43		
16	Unknown				
17	Dybalin	A	22.4.43		
18	Manujenko	M			
19	Derkatsch	A	23.5.43		
20	Cleschko	A	7.2.43		
21	Diumon	K			
22	Denisow	W	29.3.43		
23	Unknown				
24	Zelenski	M	6.2.43		
25	Menakow	G	11.3.43		
26	Jijenko	W	2.4.43		
27	Naumowicz	Α	6.9.42		
28	Afantschenko	V	2.10.43		
29	Sindut	S	11.10.43		
30	Knapp	S	14.9.42		
31	Ryndin	Т	13.5.43		
32	Demetink	J	18.6.43		
33	Kissanow	G	5.6.43		
34	Folkin	W	30.8.43		
35	Uschakow	Р	1.8.43		
36	Ploch	S	2.2.43		
37	Udot		16.4.43		

IWGC 1953 Row B				
ID	Surname	First Name	Died	
38	Unknown			
39	Muineck	S	9.10.42	

	IWGC 1953 Row C				
ID	Surname	First Name	Died		
1	Setnef	M	21.6.43		
2	Charchuk	Т	7.2.43		
3	Paulisen	H.L.	1.12.42		
4	Kotok	S	30.1.45		
5	Pereleinos	Т	3.3.43		
6	Dofgal	J	11.8.43		
7	Staschuk	Р	27.8.43		
8	Ifewiska	I	27.8.43		
9	Zcarzcinski	I	30.8.42		
10	Semenuk	Р	2.2.43		
11	Sakarof	M	18.3.43		
12	Stamschuk	S	17.6.43		
13	Stepanenko	Р	16.4.43		
14	Totski	A	8.4.43		
15	Pilat	R	8.4.43		
16	Petcerza	F	8.4.43		
17	Scha;ineko	K	24.4.43		
18	Rudyantschko	S	12.3.43		
19	Hoffmann	K	16.3.43		
20	Wannikow	S	14.3.43		
21	Lefschi	S	15.3.43		
22	Batilenko	N	16.3.43		
23	Grizkow	I	20.4.43		
24	Unknown		6.6.43		
25	Rose	R	6.6.43		
26	Orioff		6.5.43		
27	Jaron	E	22.9.43		
28	Zula	W	22.7.43		
29	Bronski	I	25.8.42		
30	Schuwalijewska	Α	2.3.43		
31	Teskiw	M			
32	Boganoff	I	14.11.43		

	IWGC 1953 Row C					
ID	Surname	First Name	Died			
33	Kotol	U.L.	23.8.43			
34	Onnuschwiki	A	28.9.42			
35	Olkanski	S	8.9.42			
36	Koleda	L	26.2.42			
37	Schukof	l	21.2.43			
38	Rasofski	A	30.1.43			
39	Nowilski	I	25.9.43			

	IWGC 1953 Row D				
ID	Surname	First Name	Died		
1	Kra - (Illegible)		24.4.43		
2	Jermolenko	J	3.4.43		
3	Bogatier	G	9.6.43		
4	Nikitenko	А	8.3.43		
5	Panaschewicz	S	43		
6	Kurlagin	A	17.3.43		
7	Forster	J			
8	Gontscharow	N			
9	Koschuchun	J	2.2.43		
10	Brikow	W	12.7.43		
11	Mischek	A	12.11.42		
12	Dawidow	J	3.2.43		
13	Morosuw	W	17.10.43		
14	Unknown				
15	Kraszewski	N	2.4.43		
16	Sadownikow	G	3.2.43		
17	Gojda	J			
18	Bojko	J	6.6.43		
19	Unknown				
20	Schalimow	Т	2.4.43		
21	Unknown		30.1.43		
22	Politewitz	J	4.5.43		
23	Ratuschni	С	18.2.43		
24	Gorbatsch	W	29.12.42		
25	Njamin	М	4.1.43		
26	Unknown				
27	Otadnik	P	5.1.43		

	IWGC 1953 Row D					
ID	Surname	First Name	Died			
28	Unknown					
29	Unknown					
30	Petranzow	Р	30.12.42			
31	Unknown					
32	Unknown					
33	Unknown		29.12.42			
34	Sukonaiyko	W	11.1.43			
35	Nowak	J	1.6.43			
36	Horin	J	3.7.43			
37	Unknown					
38	Jaunoz	A	5.5.43			

	IWGC 1953 Row E				
ID	Surname	First Name	Died		
1	Bugoanowitsch	М	29.11.42		
2	Jaroschenko	G	23.11.42		
3	Butrovik	N	29.1.42		
4	Wondes	J	26.11.42		
5	Kozol	P	26.11.42		
6	Tschechovski	J	13.11.42		
7	Kosuk	G	14.12.42		
8	Lowotschkis	I	15.12.42		
9	Drusda	М	15.12.42		
10	Rossitschuk	F	21.11.42		
11	lwanow	M	21.12.42		
12	Schechot	T	6.12.42		
13	Gadrison	I	6.12.42		
14	Roskewski	E	6.12.42		
15	Rawnski	J	4.12.42		
16	Kalak	M	25.12.42		
17	Bouizik	S	21.12.42		
18	Tscherniga	A	24.12.42		
19	Ostapenko	W	24.12.42		
20	Fremrantschuk	М	27.12.42		
21	Gomoff	L	27.12.42		
22	Iwantschuk	W	28.12.42		
23	Pogoreloff	N	28.12.42		

	IWGC 1953 Row E				
ID	Surname	First Name	Died		
24	Selesuki	A	1.1.43		
25	Lysniuk	I	1.1.43		
26	Aleka	W	2.1.43		
27	Kunoffek	I	23.1.43		
28	Korpinski	A	25.1.43		
29	Friedrich	I	25.1.43		
30	Okrainski				
31	Jadozki	S	23.1.43		
32	Demtschenko	J			
33	Schanorik	F	26.1.43		
34	Iwanof	N	26.1.43		
35	Schwewergin	F	24.1.43		
36	Swedvetzki	M	10.12.42		
37	Arischof	V	20.1.43		
38					

ID	Surname	First Name	Died
1	Jschuba	D	?.?.42
2	Obanow	L	
3	Samtschuck	M	?.?.42
4	Unknown		
5	Stefanak		?.?.42
6	Nikola	Т	30.12.42
7	Didenko	I	
8	Bandarenko	А	9.1.43
9	Alenschenko	W	6.1.43
10	Toroschwo	Т	12.1.43
11	Marischenko	W	8.2.43
12	Statscheiwetsch	A	9.1.43
13	Unknown		20.1.43
14	Borko	M	?.2.43
15	Kicha	N	10.11.42
16	Lepilof	Α	23.11.42
17	Machza	R	22.11.42
18	Nowak	P	17.11.42
19	Morosoff	I	17.11.42
20	Gawalik	А	22.11.42

ID	Surname	First Name	Died
21	Kajat	В	3.12.42
22	Stawanski		22.11.42
23	Zipko	N	29.11.42
24	Tzulpa	l	29.11.42
25	Petrina	S	2.12.42
26	Bondzakoff	G	29.11.42
27	Nowak	J	23.11.42
28	Kolesnik	D	30.11.42
29	Odartschuk	Α	2.12.42
30	Baranoff	Α	2.12.42
31	Brokepenko	W	2.12.42
32	Tamin	Р	27.11.42
33	Kirschko	Р	27.11.42
34	Wanarenko	I	4.12.42
35	Kudenok		3.12.42
36	Tzukowski	Α	5.12.42
37	Korilof	N	3.12.42

ID	Surname	First Name	Died
1	Komabuko	J	22.11.42
2	Towanetz	W	24.11.42
3	Nowiko	G	24.11.42
4	Tschernischenko	P	26.11.42
5	Tziganow	I	26.11.42
6	Musel	W	26.11.42
7	Malisch	Р	30.11.42
8	Orchimenko		1.12.42
9	Adamtschuk	А	2.12.42
10	Polissen	A	2.12.42
11	Petrancha	Р	2.12.42
12	Jarnak	N	3.12.42
13	Swinarenko	Peter	3.12.42
14	Hartschuk	S	8.12.42
15	Gawriluck	N	9.12.42
16	Wlassenko	L	9.12.42
17	Schulga	M	11.12.42
18	Filonik	N	11.12.42
19	Olentschko	N	13.12.42
20	Jankowenko	Stepan	14.12.42

ID	Surname	First Name	Died
21	Jwenin	Р	14.12.42
22	Olnik	J	17.12.42
23	Ustugow	L	18.12.42
24	Wamzinowic	В	?.12.42
25	Droscha	М	?.12.42?
26	Gretschuchin	В	17.12.42
27	Barttesch	N	20.12.42
28	Schuck	В	
29	Orlensk	J	21.12.42
30	Okschinski	J	
31	Kirhow	Α	
32	Osadtschi	J	22.12.42
33	Ohnk	K	
34	Kormilitzin	Т	5.1.43
39	Sawrich	Р	23.12.42
40	Pelepinko	Α	23.12.42
41	Pachonof	Feodor?	

	IWGC 1953 Jewish Graves				
ID	Surname	First Name	Nationality	Died	
1	Goldin	С	French National	7.2.45	
2	Perlstein	R	French National	22.12.43	
3	Becker	S	French National	30.12.43	
4	Worms	L	French National	7.1.44	
5	Stresskoski		French National	8.2.44	
6	Gordesson	W	French National	26.2.44	
7	Lipmann	Н	French National	2.3.44	
8	Kirschblatt	S	French National	26.4.44	
9	43 Unknown Russians. Names unknown				

(b) Alderney Museum Archive List

A	В	C	D	E	F	G
1. Konnirskot Wority. 2. Samunodo Swodow. 3. Dobish has Dodoy. 4. 2 k. Leo (1) 5. Bidmustet. 6. Nepoutous Videntin. 7. Bidoutain 8. Renory Nobelity. 9. Denetuh Jahan. 10. Dohanasse. 11. Bidmustet. 12. Roome Brill. 13. Franct Schilebenhe. 14. Annary Micho. 15. Bidmustet. 16. Soveps Anachel. 17. Kornkiy Dempon. 18. Koenojonlosi Tele. 19. Demanny Rishard. 20. Represaha Minota. 21. Krikun Buru. 22. Satami Wavally. 23. Pletslak Eugen. 24. Percoponny Kann. 25. Bernikana Nichanl. 26. Poberoshuyak Wasal. 27. Zudauski Edward. 28. Jenshah Nakolsty. 30. Scherhun Rasel. 21. 22. 23. Pletslak Lalured. 24. Studah Nakolsty. 25. Scherhun Rasel. 26. 26. 27. Studah Nakolsty. 28. 29. 20. 20. 20.	Bukisander. Rockeninski Iman. Rodoroba Isian. Rospin Kugen. Stranmersko Michael. Bahuman. Bokum Lemid. Tedisehenk Nokolary. Mischin Michael. Derjanyink Kombardin. Sidopous Grang. Nikontsehuk Izladimire. Kosul Michael. Lechlef Franz. Kogalschuk Josef. Cher Idessill. Dyladin Planu ylenko Maxon Derikolschi Rodoras Oleschku Afansi. Dynama Kuson Donisand Liladimire. Michael. Zelensky Nikola. Tennkous Grasciel. Ityenko Viladimir. Naumanitz Rodone Afontschenko Yaktor. Sindar Stanudaus. Knapp Stanudaus. Kna	Sedness Mishael. Charshisk Eilmen. Thalinen Leonarden. Kotok Sergei. Pereberones baun. Densentjak Tokona. Stastachuk Fedor. Jesatiguepes baun. Zenreinsky baun. Sennende Fedor. Sekneroff Michael. Stamachuk Stefan. Stepanedus Pyotr. Totaki Aleannder. Pilat Roman. Petacherista Fedor. Schaleenberg Kurt. Kudr-pashous Sergity. Hoffenn Kurt. Monyckous Stefan. Leosachin Stefan. Leosachin Stefan. Leosachin Stefan. Leosachin Stefan. Udviousit. Rost Kudt. orf baun. Jaron Educard. Zulta likustistana. Bristinsky baun. Schtopuchinsko Mesanke. Frakus Michael. Leona. Schtopuchinsko Mesanke. Frakus Michael.	Kross Jermolenko Issan. Bocalir Grigori. Nikitenku fundrei. Ranaschrainz Stefan. Kurlagin filesander. Fonster Josef. Contacharosa Nikolaiy. Noschuschom Issan. Brikosa Udanili. Muschen Antoni. Dussidma Issan. Muschen Antoni. Jusinima Issan. Kroszenski. Neceplana. Sadoamikona Germann. Gorda Issan. Ushnosan. Schalimona Turna. Unknosan. Schalimona Turna. Unknosan. Roltenitz Jen. Katisakni Genarilla. Gorbatzah Islanili. Nyamin Michael. Schoral Nikolai. odnik Filer. Unknosan. Retranzosa Riter. Unknosan.	Bobdonwitch Mahada. Toroschenho Gregor. Bobvonik Mikolaz. Idenalas Scoef. Korol Rier. Tudnerowsky Jan. Kosak Gregor. Lewolachkin Isan. Droscha Machael. Russilschuk Tenhen. Jannana Michael. Schechof Thoso Sauritsch Isan. Roschenski Eugen. Roschenski Eugen. Roschenski Eugen. Roschenski Eugen. Roschenski Eugen. Roschenski Eugen. Roschenski Hosan. Koschenski Hosan. Koschenski Hosan. Ischensich Michael. Souzik Stefan. Ischenica Nezander. Oshpenko Islaudi. Frendudschuk Mark. Gomoff Isan. Ischensich Isan. Mexalika Alexi Lysniah Isan. Mexalika Sergei Pemischenko Josef. Schunorik Isan. Meralinsky Isan. Meralins	Ischala Dauid. Gemas Insan. Samtschuch Phehail. Sagerhalle Lineali. Steparade. Terrog Nhola. Bidinko Isan. Bordarenho Isane. Bordarenho Isane. Marintschinho Li. Steparade. Terrono Taras. Marintschinho Li. Stakeristisch Jundel. Dubarata. Bobko Nichail. Kischar Nikon. Lepilosa Menodr. Machyte. Roman. Novak Philip. Moresous Lyor. Constili Adum. Napil Busil. Stainardei Stiscele. Ziphoas Nikola. Tjulpat Ivan. Estrina Sylvester. Beutzalov Grigori. Novak Jacob. Kolesaik Dromit. Odartschuk Alex. Berren Adam. Trubastenho Usanili. Famin Teeler. Kaselio Betvo. Linearenko Isane. Godund Isane. Godund Isane. Godund Isane.	Kasalenko Veljier. Tonannetz Islansili. Nesiko Grigori. Tolomnetz Islansili. Nesiko Grigori. Tolomnenko Bler. Trigomans Ilin. Musel Isladiskas. Malisek Peter. Orchimentoo Adamischuck Aleks. Polissen Hage. Petrancho Jarnak Nikola. Stainarenko Ritr. Hartschuk Sergei. Cranorilaek Nicki. Islassenko Leonid. Schulga Michael. Filonik Nikolai. Otentachko Nikolai. Jankoraenko Steph. Isseriin Pete. Otenik Jacob. Islagons Leonid. Islamonic Broni Droscha Muhael. Gretschuckin Bori. Droscha Muhael. Gretschuckin Bori. Droscha Nikolai. Schuck Davil. Orlensk Essecken. Okschinsky Josif. Nerilons Alexander. Oradtschi Islam. Unknosis. Kornittein Trofim. Somrich Feter.

(c) Chronological sequence of deaths of foreign workers on Island of Alderney (PRO WO311/13)

4010		4				
1942 Feb	26	MOIEDA	Yangr	BOE		
7.00	29	MELICHEN	Ho. olovaria	R.C.5 R.C.6		
	27	ESHOUTING!	29/10/2011	1.0.0		
Apr	27	GONZALLES	Postous ,	8.4.		
Jun	21	Ferd.	LARDE	s.A.)	These two graves res	'er to
	21	LARDIN	Permand	8.4.)	the same person	10001 10000
Jul	28	MINITEK	Eggen	S.A.		
Aug	25	DECOUNTED.	Thom	R.C.5)	These two graves rei	er to
	26	DEODENEN	J124	8.4.	the same person	
	27	SEVRIBORIE.	Lores, &	S.A.)	These two graves rei	or tp
	27	STARTLONUS	Youlou-	n.c.5 }	the same person	
- 1	30	SOLISIGINERY	Phot	S.A.)	Those two graves ref	or to
1	30	ZCANZCINGXY	7/457	R.C.5)	the same person	
Sep	5	GAIDO	Muscety	3.4.		200170-0220-02
	6	HOSETHOMDYN.	distinction	S.A.)	Those two graves ref	er to the
	6	NAUMONICZ	Antonio	R.O.6)	seme person	
	8	SCHULIMOWSKI	Stoffen	S.A.		
	8	DIKANSKI	Stenislaus	R.C.5.	These two graves ref	er to the
	9	DIK/NSKI	Sicidslan	S.A.)	some person.	
	14	KOLKON	Grigori Stanialous	S.A.	**************************************	
	14	MUPP	Stanialous	R.O. S.)	These two graves ref	er to the
	16	JERMELIK	Arseni	S.A.	some person.	
	24	DOKOWEZ	Igor	5.4.		
	25	NODITZKI	Iver	R.C.5.		
	26	KOVALETZ	Michael	S.A.		
	26	DELVAU	Evariste	S.A.		
	27	KALITIN	Wassili	S.A.		
	28	CNNUCHOWSKI	Antoni	R.C.5)	These two graves refer	r to the
	28	ONNUCHOWSKI	Anton	S.A.)	seme person.	
	28	TIMOSCHIK	Pawel	S.A.		
	28	SWIRIDOFF	Michail	S.A.		
Oot	1	NELUDA	Michael	S.A.		
	2	SCHUKOV	Stefan	S.4.		
	3	JUNEVITSCH	Merian	S.A.		
	1	IAKOMEZ SCHUKOV	Alexandr	S.A?.		
	4	DADCHUK	Solowa	S.A.		
	4	HARASO??UK	Danielo	S.A.		
	8	JEJELEW	Nikolni	S.A.		
	8	DELYDLE	Jakobus	S.A.		
	9	MUINECK	Stefan	R.C.6.		
	13	MICHALOW	Paul	S.A.		
	13	MARTINENKO	Hads.	S.A.		
	14	KLAPTSCHUK	Karlonik	S.A.		
	20	KUTASIEWICE	Erasim	S.A.		
	22	KOLOS	Loo	S.A.		
	23	HAPTSCHUK	Alexei	S.L.		
	26	SCHOLODESKI	Senon	S.A.		
	28	ADAMISCHUK	Ldnn	S.A.		
	29	DERSCHWIL	Militon	S.A.		
		A NOVEMBER OF				
	31 31	ARIS WOLOWDIK	Cornelius Petro	S.A.		

```
1942 (contd)
                                                                                     R.C. 2
                       TJULDA
                                                       Ivon
                                                                                     S. L.
                                                       Ivan
                       CHARLEDEA
                                                       M. t. Malaw
                                                                                     S.A.
             57
                       PIOTROVSKI
                                                       Vanili
                                                                                      8.4.
                       SCHELLARLY
                       MERCIY
                                                       Sergo
                                                                                     B. A.
           11
                                                                                      3.4.
                                                       Wikola
           11
                       MESA
                                                                                      R. C. 41
                       MISCHEW
                                                        inton
           12
                                                        Poedor'
                                                                                      3.4.
                       KAPISTECHUK
           14
                                                        Peodor
                                                                                      S.L.
                       PERLONSKI
           15
                                                        Kilsolai
           16
                       TUUCHN
                                                                                      Sale
                                                                                      No grave - name on other eross
                       KÜPZIN
                                                        Twon.
           17
                                                                                      No prevo - name on other oress
                                                        Bugon
            17
                       SAIROVEKI
                                                                                      R.C. 2
                       MUSOSOM
                                                        Zgor
           17
                                                                                      No grave - nome on other oress
                                                        Igor
            18
                       GUDEN
                                                                                      No grave - muse on other cross
                                                        Vossili
                       WILLOOTA ?
            19
                                                                                      No (rave - name on other cross
                       MUTTE CHUK
                                                        Pruthisin
            20
                                                                                      No grove - none on other cross
                                                        Zaul
                       DASSAJUETZ ?
            20
                                                                                       No grave - none on other eress
                        KONALCUHUK
                                                        Ivan
            20
                                                                                      R.C. 2
                                                        Milcon.
            20
                        KUCHAR
                                                                                       2.0.3
                       ROSSIDSCHUK
                                                        Trochen
            21
                                                                                       No prove - name on other eress
                                                        1210
            22
                        WCXVI
                                                                                       R.C. 2
                                                        Louen
                        ACCHUM
            22
                                                                                       R.C. 2
                        GAVLIE
                                                        Adam
            22
                                                         Charole
                                                                                       R.C. 2
            22
                        STATISTICAL
                                                                                       R.C.1
            22
                        100003.532000
                                                         Yofim
                                                         Wansili
                                                                                        2.0.1
                        TO ANUTZ
            24
                                                                                        2.0.1
            24
                        MOTTON
                                                         Grigori.
                                                                                       2,03
                        TRONGGOWISCHEROW) Peter
             25
                                                         Tila
                                                                                        3.0.1
                        TEXALION
             25
                                                                                        2.C.1
R.C.3
                                                         Windislas
             25
                        MUSEL
                         WINDAS
                                                         Josef
             26
                                                                                        1.0.3
                                                          Date
                        KOTOL
               26
                         TECHECHOVEKI
                                                                                        2.0.3
                                                         Ton
             23
                                                                                        2,0,2
                                                          Detr
             27
                        PARM
                                                                                        R.C. 2
                                                          Latro
             27
                         KIRSCHKO
                                                                                        2.0.3
2.0.3
                         DODDANOVINSCH lichail
             23
                         THERESONE
                                                         Mikolat
             29
                                                                                         R.C. 2
                                                          Miltoola
                29
                         ZING
                                                                                        2,0,2
              29
                         DATEDIANCE
                                                          Grigora
                                                          Inter
                                                                                        R.C.1
                         MATERICH
              30
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                                                          Docmit
  No date
                         KOUSSMIK
                                                                                         1.C.1
                         CHESCHIC RESIND
                                                                                                            (my be identical with
                                                                                         E.C.5
                                                          Hugo L.
                1
                          LAYLUSSEN.
                         ADMITTS OF BE
                                                           Adem
                   2
                                                                                                             (See "IMPLIESEE - cheve
                         POLESSIO
                                                                                         1.C.1
                                                           Hugo
                2
                                                                                         2.C.1
                 2
                          THE LATROETO
                                                           Tlotr
                          TENNIO TENNIO
                                                           Sylvester
                                                                                          D.C.2
                 2
                                                           Wonnili
                                                                                          1.C.2
                 2
                                                                                         B. C. 1
                                                           Nilcola.
                          MANNAK
                 333354
                                                           Dogil.
                                                                                         R.C.2
                          KATTT
                                                                                         R,0.2
                          DOMESTICK.
                                                           Jypan
                                                                                          R.C. 2
                          ROLLING
                                                           Mikala
                                                           Dest.1
                                                                                          B. C. 7
                          RICAUK
                                                                                          IL Cal
                          SHELLING GOD
                                                            Total
                                                                                          R.C. ?
                          CONDECTMENT
                                                           Jyon
                 4
                                                                                          R.C. 3
                                                            Jwon
                 46
                           CAURISCH
                                                                                          2,0,2
                                                            Alexander
                           THE PUBLICATION OF THE PERSON 
                                                            Timofe
                                                                                          R.C.3
                  6
                           SCHECKE
                                                                                          11, C. 3?
                                                            Eugen
                  6
                           ROSCERSKI
                                                                                          R.C.1
                                                            Ser ei
                           MARTSCHUCK
                  89
                                                            Niaki
                                                                                          R.C. 1
                           CAMPITLUCK
                                                                                          R.C. 1
                                                           Loonid
                           WILESERED
                  9
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1942 (contd)
Dec 10 SCHOLGA
                           Highael
                                         3.0.1
      11
           PILONIK
                           Mikolei
                                         2.0.1
      12
           SWEINETZKI
                           Mades
                                         R.C. 3
      13
           CULDETMALO
                           mikolai
                                         R.C.1
      13
           TELLTON.
                           Alexandr
                                         R.C. 2
      16
           JANKOWNERO
                           Stepan
                                         R.C.1
      14
            IMBRIDE
                           Potr
                                         R.C. 1
      14
            KOSUK
                           Gregor
                                         R.C. 3
      15
           OTENIX
                           Jakob
                                         R.C.1
            LOGOZUCHKEM
                           Iman
                                         R.C. 3
      16
           USTUGOR
                           Leonid
                                         R.C.1
     16
           WANTEINOWIC
                           Dronis
                                         R.C.1
      16
           DROGREIA
                           Michael
                                         R,C.3
                                                    Those two graves refer to
           DROSCHA
16 or 17
                                         R.C.1
                           Michael
                                                     the same person
      17
           CRETSCHUCKEN
                           Dori
      17
           MAYOR
                           Philipp
                                         11.C.2
      20
           DARTTESCH
                           Nikolei
                                         R.C.1
      20
           SCHUCK
                           Donil.
                                         R.C.1
      21
           ORLENSK
                           Erseckin!
                                         R.C.1
      24
           CESCHLISSES
                           Josef
                                         R.C.1
      21
           DAMENT
                           Josef
                                         R.C.3
      22
           KURHOW
                           Alexander
                                         R.C.1
      22
           (GADISCHI
                           Tunn
                                         R.C.1
      23
           SANGION
                           Toter
                                         R.C.1
      23
           TELE: INKO
                                         2.0.1
                           Aleksoi
     23
           ISCHULL.
                           Daniel
                                         IL.C. 2
     23
           CERCOMON
                           Iwon
                                         R.C. 2
     23
           KALAX
                           Michael
                                         R.C. 3
      24
           DOUTZIK
                          Stofan
                                         R.C.3
     24
           TSCHERNIGA
                           Aleyandor
                                         R.C. 3
     27
27
           TROPE WOTTSCHUK Mark
                                         R.C. 3
           0034035
                           Down
                                         R.C. 3
     20
           NOUNDREETTE
                           Michail.
                                         R.C. 2
     28
           IMANTSCHUK
                           Wonsili
                                         N.C.3
          No name thereon
     20
                                         R.O.4
     29
                                         R.C.4
     29
           STECNIFICK
                                         R.C. 2
     30
           THEROG
                          Mi.kola
                                        R.C. 2
     31
           TETRANSON
                           Poter
                                        R.C.4
No date
           ODARISCHUK
                           Alox.
                                        R.C. 2
No date
           JUANOW
                          Michael
                                        R.C. 3
           CORDATECH
No date
                          Wassili
                                        R.C.4
        The following also died, in 1942, day and month unknown:-
SAGNERALIO Fassili R.C.2
           DARAM
                          Ldnm
                                        R.C. 2
1943
Jen
          NJAMON
                          Mi-ohnol
                                        R.C.4
           ANGUELJ ?
                          ?
                                        R.C.4
      2
          No name therean
                                        R.C. 2
R.C. 1
      5
          KORMILITZIN
                          Tromin
      56
          STAINIK
                          Poter
                                        R.C.4
           ALENSLENCO
                          Wasili
                                        R.C. 2
      6
          SCHLEHOLF
                          Hormon
                                        No grave - name on other cross
      7
          DOMESTATION TO
                                        B.C. 2
                          Andre
      9
          STATMENTITSCH Anntol
                                        R.C. 2
     11
          SHOUWALJKO ?
                          Vossili.
                                        R.C.4
     11
          SDOU ?
                          Stanislaus
                                        R.C. 6
     16
          SCHANORIK
                          Feeder
                                        2.0.3
     20
          ARISTON
                          Wiktor
                                        R.C. 3
     23
          MONDE???
                          Iwan
                                        R.C. 3
     23
          JADOUZKI
                          Serge
                                        R.C. 3
     24
          SCHWEWE IGIN
                          Pooder
                                        R.C. 3
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1943 (contd)
Jan 25 KORTINSKI
                                        R.C.3
                          Anton
(contd)26 Unreadable
                                        R.C.4
                          1860 4
     30
                                        R.C.5
           KOTOK
                          Sergoi
     30
                                        R.C.5
           KRASOWSKI
                          Alexander
                                        R.C.4
     31
           Unbukannt
                                        R.C.4
          No name theruch
No date
                                        R.C.5
          CHUMATE
Peb

    Iwan

      2
          KCSCHUCHON
                          Iwan
                                        R.C.4
      2
           SEMPORUK
                          Poter
                                        R.C.5
      2
                                        R.C.6
           PLOCH
                          Stanislaus
           DAVIDOR
                         - Iwan
                                        R.C.4
     3
      3
           SAUXYMIKOV
                          Gurmann
                                        R.C.4
      6
                          Nikolai
                                        R.C.6
           ZELENSKY
      7
           CHARSCHUK
                          Pilimon
                                        2.0.5
                                        R.C. 6
           OLESONKO
                          Manas
      7
                                        R.C.2
           MARINTSCHENKO
                           ₩.
     18
                          Corrilla
           RATUSCHIN
                                        R.C.4
     48
      8
          KITITER
                          /mdrei.
                                         R.C.4
Mar
                                        R.C.5
          THERESINE
                          Iwan
      8
                          Gwariel
     11
          3/997/23001/
          KURLAGIN
                          Alexander
                                        R.C.4
     12
     12
          KUDRJAŁSCHOW
                          Sergei 1
                                        R.C.5
                                        R.C.5
     13
          HOMETON
                          Karl
                                        R.C.5
           WONJUKOW
                          Stopan
     14
                          Stofan
                                        R.C.5
     15
           LWWSCHIN
                                        R.C.5
      16
           DUTTLENKO
                          Nikolaij
           SAKAROFF
                                        R.C.5
                          Michael
     18
                                        R.C. 6
           KOWAL
                          Michnel
      25
           SCHIGJACHIENKO Alexander
                                        R.C.5
     28
                                        R.C. 7
                          Dim tri5
     28
           DEPK/ISCHOW
     29
           DESCRIPTION
                          Windingr
                                        R.C.6
No day
                          Stofan
           TANAS TERRITAS
                                        R.C.4
No day
           POISTING
                          Josef .
                                        R.C.4
      2
           KRASKSSERY
                          Michays
                                        R.C.4
Apr
      3
           JEAN LENKO
                                        R.C.4
                          Dw.en
      36
           RECEIVES
                          Eugen
                                        R.C. 6
           TETSCHERIZ!
                                        R.C.5
                          Fedor
           TOTZKI
      8
                          Alexander
                                        R.C.5
                          Rosen
                                        R.C.5
     10
           TALET
                                        R.O.5
R.C.6
     10
           CRIZKO
                          Lymn
           No name thereon
    15
     16
           STEL ANENKO
                          Pjotr
                                        R.C.5
                                        R.C. 6
           UDOT
                          Moi.shi.
     16
           No name thereon
                                        R.C. 6
      17
                                        R.C.4
      21
           SCHALIMON
                          Taras
           No name thereon
                                        R.C. 6
     22
      22
           KOCUTSCHUK
                          Josef
                                        R.C.6
     23
           DOKUM
                          Leonid
                                        R.C. 6
     24
           KRAW???
                                        R.C.4
                                        R.C.5
R.C.6
     24
           SCHALLKNIERG
                          Kurt
           ILJENKO
                          Winding.
No day
                                        R.C. 6
May
           KANUNENKO
                          Michael
                                        R.C.7
           STANICZEWSKI
                          Stanislaus
      1
                                        R.C.7
                          Nikolaij
      1
           RESWIJ
      4
           POLITERITZ
                          Jan
                                        R.C.4
                                        R.C.6
           FEDISCHENKO
                          Nikolaij
      4
       5
           JANUS2
                          Adnm
                                        R.C.4
           ORKL
                          Feodor ?
                                        R.C.5
       6
                                        R.C.6
           KSCHEVINSKI
                          Iwan
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43 (contd)
  Ray
             DOWGALJUK
                                         R.C.5
R.C.6
                            Jakow
  (contd) 13 INTERN
                            Timifcij
        17
             KOWALITECEUK
                            Wessilij
                                         R.C.7
        21
             No numer thereon
                                         R.C.4
        21.
             PODOROKA
                           Iwan
                                         R.C.6
        30
             FOLKLA
                            Wassilij
                                         R.C. 6
       31
             IMEGOZ
                                         S, A
R, C, 4
                           Lucie
  No day
            ???????JEROW
                            Twan
  No day
            DERRAICS
                           Andrei j
                                         R.C.6
  Jun
            NOWAY
                           \Sigma w_{221}
                                         R.C.4
        5
            KIESANOW
                           Deorgoid
                                        R.C.6
            DONE
                           Iwaz.
                                         R. C.4
        6
             Unread wale
                                         R.C.5
            DEMOTIVE
        8
                           Julian
                                        R.C.6
                                                 Probably identical with DE
        9
            DOGATER
                           Grigori
                                        R.C.4
       17
            RUHUEMATE
                           Stefan
                                        R.C.5
R.C.7
            DESCRIUK
       18
                           Julian
                                                 See above
       21
            PRINTERNA
                           Michael
                                        R.C.5
       28
            ESCHKE
                          Franz
                                        R.C.6
 Jul .
       3
            KCRIN
                          Johann
                                      ". R.C.4
                          Konstantin R.C.5
            DEMIANIUK
            KRUMIEZEV
                          Walentin
                                        R.C.7
      12
            DRIKOW
                          Wassili
                                        R.C.4
      27
           No name thereon
                                        R.C.7
                                     R.C.6
guA
            USSE/XOW
                          Peter
      19
           JARRES
                          Eduard
      27
           KOTOLUTENSO
                          Waddmir
                                       R.C.5
 Oct 2
           COMMENCETWORK
                          Viktor
                                       R.C.6
      17
           MOROGOW
                          Wassili
                                       R.C.4
Nov 14
           DOTTOTT
                          Turning.
                                       R. C. 5
         The following were also buried in 1943, any and month unknown:
                         Entras
Alexoi
           CONNECTEDE
                                       R.C.2
R.C.3
           ELLESSEI
           THENNY
                          Mikelai
                                       R.O.3
           WORLDSTEED
                                                       gregiti estimat
                         Mikolai
                                       R.C.4
           JESC TICXEDS
                         Iwon
                                       R.C.5
           ROSE
                          Audi
                                       R.C.5
1944
Feb
     7
          SCHUISCHENED
                        lawel
                                       R.C.7
     8
          MANIY
                         Misko
                                       R.C.7
     26
          KORICKIJ
                         Denjan
                                       R.C.7
     26
          REZEVORONIZON
                         Pter
                                       R.C.7
     28
          SAPERA
                         Anschel
                                       R.C. 7
     29
          POTRAWXA
                         Nikola
                                      R.C.7
          KRIKUN
                         Doris
                                      R.C. 7
Mar.
Day unknown IRAUNING Richard
                                      R.C.7
Apr
          SALINIJ
                         Wessilij
                                      R.C.7
          PLETSDUK
                                      R.C.7
                         Eugen
     18
          DESENTORNIJ
                        Iwan
     28
          LERVIZOW
                        Michail
                                      R.C.7
    29
          DODEREESCHNUUK Wasil
                                      R.C. 7
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	4 (co	ntd)		
May	7	ZALEWSKI	Eduard	R.C.7
	11	ILTSCHUK	Kana	R.C.7
	18	STUSHUK	Nickoley	R.C.7
Jun	16	SCHERHUN	Pavel	R.C.7
	22	AEPKAY ?	Aleksander	S.A.
	22	CTO ?	Anton	S.A.

In addition to the above there is evidence of other deaths, either by graves with crosses bearing no date of leath, or second names on some crosses, or, in the case of "PACHONOF Feeder" by part of a cross found in the cometery. These total 35.

KEY:-	S.A.	St. Annes Churchyard
	R.C.1	Russian cometery Row 1
	R.C.2	Russian cemetery Row 2
	R.O.3	Russian cemetery Row 3
	R.C.4	Russian cemtery Row 4
	R.C.5	Russian centery Row 5
	R.C.6	Russian cembery Row 6
	R.C.7	Russian cemetery Row 7

The following are also buried on the Western side of the Russian cometery:-

Appendix 5.3. Sites and Monuments Record for Alderney in advance of this research (after Alderney Records Centre)(Yellow indicates features relating to the Occupation)

ID	Description
05/01	Possible megalith material in old field wall.
05/02	A second wall of megalith material parallel to 8805.
06/01	Megalith material near Ladysmith end of road in west roadside wall.
06/03	Flint, Roman tile, oyster shell, pot sherds found below thin sand layer on lower beach.
06/04	Possible relic of wall and ditch of Iron Age promontery fort.
07/01	Probable megalith site WNW of Hammond .
07/02	Ammunition stores eighteenth and nineteenth centuries.
07/03	Jetty Site. Up to 18th century this jetty survived but ceased to be maintained by 19th century.
07/04	Megalith site crest of hill overlooking Val de las Bonne Terre.
07/05	gate posts between guards camp and prisoners compound
07/07	Megalith sites. Possibly one at each corner but broken up or partly buried.
07/09	Quarry. Probable source of stone for some of the rotary querns.
07/09D	Site of brick kiln and of Helke's fulminate of mercury works which was struck by lightening.
07/10	Megalith remains probably in situ near where there may have been a watch house.
07/6	Remains of old quayside under new hotel deck and pavement below it, also one stone bollard
08/02	Remains of barrack block at Corblets identical to Longis Barracks
08/03	restored and altered 19th century building.
08/04	Possible watch house, now a ruin covered in ivy.
08/05	Gun battery, mostly built over or demolished.
88/1	A curved retaining field wall, probably composed of a demolished megolith.
88/10	Gallo-Roman field walls. Walking and a test trench in 1989 has produced pot sherds.
88/11	Scattered stones and Gallo-Roman material.
88/12	Two oval stone enclosures, possible huts. A quern was found nearby.
88/13	A large ovoid area once enclosed by a curved stone faced bank at northern end. Possible a Bronze Age enclosure.
88/14	Iron Age pottery site
88/15	Hut platforms. When the area was ploughed large quantities of 12th to 14th century Normany gritty stoneware sherds were found.

ID	Description
88/16	Hut platforms on slope south of Iron Age Pottery.
88/17	A large mound in an area skirted by the Blaye wall. A probable neolithic site.
88/18	Partially destroyed monument. Triangular field containing many large stones. Possibly a cliff-top quarry.
88/19	A mound and stones, probably geological.
88/2	A large but not well defined mound, plutonic boulder in a sandstone area suggests a megalith.
88/20	Terraces within paddocks just outside the Blaye boundary.
88/22	Foundation of a large building or possibly a quay, found when the owner of the site was excavating a soakaway beside the 'The Kennels', Longis Common.
88/23	Peat deposit in a pool, good flints and tools found in deposit.
88/24	Napoleonic war period small barrack building.
88/25	Stone-faced turf bank and large stones in the bank.
88/26	Walls along the hillside, on steep North West facing slopes. On area known as the Zig Zag.
88/27	Mesolithic flint making site. High concentration of flint flakes found here.
88/28	Trois Vaux Well and terrace walls.
88/29	2 wells, sinks and issues. Logical site for settlement (pre-historic), no sign of 'wells' or springs by 1970s, presumably visible in 1945-1946.
88/3	A stone faced bank and megalith type stones.
88/30	Farm site in Vau du Saou. The walls probably predate Blaye
88/31	Walls, possibly of guard house. Known to have been one in 18th century.
88/32	Possibly ancient hedge on manmade bank of extended Blaye.
88/33	Small medieval shore fort known as 'The Nunnery'. Possibly site used as a fort during the Roman occupation.
88/34	Site of a cottage made from Bronze Age burial material.
88/35	Site of a possible Bronze Age enclosure.
88/36	Stone avenue from Longis to the Clock tower. The clock tower was possibly built on the site if a pre-Christian sacred site.
88/37	Site where 'huge stones' were marked on a 1824 chart by Capt. Martin White. These have since been destroyed, probably broken up for fort building materials in the second half of the nineteenth century.
88/38	Large horizontal stone, typical of a cyst.
88/39	Stone-faced banks possibly Iron Age. These are probably remnants of farming before the open-field system obliterated the fields on the Blaye.
88/4	A brick kiln. Now a cow shed and possibly used as a militay position 1940-45.
88/40	Hilltop site
88/41	Passage grave coverened by spoil from gun site and then re-discovered in 1989.

ID	Description
88/42	Terraces uncharacteristic of recent farming, possible site of buildings at the SE end, with a scatter of quite large stones. Gallo-Roman and later pot sherds found nearby.
88/43	Roc a L'Epine. A Bronze Age tomb and site of a circular mound.
88/44	Large grano-diorite stones incoporated into road walls
88/45	Large stones built into stone embankment of the road at Ladysmith.
88/46	'La Hogue Wind Mill' marked on chart of 1824.
88/47	Three parallel hollows across the field. Maps of 1833 and 1940 show a bank or stone wall across this field, removed in Second World War.
88/49	Cyst fallen to the beach
88/5	A field wall. A stone faced bank possibly incorportating a megalith.
88/50	Mesolithic flint floor.
88/51	A passage grave, half destroyed by German military position.
88/53	Cyst.
88/54	Orthostat stone (stone standing on its end) possibly used as a boundary mark. This was a typical practice of the used of existing large stones when aligning new boundaries of property circa 500 to 1000 BC.
88/6	A stone, possibly an orthostat (a large stone set upright, a form of megalithic monument).
88/7	Jumble of stones, probably from an Iron Age field wall.
88/8	Excavation in 1989 confirms a megalith.
89/1	Cysts mentioned in Lukis's notes on Alderney
89/11	Important archeological area, unexcavated. Iron Age urn sherds found on top of a bed of limpet shells, possibly extant Iron Age burial.
89/12	Ruined remains of a row of houses, around 20 dwellings.
89/2	A site of possible archeological importance, mentioned in Lukis's Collectinea but without reference to what it actually is.
89/3	Possible tumulus, either destroyed during the Second World War or incorporated in German military structure.
89/5	Unexcavated area west and south west of Chateau a L'Etoc.
89/6	Bronze Age burial site, almost entirely destroyed in the building of Fort Raz. Possible shallow section spotted on north-east.
89/7	Longis Pond, pond is gradually silting. Once connected to large brackish swamp from the Barrackmasters stream to the rifle butts.
89/8	Dump, probably Roman. Exact position unknown but probably close to the Nunnery. Referred to by Lukis and Kendrick.
89/9	Bronze Age bronze hoard. Discovered when John Herival was repairing his field wall. Now in Guernsey Museum.
90/05	Probable megalith.
90/1	Large four foot high stone.
90/10	1851 Census shows this as a site of houses for 1,100 people

ID	Description
90/11	Ruined vaults of pre-1850 barrack building.
90/12	Possible bank and ditch on edge of Iron Age promontary fort.
90/13	Surface finds of archeological material including Roman pot sherds.
90/14	Peat found along most of Longis beach, although a gap in the centre of the bay.
90/15	Site of 2 houses containing 13 people in 1861 census.
90/17	Watermill and house.
90/18	Seven houses on Braye Road containing 76 people.
90/2	Terraces on steep sandy north north east facing slope. They predate the Battery Quarry.
90/20	24 dwellings containing 209 people in 1851 census. Demolished during Second World War.
90/21	Site of a brick kiln and nearby a site of dwelling of quarryman.
90/22	Drilling of bore holes revealed Newtown Road as a raised beach.
90/23	Raised beach, containing flint.
90/24	Megalith. Group of stones.
90/3	Raised beach on the edge of a quarry site.
90/4	Site of brickworks which consisted of brick and lime kiln, sheds and other buildings. Sold by public auction in 1851.
90/6	Building workers' cottages, propably in two rows. On 1861 census.
90/7	Row of cottages marked in 19th century maps called Jackson's Place that predates the quarry spoil tip.
90/8	Row of cottages recorded on 1861 census, now the Strangers Cemetary.
91/07	Mount Hale Battery. Gun battery on small isolated rocky hill.
91/1	Tumulus site.
91/11	Fort Corblets. Nineteenth century gun battery and barrack.
91/12	Fort Homeaux Florians.
91/13	Fort Quesnard.
91/14	Fort Houmet Herbe
91/15	Fort Raz. Nineteenth century fort on small islet.
91/16	Fort Essex. Hilltop fort (inhabited) also called Essex Castle.
91/18	English Row. Site of a row of houses.
91/19	Chateau a L'Etoc. Promontary nineteenth century fort.

ID	Description
91/19D	Flint finds beside Berry Quarry.
91/2	Fort Clonque. Restored 19th century fort and now owned by Landmark Trust.
91/21	Field west of airport and Close des Cables.
91/22	Possible archeological sites among many WW2 structures on Bibette Head
91/25	Large stones in a curve at 2 to 3 metres depth.
91/28	Dry stone wall and slab on top in low cliff.
91/29	Large stones making a low wall.
91/3	Fort Tougis. Large walled area and barrack.
91/31	Squarish 'crater' with low wall around, probably a WW2 hut.
91/4	Fort Platte Saline. Small walled fort.
91/6	Fort Groznez. Large promentary fort guarding breakwater
91/7	Frying Pan Battery. Eighteenth century gun battery
91/8	Fort Albert. Large hilltop fort with arsenal at foot of south-west slope. Formerly La Touraille.
91/9	Roselle Battery. Nineteenth and twentieth century gun batteries.
94/1	Airport control tower.
94/2	Possible bronze age site. 'Fireplaces' shown up by geophysical apparatus. Bronze Age sherds found nearby.
97/1	Pont Martin. Walled structure and culvert with a cattle trough beside. Typical of other neolithic megalithic sites.
98/1	Breakwater at Grosnez point. Nineteenth Century civil engineering achievement.
98/1D	Possible Bronze Age burial ground.
99/10	Eighteenth century barrrack building.
99/11	Thickly vaulted magazine for explosives behind outer wall.
99/12	Ruin of a small building, probably the shot furnace building.
99/13	Site of officers quarters and barracks.
99/14	Northern group of gun sites.
99/15	Remains of buildings and garden walls among trees on the routes from the pre-1700 harbour to the town.
99/16	Example of field boundary of the 1830s distribution of common land to the Island families.
99/17	Parallel stone rows, shown on mid nineteenth century maps.
99/18	World War Two German military sites and restored Telephone Building.

ID	Description
99/19	Ruin of a building, probably an early farm house.
99/2	House with 'Guernsey' arched doorway with medieval details.
99/20	'Sugar Loaf'. White painted stone cone on slope below cliff path.
99/21	Cachaliere Quarry. Nicknamed 'Chicargo', early twentieth century diorite stone quarry and loading quary.
99/22	Probable pre-historic settlement site.
99/23	Possible site of earlier Telegraph tavern.
99/24	Large stone found lying at site erected in 1950s.
99/26	Flints found along cliff path near L'Emauve site.
99/27	Probable mesolithic/neolithic settlement.
99/28	Tower built during Peninsular war supporting a 'telegraph'. A telegraph mast was later established on the Giffoine. Recently converted for domestic accomodation.
99/29	Terracing (undated) and 'well' (for sheep or cows) short distance north.
99/30	German military canteen near the 'Gun Sites'.
99/31	World War Two structure constructed in possible megalith.
99/32	Walled bank.
99/33	Collection of German World War Two military structures, bunkers and AA gun sites.
99/35	Collection tank and parts of the 19th century water conduit to Ft. Clonque, supplied from springs in Val des Pommiers.
99/36	Ancient wall, megalith sized stones, possibly from megalith site or incorporating one, terrace wall.
99/37	Ruin of watermill last used circa 1910, work on restoration of whole site continued in 1997.
99/38	Lower water storage reservoir for milling work.
99/4	Tunnel under road to Chateau a L'Etoc, originally built for railway to carry stone to the breakwater.
99/40	Lower end of the town leat.
99/41	Dump of rotary (Beehive) querns, mostly now at the museum, damaged during manufacture.
99/5	Lighthouse built by George Baron 1904. Made automatic in 1998.
99/6	Rifle butts and stone wall to protect cottages.
99/7	Burial sites. Skeletons found when digging footings for Coastguard Cotttages.

Appendix 5.1. Methodology employed on Alderney

1. NORDERNEY

1.1.DGPS Survey

Two levels of topographic survey were undertaken at Norderney. The first was a macro-scale survey which provided data to facilitate the production of a general topographic model of the site. This model allowed the wider landscape of the former site of Norderney to be assessed, it provided a context to the individual features identified and it represents the first map of its kind with respect to the mapping of Alderney as previously only simple base mapping existed. The second level of survey that was undertaken was micro-topographic survey. It was hoped that this would allow subtle depressions caused by archaeological features to be recorded. However, having trialled this over a 40m x 40m area at the site, it was evident that levelling activity was masking any other topography. The detrend function was applied within ArcGIS in an attempt to combat this but it was unsuccessful. As such, micro-topographic survey was not undertaken across the rest of the site.

Given the lack of local datum points or correctional data from a local coordinate system, data was collected in WGS84. This meant that the base station was utilized only as a medium through which the rover could receive positional data from the satellites, as opposed to its traditional function of receiving correctional data.

A gridded survey was employed for both the macro and micro surveys to ensure that all potential features were recorded objectively. The macro survey was undertaken at 1.5 metre intervals, along a north-south orientation, with the rover set to automatically record every 0.5m, thus providing a compromise between the speed of data collection with the level of detail required to produce an accurate digital terrain model (DTM). The traverse interval was reduced to 1m for the more topographically diverse areas, such as the sand dunes which bounded the site to the north, to ensure these features were adequately represented and to reduce the need for interpolation during the creation of the 3D models. The roads bounding the site were also recorded with the GPS for inclusion in the model.

The micro-topographic survey took place over a 40m x 40m area located in the north-west corner of the site. This area was selected based on the likely presence of surviving hut platforms in this area, as suggested by contemporary aerial photographs. This area was surveyed in 0.25m traverses, with the rover set to automatically record every 0.25, thus providing dense coverage of the chosen area.

Drewett (2004) argues that an accepted level of accuracy needs to be determined based on the precision of the instruments used and the required outputs of the survey. An accepted absolute level of accuracy for the GPS survey was set at 0.05m but accuracy of 0.01-0.02m was possible across the majority of the site. Where the accuracy level rose above this maximum level or a loss of satellite lock occurred, readings were not taken. Where obstacles, such as gorse, or steep topography inhibited the surveyor, points were taken on an individual basis using the Occupy function, as opposed to in real-time.

1.2. Total Station Survey

Total Station recording with a Nikon NPL-352 was also undertaken. Whilst the Total Station is not suitable for detail recording on a large scale, it allows the subjective survey of specific features to be carried out. A control network of stations and backsights was created across the survey area to facilitate total site accessibility and the accurate integration of the survey data. Features, such as concrete foundations and other structures visible from the surface, were recorded using the EDM. Additionally, a vegetation survey was undertaken using this equipment so that the taphonomy of the site could be compared to the results of the subsurface surveys.

1.3. Resistance Survey

The locations of the geophysics grids were determined using the Leica GPS500 differential GPS. This ensured that spatial data was obtained, thus allowing grids to be relocated after the survey was completed, and ensured the recommended +/- 10cm accuracy rule defined by English Heritage (1995) was adhered to. Initially, sixteen 20 x 20m grids were laid out across the west side of the site, with a further 10 x 10m grid being added based on these results. All of the grids were surveyed along a north-south traverse, in the direction of the natural contours for ease of edge matching and equipment operation.

One of the key factors to consider when carrying out a resistance survey is that this method will be influenced by the conditions in which the survey is undertaken (BAJR 2008). During fieldwork, the sandy geology coupled with the fact that there had been no rain on Alderney for two months meant that considerable difficulties were encountered trying to take readings and a large resistance range of between 400 and 1950 ohms was recorded. Often, the machine was unable to take a reading owing to high resistance values and, on occasion, dummy values had to be recorded. As the results of the survey demonstrate, whilst this was sometimes likely to be due to the dryness of the ground, it is more likely that the high resistance values were caused by the concrete structures present just below the surface.

1.4. Post-Processing

1.4.1. DGPS Data

The DGPS data was downloaded into Leica Geosite Office, software which is specific to the equipment being used. As no correctional data was used, it was only necessary to download the data from the rover, which was then exported as an ASCII .csv file.

1.4.2. Total Station

The data from the Total Station was downloaded into Geosite Office from which it was exported as an XYZ file into Microsoft Excel and a DWG file for use in AutoCAD. By assigning a different colour to each feature code, and by utilising site drawings and photographs, it was possible to join the survey points in AutoCAD to show the outlines of the features present on the site.

1.4.3. Resistance Data

The resistance data was downloaded into Resistivity, a program specifically designed for the TR Systems machine, and composites formed of the survey grids for each area. Due to the successful normalisation of the probes on site, edge matching was only required in a select number of areas, where considerable changes in weather or obstructions had prevented normalisation in the field. Each data composite was clipped to remove spurious readings and to give greater clarity to more subtle features. The composites were then saved as both DAT (data) files and TXT (text) files so that the results could be processed in a variety of other appropriate software packages.

Given the limited processing capabilities of the Resistivity software, and due to the fact that alternative models of the data can aid interpretation, the resistance results were exported and gridded in Surfer. The Kriging method was applied to interpolate the data and boundary files were then created to mask artificial data and highlight the null readings taken in the field. Image plots of all of the composites were then created. A rainbow colour scale was used for some composites to highlight the subtleties in the data. A number of other plots, such as surface models and shaded relied were also produced to aid data interpretation. These models projected the resistance values as elevation data, thus high resistance is shown as peaks and low resistance as troughs. Although this method applies too broad an assumption to the data, thus not making it suitable as a sole interpretation source, features may be more readily defined in these types of plots and information about their composition may be obtained.

2. LONGY COMMON

Resistance survey was undertaken using the same methodology detailed above. The equivalent to twenty one 20 x 20m grids were surveyed in this area and their location was determined based on information derived from aerial imagery and desk-based research concerning the likely location of the former cemetery. Data was collected at one metre intervals across the entire survey area and then four grids were surveyed at 0.5m intervals to further clarify the extent of the feature believed to have been the mass grave. Although electrical imaging was attempted in this area, the dry conditions meant that this equipment was unable to take readings. The locations of the resistance survey grids were recorded using the Total Station. Data processing for the resistance and Total Station survey data was the same as detailed above.

Appendix 5.5. Walkover survey results for Longy Common, Alderney

Rationale for site selection

Longis Bay houses a complex of Occupation features, such as the former burial ground, and fortifications, ranging from tank traps, anti-tank walls, trench systems, flak guns, and bunkers. As such, it represents one of the main locations at which the labourers bought to the island worked and the anti-tank wall is the largest Occupation fortification on the island. Additionally, once again, Longis Bay represents a site where earlier archaeology is likely to have been utilised and affected by the German defence programme. The archaeological remains present on this site demonstrate human settlement from the Palaeolithic through to the dolmen, Roman and Norman periods, and military installations from the 19th and 20th centuries are represented by the former rifle range and trench works.

Walkover survey Methodology

Walkover survey was undertaken along Longy Bay and 76 sites were recorded and photographed, again providing data for use in the SMR. Detailed recording, using a Total Station, was also undertaken in targeted areas in order to represent significant features in plan. As well as the large concrete features that are easily visible from the surface, a number of more discrete features, such as earthworks, hidden entrances into bunkers, machine gun posts and personnel shelters, as well as further vegetation change were noted. In particular, remains were recorded from various periods, some of which had been modified by the Germans during the Occupation,

Northing	Westing	Feature Code	Site Type	Length	Width	Depth	Orientation	Description
								Consists of a man-made sand dune 7
								m. tall 15 m. wide, this trench leads
49 43 20.11	2 9 58.6	1	Tank trap	22m	15m	7m		to overhanging concrete wall
			Practise tank					2 49-cm wide pillars of concrete and
49 42 40.6	2 9 59.5	2	target		3.19m	2.06m		brick holding up tank wall.
			Smaller tank					
49 43 19.1	2 9 59.6	3	target	3.18m	0.49m	1.6m		Broken 49-cm pillars around it.
								Consists of trenches, bank and
								mounds. Main trench in centre is c.
								60 cm tall and runs from side to side,
49 43 20.5	2 10 2.8	4	Training area	25m	35m	_		so it is approx. 35 m. across.
40 40 40 0		l _	Smaller training	1.0				
49 43 19.3	2 10 3.6	5	area	12m	3m	_		
40.42.20	2405		Concentrated	5.3	C 4			
49 43 20	2 10 5	6	vegetation change	5.3m	6.1m			
								Blocks 7 and 8 are opposite and
								similar in design, found in a gap in the
			Concrete					tank wall leading down to the causeway most likely a gate or a
			structure partially					guard post, space on block is 23 cm
			hollow on the					high and 18cm from the top and
49 43 19	2 10 6	7	seaward side	1.6m	1.02m	0.57m		69cm long
.5 .5 25	1 2 2 3	-	Concrete			0.07		
			structure partially					
			hollow on the					3.46 m from feature 7, heavily
49 43 19	2 10 6	8	seaward side	11	· ·	"		covered
								Two hollow spaces, opposite it is
								thought to be another concrete
			Concrete					structure, heavily concealed by
			structure similar					vegetation, both appear to be
49 43 19	2 10 6	9	to 7 and 8	1.7m	1.02m	1.08m		reinforced concrete.

		Feature						
Northing	Westing	Code	Site Type	Length	Width	Depth	Orientation	Description
			Section through			4.10m		Gap in wall to allow vehicles up from the beach. Evidence of wooden
49 43 19	2 10 5	10	tank wall		2.7m	(visible)		beams used in construction process.
49 43 19	2 10 7	11	Embanked trench, anti-tank ditch	c.55m				Dune on the seaward side followed by a ditch with a wider dune at the back
49 43 21	2 10 7	12	Circular trench	Total 13.2m	internal: 2.5m bank:4.2m fro	-		Horse shoe shape, entrance facing away from the sea
49 43 20	2 10 9	13	Building foundation	8.4m	3.41m	0.37 visible	E/W	Rectangular shape, surrounded by heavy vegetation
49 43 21	2 10 12	14	Vegetation change	31m	23m			Elevation 6.4 accuracy 4 patch of grass next to main road
49 43 20	2 10 20	15	Exposed section of concrete	0.5m visible	0.4m visible			Next to an abrupt vegetation change e: 3.7 a:5.5
49 43 20	2 10 21	16	Concrete bunker with two rooms.	13.2m	7.95m total. Internal left room:3.21m right room:3.22m	2.6m. Inte	rnal left room:	One room with an opening onto the beach thought to be a machine gun position protected by an iron shutter
49 43 24.7	02 10 36.4	17	Sunken look-out post and associated features.	7.15m	variable. Max 2.5m	1.6m visible	Faces East	N/S orientation tunnel entering feature w.1.45m h.1.2m. Doorway entering of 0.8m. Lookout post w.0.7m h.0.3m. Visible chute on western side. Iron bars on lookout post, likely protection from thrown objects. Stone embankments either side of local material.
49 43 24.6- 24.7	02 10 35.7-36.8	18	4 small grassy mounds	variable	variable	variable		Clear mounds on landscape. Case example of uniform circular elevated bumps seen across Longis Common.

		Feature						
Northing	Westing	Code	Site Type	Length	Width	Depth	Orientation	Description
								Possibly indicative of bomb damage
			Extensive ditch					but trench does support this, no sign
	02 10		with connected					of extant remains. Located
49 43 24.2	37.7	19	trench.					immediately in front of wooded area.
			Interconnected					Room with stairs visible leading into
	02 10		feature - Tobruk					room. Original iron fittings for the
49 43 23.6	37.4	20a	Pit					machine gun.
			Interconnected					
	02 10		feature - Vertical					
49 43 23.9	37.4	20b	chute					
			Interconnected					
	02 10		feature - Sloped					
49 43 23.5	37.5	20c	chute					
	02 10							Coordinates at SSW end. Central = N
49 43 23.6	37.6	21	Trench System					49 43 23.8 W02 10 37.5
								Indicative of enclosure, probably for
								farming. Runs parallel to road one
								side and Longis Common on the
								other. Cut by feature 20, indicating
	02 10		Stone and turf					feature 22 existent prior. Change of
49 43 23.5	37.5	22	boundary wall				NE/SW	direction = N 49 43 22.5; W 02 10 38.
								Given coordinates are Northern end.
								Central = N49 42 22.4; W02 10 38.1.
								SE end = N49 43 22.5; W02 10 36.5.
	02 10							Leads to circular pit N49 43 22.5;
49 43 22.5	38.8	23	Trench System					W02 10 36.8.
								Three courses high. Possible earlier
								structure, e.g. a well. Alternatively a
			Small stone and					gun emplacement but no metal
?	?	24	cement structure	visible 1.0m	1.8m	0.35m		indicators.

		Feature						
Northing	Westing	Code	Site Type	Length	Width	Depth	Orientation	Description
	02 10					Visible		Wall width c0.15m. Entrance width c1.0m. Minimal concealment by
49 43 22	39.4	25	Sunken bunker	Total visible 3	2 Am	1.2m		rubble.
43 43 22	02 10	23	Julikeli bulikel	Total visible s	1	1.2111		Tubble.
49 43 22.1	39.3	26	Trench System				N/S	
13 13 22.1	33.3	120	Trenen System				11,75	Northern end coordinates given;
	02 10							Southern end = N49 4320.4, W02 10
49 43 21.4	38.5	27	Boundary Wall					39.2. Stone and turf construction.
75 75 21.7	02 10		Three mounds of					33.2. Storie and tarr construction.
49 43 21	39.7	28	rubble					
75 75 21	33.7	20	Tubble					Continues to N49 43 24, W02 10 38.3.
								Cut by track and extends to N49 43
			Stone and turf			visible		24.1, W02, 10, 38.1. Evidence of iron
?	?	29	wall			0.27m		hook (see SDC11599-600)
	02 10		Anderson shelter -					One man shelter adjacent to feature
49 43 24.4	38.4	30	only roof visible	visible 1.9m	max 0.6m			29 on E/W alignment.
	02 10							Heavy vegetation cover, runs
49 43 24.1	38.7	31	Trench System					adjacent to the tree line.
	02 10		Remains of stone					
49 43 23.2	33.9	32	structure					
			Field/Machine gun					
			emplacement					
			within sunken					
49 43 25	02 10 06	33a	structure	3.8m	5.2m	1.7m	<u> </u>	Emplacement faces West
								Shelters coming off passage way
								connecting 33a to 33c. Corrugated
			2xAnderson					Iron roofing. Reconstructed dry stone
As above		33b	Shelters	1.9m	1.5m	1.5m		walls faced with concrete.

		Feature						
Northing	Westing	Code	Site Type	Length	Width	Depth	Orientation	Description
								S-Shaped tunnel (left then right from 33b). Corrugated Iron Roof, passing through natural gap in the bedrock.
								Emerges into feature 33d,
As above		33c	Rock-cut tunnel		1.67m	1.7m		reconstructed dry stone extends towards centre.
49 43 25.5	02 10 05.8	33d	Large depression					Circular depression surrounded by evidence of a dry stone wall. Dimensions difficult to establish dimensions due to brambles c. 10x10x5m. Possible prehistoric feature (K.Colls 2010)
49 43 27.2	02 10 05.1	34	Rectangular differential vegetation					No gorse or or other vegetation encroachment in at least 4 years. Spagnum moss on surface. Mass grave? Boundary wall evident on N side.
49 43 25.2	02 10 4.5	35	Fallen megalith	3.93m	1.40m	0.52m		Reclining megalith, surround by potential setting stone. Possible grave.
								Possible machine gun post. Hollow within under gun-platform, trench at rear. Window faces West over common, supporting stones probably knocked over to enhance viewpoint. Megalith already reclined by
As above		36	Small bunker	2.1m	2m	1.4m		occupation (see D.Johnston, 1973).

Northing	Westing	Feature Code	Site Type	Length	Width	Depth	Orientation	Description
								Hollow lead box covered by later
								chicken wire. Depth unobtainable,
								visible height 1.08m. Braced across
								width and length, suggest
			Rectangular					considerable depth therefore
As above		37	lead(?) box	2.4m	1.54m	1.08m		reinforced.
								Natural rock Western side, Eastern
			Considerable					side gradient turf. W. side large
			elongated					megalith similar 35. Depth unknown.
49 43 24.7	02 10 4.3	38	depression	c.15m	c.10m			Probably natural formation.
								Dug into side of hill by the road, close to the boundary wall running past
			Circular	visible				house and megalithic stone (feature
49 43 23	02 10 3	39	depression	10.6m				35). Covered by Hottentot fig.
			2x earthwork					Grass and bramble changing to just
			mounds with					grass. Two mounds adjacent. First,
			abrupt vegetation	see				closest to road L.7.7m; second further
49 43 22	02 10 9	40	change	Description				from road L.6.1m.
								Depression follow by raised mound,
			Sizeable set of			mound 5.4		followed by flat area and subsequent
49 43 22	02 10 11	41	earthworks	28.7m	14.6m	depression	1.3m	further mound.
			Small earthwork,					
49 43 21	02 10 14	42	stone built	12.6m	1m			Probable boundary wall
								Next to road very similar to feature
Adjacent to								41. Rotated 90degress A.C., now
above		43	Large depression	c.16m				facing sea.
			Flat area,					
			differential					
49 43 22	02 10 18	44	vegetation	22.7m	7m			Moss covered area.
			Raised anti-tank					Not continuous break in middle. 1st
49 43 22	02 10 21	45	mound	14+18m	8m			half 18m, second 14m.

		Feature						
Northing	Westing	Code	Site Type	Length	Width	Depth	Orientation	Description
			Elongated					
			depression with					
	02 10		differential			max		Sporadic chunks of concrete. Ferns
49 43 20.5	22.7	46	vegetation	20m	10m	0.75m		covering top. Elevation 9m acc 4m
			Curved mound					
			adjacent to					Rear of tank wall. Very uniform
	02 10		rectangular					shape. Embankment c.30m in length.
49 43 20.2	23.7	47	depression	c.25m	c.20m			Elevation 7.8m acc 4.2m
								Linking feature 47 and 49. S-shape.
	02 10					approx		End of trench 49 43 xx; 02 10 26.1.
49 43 20.2	24.5	48	Trench system	c.30m		2m		Large embankment on wall side
			Rectangular					Adjacent to trench and embankment
			depression,					of feature 48. Considerable fern
	02 10		differential					growth, differential vegetation very
49 43 20.1	25.3	49	vegetation	c.35m	c.20m			apparent
			Elongated					
	02 10		depression					
49 43 20.3	26.9	50	adjacent to road	c.10m	4m	c.1m		-
			Rectangular					Parallel to wall about 5m back.
			depression					Considerable vegetation change -
	02 10		surrounded by					ferns. Concentration of brambles on
49 43 19.1	26.3	51	embankment	visible 10m	10m			NE side.
								Immediately back from tank wall
								rising up to similar level of step-like
49 43 19	02 10 28	52	Raised plateau	c.40m	c.20m			feature running along it,
								Brambles growing area of bunker.
			Vegetation change					Two entrances aligned NE/SW. Room
			over					of 7x7m with corrugated iron roof.
	02 10		bunker/Anderson					Evidence of trench system out of the
49 43 18.8	28.5	53	shelter		6m			feature on Northern side.
	02 10							
49 43 20.5	27.4	54	Exposed concrete	4m	1.5m			Uneven leading to area of brambles.

		Feature						
Northing	Westing	Code	Site Type	Length	Width	Depth	Orientation	Description
			Circular area of					
	02 10		differential					Embanked around outside no sign of
49 43 18.9	29.7	55	vegetation.	c.7.5m	c.7.5m	c.1m		structural presence.
								Just before reaching bunker and
								nunnery/Roman-period fort.
			Large area of					Extensive bramble coverage some
			differential					topographic features. Western side
			vegetation					large mound of bracken c.7.5x7.5m.
	02 10		between wall and					Wall elevates at this point by 2m to
49 43 18.5	30.2	56	road.	c.60m	c.30m			join bunker that forms feature 57.
								Bunker in entirety photo reference
								IMG-1317, Vegetation mounds up to
								top of bunker on Eastern side
								possible intentional camouflage.
								Northern side two doorways, one on
								Northern end up to a Tobruk pit
								(IMG-1354), another entering the
								bunker itself. Immediately inside
								machine gun post covering door
								(IMG-1336). Down corridor through
								corrugated iron blast door (IMG-
								1334). End of corridor, door to right
								entering a machine gun post (room 1;
								IMG-1333 for exterior, IMG-1337
								interior) dimensions 1.3x2m.
								Returning to aforementioned
								corridor, door to left into 'room 2' of
			Large bunker					3x4.7m (IMG-1338) containing
			adjacent to					machine gun post covering entrance
			nunnery or fort					to bunker (IMG-1339), shaft
			directly connected					c.1x0.75x2.5m to circular area with
49 43 16.1	02 10 32	57	to tank wall.	c.20m	c.5m	c.5m		iron-rung ladder leading to roof of

				bunker(IMG-1340), brass piping and
				evidence of power and telephone
				system, writing on wall (IMG-1331).
				Southern wall of room 2 doorway
				into 'room 3' (IMG-1342): small room
				with large pipes and writing on both
				walls(IMG-1341), possible boiler
				room), dimensions 3.05mx1.6m.
				Directly opposite entrance into room
				2 is another doorway leading into
				room 4 10x4m (IMG-1350) containing
				large gun emplacement with opening
				in wall leading directly out over
				Longis beach (IMG-1343-44), targeted
				along Southern side of wall and
				protected by iron shutters (width
				hole = 0.35cm, total cut into wall =
				1.45m); adjacent on right hand side is
				large shaft into lower room with iron
				ladder-rungs c1x1m (IMG-1346) as
				well as smaller shaft next to gun
				emplacement - Probable ammunition
				storage room with pulley system to
				transport munitions (IMG-1345).
				Point of interest in room 4, mid-20th
				century graffiti (IMG-1351) left wall
				of room 4 entrance into room 5, small
				enclosed room no clear evidence of
				use 2.6x3.5m (IMG-1347). On roof of
				bunker on SW side a shaft of
				unknown destination can be seen
	 			with iron-rung ladder (IMG-1353).

		Feature						
Northing	Westing	Code	Site Type	Length	Width	Depth	Orientation	Description
								Situated midway between tank wall
								aforementioned bunker and
								fort/nunnery. 5 visible, 2 confirmed
								to be covering some form of shaft. No
								obvious evidence of ladders but
			Assortment of					orientation does suggest some form
			concrete blocks	0.8m	1m			of connection between bunkers
As above	as above	58	covering shafts	(pictured)	(pictured)	0.06m		outside and inside the fort.
1								Possible similar to ranging blocks
			Stone block in					evident on Longis Common. Removed
			concrete setting,					from original context and redeposited
	02 10		removed from					on the side of the road. Similar stone
49 43 16.8	33.8	59	original context.	0.38m	0.3m	0.2m		rubble also deposited nearby.
			Large area					
			containing					Varying from brambles to lusher grass
			pockets of					or small flowers. Minimal topographic
	02 10		differential					variation with little evidence of
49 43 17.2	35.5	60	vegetation	80m	80m			structures underneath.
								Very lush greener grass with 3
			Long shallow					sporadic large circular bramble
			ditch, with					bushes. No clear evidence of
	02 10		differential			max		structures. Opposite (eastern) end =
49 43 20.6	32.2	61	vegetation.	c.50m	3.75m	1.5m		49 43 18.5; 02 10 32.8
								Possible trench system, ferns and
								brambles. Incorporates one large
			Area of					mound with adjacent banks and
			topographic and					ditches in between. Starts adjacent to
	02 10		vegetation					road and travels towards feature 61,
49 43 18.6	32.1	62	variation.	c.30m	c.30m			both connected to feature 63.

		Feature						
Northing	Westing	Code	Site Type	Length	Width	Depth	Orientation	Description
								Varied vegetation, some topographic
								change and no visible evidence of
			Large are of					subsurface structures. Possible trench
	02 10		differential					system connecting features 61-63
49 43 18.1	32.4	63	vegetation					max depth 1.5m
								Connected to feature 62, and
								immediately connected to the road.
	02.40		Tananahia					Depression leading to embankment,
49 43 19.1	02 10 30.3	64	Topographic feature.	c.50m	4.9m	c1.5m		some gorse encroachment. Connected to features 61-63.
49 43 19.1	30.3	04	reature.	C.SUIII	4.9111	(1.5111		
								Extensive circular area of varied
	02 10		Differential					vegetation coverage around 10m in from the road. Little topographic
49 43 20.2	29.6	65	vegetation	c.40m	c.40m			variation or evidence of structures.
13 13 20.2	23.0		regetation	c. 10111	C. 10111			North of Longis Common, past track
								north of site grid and east of wooded
								hill containing some form of bunker
			Area containing					complex. Some topographic variation
			concentrated					with concentrated circular pockets of
	02 10		areas of					gorse, around 12. No visible evidence
49 43 29.7	31.5	66	vegetation change	c.80	c.100m			of structures.
								Located on eastern side of Longis
	02 10							Common. Entrance on east, very
49 43 31.5	30.3	67	Small bunker.	2.6m	2.1m	2.3m		short corridor into small room.
								"W [upwards arrow] D". Pointing
	02 10		Concrete block					roughly NW in direction of Norderney
49 43 27.2	30.9	68	with inscription	0.3m	0.3m	0.2m		campsite.

Northing	Westing	Feature Code	Site Type	Length	Width	Depth	Orientation	Description
49 43 23.9-	02 10		3x concrete blocks with numerical					Equidistant and in alignment with each other, the gap in the tank wall and the fortifications on the top of the wooded hill. Marked 750(IMG-1379), 800(IMG-1378) and 850(IMG-1376) from SE to NW. Probably used to guide indirect artillery fire onto Longis Common in the event of an attack. Only three visible, presumed carried on over Longis Common but
28.7	33.6-33.7	69	inscriptions Extensive area of	0.3m	0.28m	0.55m		not confirmed. Brambles, gorse, ferns and other
49 43 36.0	02 10 35.9	70	differential vegetation	c.30m	c.30m			fauna. Immediately adjacent to the modern farmhouse.

Appendix 5.6. Features identified at Lager Norderney

Feature Number	Description	Photograph or Figure Reference
N01	Commandant's House	
N02	Outbuildings	
NO3	Camp kitchen	

Feature Number	Description	Photograph or Figure Reference
N04	Greenhouse	See Plate 5.31.
N05	Stairs and earthwork indicating the location of a barrack	
N06	Stairs and earthwork indicating the location of a barrack	
N07	Stairs constructed of stone, leading from the road	

Feature	Description	Photograph or Figure Reference
Number N08	Concrete foundation	

Feature Number	Description	Photograph or Figure Reference
NO9	Partially visible concrete bunker	
N10	Partially exposed concrete located within a sand dune in the north east corner of the camp area	
N11	Tunnel constructed of stone, leading to Corblett's Bay	

Feature Number	Description		Photograph or Figure Reference
N12	Concrete structure, probable buried rooms	with	



Feature Number	Description	Photograph or Figure Reference
N15	Concrete foundation, square in plan	
N16	Concrete foundation, square in plan	Possible continuation of N15.See Figure 5.16.
N17	Concrete feature, diamond shape in plan. Walls approximately 0.3m wide.	

Feature	Description	Photograph or Figure Reference
Number N18	Concrete area now used as camping site car park. Possible roll call square	

Feature Number	Description	Photograph or Figure Reference
N19	Remains of concrete road constructed by the Occupying forces	
N20	Area of vegetation change, probable location of small structure	Visible as a barrack in contemporary aerial images. See Figure 5.16.
N21	Exposed concrete	See Figure 5.15.
N22	Track at north of camp	Visible as trackway within the camp on contemporary aerial images. See Figure 5.16.
N23	Trench system	Visible in contemporary aerial images. See Figure 5.16.
N24	Trench system	See G9 in geophysical results in Figure 5.13.
N25	Rectilinear area of vegetation change. Probable barrack foundation	Visible as a barrack in contemporary aerial images. See Figure 5.16.
N26	Linear area of vegetation change.	Identified during field survey and visible on modern aerial images. See Figure 5.15.
N27	Vegetation change. Probable barrack foundation	

Feature Number	Description	Photograph or Figure Reference
N28	Concrete structure, rectilinear in plan. Archway of an apparent door is visible. Two rooms apparent at northern end.	
N29	Rectilinear feature.	Visible as vegetation change in modern aerial images and identified during field survey. See Figure 5.15.
N30	Rectilinear feature, identified using resistance survey (G1) and visible as vegetation change	See Figures 4.13-4.16.

Feature Number	Description	Photograph or Figure Reference
N31	Rectilinear feature, identified using resistance survey (G1 and G2) and visible as vegetation change	See Figures 4.13-4.16.
N32	Concrete remains. Probable barrack foundation	See Figures 5.15 and 5.16.
N33	Concrete remains, Probable barrack foundation	See Figures 5.15 and 5.16.
N34	Concrete bunker, partially concealed by a sand dune	See Figure 5.16.
N35	Topographic feature, also visible as distinct vegetation. Circular in plan	See Figure 5.16.
N36	Area lacking in vegetation growth. Location of barracks outside the camp boundary	See Figure 5.15 and 5.16.
N37	Area of distinct vegetation change. Location of barrack	Visible in Figure 5.15.
N38	Circular metal feature at ground level. Probable rail for a gun emplacement.	

Appendix 5.7. Data derived from a batch of death certificates held in the Island Archives, Guernsey (AQ875/03)

		Arrived in							Other	
Surname	First Name	Alderney	Died	Nationality	Occupation	Firm	Camp	DOB	Information	Grave
						Fa. ?estd.				
						Steinind.				
						Feldpost				St Anne 32,
						No. 19 500				spelt
Sulikowski	Stefan	8.9.42	18.9.42	Pole	Arbeiter	WD	Nordeney	1.9.08		Schulimowski
			31.8.42							
			Friedhof			Fa. Wolfer				St Anne and
Zcarzcinsky	lwan	30.8.42	St Anne	Pole	Landarbeiter	and Gobel	Nordeney	16.5.24		R.C. 5
						Fa.				
						Neumayer				St Anne 25 but
						Feldpost Nr;				says died on
Dikanski	Stanilaw	8.9.42	10.9.42	Pole	Arbeiter	19500 NR	Nordeney	25.1.01		9th
						Firme				
						Strabag				St Anne 33,
- 1	1.					Feldpost Nr.				Surname spelt
Bekowez	lgor	24.9.42	26.9.42	Russe	Arbeiter	19500/SG	Nordeney	1917		Bokowez
						Fa. Kniffler			C.O.D	St. Anne 19 but
5		20.0.42	2 40 42			F.P. Nr 19		22.0.04	Angina and	says died
Bertin	Susanne	30.9.42	2.10.42	Franzosisch	Arbeiterin	500/KF	Nordeney	23.9.91	dyptheria	30.6.42
						Firma Sager				
						& Wörner		unbekann		
Schukow	Stefan	2.10.42	3.10.42	Russe	Arbeiter	Felpost Nr. 19500/SW		t		St Anne 49
SCHUKOW	Sterair	2.10.42	3.10.42	Russe	Arbeiter	Firma		ι		St Affile 49
						Wolfer &				
Wilgota	Wassili	23.11.42	24.11.42	Russe	Hilfsarbeiter	Göbel	Nordeney	2.1.09		
						Firma Sager	110.00.00			
						& Wörner			C.O.D.	
						Felpost Nr.			Kechexio-	R.C. 1, spelt
Polipinko	Alexei	23.12.42	24.12.42	Ukrainer	Schmied	19500/SW	Sylt	17.3.07	Dysentherie	Pelepinko

		Arrived in							Other	
Surname	First Name	Alderney	Died	Nationality	Occupation	Firm	Camp	DOB	Information	Grave
V aha	Nikon	20.44.42	21 11 12	Pole	Steinbrecher	Firma Wolfer & Göbel	Nondonos	20 11 42		R.C. 2
Kuchar	NIKON	20.11.42	21.11.42	Pole	Steinbrecher		Nordeney	20.11.42		R.C. Z
						Firma Dau				
						Bau in Einsatz				
						Adolf,				
Massitsahuli	Trachon	21 11 42	22 11 42	Ukrainer	Hilfsarbeiter	Feldpost Nr. 19500	Nordeney	1904		
Mossitschuk	Trechon	21.11.42	22.11.42	Okrainer	Hiirsarbeiter	Firma Wolfer	Nordeney	1904		
Chamanali	Chicabal	22 11 12	22 44 42	Dala	Calarria ilfanta aitan		Nandana	4.6.22		
Stepanski	Sbischek	22.11.42	23.11.42	Pole	Schuhilfarbeiter	& Göbel Festdeutsche	Nordeney	4.6.22	Seimatenschrift	
Gawlik	Adam	22.11.42	23.11.42	Pole	Arbeiter	Steinindustrie	Nordeney	18.2.08?	Norasch Polen	
Gawiik	Auam	22.11.42	23.11.42	Pole	Arbeiter	Firma	Nordeney	18.2.081	Norasch Polen	
						unbekannt im				
						Einsatz Adolf,				
						Feldpost Nr.				
Lepilow	Alexander	23.11.42	24.11.42	Ukrainer	Kraftfahrer	19500	Nordeney	11.1.24		
Lepilow	Alexander	23.11.42	24.11.42	OKIGITICI	Riditialiici	im Einsatz	Nordency	11.1.24		
						Adolf,				
	Hugo					Feldpost Nr.			C.O.D.	
Paulissen	Leonardus	1.12.42	3.12.42	Holland	Vorarbeiter	19500	Nordeney	21.9.12	Tuberculosis	
radiisseii	Leonardas	1.12.12	3.12.12	Honana	Volumenter	Firma Wolfer	Horacie	21.3.12	Dysenterie und	
Tziganow	Illia	7.12.42	8.12.42	Ukrainer	Hilfsarbeiter	& Göbel	Nordeney	2.8.26	Kachexie	
						Firma Westd.	, , , , , , , , , , , , , , , , , , , ,		Pflegamon	
Olentschki	Nikolai	13.12.42	15.12.42	Ukrainer	Bilfsarbeiter	Steinindustrie	Nordeney	6.12.21	Dysenterie	
						Firma Westd.	,		on Vergiftung	
						Steinindustrie			durch	
						F.P. Nr.			Colchikum	
Olenik	Jakob	14.12.42	15.12.42	Bolschewik	Hilfsarbeiter	19500WD	Nordeney	13.5.25	antonale	
						Fa. Westd.				
Warwizinoni						Steinindustrie			an Enterite-	
С	Bronislaw	16.12.42	17.12.42	Pole	Hilfsarbeiter	19500WD	Nordeney	1.4.24	Cachexic	
						Sager and				
						Wörner F.P.N.			an Flegmone-	
Bartesch	Nikolo	20.12.42	22.12.42	Ukrainer	Hilfsarbeiter	19500/SW	Nordeney	13.10.22	Septicernia	

		Arrived in							Other	
Surname	First Name	Alderney	Died	Nationality	Occupation	Firm	Camp	DOB	Information	Grave
						Firma Dau				
						Bau in Einsatz				
						Adolf,				
						Feldpost Nr.			Empeisenneme	
Osadtschi	Ivan	20.12.42	22.12.42	Russe	Koch	19500	Nordeney	20.7.21	nt	
						Fa. Sager and				
						Wörner Fp.				
Boutzik	Stefan	21.12.42	23.12.42	Ukrainer	Hilfsarbeiter	Nr. 19500/SW		27.5.24	Tuberculosis	
						Firma				
Tschuba	Daniel	22.12.42	24.12.42	Russe	Hilfsarbeiter	Neumeyer	Nordeney	1923	Nephrite	
						Firma				
						Westdeutsche			Epellepsie	
						Stein. Im			Festellung des	
						Einsatz Feldp.			Militar	
Kinschko	Pietro	21.II.42	28.II.42	Ukrainer	Hilfsarbeiter	Nr. 19500	Nordeney	17.II.42	Inselarztec	
						Firma Sager				
Alexeanko	Archip	30.9.42???		Russe	Arbeiter	and Wörner		8.5.23		
						Fa. Deutsche-				
						Strassenbau				
Jejelew	Nikolai	8.10.42	10.10.42	Russe	Bauarbeiter	.G. Fp. 19 500	Nordeney	6.11.93		
•						Fa. Sager and				St Anne
						Wörner Fp.				20, spelt
Dadaschuk	Solowe	4.10.42	6.10.42	Ukrainer	Arbeiter	Nr. 19500/SW	Nordeney	2.2.02		Dadachuk

		Arrived in							Other	
Surname	First Name	Alderney	Died	Nationality	Occupation	Firm	Camp	DOB	Information	Grave
										St Anne
						Fa. W.D.				50,spelt
						Steinindustrie				Jurevits
Jurewitsch	Narian	3.10.42	5.10.42	Pole	Arbeiter	F.P. 19 500	Nordeney	7.9.21		ch
						Fa. Westd.				
						Steinindustrie				St Anne
Bakomez	Alexander	3.10.42	5.10.42	Russe	Landarbeiter	19500WD	Nordeney	20.5.26		51
										St Anne
										40,
				Niederland						spelt
Deuybel	Jacobue	8.10.42	10.10.42	er	Maler	Fa. Sporek	Nordeney	29.8.15		Deiyble
						Fa. Sager and				
						Wörner Fp. 19				St Anne
Lisitza	Waschili	30.9.42	1.10.42	Ukrainer	Arbeiter	500	Nordeney	8.5.23		43
										St Anne
						Fa. Wolfer				23,
						and Gobel Fp.				spelt
Martinenko	Hans	13.10.42	15.10.42	Russe	Landarbeiter	19 500	Nordeney	12.1.24		Hads
						Fa. Wolfer				
						and Gobel Fp.				
Mischuk	Nicefor	16.10.42	17.10.42	Ukrainer	Landarbeiter	19 500	Nordeney	22.9.01		
						Fa. Sager and				
						Wörner				
						Feldpost 19				
Borisenko	Basil	16.10.42	17.10.42	Ukrainer	Landarbeiter	500	Nordeney	10.7.21		
Tschukowski	Alexander	5.12.42		Ukrainer	Arbeiter			30.5.10		
						Firma Wolfer				St Anne
Haptchuk	Alexei	23.10.42	23.10.42	Ukrainer	Landarbeiter	& Göbel	Nordeney	6.1.26		21

Appendix 6.1. Results of coring at Bełżeć, that reveal that not all of the human remains at the site were cremated (after Kola 2000)

Bold sections represent where remains were found which were not fully cremated.

Grave No.	Dimensions (LxWxD)	Nature of Remains	Area
1	40 x 12 x 4.8 (1500m²)	Wax fat, burnt and unburnt layer at base (well preserved as sealed by water)	NW
2	14 x 6 x 2 (170m²)	Unburnt layer and 'cremated substances'	NE
3	16 x 15 x 5 (960m²)	Carbonised wood. Burnt remains, skull fragments with skin and hair attached, grey human fat and unburnt bone	S
4	16 x 6 x 2.3(?) (250m²)	Cremated, wax fat, unburnt remains below water level	S
5	32 x 10 x 4.5 (1350m²)	Densely packed burnt human bone (drill could not operate)	SW
6	30 x 10 x 4 (1200m²)	Carbonised wood and burnt human bone, E end covered in grey sand containing crushed pieces of burnt and unburned bone	S-Central
7	13 x 14 x 4.5 (height 27m?) (1600m²)	Carbonised wood and fragments of burnt human bones mixed with dark grey ash	E-Central
8	28 x 10 x 4 (850m²)	Burnt pieces of human bone and fragments of	SW

Grave No.	Dimensions (LxWxD)	Nature of Remains	Area
		carbonised wood	
9	10 x 8 x 3.8 (280m²)	Carbonised wood and fragments of burnt human bones mixed with dark grey sand	NE
10	24 x 18 x 5 (2100m²)	Thick layer of human fat, unburned human remains and pieces of unburned large human bones. Fatty tissue mixed with greasy lime	N-central
11	9 x 5 x 1.9 (80m²)	Fragments of burnt human bone with carbonised wood	NE
12	L shaped, 20m west, 28m north, depth 4.4m (400m²)	Unburnt bone , grey sand and carbonised wood	N of grave 10
13	12.5 x 11 x 4.8 (height 17m?) (920m²)	Burnt remains, carbonised wood and grey sand	W
14	70 x 30 x 5 (estimate) (1850m²)	Burnt bone, carbonised wood and grey sandy soil	N
15	13.5 6.5 x 4.5 (400m²)	Burnt remains, carbonised wood and grey sand	S side of grave 14
16	18.5 x 9.5 x 4 (700m²)	Burnt human bone and carbonised wood	Adjacent to grave 14 and to E of grave 15
17	17 x 7.5 x 4 (500m²)	Burnt remains, carbonised wood and grey sand	S of graves 12+16
18	16 x 9 x 4 (570m²)	Burnt remains, carbonised wood and grey sand	Next to S edge of grave 15
19	12 x 12 x 4 (500m²)	Burnt remains, carbonised wood and grey sand	Within area formed by 14, 15, 18 and 20

Grave No.	Dimensions (LxWxD)	Nature of Remains	Area
20	26 x 11 x 4 (1150m²)	Dental bridge with four false teeth – doesn't describe remains	W of grave 14
21	1.7m deep (35m²)	Burnt remains, carbonised wood and grey sand	Central
22	Inverted L shape 27m east, 10m south, depth 3.5m (200²)	Burnt remains, carbonised wood and grey sand	E
23	16 x 8.5 x 4.2 (550m²)	Burnt remains	Between 6+21
24	20 x 5.5 x 5 (520m²)	Burnt remains	N
25	12 x 5 x 5 (250m²)	Burnt remains inc skeletons and corpses, 1m layer of waxy fat and lime. Decaying tissue present and large pieces of bone	East of 12+14
26	13 x 7 x 4.2 (320m²)	Burnt remains	E of 25
27	18.5 x 6 x 6 (450m²)	Burnt bones and carbonised wood above grey waxy lime layer. Bottom of grave contains completely decomposed remains and greasy fat	N end of 25
28	6 x 6 x 5 (70m²)	Burnt remains above grey greasy lime. Human fat layer at bottom	Between 27 and N fence
29	25 x 9 x 4.5 (900m²)	Burnt remains, carbonised wood and grey sand	NE of 26
30	5 x 6 x 2.7 (75m²)	Burnt remains, carbonised wood and grey sand	NE angle between 26+29
31	9 x 4 x 2.6 (90m²)	Burnt remains, carbonised wood and grey sand	Next to N fence between 28+29

Grave No.	Dimensions (LxWxD)	Nature of Remains	Area
32	15 x 5 x 4.1 (400m²)	Burnt remains, carbonised wood and grey sand above grey, greasy lime and decomposing remains. Unburned large bones at bottom	N, between 9+13
33	9 x 5 x 3 (120m²)	Small fragments of burnt remains, carbonised wood and grey sand	NE of memorial site

REFERENCED SOURCES

Abzug, R. H. 1985. Americans and the Liberation of Nazi Concentration Camps, Oxford.

Achiezer (Rabbi Chaim Ozer Grodzinsky, Dayan of Vilna 1863-1940).

Ainsworth, S. and Thomason, B. 2003. Where on Earth Are We? The Global Positioning System (GPS) In Archaeological Field Survey. English Heritage Technical Paper. Swindon.

Alderney General Services Committee. 2009. '54.9 Bunker No. 56, 7/5/09' [WWW] www.alderney.gov.gg (Accessed 14th May 2009).

Alderney Records Centre. 2009. [WWW]

http://www.alderneyrecordscentre.org/html/livedata.php?type=hist (Accessed 20th September 2009).

Alderney Wildlife Trust. 2010. *Aerial Photograph Composite of Alderney*. Alderney.

Alleyne, B., 2002. An idea of community and its discontents: towards a more reflexive sense of belonging in multicultural Britain. *Ethnic and Racial Studies*, 25 (4), 607–627.

Ancel, J. 1988. 'The Romanian Way of Solving the 'Jewish Problem' in Bessarabia and Bukovina, June-July 1941', *Yad Vashem Studies* 19, 187-232.

Antkowiak, M. 2000. 'Erinnerungsarbeit und Erkenntnisgewinn. Die Konzentrationslager Ravensbrück und Sachsenhausen im Spiegal der Bodenfunde', Archäologie in Berlin und Brandenburg, 149-151.

Antkowiak, M. and Völker, E. 2000. 'Dokumentiert und koserviet. Ein Außenlager des Konzentrationslagers Sachenhausen in Rathenow, Landkreis Havelland'. *Archäologie in Berlin und Brandenburg*, 147-149.

Apenszlak, J. 1943. Black Book of Polish Jewry. New York.

Arad, Y. (ed.) 1996. The Pictoral History of the Holocaust. Israel.

Arad, Y. 1987. Bełżec, Sobibor and Treblinka: The Operation Reinhard Death Camps, USA.

Arad, Y. Gutman, I. and Margaliot, A. (eds) 1999. *Documents on the Holocaust: Selected sources on the destruction of the Jews of Germany, Austria, Poland, and the Soviet Union*. 8th Edn. Lincoln, London and Jerusalem.

ARC (Action Reinhard Camps). 2005a. [WWW] http://www.deathcamps.org/treblinka/maps.html (Accessed 12th July 2007).

Artner, G. Farka, C. Hofer, N. and Kreen, M. (eds) 2004. 'Archäologische Unterschuchungen im ehemaligen Konzentrationslager von Mauthausen in Bundesministerium für Inneres'. *Das Gedächtnis von Mauthausen*. Vienna.

Ashworth, G. 2003. 'Heritage, Identity and Places: For Tourists and Host Communities' in Singh, S. Timothy, D.J. and Dowling, R.K. *Tourism in destination communities*. Oxon.

Assendorp, J.J. 2003. 'KZ Bergen-Belsen', Archäologie in Niedersachsen, 78-81.

Auerbach, R. 1979. 'In the fields of Treblinka' in Donat, A. 1979. *The Death Camp Treblinka: A Documentary*. New York, 19-73.

Aulich, J. 2007. 'Memory, What's it Good For? Forced Labour, Blockhouses and Museums in Pas de Calais, Northern France' in Purbrick, L. Aulich, J. and Dawson, G. (eds.). *Contested Spaces: Sites, Representations and Histories of Conflict*. Basingstoke, 191-210.

Auschwitz-Birkenau Foundation. 2011. The Preservation of Auschwitz-Birkenau. Our Responsibility for Future Generations. Warsaw.

Auschwitz-Birkenau Memorial and Museum. 2010. [WWW] www.auschwitz.pl (Accessed 7th April 2011).

BABAO (British Association for Biological Anthropology and Osteoarchaeology'. 2008. 'BABAO Code of Ethics for Archaeological Human Remains' [WWW] http://www.babao.org.uk/index/ethics-and-standards (Accessed 29th November 2010)

Babic, J. Cupkovic, T. and Bosiocic, N. 2000. 'The application of remote sensing and IT in research of mass graves in the system of Jasenovac ustasha camps', [WWW] http://www.jasenovac-info.com/projekti/rsgis_jasenovac_eng.pdf (Accessed 2nd August 2010).

Bailhache, P. 2009. 'Sir Philip Bailhache, Bailiff of Jersey, speech, Holocaust Memorial Day 27th January 2009', [WWW]

http://www.thisisjersey.co.uk/hmd/pageviewer2.pl?Autoincrement=000098 (Accessed 3rd February 2010).

BAJR (BRITISH ARCHAEOLOGY JOBS RESOURCE). 2008. Archaeological Geophysics: A Short Guide. Revised Edition. London.

BAJR (BRITISH ARCHAEOLOGY JOBS RESOURCE). 2004. A Short Guide to GPS. London.

Baker, F. 1988. 'History that Hurts: Excavating 1933-1945' in *Archaeological Review from Cambridge* 7(1), 94 – 109.

Barratt, G. Gaffney, V. Goodchild, H. and Wilkes, S. 2000. 'Survey at Wroxeter Using Phase, Differential GPS Surveying Techniques', *Archaeological Prospection* 7, 133-143.

Batawia, S. 1982. 'Extermination of Patients with Mental Disorders' in Central Commission for the Investigation of German War Crimes in Poland. *German War Crimes In Poland*. 2nd Edn. USA, 151-160.

Bay, C. A. 2003. 'The Reconstruction of Treblinka', [WWW] http://www.holocaust-history.org/Treblinka/ (Accessed 5th May 2007).

Baxter, I. 2010. The SS of Treblinka. Stroud.

Baxter, I.W.F. 2009. 'Global heritage tourism: the value of experiencing the past' in Smith, G. Soderland, H. and Messenger, P. (eds.) *Heritage values in contemporary society*. Walnut Creek.

BBC (BRITISH BROADCASTING CORPORATION). 2011a. 'Profile: John Demjanjuk' [WWW] http://www.bbc.co.uk/news/world-europe-13345166 (Accessed 1st July 2011).

BBC (BRITISH BROADCASTING CORPORATION). 2011b. 'House-by-house struggle for East Jerusalem', [WWW] http://www.bbc.co.uk/news/world-middle-east-10656890 (Accessed 14th August 2011).

BBC (BRITISH BROADCASTING CORPORATION). 2011c. 'Division mars Poland's Smolensk plane crash anniversary' [WWW] http://www.bbc.co.uk/news/world-europe-13025746 (Accessed 12th May 2011).

BBC (BRITISH BROADCASTING CORPORATION). 2011d. 'Top Nazi Rudolf Hess exhumed from 'pilgrimage' grave', [WWW] http://www.bbc.co.uk/news/world-europe-14232768 (22nd July 2011).

BBC (BRITISH BROADCASTING CORPORATION). 2007. 'Ukrainian mass Jewish grave found', [WWW]

http://news.bbc.co.uk/1/hi/world/europe/6724481.stm (Accessed 19th January 2008).

Beder, J. 2002. 'Mourning the Unfound: How Can We Help', Families in Society: The Journal of Contemporary Human Services 83(4), 400-403.

Beech, J. 2000. 'The enigma of holocaust sites as tourist attractions - the case of Buchenwald', *Managing Leisure* 5(1), 29 – 41.

Beech, J. 2002. 'The differing development paths of Second World War concentration camps and the possibility of an application of a principle of equifinality' in Schofield, J. Gray Johnson, W. and Beck, C.M. (eds.) *Materiél Culture: The archaeology of twentieth century conflict.* One World Archaeology 44.

Bell, W. 2000. 'Escape from Alderney', Channel Islands Occupation Review 26, 5-15.

Bernbeck, R. and Pollack, S. 2007. 'Grabe, Wo Du Stehst!' An Archaeology of Perpetrators' in Hamilakis, Y. and Duke, P. (eds.) *Archaeology and Capitalism: From Ethics to Politics*. Walnut Creek, 217-231.

Beth Shalom. 2010. [WWW] http://holocaustcentre.net/ (Accessed 8th January 2010).

Bevan, B. 1994. A Case To Answer: The Story of Australia's First European War Crimes Prosecution. South Australia.

Bezwinska, J (ed.) 1973. Amidst a Nightmare of Crime: Manuscripts of Members of Sonderkommando. Oswięcim.

Blobel, P. 1947. 'Evidence by Blobel on the Burning of Bodies and Obliterating the Traces of Bodies of Jews Killed by the Einsatzgruppen' in Arad, Y. Gutman, Y. and Margaliot, A. (eds.) 1981. Documents on the Holocaust, Selected Sources on the Destruction of the Jews of Germany and Austria, Poland and the Soviet Union. Jerusalem. 471-473.

Bloch, J.J. in Jersey Heritage Trust. 'Forced Worker's Testimonies from La Hougue Bie Research Project' [WWW]

http://www.jerseyheritagetrust.org/occupation_memorial/pdfs/forcedworkertestimony.pdf (Accessed 27th May 2009).

Bomba, A. 1990. 'Abraham Bomba's testimony', [WWW] http://www.ushmm.org/lcmedia/viewer/wlc/testimony.php?Refld=ABA0081M (Accessed 1st November 2010).

Bonnard, B. 2009a. *Alderney at War*. 2nd edn. Stroud, United Kingdom.

Bonnard, B. 2009b. Alderney From Old Photographs. Stroud.

Bonnard, B. 1991. The Island of Dread in the Channel: The Story of Georgi Ivanovitch Kondakov. United States.

Boot, J. 2004. 'Alderney & Sylt Camp – the Memories of Sylvester Kukula', Channel Islands Occupation Review (Guernsey) 32, 10-16.

Bowden, M. 1999. *Unravelling the Landscape: An Inquisitive Approach to Archaeology.* Gloucestershire.

Boyd, W.E. forthcoming. 'A Frame to Hang Clouds On: Cognitive ownership, landscape and heritage management' in Skeates, R. McDavid, C. and Carman, J. (eds.) *The Oxford Handbook of Public Archaeology*. Oxford.

Brenner, I. 1999. 'Returning to the Fire: Surviving the Holocaust and "Going Back", *Journal of Applied Psychoanalytical Studies* 1(2), 145-162.

Brickley, M. 2003. 'A Mirror to Life: Analysis of Human Remains' in Buteaux, S. Beneath the Bull Ring: the archaeology of life and death in early Birmingham. Studley.

Browning, C. 1993. Ordinary Men: Reserve Police Battalion 101 and the Final Solution in Poland. New York.

Browning, C.R. 2004. 'The Factory Slave Labor Camps in Starachowice, Poland: Survivors' Testimonies' in United States Holocaust Memorial Museum. *Forced and Slave Labor in Nazi-Dominated Europe: Symposium Presentations*. Washington D.C., 63-76.

Buchli, V. and Lucas, G. 2001. Archaeologies of the Contemporary Past. London.

Buck, S. C. 2003. 'Searching for Graves Using Geophysical Technology: Field Tests with Ground Penetrating Radar, Magnetometry, and Electrical Resistivity', *Journal of Forensic Sciences* 48(1), 1-7.

Budde, E. Hansen, F. I. and Sokolowski, J. 2009. *Treblinka: Treblinka II – Obóz Zagłady.* Siedlce.

Bunting, M. 2004. 'Our part in the Holocaust: One Channel Island at least is owning up to its wartime shame', [WWW] http://www.guardian.co.uk/world/2004/jan/24/germany.race (Accessed 17th January 2009).

Bunting, M. 1995. *The Model Occupation; The Channel Islands Under German Rule 1940-45.* London.

Burleigh, M. 1994. Death and Deliverance: Euthanasia in Germany 1900-1945. Oxford.

Carel, T. 1967. Hitler's Fortress Islands. London.

Cargas, H.J. 1986. 'Preface' in Shelley, L. (eds) Secretaries of Death. New York.

Carman, J. forthcoming. *Archaeologies of Conflict*. Bristol.

Carman, J. 2005. Against cultural property: archaeology, heritage and ownership. London.

Carman, J. 2002. Archaeology and Heritage: An Introduction. Leicester.

Carr, G. 2011. 'Why have bunkers become sites of selective amnesia? German fortifications in the Channel Islands?', Lecture delivered at the Atlantic Wall Research Group Workshop, McDonald Institute, Cambridge, 4th August 2011.

Carr, G. 2009. 'Archaeology That Matters', British Archaeology 104, 18-22.

Carr, G. 2007. 'The Politics of Forgetting on the Island of Alderney', *Archaeological Review from Cambridge* 22(2), 89-112.

Cassia, P. S. 2005. 'Bodies of evidence: burial, memory and the recovery of missing persons in Cyprus'. New directions in anthropology, Volume 20. Canada.

Central Commission for the Investigation of German Crimes in Poland. 1982. *German War Crimes in Poland*. New York.

Central Commission for the Investigation of German Crimes in Poland. 1946. *German War Crimes in Poland*. Volume 1. Warsaw.

Cesarani, D. 2005. After Eichmann: Collective Memory and the Holocaust 1961. London and New York.

Chapman, H. 2003. Landscape Archaeology and GIS. Stroud.

Cheetham, P. 2005. 'Forensic Geophysical Survey' in Hunter, J. and Cox, M. 2005. Forensic Archaeology: Advances in Theory and Practice. London.

Chrostowski, W. 2004. Extermination: Camp Treblinka. London.

Clark, O.A. and Clarke, A. 1991. Seeing Beneath the Soil: Prospecting Methods in Archaeology. London.

Clendinnen, I. 1999. Reading the Holocaust. Cambridge.

Cohen, F. 2000. The Jews in the Channel Islands during the German Occupation 1940-45. Jersey and London.

Cohen, I. 1942. *The Jews in the War.* London and Southampton.

Cohen, S. 2001. 'Memory wars and peace commissions', *Index on censorship*, 30 (1), pp. 38-48.

Commission of the Historians of Latvia. 2001. The Progress Report of Latvia's History Commission: Crimes against Humanity Committed in the Territory of Latvia from 1940 to 1956 during the Occupations of the Soviet Union and National Socialist Germany. Latvia.

Conyers, L. and Goodman, D. 2004. *Ground-penetrating radar: an Introduction for Archaeologists*. 2nd edn. London.

Council for British Archaeology. 2002. Defence of Britain Project. York.

Council of Europe. 2010. 'European Convention on the Protection of the Archaeological Heritage (Revised) Valetta, 16.I.1992' [WWW] http://conventions.coe.int/Treaty/en/Treaties/html/143.htm (Accessed 13th March 2011).

Council of Europe. 2005. 'Council of Europe Framework Convention on the Value of Cultural Heritage for Society. Faro 27.X.2005' [WWW] http://conventions.coe.int/Treaty/EN/Treaties/Html/199.htm (Accessed 16th September 2011).

Cox, M. Flavel, A. Hanson, I. Laver, J. and Wessling, R. (eds) 2007. *The Scientific Investigation of Mass Graves*. Cambridge.

Cruickshank, C. 1975. The German Occupation of the Channel Islands: The Official History of the Occupation Years. Guernsey.

CWGC (Commonwealth War Graves Commission) 2010. [WWW] http://www.cwgc.org (Accessed 16th March 2010).

CWGC (COMMONWEALTH WAR GRAVES COMMISSION) 2009. [WWW] http://www.cwgc.org/fromelles/blog/?p=567 (Accessed 18th October 2010)

Czynska, S. 1982. 'Mass executions in Poland in the Period 1939-1945' in Central Commission for the Investigation of German War Crimes in Poland. *German War Crimes In Poland*. 2nd Edn. USA, 47-66.

Czynska, S. and Kupsc, B. 1982. 'Extermination, concentration and labour camps in Poland during the years 1939-1945' in Central Commission for the Investigation of German War Crimes in Poland, *German War Crimes In Poland*. 2nd Edn. USA, 11-24.

Dalmau, J. 1945. Slave Worker in the Channel Islands. Guernsey.

Dalrymple, J. 1992. The haunted isles. Sunday Times, 6 December 1992, 11.

Darmamin, M. and Mootz, D. 2006. 'Archaeology, the classroom and the Holocaust: Telling human stories', *Proceedings of the Yad Vashem International Conference 2006* [WWW] http://www1.yadvashem.org/education/conference2006/workshops.htm. (Accessed 27th October 2007).

Darvill, T. 1995. 'Value Systems in Archaeology' in Cooper, M. *Managing Archaeology*. London.

Davenport, G. Clark. 2001. 'Remote Sensing Applications in Forensic Investigations', *Historical Archaeology* 35(1), 87-99.

Davenport, T. 2003. Festung Alderney. Jersey.

David, W. 2003. Archäologische Ausgrabungen imn der ehemaligen SS-Schießanlage bei Heberthausen. Unpublished thesis. München.

David, W. 2001. Archäologische Ausgrabungen im ehemaligen Konzentrationslager Dachau. Unpublished thesis. München.

Davidowitz, L. 1990. The War Against The Jews, 1933-1945. London.

Davies, I. 2000. Teaching the Holocaust: educational dimensions, principles and practice. London and New York.

Desbois, P. 2008. The Holocaust by Bullets: A Priest's Journey to Uncover the Truth Behind the Murder of 1.5 Million Jews. Hampshire.

De Spiegel. 10th March 2006, [WWW] http://www.spiegel.de/international/0,1518,440544,00.html (Accessed 21st June 2007).

Deutsche Welle. 2010. 'Poland battles rising flood waters ', [WWW] http://www.dwworld.de/dw/article/0,,5602866,00.html (Accessed 26th May 2010).

Dobinson, C. 1998. 'Twentieth-Century Fortifications in England: the MPP approach' in Schofield, J. (ed) 1998. Monuments of War: The evaluation, recording and management of twentieth-century military sites. English Heritage. London, 2-6.

Donat, A. 1979. The Death Camp Treblinka: A Documentary, New York.

Efremov, I. 1940. 'Taphonomy: new branch of paleontology', *Pan American Geologist* 74, 81-93.

English Heritage. 2007. *Understanding the Archaeology of Landscapes: A Guide to Good Working Practice*. Swindon.

English Heritage. 2003. *Twentieth-Century Military Sites: Current approaches to their recording and conservation.* English Heritage. Swindon.

English Heritage 1995. Geophysical survey in archaeological field evaluations. Swindon.

Estonian Foundation for Investigating Crimes Against Humanity. 2006. Estonia 1940–1945: Reports of the Estonian International Commission for the Investigation of Crimes Against Humanity. Tallinn.

Evans, J. 1941. The Nazi New Order in Poland. London.

Evans, R. 2001. Lying about Hitler: History, Holocaust and the David Irving Trial. USA.

Evans, S. 2011. 'John Demjanjuk case: Germany's surreal war crimes trial', [WWW] http://www.bbc.co.uk/news/world-europe-13369035 (Accessed 19th July 2011).

Evans, S. 2004. Forgotten crimes: the Holocaust and people with disabilities. Chicago.

Fairgreave, S. I. 2008. Forensic Cremation: Recovery and Analysis. London and New York.

Faith in Focus. 2008. [WWW]

http://faithinfocus.wordpress.com/2008/02/22/french-priest-helps-find-800-mass-graves-from-holocaust-in-ukraine/ (Accessed 23rd June 2008).

Farmer, S. 2002. 'Foreign Labour in Vichy France: The Groupements de Travailleurs Etrangers', USHMM Symposium: Forced and Slave Labor in Nazi-Dominated Europe, 1933 to 1945.

Fenning, P and Donnelley, L. 2004. 'Geophysical Techniques for Forensic Investigation' in Pye, K. and Croft, D. (eds.) *Forensic Geoscience*. London.

Ferenc, M. 2008. 'Secret World War II Graves in Slovenia' in Jambrek, P. (ed.) Crimes Committed by Totalitarian Regimes. Crimes and other gross and large scale human rights violations committed during the reign of totalitarian regimes in Europe: crossnational survey of crimes committed. Slovenia, 155-160.

Ferguson, L. 2008. 'The Archaeological Potential of The Aerial Reconnaissance Archives', *Paper presented at the European Association of Archaeologists, Malta, 19*th September 2008.

Ferrándiz, F. 2006. The return of Civil War ghosts: The ethnography of exhumations in contemporary Spain. *Anthropology Today* 22(3), 7-12.

Fiedler, S. Berger, J. Stahr, K. and Graw, M. 2009. 'Localisation of a Mass Grave from the Nazi Era: A Case Study' in Ritz, K. Dawson, L. and Miller, D. *Criminal and Environmental Soil Forensics*. Springer.

Field. S. 2007. "No-one has allowed me to cry": Trauma, Memorialisation and Children in Post-Genocide Rwanda' in Purbrick, L. Aulich, J. and Dawson, G. (eds.). *Contested Spaces: Sites, Representations and Histories of Conflict*, Basingstoke, 211-232.

Fonseca, I. 1995. Bury Me Standing: The Gypsies and Their Journey. Oxford.

Font, F in Jersey Heritage Trust. 'Forced Worker Testimony', [WWW] http://www.thisisjersey.co.uk/hmd/pageviewer2.pl?Autoincrement=000020 (Accessed 11th October 2009).

Forty, G. 1999. The Channel Islands at War: A German Perspective. Sheperton.

France, D.L. Griffin, T.J. Swanburg, J.G. Lindemann, J.W. Davenport, C. Trammell, V. Travis, C.T Kondratieff, B. Nelson, A. Castellano, K, Hopkins, D. and Adair, T. 1997. 'Necrosearch Revisited: Further Multidisciplinary Approaches to the Detection of Clandestine Graves' in Haglund, W. and Sorg, M. H. (eds), *Forensic Taphonomy: The Postmortem Fate of Human Remains*, USA, 497-507.

Fraser, D. 2000. The Jews of the Channel Islands and the Rule of Law, 1940-1945. Brighton and Portland.

Freeman-Keel, T. 1995. From Auschwitz to Alderney and beyond. Worcestershire.

Freidman, R. 1963. in Jersey Heritage Trust. 'Testimony' [WWW] http://www.jerseyheritagetrust.org/edu/resources/pdf/freidman.pdf (Accessed 5th Dec 2008).

Friedlander, S. 1984. 'From Antisemitism to Extermination: A Historigraphical Study of Nazi Policies Towards the Jews and an Essay in Interpretation', *Yad Vashem Studies* XVI, 1-50.

Friedman, P. 1982 . Martyrs and Fighters: The epic of the Warsaw Ghetto. London.

Friedrich, J. 2004. 'Terror from the Sky', Exberliner 20.

Friends of Sobibor Remembrance. 2006. 'Archaeological Research', [WWW] http://www.sobibor.edu.pl/angielska/historia/index.htm (Accessed 21st December 2007).

Fuhrmeister. J. 2009. Der Westwall: Geschichte und Gegenwart. Stuttgart.

Gaffney, C. and Gater, J. 2003. Revealing the Buried Past. Stroud.

Gaffney, V. Gater, J. Saunders, T. and Adcock, J. 2004, 'D-Day: Geophysical Investigation of a World War II German Site in Normandy, France', *Archaeological Prospection* 11, 121-128.

Garber, Z. 1994. Shoah The Paradigmatic Genocide. Essays in Exegesis and Eisegesis. Studies in the Shoah VIII. Lanham, New York and London.

Geoportal. 2010. [WWW] http://www.geoportal.gov.pl/ (Accessed 18th June 2010).

German Commission for UNESCO. 1980. *Protection and Cultural Animation of Monuments, Sites and Historic Towns in Europe*. Bonn.

Gilbert, M. 2002. The Routledge Atlas of the Holocaust. 3rd Edn, London.

Gilbert, M. 1999. Holocaust Journey: Travelling in Search of the Past. Columbia.

Gilchrist, R. 2003. 'Introduction: towards a social archaeology of warfare', *World Archaeology* 35(1), 1-6.

Gilead, I. Hamai, Y. and Mazurek, W. 2009. 'Excavating Nazi Extermination Centres', *Present Pasts* 1, 10-39.

Ginns, M. 1994. The Organisation Todt and the Fortress Engineers in the Channel Islands. Archive Book No. 8. Jersey.

Gipps, C. 2011. Address on Holocaust Memorial Day, University of Wolverhampton.

Glazar, R. in Lanzmann, C. [DVD] (2005) Shoah. Videofilmexpress.

Glazar, R. 1999. Trap with a Green Fence: Survival in Treblinka. 2nd edn, Illinois.

Glowacka, D. and Żylińska, J. 2007. *Imaginary neighbors: mediating Polish-Jewish relations after the Holocaust*. Nebraska.

Golbert, R. 2004. 'Holocaust Sites in Ukraine: Pechora and the Politics of Memorialization', *Holocaust and Genocide Studies* 18(2), 205-233.

Golden, J. 2003. 'Remembering Chelmno: Heart-wrenching finds from a Nazi death camp'. *Archaeology* 56(1), 50-54.

Goldfarb, A. quoted in Arad, Y. 1987. Bełżec, Sobibor and Treblinka: The Operation Reinhard Death Camps, USA.

Golsan, R.J. 2006. 'The legacy of World War II in France: Mapping the discourses of memory' in Lebow, R.N. and Kansteiner, W. *The Politics of Memory in Post-War Europe*. Durham and London, 73-101.

González-Ruibal, A. 2009. 'Topography of terror or cultural heritage? The monuments of Franco's Spain' in Forbes, N. Page, R. and Pérez, G. (eds.) *Europe's deadly century. Perspectives on 20th century conflict heritage*. Swindon, 65-72.

González-Ruibal, A. 2008. 'Time to Destroy: An Archaeology of Supermodernity', *Current Anthropology* 49(2), 247-279.

González-Ruibal, A. 2007. 'Making things public: Archaeologies of the Spanish Civil War', *Public Archaeology* 6(4), 203-226.

Gould, R.A. and Schiffer, M.B. 1981. *Modern material culture: The archaeology of us.* New York.

Gradowski, S. in Bezwinska, J (ed). 1973. Amidst a Nightmare of Crime: Manuscripts of Members of Sonderkommando. Oswiecim

Graf, M. 1989. The Krakow Ghetto and the Płaszów Camp Remembered. Tallahasse.

Greene, K. 1993. Archaeology: An Introduction. London.

Gross, J.T. 1979. Polish Society Under German Occupation: The Generalgouvernement 1939-1944. New Jersey and Surrey.

Gross, J. 2004. 'Critical remarks indeed' in Polonsky, A. and Michlic, J.B. *The Neighbours Respond: The Controversy Over The Jedwabne Massacre In Poland*. Princeton, 344-370.

Grossman, W. 2011. 'The Hell of Treblinka' in Rajchman, C. *Treblinka: A Survivor's Memory*. London, 113-181.

Grothe, A. 2006. 'Ezwungene Dienstleistung. Arbeirslager und Wirtschaftbetreib bei Groß Schönebeck, Lkr. Barmin', *Archäelogie in Berlin und Brandenburg*, 10-39.

Gruber, S. and Myers, P. 1995. Survey of Historic Jewish Monuments in Poland: A Report to the United States Commission for the Protection of America's Heritage Abroad. 2nd Edn. USA.

GSSI (Geophysical Survey Systems, Inc.). 2003. *TerraSIRch SIR System-3000: User's Manual*. North Salem.

Guernsey Evening Press, Friday 17th October 1961.

Guernsey Star. 1947. 'In Alderney: A Corner of a Foreign Field', 26th July 1947.

Guernsey Star. 1961a Wednesday 18th October 1961.

Guernsey Star. 1961b, Friday 17th November 1961.

Guernsey Star. 1961c, Tuesday 19th December 1961.

Haglund, W. 2002. 'Recent Mass Graves: An Introduction' in Haglund, W. and Sorg, M. H. (eds). 2002. Advances in Forensic Taphonomy: Method, Theory and Archaeological Perspectives. USA, 243-262.

Haglund, W. 1997. 'Rodents and Human Remains' in Haglund, W. and Sorg, H. (eds.) *Forensic Taphonomy*. USA, 403-413.

Haglund, W. and Sorg, M. H. (eds). 2002. Advances in Forensic Taphonomy: Method, Theory and Archaeological Perspectives. USA, 379-399.

Haglund, W. and Sorg, M. H. (eds). 1997. Forensic Taphonomy: The postmortem fate of human remains. USA.

Hamilakis, Y. 2007. 'From Ethics to Politics' in Hamilakis, Y. and Duke, P. G. Archaeology and capitalism: from ethics to politics. Walnut Creek, 15-40.

Harrison, R. and Schofield, J. 2010. After Modernity: Archaeological Approaches to the Contemporary Past. Oxford.

Hayes, P. 2003. 'Auschwitz, Capital of the Holocaust: Review Essay', *Holocaust and Genocide Studies* 17(2), 330-350.

Hayes, P. 2002. 'Forced and Slave Labor: The State of the Field', USHMM (United States Holocaust Memorial Museum) *Symposium: Forced and Slave Labor in Nazi-Dominated Europe*, 1933 to 1945, 24th October 2002.

Head, L. (2000). *Cultural landscapes and environmental change*. London.

H.E.A.R.T. (Holocaust Education & Archive Research Team). 2011. 'Otto Horn, Extracts from the Horn deposition in the Demjanjuk case – 26 February 1980 in Berlin [WWW] http://www.holocaustresearchproject.org/trials/horn.html (Accessed 3rd July 2011).

H.E.A.R.T. (Holocaust Education & Archive Research Team). 2009. 'Treblinka Death Camp: The Removal of Dr Eberl and the Re-Organisation of the Camp – August 1942', [WWW] http://www.holocaustresearchproject.org/ar/treblinka.html (Accessed 19th March 2010).

H.E.A.R.T. (Holocaust Education & Archive Research Team). 2008. 'The Jasenovac Extermination Camp: "Terror in Croatia"' [WWW] http://www.holocaustresearchproject.org/othercamps/jasenovac.html (Accessed 20th March 2011).

H.E.A.R.T. (Holocaust Education & Archive Research Team). 2007. 'Treblinka Death Camp History', [WWW] http://www.holocaustresearchproject.org/ar/treblinka.html (Accessed 27th January 2008).

Hey, G. and Lacey, M. 2001. Evaluation of Archaeological Decision-Making Processes and Sampling Strategies. Oxford.

Hirshaut, J. 1982. Jewish Martyrs of Pawiak. New York.

Hirte, R. 2000. Offene Befunde. Ausgrabungen in Buchenwald. Zeitgeschichtliche Archäologie und Erinnerungskultur. Braunschweig.

Hochrein, M.J. 2002. 'An Autopsy of the Grave: Recognizing, Collecting and Preserving Forensic Geotaphonomic Evidence' in Haglund, W. and Sorg, M. H. (eds.) *Advances in Forensic Taphonomy: Method, Theory and Archaeological Perspectives*. USA, 45-70.

Hojan, A. and Webb, C. 2008. 'Koscian: Executions and Euthanasia', [WWW] http://www.holocaustresearchproject.org/euthan/koscian.html (Accessed 6th February 2009).

Holocaust Task Force. 2006. 'Country Report on Holocaust Education in Task Force Member Countries: United Kingdom', [WWW] http://www.holocausttaskforce.org/education/holocaust-education-reports/unitedkingdom-holocaust-education-report.html (Accessed 20th March 2008)

Hoshower L.M. 1998. 'Forensic Archaeology and the Need for Flexible Excavation Strategies: A Case Study', *Journal of Forensic Sciences* 43(1), 53–56.

Hoskins 2003. 'Signs of the Holocaust: exhibiting memory in a mediated age', Media, Culture and Society 25, 7-22.

Howard, P. 2007. Archaeological Surveying and Mapping. Oxford.

Hritz, C. 2008. 'Remote Sensing of Cultural Heritage in Iraq: A Case Study of Isin', *TAARII Newsletter* 3(1), 1-8.

Huener, J.2003. Auschwitz, Poland and the politics of commemoration, 1945-1979. Ohio.

Hunter, J. 1996. 'Locating Buried Remains' in Hunter, J. Roberts, C. and Martin, A. *Studies in Crime: An Introduction to Forensic Archaeology*. London, 7-23.

Hunter, J. and Cox, M. 2005. Forensic Archaeology: Advances in Theory and Practice. London.

Hunter, J. and Ralston, I. (eds.) 2006. *Archaeological Resource Management in the UK. An Introduction*. 2nd Edn. Stroud.

Hunter, J. and Simpson, B. 2007. 'Preparing the Ground: Archaeology in a War Zone' in Ferllini, R. (ed). *Forensic Archaeology and Human Rights Violations*. Illinois, 266-292.

Hunter, J. Simpson, B. and Sturdy Colls, C. forthcoming. *Forensic Approaches to Buried Remains*. Wiley.

Huyssen, A. 1994. 'Monument and Memory in a Postmodern Age' in Young, J.E. (ed). *The Art of Memory: Holocaust Memorials in History*. Munich, 9-17.

Ibel, J. 2002. 'Konzentrationslager Flossenbürg: Ausgrabungen und Funde', *Das Archäologische Jahr in Bayern*, 147-149.

ICMP (International Commission on Missing Persons).2011. [WWW] www.ic-mp.org (Accessed 12th June 2011).

ICMP (International Commission on Missing Persons). 2010. [WWW] www.ic-mp.org (Accessed 14th March 2010)

ICMP (International Commission on Missing Persons). 2007. 3rd Meeting of the Steering Committee on Forensic Science Programs. Denmark.

IfA (Institute for Archaeologists). 2010. By-Laws. Code of Conduct. Reading.

IMTN (INTERNATIONAL MILITARY TRIBUNAL AT NUREMBERG). 1947. *Trial of the Major War Criminals before the International Military Tribunal Nuremberg 14 November 1945 – 1^{st} October 1946. Nuremberg, [WWW] http://www.loc.gov/rr/frd/Military_Law/NT_major-war-criminals.html (Accessed 20th October 2007).*

International Herald Tribune, 14th June 2007.

INTERNATIONAL JEWISH CEMETERY PROJECT 2010. http://www.iajgsjewishcemeteryproject.org/eastern-europe/index.html (Accessed 29th June 2010).

International Coalition of Sites of Conscience. 2011. [WWW] http://www.sitesofconscience.org/resources/networks/europe (Accessed 15th February 2012).

IPN (INSTITUTE OF NATIONAL REMEMBRANCE). 2009. [WWW] www.ipn.gov.pl (Accessed 21st February 2009).

Irving, D. 2000. 'Using modern technology to establish real history. Retrieved on May 25, 2006, from The International Campaign for Real History' [WWW] http://www.fpp.co.uk/Auschwitz/Treblinka/groundscan.html (Accessed 27th September 2007).

Irving, D. 2010. [WWW] http://www.fpp.co.uk/wolfslair/ (Accessed 20th October 2010).

Isenberg, G. 1995. 'Zu den Ausgranungen im Konzentrationslager Witten-Annen', *Ausgrabungen und Funde* 40, 33-37.

Iwaszko, T. Kubica, H. Piper, F. Strzelecka, I. and Strzelecki, A. 2000. *Auschwitz 1940-1945 Central Issues in the History of the Camp: The Prisoners — their life and work*. Volume II. Oświęcim.

Jacobs, J. 2004. 'From the Profane to the Sacred: Ritual and Mourning at Sites of Terror and Violence', *Journal for the Scientific Study of Religion* 43(3), 311–315.

Jambrek, P. (ed.) 2008. Crimes Committed by Totalitarian Regimes. Reports and proceedings of the 8 April European public hearing on "Crimes committed by totalitarian regimes", organised by the Slovenian Presidency of the Council of the European Union (January–June 2008) and the European Commission. Slovenia.

Jankauskas, R. Barkus, A. Urbanavièius, V. and Garmus, A. 2005. 'Forensic archaeology in Lithuania: the Tuskulënai mass grave', *Acta Medica Lithuania* 12(1), 70–74.

Jasinski, M. 2011. 'WWII and the Atlantic Wall in Norway: Landscapes of Supremacy and Slave Labour', Lecture delivered at the Atlantic Wall Research Group Workshop, McDonald Institute, Cambridge, 4th August 2011.

Jäckel, E. in LaCapra, D. 1996. Representing the Holocaust: history, theory, trauma. Ithaca.

Jefferson Tribune, 3rd May 1961.

Jersey Heritage Trust. 2009. 'Forced Worker's Testimonies from La Hougue Bie Research Project' [WWW]

http://www.jerseyheritagetrust.org/occupation_memorial/pdfs/forcedworkertestimony.pdf (Accessed 5th January 2009).

Jewish Journal. 2011. 'Last gay survivor of the Holocaust dies', [WWW] http://www.jewishjournal.com/world/article/last_gay_survivor_of_holocaust_dies_2011080 8/ (Accessed 10th August 2011).

Jewish World. 2011. [WWW]

http://www.ynetnews.com/articles/0,7340,L-4077944,00.html (Accessed 7th July 2011).

Jick, L.A. 1981. 'The Holocaust - its use and abuse within the American Public'. *Yad Vashem Studies* 14, 303-318.

Kamp Westerbork. 2011. [WWW] http://www.kampwesterbork.nl/museum/ (Accessed 4th June 2011).

Kaplan, B.A. 2011. *Landscapes of Holocaust postmemory*. Routledge research in cultural and media studies 29. New York and London.

Kay-Mouat, J. 2009. 'From the President's Office' in Bonnard, B. 2009a. *Alderney at War*. 2nd edn. Stroud.

Kay-Mouat, J. 1998. President of the States of Alderney, Memorial Service at Jersey Synagogue 1998.

Kellerman, N.P.F. 2001. 'The Long-term Psychological Effects and Treatment of Holocaust Trauma', *Journal of Loss and Trauma* 137(6), 197-217.

Killam, E. 1990. The Detection of Human Remains. USA.

King, P. 1991. The Channel Islands War 1940-1945. London.

Kleiman, Y. and Springer-Aharoni, N. (eds). 1995. The Anguish of Liberation. Jerusalem.

Klimesch, W. 2002. 'Veritatem dies aperit! Vernichtet - Vergraben - Vergesen. Archäologische Spuren im Schloss Hartheim', *Jahrbuch des Oberösterreichischen Musealvereines* 147(1), 411-434.

Knapp, A.B. and Ashmore, W. 1999. 'Archaeological Landscapes: Constructed, Conceptualized, Ideational' in Ashmore, W. and Knapp, A.B. *Archaeologies of landscape: contemporary perspectives*. Malden and Oxford.

Knischewski, G. and Spittler, U. 2007. 'Competing Pasts: a Comparison of National Socialist and German Democratic Republic Remembrance in Two Berlin Memorial Sites' in *Contested Spaces: Sites, Representations and Histories of Conflict*. Basingstoke, 318-327.

Knowles Smith, H.R. 2007. The Changing Face of the Channel Islands Occupation. Basingstoke.

Kola, A. 2001. 'Badania archeologiczne terenu byłego obozu zagłady Żydów w Sobiborze', Przeszłość i Pamięć. Biuletyn Rady Ochroni Pamięci Walk i Męczeństwa, 4, 115-122.

Kola, A. 2000. Bełżec: The Nazi Camp For Jews in the Light of Archaeological Sources, Excavations 1997-1999. Warsaw and Washington.

Komar, D. A. and Buikstra, J. E. 2008. *Forensic Anthropology: Contemporary Theory and Practice*. New York and Oxford.

Kopówka, E. and Rytel-Andrianik, P. 2011. *Dam im imię na wieki (Księga Izajasza 56,5) Polacy z okolic Treblinki ratujący Żydów.* Biblioteka Drohiczyńska VII. Oxford.

Kopówka, E. and Tołwiński, P. 2007. Kamienie milczą - ja pamiętam. Siedlce.

Kouchoukos, N. 2001. 'Satellite Images and Near Eastern Landscapes', *Near Eastern Archaeology* 64(1-2), 80-91.

Kranz, T. 2007. Extermination of Jews at Majdanek Concentration Camp. Lublin.

Krondorfer, B. 2008. 'Is Forgetting Responsible: Holocaust Remembrance and the Task of Oblivion', Journal of Religious Ethics 36(2), 233-267.

Krzepicki, A. 1979. 'Eighteen Days in Treblinka' in Donat, A. *The Death Camp Treblinka: A Documentary*. New York, 77-146.

Kudlik, A. 1946. 'Treblinka' in Blumenthal, N. Dokumenty i materialy: obozy 1(6)

Kudlik, A. Laks, M. and Platkiewicz, M. 1945. 'Treblinka', [WWW] http://www.deathcamps.org/treblinka/pic/bmap2.jpg (Accessed 12th July 2007).

Kudlik, A. Wiernik, J. and Trautsolt, K. 1946. 'Plan obozu straceń w Treblince' in Łukaszkiewicz, Z. 1946a. *Obóz straceń w Treblince*. Warsaw.

Kuperhand, M. and Kuperhand, S. 1998. *Shadows of Treblinka*. Urbana and Chicago. Kushner, T. 2006. 'Holocaust Testimony, Ethics, and the Problem of Representation', *Poetics Today* 27,275-295.

Kuwałek, R. 2008. From Lublin to Bełżec: Traces of Jewish Presence and the Holocaust in South-Eastern Part of the Lublin Region. Lublin.

Kvamme, K. 2006. 'Integrating Multidimensional Geophysical Data', *Archaeological Prospection* 13(2), 91-102.

Kvamme, K. 2003. 'Geophysical Surveys as Landscape Archaeology', *American Antiquity* 68(3), 435-457.

KZ NEUENGAMME 2010. [WWW] http://www.kz-gedenkstaette-neuengamme.de/index.php?id=940 (Accessed 11th August 2011).

Laks, M. 1946. in Blumenthal, N. Dokumenty i materialy: obozy 1(6)

Lang, B. 2000. Holocaust representation: art within the limits of history and ethics. Baltimore.

Lang, B. 1999. Between History and Memory: The Future of the Holocaust. USA.

Lang, N. 1990. 'Sites and Monuments Records', Context 25, 14.

Lanzmann, C. [DVD] (2005) Shoah. Videofilmexpress.

Laponder, P. 2000. Reconstructing Treblinka Death Camp. Unpublished Report.

Lattek, C. 1997 'Bergen-Belsen: From Privileged' Camp to Death Camp' in Reilly, J. Cesarani, D. Kushner, T. and Richmond, C. 1997. *Belsen in History and Memory*. London.

Leica (Leica Geosystems) 2002. GPS System 500. GPS Equipment User Manual. Version 4. Switzerland.

Leleko, P.V. 1945. 'Leleko Interrogation', [WWW]

http://www.nizkor.org/ftp.cgi/camps/aktion.reinhard/treblinka/leleko.002 (Accessed 12th July 2008).

Lennon, J. and Foley, M. 2000. Dark Tourism. Padstow.

Le Sueur, R.W. 1993. Transcript of talk about Foreign Workers, 1942-1945. Society Jersiase.

Levi, P. 2006. Auschwitz Report. London and New York.

Levy, M.N. 1992. 'Jewish Law and the Holocaust', University of Toronto Faculty of Law Review 241

Lilley, J.M. Stroud, G. Brotherwell, D. R. and Williamson, M. H. 1994. *The Jewish Burial Ground at Jewbury*. York.

Lisle, D. 2007. 'Encounters with partition: tourism and reconciliation in Cyprus' in Purbrick, L. Aulich, J. and Dawson, G. (eds.) *Contested Spaces: Sites, Representations and Histories of Conflict*. Basingstoke.

Little, B.J. and Shackel, P. A. 2007. *Archaeology as a tool of civic engagement*. Lanham and Plymouth.

Logan, W. and Reeves, K. (eds.). 2009. *Places of pain and shame: dealing with 'difficult heritage'*. Oxon.

Loke, M.H. Acworth, I. and Dahlin, T. 2003. 'A comparison of smooth and blocky inversion methods in 2D electrical imaging surveys', *Exploration Geophysics* 34, 182-187.

Lowenthal, D. 1985. The Past is a Foreign Country. Cambridge.

Łukaszkiewicz, Z. 1946a. Obóz straceń w Treblince. Warsaw.

Łukaszkiewicz, Z. 1946b. 'Obóz zagłady Treblinka', in *Biuletyn Głównej Komisji Badania Zbrodni Niemieckich w Polsce* 1. Posen, 133-144.

Łukaszkiewicz, Z. 1946c. 'Plan Treblinka', [WWW] http://www.deathcamps.org/treblinka/maps.html (Accessed 12th July 2007).

Łukaszkiewicz, Z. 1946d. 'Obóz pracy w Treblince', Biuletyn Głównej Komisji Badania Zbrodni Niemieckich w Polsce III. Malagon, N. 1979. 'Nikolai Malagon: Fedorenko, Marchenko, the Infirmary, killing the Jews. Record of Questioning of Witness, City of Zaporozh'ye, March 18, 1978' [WWW] http://search.nizkor.org/hweb/people/m/malagon-nikolai/malagon-001.html (10th Sept 2009).

Mant, A. K. 1987. 'Knowledge Acquired from Post-War Exhumations' in Boddington, A. Garland, N.A. and Janaway, R.C. (eds). *Death, Decay and Reconstruction*. Manchester.

Mant, A. K. 1950. A Study of Exhumation Data. Unpublished thesis, London University.

Marrus, M. R. 2000. The Holocaust in History. Canada.

Marshall, Y. 2001. 'What is community archaeology?', World Archaeology 34(2), 211-219.

Matthews, C.N. 2009. 'Review Essay: Is Archaeology Political? Transformative Praxis within and against the Boundaries of Archaeology', *The Public Historian* 31(2), 79-90. Mattogno, C. and Graf, J. 2004. *Treblinka: Extermination Camp or Transit Camp?* USA.

McDavid, C. 2007. 'Archaeology, Race and White Privilege' in Little, B.J. and Shackel, P. A. 2007. Archaeology as a tool of civic engagement. Lanham and Plymouth, 67-88.

McDavid, C. 2002. 'Archaeologies that hurt; descendants that matter: a pragmatic approach to collaboration in the public interpretation of African-American archaeology', World Archaeology, 34(2), 303-314.

McGuire, R. 2008. Archaeology as Political Action. California Series in Public Anthropology. California.

McManamon, F.P. 1991. 'The many publics for archaeology', *American Antiquity* 56(1), 121-130.

Melmed LeHoil, Yoreh Deah 114:2 (Rabbi Dovid Tzvi Hoffman, Germany 1843-1921).

Meng 2010. 'From Destruction to Preservation: Jewish Sites in Germany and Poland after the Holocaust', *Bulletin of the GHI* 46, 45-59.

Meo, N. Alexander, H. and Mendick, R. 2011. 'Norway killings: The laughing gunman who shot 85 young victims, one by one', [WWW] http://www.telegraph.co.uk/news/worldnews/europe/norway/8657475/Norway-killings-The-laughing-gunman-who-shot-85-young-victims-one-by-one.html (Accessed 15th August 2011).

Merriman, N. (ed.) 2004. Public Archaeology. London.

Mémorial de la Shoah. 2007. 'The Mass Shooting of Jews in Ukraine 1941-1944: The Holocaust by Bullets', [WWW]

http://www.memorialdelashoah.org/upload/minisites/ukraine/en/en_exposition1.htm (Accessed 20th June 2008).

Migeod, F.W.H. 1934. 'Report on Excavations at Longy bay, Alderney 1934', *Report and Transactions* 12(2), 134.

Ministry of Foreign Affairs. 2008. From the Pages of Polish History: Nazi German Camps on Polish Soil During World War II. Poland.

Młynarczyk, J.A. 2004. Treblinka - obóz śmierci "akcji Reinhardt" in Libionka, D. Akcja Reinhardt: zagłada Żydów w Generalnym Gubernatorstwie. Warsaw.

Moeller, R. 2006. 'On the History of Man-Made Destruction: Loss, Death, Memory, and Germany in the Bombing War', *History Workshop Journal* 161, 103-134.

Morrison, J. 2000. *Ravensbrück: Everyday Life in a Women's Concentration Camp 1939-45*. Princeton.

Moshenska, G. 2009. 'Contested pasts and community archaeologies: public engagement in the archaeology of modern conflict' in Forbes, N. Page, R. and Pérez, G. (eds.) *Europe's deadly century. Perspectives on 20th century conflict heritage*. Swindon, 73-79.

Moshenska, G. 2008. 'Ethics and Ethical Critique in the Archaeology of Modern Conflict', *Norweigan Archaeological Review* 41(2), 159-175.

Moyn, S. 2011. 'Preface' in Rajchman, C. Treblinka: A Survivor's Memory. London, 1-11.

Murmelstein, W. 2007. 'Theresienstadt: The Show Ghetto', [WWW] http://www.holocaustresearchproject.org/othercamps/showcamp.html (Accessed 12th August 2011).

Muszkat, M. 1948. Polish Charges Against German War Criminals. Warsaw.

Muzeum Walki I Męczeństwa w Treblince. 2011. [WWW] http://www.treblinka.bho.pl/index.php?option=com_content&task=view&id=6&Itemid=6 (Accessed 20th January 2009).

Muzeum Walki I Męczeństwa w Treblince. 2008. Treblinka. Siedlce.

Myers, A.T. 2010. 'Camp Delta, Google Earth and the Ethics of Remote Sensing in Archaeology', World Archaeology 4(3), 455-467.

Myers, A.T. 2008. 'Between memory and materiality: an archaeological approach to studying Nazi concentration camps', *Journal of Conflict Archaeology* 4, 231-246.

Myers, A. T. 2007. 'Portable material culture and death factory Auschwitz', *Papers from the Institute of Archaeology* 18, 57-69.

Nebel, G. 1942. Bei den nördlichen Hesperiden. Germany.

Neubauer, W. 2004. 'GIS in Archaeology - the Interface between Prospection and Excavation', *Archaeological Prospection* 11, 159–166.

Nobes, D.C. 2000. 'The Search for 'Yvonne': A Case Example of the Delineation of a Grave Using Near-Surface Geophysical Methods', *Journal of Forensic Sciences* 45 (3), 715-721.

Nolan, T.J. 2009. 'Geographical Information Science as a method of integrating history and archaeology for battlefield interpretation', *Journal of Conflict Archaeology* 5(1), 81-104.

Novick, P. 1999. *The Holocaust in American life*. Boston and New York. *Novosty Press*, June 1944

Observer, 31st May 1981

O'Neil, R. 1998. 'Bełżec- the forgotten death camp', East European Jewish Affairs 28(2), 49-62.

O'Neil, R. and Tregenza, M. 2006. 'Archaeological investigations: A Review By Historians', [WWW] www.holocaustresearchproject.org/ar/modern/archreview.html (Accessed 17th October 2007).

Oroschakoff, K. 2011. 'No jail for Nazi war criminal Scheungraber: lawyer says', [WWW] http://www.reuters.com/article/2011/08/11/us-germany-nazi-idUSTRE77A4RX20110811 (Accessed 30th August 2011).

Packe, M. St. J. and Dreyfus, M. 1990. The Alderney Story 1939-1949. 4th Edn. Guernsey.

Pantcheff, T.X.H. 1981. Alderney Fortress Island. Sussex.

Paperno, I. 2001. 'Exhuming the Bodies of Soviet Terror', Representations 45, 89-118.

Paradopoulos, N.G. Tsourlos, P. Tsokas, G.N. and Sarris, A. 2006. 'Two-dimensional and Three-dimensional Resistivity Imaging in Archaeological Site Investigation', *Archaeological Prospection* 13, 163-181.

Parcak, S. 2009. Satellite Remote Sensing for Archaeology. Oxon.

Paris, A, 2011. 'The KL Stutthof Archaeological Resources Protection and Preservation Program: Site Assessment Report', [WWW] http://stutthof.pl/english/node/147 (Accessed 12th May 2011).

Partridge, G. 1990. 'Abandoned Alderney', Channel Islands Occupational Review 18, 86-89.

Payne, S. 2009. 'Is it right to excavate and study human remains? Re-examining the issues of Jewbury', *The Archaeologist* 72, 42-43.

Pawlicka-Nowak, Ł. 2004a. 'Archaeological research in the grounds of the Chełmno-on-Ner extermination center' in Pawlicka-Nowak, Ł. (ed.) *The Extermination Center for Jews in Chełmno-on-Ner in the Light of Latest Research, Symposium Proceedings September 6-7, 2004.* Konin.

Pawlicka-Nowak, Ł. 2004b. 'Archaeological research in the grounds of the Chełmno-on-Ner former extermination center' in Pawlicka-Nowak, Ł. (ed.) *Chełmno Witnesses Speak.* Konin and Łódź.

Perera, C. and Briggs, C. 2008. 'Guidelines for the effective conduct of mass burials following mass disasters: post-Asian Tsunami disaster experience in retrospect', *Forensic Science and Medical Pathology* 4, 1–8.

Perl, J. 2004. 'Faces in the Smoke' in Whitworth, W (ed.) *Survival: Holocaust Survivors Tell Their Story*. 2nd Edn. Trowbridge.

Pfannenstiel, W. quoted in Quinn, J. 2010. 'Wilhelm Pfannenstiel: Witness to the Exterminations at Belzec' [WWW]

http://www.holocaustresearchproject.org/ar/belzec/pfannenstiel.html (Accessed 20th March 2011).

Pfoch, H. 1994. 'A Wehrmacht Soldier's Diary' in [WWW]

http://www.nizkor.org/ftp.cgi/camps/aktion.reinhard/treblinka/siedice.002 (Accessed 10th Sept 2009)

Pilichowski, C. 1980. No Time Limit For These Crimes. Warsaw.

Piper, F. 2000. *Auschwitz 1940-1945 Central Issues in the History of the Camp: Mass Murder.* Volume III. Oświęcim.

Polish-Soviet Extraordinary Commission for Investigating the Crimes Committed by the Germans in the Majdanek Extermination Camp in Lublin. 1944. *Communique of the Polish-Soviet Extraordinary Commission for Investigating the Crimes Committed by the Germans in the Majdanek Extermination Camp in Lublin*. Warsaw.

Pollard, T. 2007. 'Burying the Hatchet? The Post-Combat Appropriation of Battlefield Spaces' in Purbrick, L. Aulich, J. and Dawson, G. (eds.) *Contested Spaces: Sites, Representations and Histories of Conflict*. Basingstoke, 121-145.

Polonsky, A. and Michlic, J.B. 2004. *The Neighbours Respond: The Controversy Over The Jedwabne Massacre In Poland*. Princeton.

Poria, Y. Airey, D. and Butler, R. 2001. 'Challenging the present approach to heritage tourism: Is tourism to heritage places heritage tourism?', *Tourism Review* 56, 51-53.

Price, A. 2003. *Targetting the Reich. Allied Photographic Reconnaissance over Europe 1939-45*. London and Mechanicsburg.

Price, J. 2005. 'Orphan Heritage: Issues in Managing the Heritage of the Great War in Northern France and Belgium', *Journal of Conflict Archaeology* 1, 181-196.

Pringle, J.K. Doyle, P. Babits, L.E. 2007. 'Multidisciplinary Investigations at Stalag Luft III Allied Prisoner-of-war Camp: The Site of the 1944 "Great Escape," Zagan, Western Poland', *Geoarchaeology: An International Journal* 22(7), 729-746.

Profatilov, I. 1945. 'Evidence on the killing of Jews in Kharkov: On the Mass Shooting of Jews by the German Murderers in the Drobitzki Valley' in Arad, Y.Gutman, I. and Margaliot, A. (eds). 1999. Documents on the Holocaust: Selected sources on the destruction of the Jews of Germany, Austria, Poland, and the Soviet Union. 8th Edn. Lincoln, London and Jerusalem, 421-425.

Pullan, W. 2007. 'Contested mobilities and the spatial topography of Jerusalem' in Purbrick, L. Aulich, J. and Dawson, G. (eds.) *Contested Spaces: Sites, Representations and Histories of Conflict*. Basingstoke. 172-79.

Purbrick, L. Aulich, J. and Dawson, G. (eds.) 2007. *Contested Spaces: Sites, Representations and Histories of Conflict*. Basingstoke.

Pyburn, K. 2009. 'Practising Archaeology - As if It Really Matters', *Public Archaeology* 8(2-3), 161-175.

Pye, K. and Croft, D. (eds). 2004. Forensic Geoscience. London.

Raalte, E. Van IJzendoorn, M.H. and Bakermans-Kranenburg, M. J. 2007. 'Quality of Care After Early Childhood Trauma and Well-Being in Later Life: Child Holocaust Survivors Reaching Old Age', *American Journal of Orthopsychiatry* 77(4), 514-522.

Radecka, K. [DVD] (2011). *Treblinka: Materiały dotyczące realizacji Mauzoleum Ofiar Obozu Zagłady w Treblince*. Gdańsk.

Rahtz, P.A. 1995. 'The incomparable hallmark of the Divine image', Antiquity 69(1), 196-200.

Rajzman, S. 1979. 'The End of Treblinka' in Donat, A. *The Death Camp Treblinka: A Documentary*. New York, 231-251.

Ramsey, W.G. 1981. The War in the Channel Islands: Then and Now. London.

RCAHMS (Royal Commission on Ancient and Historic Monuments in Scotland). 2010. [WWW] www.rcahms.org (Accessed 30th February 2010).

RCHME (Royal Historic Monuments in England). 1999. Recording Archaeological Field Monuments: A Descriptive Specification. Swindon.

Reilly, J. Cesarani, D. Kushner, T. and Richmond, C. 1997. *Belsen in History and Memory*. London

Reinartz, D. and von Krockow, C.G. 1995. Deathly Still. Germany.

Rettschlag, A. 2009. Sachsenhausen: Fotoimpression aus Sachsenhausen. Germany.

Rzeźniak, M. 2007. Rotunda Zamojska/The Zamosc Rotunda. Przewodnik/The Guide Book. Zamość.

Rollman, N. 2011. 'The most desirable legacy: bunkers and politics in Europe', Lecture delivered at the Atlantic Wall Research Group Workshop, McDonald Institute, Cambridge, 4th August 2011.

Rosenbaum, I.J. 1976. The Holocaust and Halakhah. New York.

Rosensaft, M. Z. 1979. 'The Mass-Graves of Bergen-Belsen: Focus for Confrontation', *Jewish Social Studies* 41(2), 155-186.

Rossmo, D.K. 2000. *Geographic Profiling*. New York.

Rost. N. 1999. 'A Historical Document' in Reder, R. Bełżec. 2nd Edn. Kracow.

Roth, J.K. 2005. Ethics During and After the Holocaust: In the Shadow of Birkenau. London.

Royal Geographical Society. 2005. Field Techniques: GIS, GPS and Remote Sensing. London.

Salt, R. 2004. 'Through the Eyes of a Child' in Whitworth, W (ed.) *Survival: Holocaust Survivors Tell Their Story*. 2nd Edn. Trowbridge.

Sanders, J. and Watson, C. 2005. The island of Alderney: A visitor's guide. Alderney.

Sauer, E.W. 2004. Archaeology and ancient history: breaking down the boundaries. Abingdon.

Saunders, A. 1998. 'The defence of Britain project' in Schofield, J. (ed) 1998. *Monuments of War: The evaluation, recording and management of twentieth-century military sites*. London, 7-9.

Saunders, N. 2001. 'Excavating memories: archaeology and the Great War 1914-2001', *Antiquity* 76, 101-108.

Saunders, P. 2005. The British Channel Islands Under German Occupation 1940-45. Jersey.

Scheuer, L. and Black, S. 2006. 'Osteology' in Thompson, T. And Black, S. (eds.) *Forensic Human Identification*. London, 199-219.

Schmitt, S. 2002. 'Mass graves and the collection of forensic evidence: Genocide, war crimes, and crimes against humanity' in Haglund, W. and Sorg, M. H. (eds.) *Advances in Forensic Taphonomy: Method, Theory and Archaeological Perspectives*. USA.

Schmitt. U. 2001. 'Discussing Slave Labourers in Nazi Germany: Topography of Research or Politics of Memory?', *German History* 19(3), 408-417.

Schofield, J. 2009. 'The Modern Age' in Hunter, J.R. and Ralston, I. *The Archaeology of Britain*. Oxon.

Schofield, J. (ed). 2004. Modern Military Matters: Studying and managing the twentieth century defence heritage in Britain: a discussion document. York.

Schofield, J. (ed.) 1998. Monuments of War: The evaluation, recording and management of twentieth-century military sites. London.

Schofield, J. Gray Johnson, W. and Beck, C.M. (eds.) 2002. *Materiél Culture: The archaeology of twentieth century conflict*. One World Archaeology 44.

Schultz, J. 2007. 'Using ground penetrating radar to locate clandestine graves of homicide victims: forming forensic archaeology partnerships with law enforcement', *Homicide Studies* 11, 15-29.

Schute, I. and Wijnen, J.A.T. 2010. Archeologisch onderzoek in eenchuldig lanschap: Concentratiekamp Amersfoort. RAAP-Rapport 2197. Weesp.

Scott, A. and Hunter, J.R. 2004. 'Environmental influences on resistivity mapping for the detection of clandestine graves' in Pye, K. and Croft, D.J. (eds.). *Forensic Geoscience*. London, 21-32.

Sen, S. 2001. 'Community boundary, secularized religion and imagined past in Bangladesh: Archaeology and historiography of unequal encounter', *World Archaeology* 34(2), 346-362.

Sereny, G. 1995. Into that darkness: from mercy killing to mass murder. London.

Short, G. and Reid, C.A. 2004. Issues in Holocaust education. Aldershot.

Skinner, M. York, H.P. and Connor, M.A. 2002. 'Postburial disturbance of graves in Bosnia-Herzegovina' in Haglund, W. and Sorg, M. H. (eds.) *Advances in Forensic Taphonomy: Method, Theory and Archaeological Perspectives*. USA.

Smith, S.D. 2007. Forgotten Places. Nottingham.

Smith, L. and Akagawa, N. 2008. Intangible heritage. Oxon.

Smith, L. and Waterton, E. 2009. Heritage, Communities and Archaeology. London.

Sofaer Derevenski, J. 2000. Children and Material Culture. London and New York.

Spiess, A. in Lanzmann, C. [DVD] (2005) Shoah. Videofilmexpress.

Stanley, R.M. Col. 1998. To Fool A Glass Eye. Camouflage versus Photoreconnaissance in World War II. Shrewsbury.

State Museum of Majdanek. 2010. [WWW] http://www.majdanek.eu/?lng=1 (Accessed 20th September 2010).

States of Alderney. 2007. [WWW] www.alderney.gov.gg/.../BUILDING-AND-DEVELOPMENT-COMMITTEE-06-fs-12-fs-2007 (Accessed 15th September 2009).

States of Alderney. 2006. 'Alderney Land Use Plan 2006 (Updated November 2010)', [WWW] http://www.alderney.gov.gg/Land-Use-Plan (Accessed 6th January 2010).

Steckoll, S. 1982. The Alderney Death Camp. London, Toronto, Sydney and New York.

Sterenberg, J. 2009. 'Dealing with the remains of conflict: an international response to crimes against humanity, forensic recovery, identification and repatriation in the former Yugoslavia', in Blau, S. and Ubelaker, D. (eds.). *Handbook of Forensic Archaeology and Anthropology*. World Archaeological Congress Research Handbooks. Walnut Creek.

Stone, E. 2008a. 'Archaeological site looting: the destruction of cultural heritage in Southern Iraq' in Emberling, G. and Hanson, K. *Catastrophe! The Looting and Destruction of Iraq's Past*. Chicago, 65-80.

Stone, E. 2008b. 'Patterns of looting in Southern Iraq', *Antiquity* 82, 125–38.

Strezelecki, A. 2000. 'Utilization of the victims' corpses' in Iwaszko, T. Kubica, H. Piper, F. Strzelecka, I. And Strzelecki, A. 2000. *Auschwitz 1940-1945 Central Issues in the History of the Camp: The Prisoners – their life and work*. Volume II. Oświęcim.

Sturdy, C. 2008. The Past is History?: The Investigation of Mass Graves of the Holocaust Using Archaeological and Forensic Archaeological Techniques. Unpublished MPhil(B) Thesis, University of Birmingham.

Sturdy, C. 2007. *The Role of the Forensic Archaeologist in Long-term Searches for Human Remains*. Unpublished BA Thesis, University of Birmingham.

Suchomel, F. 1967, 'Franz Suchomel speaks on Treblinka', [WWW] http://www.holocaustresearchproject.org/trials/suchomelstatement.html (Accessed 23rd September 2008).

Susa, E. 2007. 'Forensic Anthropology in Hungary' in Brickley, M. and Ferlini, R. *Forensic Anthropology: Case studies from Europe*. USA.

Sweibocka, T. (ed.) 1995. Auschwitz: A History in Photographs. 2nd edn. Warsaw.

Ševčenko, L. 2011. 'Sites of Conscience: Heritage of and for Human Rights' in Isar, Y.R. Anheier, H.K. Cultures and Globalization: Heritage, Memory and Identity. London, 114-123.

The Economist. 2010. 'Have your Roma back', [WWW] http://www.economist.com/blogs/easternapproaches/2010/08/frances_expulsion_roma (Accessed 1st September 2010).

The Guardian, 12th January 2009.

The Guardian, 9th June 2011

Teigman, K. 2011. 'Kalman Teigman Interview with Jonathan Charles - 06/04/11'. Interview Transcript. Provided and used with the permission of BBC Radio 4 and Unique Productions.

The News. 2011. 'Yet another victory in anti 'Polish concentration camps' campaign', [WWW] http://www.thenews.pl/1/10/Artykul/23905,Yet-another-victory-in-anti-Polish-concentration-camps-campaign (Accessed 15th September 2011)

The New York Times, 6th October 2007

The Telegraph. 2011. 'Libya live: latest developments after Gaddafi downfall', [WWW] http://www.telegraph.co.uk/news/worldnews/africaandindianocean/libya/8716240/Libya-live.html (Accessed 7th September 2011).

Theune, C. 2011. 'Archaeology and remembrance. Archaeological research at former concentration camps', Lecture delivered at McDonald Institute, Cambridge, 19th May 2011.

Theune, C. 2010. 'Historical archaeology in national socialist concentration camps in Central Europe', *Historische Archäologie* 2, 1-13.

Thomas, R.C. 2003. Prisoner of War Camps (1939-1948). Swindon.

Thomas, D. Kidd, F. Nikolovski, S. and Zipfel, C. 2008. 'The archaeological sites of Afghanistan in Google Earth', *AARGnews* 37, 22–30.

Thompson, T.J.U. 2004. 'Recent advances in the study of burned bone and their implications for forensic anthropology', *Forensic Science International* 146S, 203-205.

Thorne, L. 1972. Out of the Ashes. New York.

Tonkov, N. and Loke, M.H., 2006. 'A resistivity survey of a burial mound in the Valley of the Thracian Kings', *Archaeological Prospection* 13, 129-136.

Trier, Ø. D. Larsen. S. Ø. and Solberg, A. 2009. 'Automatic Detection of Circular Structures in High-resolution Satellite Images of Agricultural Land', *Archaeological Prospection* 16, 1-15. TR Systems. 2007. *TR/CIA RESISTANCE METER: Electrical Imaging Using the TR/CIA Resistance Meter*. Peterborough.

Tsokos, M. Lessig, R. Grundmann, C. Benthaus, S. and Peschel, O. 2006. 'Experiences in tsunami victim identification'. *International Journal of Legal Medicine*,120, 185–7.

Tully, G. 2007. 'Ten Years On: The Community Archaeology Project Quseir, Egypt', *Treballs d'Arqueologia* 15, 63-78.

Tygonik Siedlecki, 29th August 2011

Tzalmona, R. 2011. 'Traces of Collective Amnesia: Confronting Hitler's Atlantic Wall', Lecture delivered at the Atlantic Wall Research Group Workshop, McDonald Institute, Cambridge, 4th August 2011.

Under Sobibor. 2008. [WWW] www.undersobibor.org (Accessed 12th July 2008).

United Nations General Assembly. *Resolution 3220: Assistance and co-operation in accounting for persons who are missing or dead in armed conflicts*. 6th November 1974.

US Commission (UNITED STATES COMMISSION FOR THE PRESERVATION OF AMERICA'S HERITAGE ABROAD) 2005. Jewish Cemeteries, Synagogues and Mass Grave Sites in the Ukraine. [WWW]

http://www.heritageabroad.gov.uk/reports/doc/survey_ukrain_2005.pdf (Accessed 3rd September 2007).

USGS. 2010. [WWW] www.usgs.gov (Accessed 12th January 2010).

USHMM (UNITED STATES HOLOCAUST MEMORIAL MUSEUM). 2011. 'Dachau' [WWW] http://www.ushmm.org/wlc/en/article.php?ModuleId=10005214 (Accessed 20th March 2011).

USHMM (UNITED STATES HOLOCAUST MEMORIAL MUSEUM). 2009. [WWW] http://www.ushmm.org/maps/ (Accessed 12th January 2010).

Uzan, Dr. in Jersey Heritage Trust. 'Forced Worker's Testimonies from La Hougue Bie Research Project' [WWW]

http://www.jerseyheritagetrust.org/occupation_memorial/pdfs/forcedworkertestimony.pdf (Accessed 27th May 2009).

Uzzell, D.L. 1989. 'The Hot Interpretation of War and Heritage' in Uzzell, D.L. (ed.). *Heritage Interpretation: Volume 1: The Natural and Built Environment*. London.

Van der Laarse, R. 2010. 'The Holocaust experience: WWII's traumascapes and the paradox of authenticity', *Packaging the Past: The Commodification of Heritage*, Paper presented at The Cambridge Heritage Seminar, the McDonald Institute for Archaeological Research, 19th April, 2008

Van Leusen, M. Barratt, G. and Gaffney, V. 1999. 'The Viroconium Cornoviorum Atlas: High Resolution, High Precision Non-Invasive Mapping of a Roman Civitas Capital in Britain', *European Journal of Archaeology* 2. 393-405.

Visit Alderney. 2010. [WWW] www.visitalderney.com (Accessed 4th January 2010).

Volksbund Deutsche Kriegsgraeberfuersorge. 2010. [WWW] http://www.volksbund.de (Accessed 15th January 2010).

Wainright, A. 2009. 'Orford Ness – A landscape in conflict?' in Forbes, N. Page, R. and Pérez, G. (eds.) *Europe's deadly century. Perspectives on 20th century conflict heritage*. Swindon

Wallis, L.A. Moffat, I. Trevorrow, G. and Massey, T. 2008. 'Locating places for repatriated burial: a case study from Ngarrindjeri ruwe, South Australia', *Antiquity 82 (317), 750-760.*

Watters, M. and Hunter, J.R. 2004. 'Geophysics and Burials: Field Experience and Software Development' in Pye, K. and Croft, D.J. (eds.) *Forensic Geoscience*. London.

Weinstein, E. 2002. Quenched Steel. The Story of an Escape From Treblinka. Jerusalem.

Weiss, A. 2003. 'A monumental failure at Belzec', [WWW] http://www.hir.org/amcha/belzec.html (Accessed 21st September 2007).

Wiernik, J. 1946. in Friedman, F. This was Oświęcim!. London.

Wiernik, J. 1944. A Year in Treblinka: an inmate who escaped tells the day-to-day facts of one year of his torturous experience. New York.

Wiesel, E. 1985. 'Congressional Gold Medal Awarded to Elie Wiesel' [WWW] http://www.jewishvirtuallibrary.org/jsource/US-Israel/RR4_19_85.html (Accessed 15th August 2011).

Wiesel, E. 1967. 'Review of J. Bor, The Terezin Requiem', New York Times Book Review.

Wiley. 2002. 'Non Sequiter: Holocaust' [WWW] http://dudelol.com/non-sequitur-holocaust (Accessed 20th January 2010).

Willenberg, S. 1989. Surviving Treblinka. Oxford and New York.

Williams, E.D. and Crews, J.D. 2003. 'From Dust to Dust: Ethical and Practical Issues Involved in the Location, Exhumation, and Identification of Bodies from Mass Graves', *Croatian Medical Journal* 44(3), 251-258.

Williams, H. and Williams, E.J.L. 2007. 'Digging for the Dead: Archaeological Practice as Mortuary Commemoration', *Public Archaeology* 6(1), 47-63.

Wilson, R.J. 2007. 'Archaeology on the Western Front: the Archaeology of Popular Myths', *Public Archaeology* 6(4), 227-241.

Wojskowy Instytut Geograficzny. 1936. Map of Małkinia. Poland.

Wojtczak, S. 1975. 'Karny obóz pracy Treblinka I i ośrodek zagłady Treblinka II', Biuletyn Głównej Komisji Badania Zbrodni Hitlerowskich w Polsce XXVI, 117-185.

Wood, A. and Wood, M.S. 1982. *Islands in Danger: The Fantastic Story of the German Occupation of the Channel Islands 1940-45*. Kent.

Wright, R. 1995. 'Investigating war crimes – the archaeological evidence', *The Sydney Papers* 557(3), 39-44.

Wright, R. Hanson, I. and Sterenberg, J. 2005. 'The Archaeology of Mass Graves' in Hunter, J.R. and Cox, M. (eds.) Forensic Archaeology: Advances in Theory and Practice. London.

Wróbel, P. 1997. 'Double Memory: Poles and Jews after the Holocaust', *East European Politics and Societies* 11, 560-574.

Yad Vashem. 2010. [WWW] http://www.yadvashem.org (Accessed 6th January 2010).

Yad Vashem 2009. [WWW]

http://www1.yadvashem.org/yv/en/education/learning_environments/sites_map.asp (Accessed 3rd October 2009).

Yad Vashem 1990. 'Treblinka' [WWW]

http://www1.yadvashem.org/odot_pdf/microsoft%20word%20-%205886.pdf (Accessed 27th June 2007).

Yahad In-Unum. 2011. [WWW] http://www.yahadinunum.org (Accessed 5th August 2011).

Yeger, A. 1948. [WWW] http://search.nizkor.org/hweb/people/y/yeger-aleksandrivanovich/yeger-002.html (Accessed 10th Sept 2009).

Young, J.E. (ed.) 1994. The Art of Memory: Holocaust Memorials in History. Munich.

You Tube. 2007. [WWW] http://www.youtube.com/watch?v=-wsxmCTScCE (Accessed 6th January 2008).

Zabecki, F. 1977. 'Treblinka Station Master Franciszek Zabecki' in ARC. 2005. [WWW] http://www.deathcamps.org/treblinka/zabecki.html (Accessed 17th July 2008).

Zertal, D. 2010. Israel's Holocaust and the Politics of Nationhood. Cambridge.

Zubrzycki, G. 2006. The crosses of Auschwitz: nationalism and religion in post-communist *Poland*. Chicago.

REFERENCED ARCHIVE MATERIAL

ALDERNEY MUSEUM ARCHIVE (AMA)

German Occupation Files

00/122/10. German map of Alderney

07/433. Site of Norderney Camp

07/726. Photograph of workers in striped pyjamas. Copyright J.H. Wallbridge

08/233. Newspaper article by Guy Rais, entitled 'Bitterness of Channel Island Memories'

77/102/10. Breakwater workers on their way to work

79/024.4. Graves of some of the identified Soviet nationals buried at Longy

86/107/10. Photograph of the Liberation Concert on Alderney

93/129. The German Commandant's Chalet; on Longy about 1950

97/312.4.18. Russian Graves. St Anne's Church Yard

97/312.4.20. Graves of French Jews

97/312.4.21. Cemetery of foreign workers on Longy Common

ALNYM 1977/102.48. Inspection of the Branch Office. German Officers outside Lloyds Bank, Victoria Street. 1st May 1941. Photograph from Hans Herzog Album

AMA V58RAF7366. Aerial photograph of the former site of Lager Norderney, taken in May 1966

AMA-a. Letter to Bailiff of Guernsey from FK515 regarding conditions in Alderney. 29th November 1940

AMA-b. Letter from member of 1st Working Party sent to Alderney. 9th December 1940

AMA-c. FK515. Report about the condition on the Isle of Alderney since June 1940. 10th February 1942

AMA-d. 95/218/10. Life in Alderney: All Going Well. Unknown Newspaper Report. 16th September 1940

AMA-e. "ORGANISATION TODT". A propaganda painting by the German artist Kettler for the conscripted builders of the Channel Defences

COMMONWEALTH WAR GRAVES COMMISSION (CWGC)

CWGC-a. 7th December 1961. Members of the German Todt Organisation. Alderney Russian Cemetery. PA UKC/10823

CWGC-b. 3rd September 1954. Letter from Len Dowsen to Wally.

CWGC-c. 23rd October 1945. Note A/21613. CAO UK

CWGC-d. 8th December 1961. List of German War Graves. Alderney. St Anne's Churchyard

CWGC-e. 29th March 1963. Letter from Volksbund Deutsche Kriegsgräberfürsorge CM 22/1/7. Subject: German graves in the Channel Islands

CWGC-f. 25th July 1947. Letter to IWGC from HG Evans, Garrison Engineer

CWGC-g. 25th June 1945. Present War Graves Plot – UK report form

CWGC-h. 28th Sept 1953. A/21613. Letter from South West Regional Inspector

CWGC-i. 1952. Minute sheet A21613

CWGC-j. 31st May 1954. Letter from Regional Inspector A/21613.

CWGC-k. 31st March 1955. Letter to Chief Admin Officer from SW Regional Inspector

CWGC-I. 17th January 1958. Graves Registration Report Form. Contained in file Alderney Russian Cemetery UK5135

CWGC-m. 7th June 1957. S/3/1058. Letter to Major General Colwill, Government Secretary, Guernsey from P.W Radice IWGC

GOSUDARSTVENNI ARCHIV ROSSIISKOI FEDERATSII (STATE ARCHIVE OF THE RUSSIAN FEDERATION), MOSCOW

GARF 7021-115-11

IMPERIAL WAR MUSEUM (IWM)

MISC 2826 189/1-2

- -a. Interview with Daphne Pope. Tape 4529. IWM MISC 2826 189/1-2 DATE
- -b. Interview with Reg Blanford Tape 4420 (IWM MISC 2826 189/1-2)
- -c. Interview with Gordon Prigent Tape 4390 and 1 (IWM MISC 2826 189/1-2)
- -d. Interview with Bunny Pantcheff Tape 4402 (IWM MISC 2826 189/1-2)

ISLAND ARCHIVES SERVICE, GUERNSEY (IAS)

AQ875/03. Photocopy of papers from the State Archives of the Russian Federation, Moscow. Concerning atrocities in Alderney during the Occupation

- -a. Letter addressed to the Ambassador of the USSR in GB, Comrade F.T. Gusev
- -b. Appendix 1 Protocol. Stamp: The Department For Repatriation of the USSR. 10 June 1945. Written by Major Gruzdev in cooperation with Captain Wallis from MOD and 4 Russian survivors.
- -c. The department for repatriation of the Soviet people's commissars of the USSR. Moscow, Krapokinskaya Street, 7. Tel G-6-11-00. Ref 05333, 7 September 1945.
- -d. A report on the crimes committed in the "Alderney" camp during the period from 1942-1945. Written by Pantcheff
- e. Dates of death of Foreign Workers on the island of Alderney in chronological order

BA96-14. Alderney's Airport. Dec 1945 – Dec 1946

FK31/11. O.T. Death Certificates. A selection of several hundred certificates mostly from Oct-Dec 1942

JERSEY ARCHIVE (JAS)

L/C/14/A/5/5. Outline of 'Plan Prophet' for the take over of Guernsey and 'Plan Moslem' for the take over of Jersey by the British Forces from the German Forces. Notes regarding the 'Disposal of German documents' 03/05/1945 - 03/05/1945

L/C/14/C/5. War diary of HQ under Brigadier Snow and daily report forms to Southern Command from Force 135 05/05/1945 - 31/05/1945

L/C/14/C/19. War diary of the Alderney Force under Lt. Colonel E Jones 03/06/1945 - 30/06/1945

L/D/25/A/4. An account of Colonel B E Arnold's memory of the island of Alderney named 'The Alderney Story'. Includes details of the liberation of the islands, the German troops being placed in camps, appendix called 'Notes on the German Occupation' by Theodore Pantcheff, an account of the British plan to capture Alderney in 1942 called Operation Blazing, copies and translations of newsletters called 'Der Tag' [The Day] produced by the German prisoners of war at the conclusion of the conflict and a landing table index

L/D/25/D1/5/1. Report by Graf von Schmettow on the Channel Islands 1940-45: 61. Albums from auction.

L/D/25/G/1A. Map of Alderney Third Edition, scale 1:10,560 or six inches to one mile, drawn and reproduced by the Home Forces [laminated]

L/F/64/A/11. Burial list from the Russian Cemetery in Alderney

L/F/64/A/9. Letters from C G Cruickshank to F Font relating to the official history of the occupation of the Channel Islands and F Font's experiences as a slave worker

NATIONAL AERIAL RECONNAISSANCE ARCHIVE, UNITED STATES (NARA)

#04403. An aerial photograph of the Treblinka area. After Nov 30, 1943.

#04163. An aerial photo of the area around the Treblinka concentration camp.

NATIONAL ARCHIVES, KEW (FORMERLY THE PUBLIC RECORD OFFICE) (PRO)

DO35/6145. Agreement between United Kingdom on German war graves in UK territory. 1956-1957

FO371/100916 - Graves of foreign workers in the Channel Islands; Russian graves on the Island of Alderney. 1952

FO371/106597. Agreement to defray cost of maintaining graves of Soviet citizens on the island of Alderney, Channel Islands. 1953

FO371/111797. Maintenance of Soviet war graves on Alderney. 1954

HO144/22237. CHANNEL ISLANDS: German occupation: conditions generally. 1941-1945

HO282/21. Exhumation from graves throughout the UK and re-interment in the German Military Cemetery, Cannock Chase, Staffs, of the remains of German servicemen killed in the First and Second World Wars. 1959-1963

HO284/84. Application of Agreement regarding German War Graves in UK (Cmnd 930), to Channel Islands, Isle of Man and Ireland. 1956-1966

WO106/5248B. SHAEF intelligence directives, minutes of meetings, civil and military plans and reports. September-October 1944

WO208/3629. Prisoner of War Interrogation Section (Home) Kempton Park: Interrogation Reports K.P. 643-718

WO235/718. Defendant: Kurt Klebeck DJAG No. 630

WO311/11. German Occupation of the Channel Islands: deaths and ill treatment of slave labour and transportation of civilians to Germany. May 1945 - June 1948

- -a. 21st May 1945. Letter from Major Haddock to Shapcott
- -b. 23rd May 1945. Report from SJT Francis Bennett to 10-I(B) HQ Force 135. Alderney
- -c. 26th May 1945. Letter from Shapcott JAG to Major Haddock
- -d. 28th May 1945. Letter from Major Haddock to Shapcott
- -e. 15th June 1945. Letter from Major Haddock to Shapcott
- -f. 16th July 1945. Letter to P Dean
- -g. 14 June 1945. Letter from JAG to Legal Staff Office Force 135
- -h. 2nd July 1945. Letter from Treasury Solicitor to Shapcott
- -i. 6th July 1945. 'Alderney Atrocities' from JAG
- -j. 11th July 1945. Letter from P Dean to Shapcott
- -k. 2nd June 1945. Letter from Shapcott J.A.G. to Treasury's Solicitor
- -l. Statement of Charles Synderick RISBRIDER, Portville, St Helier
- -m. Statement of John Sidney PINEL. May 1945

- -n. Statement of William John UPSON. May 1945
- -o. Statement of Helmut LUCKE. 21st May 1945
- **WO311/12**. German Occupation of the Channel Islands: deaths and ill treatment of slave labour and transportation of civilians to Germany. September 1945 June 1948
- -a. 23rd May 1945. 'Statement of Brian HURLEY'. Statements and Reports of Atrocities Committed in Channel Islands
- -b. 10th June 1945. Statement of Emil SULIKOWSKI. From Poland near Rovno. Aged 19 years. Interview with Pantcheff.
- -c. 28th July 1945. 'Statement by Jan SZULC, born 28 March 1921 in HUTA STEPANSKA, powiat ROWNO, civilian occupation Postal clerk', Channel Islands. Alderney. Offences Against Russians
- -d. 10^{th} June 1945. Statement made by SAJENKO Vladimir, 22 years old, from SUMA district on 10 June 1945 at Island HQ Alderney
- -e. 22nd May 1945. 'Statement of Kurt BUSSE No 78'. Statements and Reports of Atrocities Committed in Channel Islands, Interview with CC Kent
- -f. Allwork, J. 23rd May 1945. 'Alderney Concentration Camps 802 P.W. Camp B.L.A. ', Statements and Reports of Atrocities Committed in Channel Islands
- -g. 19th May 1945. 'Statement of Josef WELKERLING. M St A 1886675 Goldbuch', Statements and Reports of Atrocities Committed in Channel Islands. Interview with CC Kent
- -h. 10th August 1945. Statement by POMAR Pascual, born 2 October 1917 in Valencia. Originals of Alderney statements. Signed Major Haddock
- -i. $10^{\rm th}$ August 1945. Statement by MAYORGA Francisco, born 21 August 1908 in TOLEDO. Signed Major Haddock
- -j. 'Statement of Franscisco MAYORGA Galdeano', Statements and Reports of Atrocities Committed in Channel Islands
- -k. 4th June 1945. Statement of Sonderfuhrer Wilhelm RICHTER. In presence of Capt C Kent
- -I. Statement of Obergefreiter KRAUS, Camp Nr. 68
- -m. 28th July 1945. Statement by Civ. Cyprian

WO311/13. German occupation of Channel Islands: death and ill treatment of slave labour and transportation of civilians to Germany. May 1945 – June 1948

- -a. Pantcheff, T.X.H. 23rd June 1945. 'Periodical Report on Atrocities Committed in Alderney (1942-1945)', Report No. PWIS(H)/KP/702
- -b. Pantcheff, T.X.H. 5th July 1945. 'Periodical Report on Island Atrocities No. 1', Report No. PWIS(H)/KP/703
- -c. Pantcheff, T.X.H. 18th July 1945. 'Periodical Report on Alderney Atrocities No. 2', Report No. PWIS(H)/KP/704
- -d. Pantcheff, T.X.H. 12th Aug 1945. 'Periodical Report on Alderney Atrocities No. 3', Report No. PWIS(H)/KP/709
- -e. Pantcheff, T.X.H. 11th September 1945. 'Periodical Report on Alderney Atrocities No. 4', Report No. PWIS(H)/KP/709
- -f. 1st August 1945. (Translation) Statement by OT Frontfuhrer Johann HOFFMANN from Hassel/St Ingbert
- -g. 1945. Statement by a) O/Gefr Georg PREUKSCHAT b) Bruno ZIETLOW in Alderney since 20th November 1942
- -h. 5th Sept 1945. Translation of statement by Mil. Vorw. O/Insp. Hans SPANN
- -i. 27^{th} June 1945. Translation of statement by PW LD 685 O'Lt William GIRBACH

WO311/106. Alderney, Channel Islands: ill-treatment of Russian forced labourers. June 1945-May 1947

ROYAL AIR FORCE MUSEUM (RAF)

PC98/173/6057/6. The remains of Lager Sylt, Alderney, May 1945

TARA (NATIONAL AERIAL RECONNAISSANCE ARCHIVE)

Allied Central Intelligence Unit Files

ACIU MF C0704. Sortie 106G/813. 12.6.1944.

ACIU MF C0792. Sortie A/317. 15.2.1942.

ACIU MF C0766. Sortie A/110. 23.12.1941.

ACIU MF C0809. Sortie Z/26. 14.3.1942.

ACIU MF C0813. Sortie Z/45. 23.3.1942.

ACIU MF C0913. Sortie R/238. 2.6.1942.

ACIU MF C0979. Sortie R/407. 20.7.1942.

ACIU MF C1090. R/827. 30.9.1942.

ACIU MF C1183. Sortie C879. 23.1.1943.

ACIU MF C1479. D/969. 12.8.1944.

ACIU MF C1563. Sortie RA/820. 3.10.1943.

ACIU MF C1978. Sortie RB/463. 20.3.1944.

ACIU MF C2208. Sortie US 7 GR 1402. 10.5.1944.

YAD VASHEM (YV)

YV 1448

- a. Treblinka, Poland, Seven photographs of the menagerie belonging to the camp command.
- b. Treblinka, Poland, Old chimney of the sugar factory in Małkinia before being destroyed.
- c. Treblinka, Poland, A dredge on the burial grounds.

YV 1868/10. Valmiera, Latvia, Postwar, Examination of corpses after exhumation.

YV 3960/11. Poland ,Treblinka, Postwar, The site of a mass grave.

YV 3960/12. Treblinka, Poland, Postwar, The site of a mass grave.

YV 3960/19. Treblinka, Poland, 1960, A site where exhumation was performed.

YV 3960/21. Treblinka, Poland, 1960, A site where exhumation took place.

YV 3960/26. Treblinka, Poland, 1960, A general view of the camp.

YV 41EO9. Treblinka, Poland, Bones in the camp, after the liberation.