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Introduction

1.1 Physical Evidence and the Holocaust

The Holocaust resulted in the deaths of millions of Jews, Roma, Sinti, disabled people, Jehovah's Witnesses, black people, political prisoners and other so-called enemies of the Reich (Gilbert 2012). These events irreversibly altered the geographic, political and demographic map of the world. Whilst some of the victims were murdered in the extermination camps, others were subject to 'annihilation through work', ad hoc executions and terrible living conditions. In addition to the societal impact of these killings, Europe's landscape was physically transformed. Previously unassuming villages were to be defined by the presence of over 20,000 extermination, concentration and labour camps (USHMM 2013). Factories and fortifications were built to support to war effort. Transport infrastructures were constructed and altered. Areas were designated as ghettos and internment sites, and the fields of Europe became burial grounds for millions of people. Previously unconnected places became linked through the transportation of materials used to construct the camps and ghettos, personal belongings and people. These people included victims of Nazi crimes and individual Nazi officers, as well as specific groups such as the Nazi killing squads—the Einsatzgruppen. In fact, the Holocaust transformed the thousands of places throughout Europe where atrocities occurred into crime scenes and one of the legacies of the Holocaust is the complex body of physical evidence that it left behind. Historically, considerable importance has been placed on this physical evidence where it has survived above the ground. Sites such as Auschwitz-Birkenau, Majdanek and Bergen-Belsen are universally recognisable because of the fact that their structures survive intact, and their museums and memorials attract millions of visitors a year (Fig. 1.1). Analysis of the form and function of these places has informed historical narratives and an understanding of their architecture has become synonymous with an understanding of Nazi extermination policies (Sofsky 2013; van Pelt 2002; Jaskot 2000). The abundance of personal items that are displayed at these memorial sites—such as shoes, suitcases and clothing—have also come to form an essential part of the iconography of the Holocaust and are viewed as important reminders of the atrocities perpetrated (Myers 2008; Fig. 1.2).

Fig. 1.1 The gates of Auschwitz-Birkenau, which have become an iconic image of the Holocaust. (Copyright: Caroline Sturdy Colls)

Fig. 1.2 Piles of shoes which were found at Auschwitz-Birkenau after the liberation of the camp. (Copyright: Robert Hoetink)

Conversely, however, little attention has been paid to the wealth of other physical evidence that exists pertaining to this period, particularly at sites that do not have the surviving built infrastructure of places like Auschwitz-Birkenau. Instead, it has often been suggested that no

¹ The exact number of people killed during the Holocaust remains unknown. Some scholars have suggested a figure of around 11 million. Of these, it is estimated that approximately six million Jews were killed but the number of Roma, Sinti, disabled people, political prisoners and others killed cannot be estimated with complete certainly.

physical evidence survives at sites where tangible, above-ground features are not visible and that the Nazis were somehow successful in eradicating all traces of their crimes (Sturdy Colls 2012; Fig. 1.3). Some sites have been preserved as memorials and museums, and this may have led to the belief that any evidence that existed has already been located. In other cases, sites are unmarked and have become dilapidated, whilst the locations of others have been forgotten altogether with the passage of time. This is particularly true of graves pertaining to individual massacres. However, atrocity on such a scale cannot be so easily erased. Long after sites from this period were destroyed or became dilapidated, traces of them will remain; some in the form of visible structural remnants and personal belongings, but less acknowledged as buried or concealed evidence. At the majority of sites, far from being destroyed, evidence has likely been modified or masked through natural or anthropogenic landscape change, deliberate attempts to hide it by those who perpetrated the crimes or through tampering or neglect by those who wished to forget what happened. The remnants of sites may survive only as subtle traces of evidence—as banks, ditches, vegetation change, depressions and other markers in the landscape—but these have considerable potential to increase our understanding of the nature of Nazi genocide. These micro-level changes have been shown to survive for archaeological sites that are thousands of years old and in longer-term criminal investigations (Hunter et al. 2013). Drawing on the latest developments in archaeology, in particular forensic archaeology, it is now possible to locate, record, analyse and (re-)present the above- and below-ground evidence that lies within Holocaust landscapes. Camps, ghettos, massacre sites, graves and an abundance of other features can be located, characterised and marked. This book will explore how new approaches to forensic and archaeological investigation will help to reveal this evidence. It will demonstrate how the study of Holocaust archaeology can provide new insights into the crimes that took place, enhance historical narratives and contribute to commemoration, conservation and education programmes. This opening chapter will provide an overview of the key themes of the book and will highlight why a unique approach to Holocaust archaeology is required. The value of interdisciplinary methodologies and novel approaches to the examination of physical evidence will be explored, alongside a consideration of how archaeology can uniquely complement and challenge histories of this period. This acts as a platform for the chapters which follow.

Fig. 1.3 Some of the tens of thousands of Holocaust sites where it is often believed the Nazis managed to destroy the traces of their crimes and where the surviving physical evidence has been underestimated: Treblinka extermination camp (top left); an area containing mass graves at Izbica (top right); Brok Jewish Cemetery (bottom left); and the area of the former Kraków Ghetto, all in Poland. (Copyright: Caroline Sturdy Colls)

1.2 A Unique Approach

The term Holocaust archaeology is one with which the reader may be unfamiliar. Conversely, the Holocaust itself likely needs little in the way of an introduction, although a broad historical outline is included in Chap. 2. The crimes persecuted by the Nazis have been thoroughly documented by historians, psychologists, demographers and sociologists, and have come to form part of collective memories of the twentieth century (van der Laarse 2013). For the purposes of this book, the term Holocaust is used throughout, as opposed to Shoah (which is a specific reference to the murder of the Jews), in order to reflect the fact that physical evidence will be examined that pertains to various religious and cultural groups. The Holocaust is also considered to be broad in temporal scope, spanning from the Nazis' rise to power in 1933 until

the collapse of the Third Reich in 1945. In recent years, an abundance of literature has emerged that has considered the role of archaeology in the investigation of conflict (Cornish and Saunders 2013; Carman 2013; Saunders 2012; Scott et al. 2009; Schofield 2009), genocide (González-Ruibal 2011; Giblin 2010; Ferllini 2007) and murder (Hunter et al. 2013; Cox and Hunter 2005). Additionally, a wealth of material exists which outlines the significant advances in archaeological methodologies that have emerged and which demonstrate that archaeologists have become more technologically aware (Ch'ng et al. 2013; Opitz and Cowley 2013; Parcak 2009). The number of archaeological projects undertaken at Holocaust sites has also increased considerably over the past two decades and there is now a reasonable body of literature that highlights the contribution that archaeology has made at specific sites (for an overview, see Sect. 2.3; Sturdy Colls 2012; Gilead et al. 2010). Hence, Holocaust archaeology has become a definable field of research and professional practice. That said, the reader may ask themselves why a book focusing specifically on Holocaust archaeology is required. Firstly, given the increased interest in Holocaust archaeology in recent years, it seems timely to take stock; to evaluate the investigations that have been carried out to date, to address the lessons that can be learnt from them and to consider how sites should be approached in the future (Chap. 2). Although more investigations at Holocaust sites are taking place, there have still been relatively few investigations in comparison to the number of sites that exist. The Holocaust is also underinvestigated by archaeologists compared to other twentieth-century conflicts and genocides, for example the First World War, the Spanish Civil War and the genocide in the former Yugoslavia (Sturdy Colls 2012). Therefore, there is a need to reflect on why this is the case. Undoubtedly, this is because, although the Holocaust may be distant in terms of time, these events exist between history and memory (Chap. 3). Many sites are no longer considered to be of 'forensic significance', in terms of the investigation of war crimes, but the events have not been confined to the annals of history. In fact, in many cases these events continue to have considerable resonance in modern society and remain extremely sensitive. Whilst it is true that archaeologists wishing to examine Holocaust sites can learn a great deal from the existing literature concerning conflict and forensic archaeology, the nature of the Holocaust means that archaeologists working in this area are forced to confront a unique set of circumstances that require a unique approach. It is this unique approach that will be the primary focus on this book. Crucially, there has been little discussion amongst archaeologists operating in this area regarding the ethics of Holocaust archaeology and the vast number of religious, political, social and cultural affiliations that are connected to this period of history (Chaps. 3 and 4). This book will provide the first in-depth analysis of these issues and suggest ways in which they can be accounted for when planning fieldwork methodologies. In the past, the failure to design methodologies with these issues in mind has led to opposition to archaeological investigations, in particular where excavation of human remains has been undertaken or suggested (Weiss 2003; Sect. 3.5). Therefore, to date, the need for a unique approach to Holocaust archaeology has not been given adequate attention; Holocaust archaeology has become something that is simply done, with little consideration of its value and what constitutes an ethical approach to its undertaking. Archaeologists who have not previously worked in this area are often shocked by the fact that they cannot simply employ the standard methodologies that they have used elsewhere and that the suggestion of doing so is met with opposition. Indeed, many are surprised that the Holocaust remains such a sensitive subject. However, when a detailed investigation is made concerning the various groups who were, and who continue to be, affected by the Holocaust, it becomes clear why bringing the physical evidence pertaining to

this period to the fore—or even the suggestion of doing so—may raise concerns and objections. Issues may arise due to politics, religious beliefs, cultural differences, disparate opinions between (or within) communities, or a lack of understanding of archaeological practices (Chap. 3). Since many investigations will focus on sites where people were killed and buried, archaeologists must consider the religious and commemorative significance of the locations that they plan to investigate. Most importantly, it must be borne in mind that the standard invasive archaeological techniques carried out at other sites (e.g. excavation) may be completely at odds with the religious beliefs of the victims and their ancestors (Sect. 3.5). In some cases, failure to consider these issues can also result in the re-emergence of societal divisions or even incite violence (Sect. 3.3.5). Even when the intention of archaeological investigations is to assist in locating victims or to commemorate a site of atrocity, hostility may still arise if the context in which the work is being undertaken is not fully understood. Therefore, it is simply not enough to attempt to apply traditional archaeological techniques at Holocaust sites. As more investigations of the physical evidence are likely to take place in the future— given calls to memorialise sites, pressures to develop land and the desire to conduct research—further consideration of the most appropriate techniques to use to facilitate the investigation of the physical evidence from this traumatic chapter of Europe's history is required. This book will take an in-depth look at the practicalities of carrying out archaeological investigations in this context. It will demonstrate how investigations should balance the scientific and historic requirements of investigations with the various issues surrounding them in order to ensure that they can be undertaken ethically and respectfully. It is the intention of this book to encourage future research at Holocaust sites that seeks to create such a balance. Central to this book is the suggestion that Holocaust archaeology, as a field of investigation, must embrace the variety of novel techniques now available to archaeologists and forensic scientists. An interdisciplinary methodology will be presented in order to demonstrate how archaeology can (uniquely) contribute to the history of this period (Chaps. 5-7). This methodology has been 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 socalled ownership of the past. This methodology has also been designed to allow the abundance of different evidence types present within Holocaust landscapes to be comprehensively located, recorded, analysed and (re-)presented. Indeed, another focus of this book is the wide variety of evidence that exists within Holocaust landscapes, much of which has been overlooked in the past (Sect. 1.1; Chap. 8 These methods also allow the various layers of a site's history to be recorded in order to understand the relationships between the physical evidence of the Holocaust, later events and the development of cultural memory (Chap. 11). Finally, this book will address a number of issues that have not previously been discussed with regards to the impact of archaeological investigations. Once fieldwork has been carried out and new material generated, archaeologists have the difficult task of presenting it to the wider world. Particularly, when data are generated using highly specialised equipment, its significance may be difficult to convey to the general public. A number of questions also arise regarding what exactly are appropriate forms of presentation in light of the ethical issues that surround the investigation of this period; yet these issues have never been addressed directly by archaeologists. Chapter 12 will explore novel forms of presentation and highlight some of the issues that should be taken into account when presenting archaeological material for use in commemorative, educational or heritage strategies. It will also consider the various uses and abuses of this material once it has entered the public realm.

1.3 Defining Holocaust Archaeology

The terms Holocaust archaeology and Holocaust archaeologies, used in the title of this book, require something in the way of further explanation. Holocaust archaeology has two main connotations; it implies the study of the archaeological remains pertaining to the Holocaust and also the use of archaeological techniques to examine this period. At this present time, the former can be problematic, given the Holocaust's position between history and memory. Describing the physical evidence of this period as 'archaeological' may be deemed inappropriate when this evidence includes the remains of victims, many of whom have living relatives. Archaeological remains are usually associated with the distant past, yet for many the Holocaust is deemed recent. With regards to the second definition—the use of archaeological techniques to examine the sites of the Holocaust—this can also be problematic. The discipline of archaeology often conjures up images of searching for lost treasures, excavating ancient sites and looking for the skeletons of our ancestors. Not only are these associations misleading in terms of failing to recognise the breadth of archaeology but they can also sometimes be difficult, particularly in the context of studying recent events. When one suggests investigating sites of the Holocaust, if archaeology is perceived as being about excavation, particularly of human remains, then opposition may be encountered (see Sect. 3.2.1). This is commonplace at, though not exclusive to, sites where Jewish victims were killed by the Nazis and where disturbance of the remains contravenes Halacha Law (Sect. 3.5.2). However, this book takes the approach that the term Holocaust archaeology reflects both the diversity of the evidence relating to this period and the methodologies that can be used to investigate it. Firstly, if we take Deetz's (2010, p. 4) definition of archaeology that states 'archaeology is the study of past peoples based on the things they have left behind and the ways they left their imprint on the world' then assemblages of remains from any period can be termed archaeology. Whatever form it takes, the physical evidence of the Holocaust survives 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 local, national and international histories of this period, and its aftermath. This is the basic principle on which this book is based. It will be demonstrated how archaeological research has the potential to identify places and material remains. It will be shown how physical evidence can reveal the stories of the people who experienced the events to which it relates. Therefore, at the core of the methodology described throughout this book is the human experience; the techniques outlined, be they archaeological, historical, forensic or otherwise, are simply the medium to derive information about the people affected by these events contemporaneously and in the years since. Additionally, the reality is that in recent years 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). Similarly, Wright (2010, p. 96) has argued that buried evidence—be it structural, topographic, human remains or otherwise—should be considered 'archaeological territory' on the simple basis that it is in the ground; thus removing the temporal connotations of the discipline. This is the approach that was taken when devising the methodology outlined in this book. Archaeologists are essentially experts in the analysis of landscapes and the physical evidence that is buried within them. They are uniquely trained to understand sequences of deposition (layers) and how these relate to specific activities, actions and time periods. This will be relevant when examining buried remains and landscapes relating to all periods of history, no matter how recent. The growth of forensic archaeology into a sub-discipline in its own right in recent years serves to demonstrate how it is not the period of time that has elapsed since deposition that

defines the "archaeological" investigation of buried remains, but the approaches and methods which are drawn upon to examine them (Hunter et al. 2013).

1.4 To Dig or Not to Dig ...

Whilst, traditionally, archaeology has been seen as a discipline centred on excavation, this need no longer be the case. This is a fortunate reality in the context of the investigation of Holocaust sites where the sensitivities involved in their investigation may negate or delay invasive activity (Sect. 3.5). The variety of non-invasive recording methods now available to archaeologists has increased considerably in recent years (Corsi et al. 2013; Sturdy Colls 2012; Parcak 2009). This is mainly due to developments in remote sensing technologies, geophysics, geographical information systems (GIS) and digital archaeology, alongside a greater appreciation of systematic search strategies and landscape profiling. The success of these methods for recording and analysing complex archaeological assemblages and landscapes has been well documented with regards to archaeological explorations of the distant past. However, their value in terms of mapping conflict and genocide sites has not yet been fully appreciated. Where excavation is not permitted, desirable or wanted, these tools offer the possibility to record and examine topographies of atrocity in such a way that the disturbance of the ground is avoided (Sturdy Colls 2012; Fig. 1.4). The specific techniques that can be used are discussed in Chaps. 5–7 but a discussion of the value of these methods is provided here by way of introduction. When non-invasive methods are employed at Holocaust sites, the entirety of the landscape can be examined and complex configurations of structures, graves and other features can be more readily understood. The transport infrastructures that connected sites to other locations, the areas adjacent to camp and ghetto boundaries, and the settlements located nearby, can all be evaluated. The transport infrastructures that connected the site to other locations, the fields outside the camp boundaries and the settlements located nearby, all of which form part of the surrounding 'intermediate zone' (Kolen 2013) can all be evaluated (Sects. 8.7 and 8.8). Larger areas can be assessed and both above- and below-ground remnants can be recorded across the entirety of a chosen search area. In many of the investigations undertaken by the author, much of the physical evidence of the Holocaust lay on the surface and had not been looked for previously (Sect. 11.7). This included sections of buildings, earthworks and vegetation change indicative of buried evidence, as well as artefacts and human remains. Therefore, adopting a broader, non-invasive landscape approach ensures that such evidence is not overlooked and facilitates an assessment of both the macro- and micro-scale evidence; thus, largescale events and landscapes can be analysed alongside individual stories. The examination of the physical evidence relating to the Holocaust is inextricably linked to: • The historical narratives of the period • The cultural memory surrounding both the individual site in question and the events in general (at local, national and transnational level) • The political, social, religious and ethical issues that have both shaped the site's current appearance and which will be brought to bear when archaeological investigation is suggested Therefore, Holocaust archaeology as a subject area is not, and should not be, limited to the remit of archaeological practice in the truest sense. Archaeology is at the core of the investigation, in terms of the location and analysis of physical evidence, but it needs to be complemented by historical enquiry, geographical analysis, memory studies, political science, social anthropology, forensic science and criminology in the context of the Holocaust which was, and is, a crime as well as a historical event. As such, the collection of data 'in the field' must be complemented by archival research (including but not limited to witness testimonies, administrative documents, plans and court transcripts),

cartography, spatial interpretation, oral histories, forensic analysis, and research into current and past political and social climates. Archaeology is by its very nature an interdisciplinary field and many archaeologists reading this book are likely to be familiar with the techniques discussed. Most would agree that many techniques used by archaeologists have been 'borrowed' from other subject areas—one particularly relevant example are geophysical techniques which have been adapted for archaeological purposes from the fields of engineering, computing and geology. By utilising a range of different techniques capable of assessing both the above-ground and subterranean evidence present at a site, methodologies 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 2008, p. 3). Additionally, the limitations of one method can be compensated for by another, thus ensuring as much as possible can be derived about surviving remains. Particular attention needs to be paid to method selection when examining burial sites. If excavation is not permitted, there are now a wide variety of non-invasive methods that can be utilised.

Fig. 1.4 Non-invasive approaches to archaeological investigation. (Copyright: Caroline Sturdy Colls)

These techniques provide the opportunity to locate graves so that they can be marked, protected and avoided in the course of future groundwork. This will prevent the disturbance of these sites during any future excavation works that may arise as a result of archaeological projects or in the process of the construction of monuments, memorials and buildings. It may also be possible to eliminate areas and demonstrate that they do not contain human remains, thus allowing development works or archaeological excavations to proceed. As Henrik Ofstad, the Norwegian Ambassador to Bosnia-Herzegovina has argued 'as we have the people and the technology to do it, nothing should prevent us helping to resolve the fate of those missing persons' (ICMP 2005). The development of well-established protocols in relation to the search for and recovery of victims of genocide by forensic and conflict archaeologists have been a major driver behind facilitating such activity (Cox et al. 2007). Many of these same techniques can now be applied at Holocaust sites. New methods in forensic archaeology also offer the possibility to go beyond the simple documentation of burials—to explore these crime scenes as evidence of the suffering of the victims and the actions of the perpetrators; to use techniques in offender profiling to locate lost and unmarked sites; to analyse whole landscapes for what they can tell us about systematic murder; to examine graves in terms of how genocide was carried out and attempts made to hide the crimes; to provide both an account of how victims died and to tell the stories of their lives. Much of this can still be achieved even when the remains themselves are not exhumed providing appropriate non-invasive or minimally invasive methods are selected (Sect. 7.5). Because non-invasive approaches can account for many of the sensitivities surrounding Holocaust sites, they may also act as a mediatory tool between archaeologists and those with a connection to them (Chap. 4). The use of these methods may facilitate access to, and the detailed recording of, sites where work has not previously been permitted (Fig. 1.5). An approach that demonstrates that archaeologists have thoroughly considered the religious and commemorative importance of sites will help to build trust between local authorities, communities and researchers. The results of the research may also be used to facilitate discussions between groups who may have had differing opinions in the past and to determine how the site should be approached in the future.

Fig. 1.5 Discussions with local residents and visitors during a non-invasive survey at Staro Sajmište in Belgrade, Serbia. (Copyright: Caroline Sturdy Colls)

It is not suggested in this book that non-invasive methods should always be used in place of excavation. However, by demonstrating the benefits of an interdisciplinary approach and the individual merits of different techniques, 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. Similarly, in terms of devising a methodology for the investigation of Holocaust sites, even when excavation may potentially be permitted, it is also important to consider the value of adopting a non-invasive approach either in advance of or instead of an invasive strategy. In the first instance, at sites where excavation is to take place, these methods offer a valuable precursor and allow appropriate, minimally invasive excavation strategies to be devised based on clearly defined search areas (Chaps. 5-7). For example, in some cases, it will of course be desirable to carry out excavations of mass graves in order to recover human remains. Non-invasive methods, ranging from community liaison (Sect. 4.2.4), walkover survey (Sect. 6.4), remote sensing (Chap. 6) and geophysical survey (Sect. 7.2), may help locate graves. If there is then a desire to identify victims, practitioners can draw on the well-established protocols developed by forensic archaeologists and anthropologists as part of recent war crimes investigations (Hunter et al. 2013, Chap. 8; Steele 2008; Ferllini 2007; Cox et al. 2007) and Disaster Victim Identification in order to do so (Black et al. 2011; Interpol 2009; Sect. 7.5). Secondly, the practicalities of conducting excavations mean that it cannot be undertaken at the same scale as non-invasive surveys. Features are often excavated only in part, usually through a series of test pits. Given the size of these tests pits in relation to the overall size of the chosen site, excavation can result in 'tunnel vision' and shortsightedness concerning the overall landscape and the amount of evidence contained within it. For example, where excavation is the focus of an investigation, it may be possible to examine only a handful of buildings and/or other features within a camp. Where non-invasive surveys are undertaken, it may be possible to carry out area- or even countrywide surveys. This book is not intended to represent a textbook that outlines how Holocaust sites should be investigated. The individual sites and, perhaps most importantly, the issues that will surround the investigation of each, are too diverse to present a standard methodology. What this book intends to do, however, is to outline the issues that need to be considered when conducting such investigations, as well as highlighting the methods that could be used to examine the physical evidence. It is of course up to the individual practitioner to select the methods used based on the practicalities of search, the logistical and financial framework within which they are working, and the type of remains being sought. Therefore, the methods discussed in this book should be viewed as forming part of a toolbox, from which the most appropriate techniques can be selected on a case-by-case basis. This book is also intended to provide a source of debate for those already engaged in such work. It seems like an appropriate time to raise such issues due to the increasing number of investigations at Holocaust sites in recent years.

1.5 Archaeologies of the Holocaust

What constitutes the physical evidence of the Holocaust has often been viewed in very narrow terms and has centred on a distinct set of typologies borne out of the iconography of this period (Hayes 2003). However, an abundance of different evidence types exist that have often been overlooked or undervalued in terms of what they can reveal about the history of this period. In addition to individual features, many 'archaeologies' of the Holocaust can also be identified.

The term archaeologies can here be used interchangeably with the terms layers or assemblages. There may be temporally, spatially or typologically different archaeologies which may reflect what Schiffer (1976) has termed 'cultural transforms' or different groups occupying the same space. Through the identification of individual features it will be possible to classify them according to whether they are structural, infrastructural, mass graves, cremation pits, artefacts (which can be further broken down into their form and function) etc. Individually, these features may provide an insight into the living and working conditions of inmates in the camps and ghettos, and the killing and burial processes employed by the Nazis. When the broader landscape of the site being investigated is considered, collectively these features may aid our understanding of how particular sites functioned in spatial terms. Here lessons can be learnt from scholars in architecture and geography who have, for some time, been interested in examining the architecture of genocide (Knowles et al. 2014; Sofsky 2013; Jaskot 2000; van Pelt 2002). Locating the remains of structures for example can enhance our understanding of the layout of the camps and, subsequently, the way in which inmates moved throughout the space. Sites, and their subsequent analysis, should also 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 sites transcends geographical boundaries and that they form part of a wider Holocaust landscape (Sturdy Colls 2012; Gilbert 1997). Networks of sites can be examined and comparisons made between places in order to derive more detailed information about the nature of the genocidal acts carried out and, thus, the actions of those who experienced them. It is also possible to examine the material remains of the Holocaust in terms of what they can reveal about patterns of behaviour at both individual site level and more broadly. This physical evidence may tell us about specific events and individuals but it can also reveal vital information about the architecture of oppression, deception and killing practices. It can demonstrate how internment and killing practices changed over time through the examination of landscape development; it can highlight how individuals or groups attempted to resist or rebel against their oppressors; it can reveal how perpetrators used the landscape to hide their crimes—both during periods of extermination and afterwards (e.g. when the camps were abandoned). Both within their boundaries and outside, Holocaust sites 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. The various archaeologies of the Holocaust that can be identified are discussed further in Chaps. 8–10. Many layers will be characterised by the fact that they represent a specific instance in time—this may be an extended period of time e.g. the period when a particular camp was operational, or a very short one, e.g. a specific event such as when a camp was burnt down on a particular day. However, the evolving nature of Holocaust landscapes should also be acknowledged. The history of Holocaust sites extends beyond (and indeed before) the period 1933–1945 and all of the pre- and post-war layers associated with this history form an equally important part of the narrative of the site. Layers dating to before a particular camp or ghetto was constructed may reveal information about life before the Holocaust, as well as demonstrating how Holocaust landscapes evolved. In some circumstances, their examination may reveal how the Nazis made used of existing landscape features in order to construct the camps and ghettos or execute the victims (Sects. 9.3 and 10.6.4). With regards to post-Holocaust layers, they may demonstrate how a site evolved and, in turn, this may reflect

attitudes towards them or social, political or cultural shifts (Sect. 1.6 and Chap. 11). Relationships between such changes and the effect on the physical evidence can be derived. In some instances, such changes will have damaged evidence, whilst in others they may have protected it (Sect. 11.2).

1.6 Traces of Memory

As already observed above, the history of the Holocaust did not end with the closing of the camps, the final mass killing or the end of the Nazi regime. The legacy of the Holocaust has been far reaching and has not remained static, having diversified according to political and social changes differentially throughout Europe. Thus, an examination of these changes is crucial in order to understand how the landscape being investigated has evolved and this should form an essential part of archaeological methodologies. The treatment of sites since their abandonment is also inextricably linked to the perceptions of them. In many cases, the modern form of a site is a physical manifestation of how the Holocaust is, and has been, viewed. Therefore, it is possible to read the landscape in terms of what it can reveal about societal changes, political circumstances, perceptions of particular groups, acceptance or rejection of the past, heritage management and tourism. This may be achieved through the examination of the built environment and the examination of memorials or museums (or lack thereof). Other forms of evidence such as graffiti or the presence of artefacts on the surface may also highlight current perceptions of the site. Because many sites will have taken on alternative functions since the Holocaust, this also means they will have taken on new meanings (Fig. 1.6). In addition to assessing the physical evidence pertaining to these alternative uses, it is important to consider how people behave in these spaces. Through the observation of how people use the space, the kinds of activities carried out there and any spontaneous, personal acts of memory making, it may be possible to evaluate the level of knowledge about a site's history. Therefore, an archaeological methodology that incorporates an analysis of all of the 'layers' present is vitally important when addressing Holocaust sites. This is not to detract from the events of the Holocaust but instead to gain an understanding of the context in which the site is based. The traces of memory that can be recorded at Holocaust sites will be discussed further in Chap. 11.

1.7 After Archaeology

Having considered how archaeological surveys can be conducted and what this can reveal about the physical evidence of the Holocaust, it is also important to consider what happens after fieldwork has been completed. Chapter 12 will consider the various ways in which archaeologists can present the results of their investigations to a variety of audiences. A variety of new and emerging technologies in the digital humanities field now offer the possibility for new forms of presentation of the results of archaeological surveys, both in situ and in a virtual environment (Ch'ng et al. 2013; Jones 2013). As with the methods used during in-field survey, it is important to consider the appropriateness of these techniques and ethical approaches to their use in light of the sensitivities that continue to surround the Holocaust. Looking to the future, the impact of archaeological investigations on the 're-presentation' of the Holocaust and on memorialisation also requires consideration. This discussion is a timely one as we enter an age without survivors and as questions are raised about how to educate future generations about these events in their absence. Issues pertaining to the conservation of Holocaust sites also need to be considered, particularly in the context of the debates surrounding commodification,

authenticity and restoration (Podoshen and Hunt 2011; Huyssen 2003; Charlesworth and Addis 2002).

Fig. 1.6 The former camp hospital in Semlin camp, Serbia, which has also been an exhibition hall, a concert venue and a gymnasium in the years before and after the Second World War. (Copyright: Caroline Sturdy Colls)

Whilst there will be some legacies of archaeological investigations over which archaeologists have control, there will be others over which they do not. Although attempts can be made to disseminate the new information derived from archaeological work, whether or not historical narratives are revised as a result will depend on a number of factors. One key factor is the willingness of the international, national and local community to depart from "official histories" or long-held perceptions that they may have. Other reasons include a willingness by the same groups to face these aspects of their past, any future plans for the development of sites and the level of interest in this history to name but a few. By challenging or corroborating longestablished historical narratives, archaeologists may find themselves caught up in political debates or facing hostility (Chaps. 3 and 12). Whether or not sites that were previously unmarked or poorly explained will be commemorated and modified will also depend on the particular circumstances in which the work is being undertaken. Whilst in some places the results of archaeological surveys will face hostility, indifference or lack of acknowledgement, in others they may attract considerable attention in ways that archaeologists did not intend or want. The evidence uncovered can of course be manipulated. It can be configured or engineered so as to facilitate the production of particular narratives and elements of it can be suppressed or cast into oblivion to the same end (Sect. 12.6). The presence or absence of evidence, as outlined in archaeological reports, can be drawn upon in denial debates and archaeologists may find themselves subject to harassment by so-called Holocaust revisionists (Sect. 12.6). These are all issues archaeologists will be forced to address, sometimes for many years after projects have been completed and any number of unforeseen uses and abuses of archaeology may occur. Yet, these are all issues that have not been discussed in any detail in current literature concerning Holocaust archaeology.

1.8 Holocaust Archaeologies: Approaches and Future Directions

In order to provide a comprehensive overview of the themes outlined above and to address at length both the methodological approaches to Holocaust archaeology and the comprehensive body of evidence that can be uncovered, this volume is divided into three parts. Part I provides an overview of the contexts in which Holocaust archaeology may be undertaken. Chapter 2 outlines the historical background of the Holocaust and the development of investigations of genocide, whilst Chap. 3 offers a reading of the cultural, political and religious landscapes in which work may take place. The latter provides a comprehensive overview of the challenges that archaeologists may face in the course of their work. Part II centres on novel methodological approaches to the investigation of the Holocaust. Chapter 4 outlines strategies that should be considered in advance of fieldwork in order to mitigate against the issues outlined in Chap. 3. Chapters 5–7 provide a detailed account of the various cutting-edge methods that archaeologists should consider employing when examining Holocaust landscapes. Part III addresses the various forms of physical evidence that can be encountered, recorded and analysed by archaeologists. Chapters 8–11 discuss the ways in which this evidence has the potential to enhance historical narratives of the Holocaust and knowledge concerning the

cultural memory that surrounds it. Finally, Chap. 12 addresses the various ways this evidence can be (re-)presented and the impact that archaeological investigations are having, and will likely have, in the future. Case studies are provided throughout in order to provide examples of past or current works. The geographical distribution of the case studies, and the need to repeatedly refer to sites, stems from the fact that Holocaust archaeology as a field is still in its infancy. Many of the case studies are also drawn from the author's own work and are repeatedly referred to since they are the only sites to have been examined using the full suite of methods outlined in this volume. It is hoped that this book will demonstrate the various possible approaches to Holocaust archaeology and inspires more work in this field in the future.

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