

<b>Institution:</b> Staffordshire University		
<b>Unit of Assessment:</b> 15 Archaeology		
<b>Title of case study:</b> Global Impacts of Holocaust Archaeology		
<b>Period when the underpinning research was undertaken:</b> 1 August 2013-31 December 2020		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Names:</b> Caroline Sturdy Colls  Kevin Colls Rachel Bolton-King Michael Branthwaite William Mitchell	<b>Roles:</b> Professor of Conflict Archaeology and Genocide Investigation Associate Professor of Archaeology Associate Professor of Forensic Science Senior Lecturer in Fine Art Lecturer in Archaeology	<b>Period employed by HEI:</b> 2010 to present 2013 to present 2012 to present 2008 to present 2015, 2016 to present
<b>Period when the claimed impact occurred:</b> 1 August 2013 to 31 December 2020		
<b>Is this case study continued from a case study submitted in 2014? No</b>		

### 1. Summary of the impact

The Centre of Archaeology (CoA) has undertaken interdisciplinary research using forensic archaeological methods to find, characterise and protect Holocaust sites at more than 50 locations across Europe (2013-present). We have responded to ethical challenges to investigation, using non- and minimally invasive methodologies to identify over 60 mass graves. Our work at these sites has influenced communities, survivors and descendants affected by the Holocaust. It has created new memorials (n=22), commemorative events, and volunteering opportunities (approximately 500 individuals in 6 countries). Reach has been extended through our impact on global professional practice. Our ethical methodologies are endorsed and used by practitioners and specialists in multiple countries. We have raised awareness of the causes and consequences of genocide by developing new Holocaust education materials for students and teachers; new international exhibitions (n=9 in 7 countries), and media documentaries, which have reached over 8,500,000 viewers worldwide.

### 2. Underpinning research

International law defines knowing the fate of missing persons and the right to a marked burial place as a 'basic dignity'. However, little is known about the fate of millions of people who died as a result of the Holocaust and Nazi persecution nor what happened to their remains. Sturdy Colls responded to this unmet need with research that uses forensic archaeological methods to identify, study, and protect Holocaust sites. This research was necessary because past archaeological projects have (a) employed traditional archaeological excavations and ground-coring methods, which fail to account for ethical issues and religious implications, and (b) failed to use non-invasive techniques and approaches now common in forensic archaeology.

Since its formation in Sept 2013, the Centre of Archaeology at Staffordshire University (SU) has developed a non- and minimally invasive methodology to investigate and record Holocaust sites whilst accounting for key ethical concerns. This development involved detailed research concerning Jewish law (Halacha) and the diversity of victims' and survivors' religious beliefs. Our novel interdisciplinary approach combines archival research, aerial and satellite data analysis, airborne and terrestrial LiDAR, photogrammetry, DGPS, Total Station survey, geophysical survey (e.g., GPR, resistivity and magnetometry), and, if appropriate, excavation. It also draws upon tools derived from games technology, VR and artistic practice.

In 2013, the team undertook the 'Finding Treblinka' project at Treblinka extermination and labour camps (Poland). The new methodology successfully mapped the campscape, located mass graves and structural remains and identified the gas chambers [3.1]. The team has since used the methodology to accomplish successful (and often the first) archaeological investigations at over 50 other Holocaust sites. These include Semlin concentration camp (Serbia), Bergen-Belsen concentration camp (Germany), Stara Gradiska (Croatia). They also include previously unrecorded camps and killing sites in Ukraine, Poland and Alderney [3.2].

Sturdy Colls has documented the team's methodology in *Holocaust Archaeologies: Approaches and Future Directions* (2015) [3.3]. This book and subsequent methodological papers (e.g., [3.4]) have influenced a range of academics and practitioners to adapt their approaches. They promote research that foregrounds the importance of materiality for understanding historical

## Impact case study (REF3)

genocide and conflict. Since 2015, the Centre has published more work in the fields of Holocaust and forensic archaeology than any other institution worldwide. Respectively, 30% and 25% of all publications on these topics have direct links to our team (source: SciVal).

Our interdisciplinary approach offers new opportunities to forefront forgotten histories, present evidence to inspire dialogue, and explore why issues relating to genocide and racial hatred are still relevant in the modern world. Examples include research on how art and archaeology methodologies can combine to investigate ambiguous material culture from Treblinka [3.5], and on how community archaeology can raise public awareness of racial hatred and cultural intolerance being precursors to genocide and mass violence [3.6]. The research has won significant recognition. In 2016, Sturdy Colls received the European Archaeological Heritage Prize for her pioneering contribution to twentieth-century conflict investigation. She received a Fred and Maria Devinki Memorial Fellowship at the Jack, Joseph and Morton Mandel Centre for Advanced Holocaust Studies at the United States Holocaust Memorial Museum, Washington, DC (2016-2017). She also won the O2 NextGen Digital Challenge Award for Novel Digital Application (awarded at the House of Lords, October 2016).

### 3. References to the research

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- 3.1** Sturdy Colls, C. and Colls, K. (2020). 'The Heart of Terror: A Forensic and Archaeological Assessment of the Old Gas Chambers at Treblinka'. In: Vareka, P. and Symonds, J. *Archaeologies of Totalitarianism, Authoritarianism, and Repression: Dark Modernities*. Basingstoke: Palgrave Macmillan, pp.83-106. <http://eprints.staffs.ac.uk/id/eprint/6032>
- 3.2** Sturdy Colls, C., Bolton-King, R., Colls, K., Harris, T. and Weston, C. (2018). 'Proof of Life: Mark-Making Practices on the Island of Alderney'. *European Journal of Archaeology* 22(2): 232-254. <https://eprints.staffs.ac.uk/4869>
- 3.3** Sturdy Colls, C. (2015) *Holocaust Archaeologies: Approaches and Future Directions*. Springer, New York. <http://eprints.staffs.ac.uk/2675>
- 3.4** Sturdy Colls, C. (2016) 'Earth conceal not my blood': forensic and archaeological approaches to locating the remains of Holocaust victims' In: Dreyfus, J-M. and Anstett, E. *Human Remains in Society: Curation and Exhibition in the Aftermath of Genocide and Mass-Violence*. Manchester: Manchester University Press. <http://eprints.staffs.ac.uk/2578>
- 3.5** Sturdy Colls, C., and Branthwaite, M. (2016) "This is proof"? Forensic evidence and ambiguous material culture at Treblinka extermination camp'. *International Journal of Historical Archaeology*, 23. DOI 10.1007/s10761-017-0432-3. <http://eprints.staffs.ac.uk/2792>
- 3.6** Sturdy Colls, C. (2017). 'The Archaeology of Cultural Genocide: A Forensic Turn in Holocaust Studies?' In Dziuban, Z. (ed.), *Mapping the 'Forensic Turn': The Engagements with Materialities of Mass Death in Holocaust Studies and Beyond*, New Academic Press, Vienna. <https://eprints.staffs.ac.uk/2791>

The above research was published in 2 Q1 journals, 1 sole-authored book by Sturdy Colls and 3 chapters in internationally edited books, all of which were peer reviewed.

Total Funding GBP1,356,724 over several grants including University of Amsterdam, 2016, EUR1,200,000 'Accessing Campscapes', EU HERA, Uses of the Past Programme, Sturdy Colls; 2017-2019, EUR183 454 'Digital Forensic Archaeology', Horizon 2020 Marie Skłodowska-Curie Fellowship, and Sturdy Colls; 2016, EUR67,089, Recording Cultural Genocide and Killing Sites in Jewish Cemeteries, International Holocaust Remembrance Alliance.

### 4. Details of the impact

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The significance of our research impact is evidenced through the profound discoveries and outcomes of our fieldwork at Holocaust landscapes across Europe. These outcomes have had powerful implications for descendants of Holocaust victims, religious organisations and volunteers. Their impact has a global reach. Our new methodological approaches are adopted and endorsed by a wide range of practitioners and specialists. Our findings are part of formal and informal Holocaust education provision and media in the UK and internationally. Our commitment to social action projects has brought partners, NGOs, community leaders and volunteers together to locate and restore sites.

## 1) Impact of work at Holocaust landscapes across Europe

### New memorials and commemoration

Since August 2013, the team has examined more than 50 Holocaust landscapes across Europe. This has led to the protection of the sites, the construction of 22 memorials across Ukraine and Poland, and new commemorative events. Our 'Finding Treblinka' project located 18 unmarked mass graves at the Treblinka camps. 6 graves were subsequently marked and commemorated [5.1]. Our contribution to the 'Protecting Memory Project' helped to identify 16 mass graves in Ukraine, which led to new public information panels and 10 memorials [5.2, pp.16, 28]. In Poland, our 'Adampol Archaeology Project' focused on a labour camp site previously 'so forgotten that the inhabitants of Adampol did not know about its existence' [5.3]. The Project identified an additional area of mass graves. It led to a redesigned memorial that accurately reflects the location of Holocaust-era burials. The local secondary school also became custodians of the sites [5.3]. Our 'Recording Cultural Genocide Project' identified 2 mass graves in Piaski Jewish Cemetery and contributed to the listing and marking of Wawolnica Jewish Cemetery by the Institute of National Heritage (all Poland) [5.4, p.13]. In Rohatyn (Ukraine), our work has deep significance for Holocaust victims and their descendants: *'The facts established through the Centre's research, surveys, and reporting have also brought confirmation, precision, and some consolation to the Jewish descendants of victims of the killing in Rohatyn, who now have well-defined grave locations and boundaries on which to focus their commemoration'* [Rohatyn Jewish Heritage Foundation, 5.5].

We have also provided opportunities for descendants to commemorate their deceased loved ones when participating in our fieldwork. This has happened in Ukraine, Poland and the UK [5.6]. For example, during the Lake District Holocaust Project, volunteer DK stated, *'taking part in this dig project has above all else granted me a totally unexpected opportunity to connect with and pinpoint physically those places, often spoken of by my late mother Minia Jay, where she had stayed during a crucial moment of her life'*. Minia was an orphan Holocaust survivor who arrived in the UK in August 1945 [5.6 p.7].

### Creating partnerships and developing volunteering

Our projects have created engagement between regional and global organisations and communities affected by the Holocaust [3.5]. We have provided volunteering opportunities for approximately 500 people from 6 countries. They gained new skills, acquired new perspectives on the Holocaust and were able to commemorate the victims [5.4, 5.5, 5.6]. Between 2016 and 2019, 'Recording Cultural Genocide' brought 20 official organisations and NGOs together to engage local communities during archaeological projects.

Between 2017 and 2018, over 400 people (volunteers) worked with the project team to identify cultural genocide in Jewish cemeteries in Poland and Ukraine. 70,443 people from 103 countries have engaged with the project on social media and a digital platform [5.6, p.6]. The team built long-lasting relationships with political and educational decision-makers in the Polish, Ukrainian and British governments. They also built relationships with mayors, civil servants, police, educational multipliers, and religious and community leaders. These relationships help to develop strategies to protect sites [5.4 pp.4, 6] and develop further opportunities for sustainable education and social cohesion. Three participants in The Lake District Holocaust Project stated that their volunteering experience inspired them to pursue further archaeological studies. Others noted the profound impact their involvement had on their awareness of the Holocaust [5.6]. MP Tim Farron stated the work's social importance, and a Member of Youth Parliament joined in with the excavation [5.6 p.14].

## 2) Impacts on global professional practice

Many practitioners and specialists have endorsed and adopted our methodological approach to investigating Holocaust landscapes and sites [3.4]. The Chief Rabbi of Poland described it as *'the perfect balance between scientific study and religious beliefs and ethics. The non-intrusive methodology that her projects have pioneered have set new standards for investigating sites of this period. This methodology reaches the highest standards of professionalism and ethics while also respecting Jewish religious tradition. This is the way of the future'*. He has *'actively promoted the use of this methodology amongst fellow Rabbis and colleagues working for NGOs in the UK, USA, Poland, and Ukraine'* [5.7]. As a result, our research was *'fundamental to the development of the [Zapomniane] Foundation'* (The Rabbinical Commission for Jewish

Cemeteries in Poland) [5.3]. Following a series of training sessions delivered by Sturdy Colls plus her operational guidance and technical support, the Foundation observed: *'The non-invasive methodology we employ directly mirrors that developed by Prof Sturdy Colls and has drawn influence from her work at Treblinka and at other sites across Europe.'* With a mandate to oversee Halachic integrity of all Jewish Cemeteries in Poland (over 1,000), since its formation in 2014 the Foundation has investigated 101 Holocaust grave sites [5.3]. As stated by the United States Holocaust Memorial Museum (USHMM), our methodology [3.3] *'has provided the foundation for a desperately needed practical and ethical protocol for the archaeological investigation of Holocaust sites... and is a resource not only for academics but also members of the local and transnational communities, cultural-heritage professionals, and families of survivors and victims'* [5.8]. The work has influenced the practices and identity of the Matzevah Foundation (TMF), a non-profit charity in Georgia, USA, that restores Jewish cemeteries in Poland. A three-year collaboration with SU (2016-2018) led to TMF using archaeological methods for the first time. TMF describe how our methods let them appreciate material evidence in cemeteries. They have since adopted a new strategic focus on advocacy from having *'learned that we are moral and ethical agents who speak to the Shoah's injustice by being a voice for those who have no voice today'* [5.9].

### 3) Impacts on Holocaust education: schools, media outputs and exhibitions

We achieved an international reach by targeting educational organisations worldwide.

'Recording Cultural Genocide' engaged 6 higher, secondary, and public sector educational bodies in the UK, the US, Poland, Germany, Ukraine, and Israel [5.4, p.7]. Activities included securing volunteer participants, distributing information through participants' networks, creating project-related events and developing sustainable teaching materials from our research. In addition, CoA staff have given public lectures on Holocaust archaeology in 18 countries [5.6, p.3]. A USHMM representative said: *'Dr. Caroline Sturdy Colls is currently the foremost Holocaust archaeologist and spokesperson in the world. I could not stress the importance of her work to non-academic institutions and the general population more'* [5.8].

i) Findings from our investigations have influenced teacher training. They are used as the basis for new educational resources. They expose students to archaeological approaches in the classroom and on an annual Holocaust Study Tour programme attended by 83 people (students from high schools in New Jersey and California since 2014). A high school teacher from New Jersey, USA describes our research as *'a huge game changer in the way I look at the sites that I visit with my students'* [5.6, p.5]. Since 2014, our work has been embedded into the resource portfolio of University College London's (UCL) Centre of Holocaust Education (CoHE): *'Prof Sturdy Colls' work has had significant impact upon us and our approach. Her research provides raw materials to be used in the classroom. Our 'Space called Treblinka' session would not exist without her research. It is front and centre of that resource'* [5.10, p.2, Associate Professor, UCL]. This session is used in the Centre's Beacon School Programme. There are 160 Beacon Schools across England (as of 2020). They partner with a network of 1,600 local schools to improve Holocaust education. The Treblinka materials are therefore accessible to 18,000 people each year [5.10]. Since 2015, a workshop and resource pack on a 'Space Called Treblinka' have been integrated into a CoHE CPD course that has been attended by 400 people (teachers). One Beacon School teacher stated that the course and our research *'drew out the key events with such expertise – brilliant learning for me as teacher, and profound challenge and learning opportunity for my students – feels cutting edge'* [5.10, pp.5]. Since 2015, teachers from 75 schools (15 schools each year) visit our exhibition in the Treblinka Museum. This visit has become the keystone of the Beacon School residential teacher training trip to Poland [5.10, p.2]. Sturdy Colls participated in the trip in 2014 and 2018. A UCL Lecturer then stated *'it was really effective to have Caroline's input at the site itself which was shown in how teachers and staff were really engaged... adding to their own knowledge that they could then take back to their classrooms'* [5.10, Appendix 2].

ii) Our portfolio of Holocaust archaeology projects has led to an increased awareness of the causes and consequences of cultural and physical genocide, racial hatred and intolerance. The Smithsonian funded three television programmes that followed our work (first aired 2014 and 2019). The programmes have now reached over 8,500,000 people as viewers worldwide, including (but not limited to) in the USA, Israel, Poland, The Netherlands, Germany, Canada, South America, France, Australia and the UK (via cable networks) [5.6, p.3]. Since the

transmissions, the team has received emails from 2,123 people (public, peers, survivors, and descendants of victims) as of 2020. The emails offer thanks for the research, comment on the ethically sensitive approach taken, and provide witness information that has led to further investigations [5.6 p.4]. Our work has also inspired two poets and two authors to create new works [5.6, p.6]. After intensive archaeological work on the site from 2013/4 during the making of a TV documentary and the subsequent local, national and international media interest, visitors to the Treblinka Museum (formerly the Museum of Struggle and Martyrdom) increased 390% from 4,876 (2013) to 23,931 (2014). Visitors then increased to 28,521 by 2019 [5.1].

iii) We have presented results from our work and our methodological approach at nine international exhibitions. These exhibitions were in the UK (Wiener Library, and Imperial War Museum), Poland (Treblinka and Warsaw), Norway (Falstad), Czech Republic (Lety), Germany (Berlin and Bergen-Belsen), the Netherlands (Westerbork), and Croatia (Jasenovac) [5.1; 5.6, p.2]. In 2015, we developed a new, permanent indoor installation at the Treblinka Museum and 43 new outdoor information boards [5.1]. *'The airing of the TV documentary, the opening of the 'Finding Treblinka' exhibitions, and her [Sturdy Colls'] scientific publications have directly contributed to an increase in attendance at our museum and memorial site'* [Museum Director; 5.1]. After a commemoration and launch event was attended by 550 people, subsequent visitors to the museum increased to 27,431 people in 2015. Total visitor numbers to the site also increased during this period (not all visitors enter the museum). Site visitor numbers increased from 42,817 people in 2014 to 54,863 people in 2015. They increased to 64,865 people by 2017 [5.1]. The 2015 installation project also included a unique collaboration between artists and the archaeological team. One of the key challenges while designing the exhibition was providing a global and diverse audience access, particularly when the objects had to remain at Treblinka. We commissioned five artists to create new works that respond to the archaeological data [3.6]. The artworks were displayed at Treblinka before travelling to the Wiener Library and SU [5.1]. Visitors to the exhibition commented that they had learnt more about *'the detailed planning that went into the construction of this place'*, how *'the Germans tried to cover up their crimes'* and *'the camp layout'* because of the exhibition, and that it had played a significant role in combatting Holocaust denial and *'filling in the gaps of our understanding'* [3.6].

### **Sustaining impact through continuing leadership**

In 2014, the CoA organised and hosted the international conference *'What Britain Knew'*. It was held at SU in partnership with the International Holocaust Remembrance Alliance (IHRA). The conference was attended by approximately 150 people (international delegates, the majority of which were non-academics e.g., ambassadors, ministers and representatives from governments and non-government organisations) from 28 countries. It led to an invitation to complete non-invasive archaeological surveys at Bergen-Belsen on behalf of the United Kingdom Holocaust Memorial Foundation (UKHMF). It also led to Sturdy Colls's appointment in 2015 to the UK Holocaust Memorial Foundation Education Advisory Group. This Group was tasked with developing plans for the new GBP60,000,000 UK Holocaust Memorial and Learning Centre at Westminster, London. As an appointee, Sturdy Colls has attended meetings at 10 Downing Street. She has also been appointed Archaeological Advisor to the UKHMF (overseen by the Ministry of Housing, Communities and Local Government) for the project's development phase.

### **5. Sources to corroborate the impact**

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5.1 Letter: Director of the Treblinka Museum

5.2 Protecting Memory Project Report; available at <https://www.erinnerungbewahren.de>

5.3 Letter: The Chair of the Zapomniane Foundation, on impacts to professional practice and Polish communities

5.4 'Recording Cultural Genocide' Project Report

5.5 Testimonial: Rohatyn Jewish Heritage, showing impact on descendants and commemoration

5.6 Public Engagement Evaluation Report. Exhibitions; social media data; TV data (from consultants I-Digital); viewer correspondence; volunteer and partner statements.

5.7 Letter: Chief Rabbi of Poland, confirming research impact on the global Jewish community

5.8 Testimonial: United States Holocaust Memorial Museum

5.9 Testimonial: Matzevah Foundation, impact on professional practice and community outreach

5.10 Document and testimonial: UCL's Centre for Holocaust Education.