

PUBLISHER

The Swedish Archaeological Society & Nordic Academic Press

EDITORS

Ing-Marie Back Danielsson & Elisabeth Niklasson

REVIEWS EDITOR

Anna Sörman

EDITORIAL BOARD

Benjamin Alberti

Elisabeth Arwill-Nordbladh

Anders Carlsson

Kerstin Cassel

Catherine Frieman

Roberta Gilchrist

Yannis Hamilakis

Andrew M. Jones

Carl Knappett

Gavin Lucas

Lynn Meskell

Nick Shepherd

Lena Sjögren

Brit Solli

Fredrik Svanberg

Julian Thomas

Anna Wessman

SUBSCRIPTION

Current Swedish Archaeology is published in one annual volume. Price per volume excl. postage: SEK 200 for individuals, SEK 400 for institutions. Subscription orders should be sent to:

Current Swedish Archaeology

c/o eddy.se ab

Box 1310

621 24 Visby

Sweden

<https://csa.bokorder.se/en-us/shop>

Tel: +46 (0)498 25 39 00

order@bokorder.se

<https://publicera.kb.se/csa/index>

This book is published under a Creative Commons 4.0 International licence (CC BY 4.0). This licence allows you to share, copy, distribute and transmit the work; to adapt the work and to make commercial use of the work providing attribution is made to the authors (but not in any way that suggests that they endorse you or your use of the work).

Further details about Creative Commons licences are available at

<http://creativecommons.org/licenses/>

© The Swedish Archaeological Society & the Authors 2025

Revision of English language: Kristin Bornholdt-Collins (article by Kristiansen et al) and Hannah Sackett (articles by de Vos and Pantmann & Bangsgaard)

Graphic design: Lönegård & Co and Anders Gutehall, Visuell Arkeologi

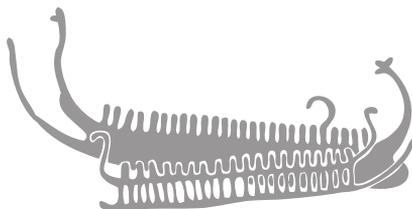
Image processing and typesetting: Anders Gutehall, Visuell Arkeologi

Boat illustration on cover: Inger Kåberg

Printed by Multiply Solutions AB, Malmö 2025

ISSN 1102-7355 (print)

ISSN 2002-3901 (online)



The Swedish
Archaeological
Society

Vol. 33 2025

CURRENT SWEDISH ARCHAEOLOGY

Editors:

Ing-Marie Back Danielsson
& Elisabeth Niklasson

The Swedish Archaeological Society

In 1947 the first meeting to establish the Swedish Archaeological Society was held at the Museum of National Antiquities in Stockholm. The Society is the common body for professional archaeologists in Sweden, regardless of specialism. According to the statutes the purpose of the Society is to further Swedish archaeological research and to support this research by granting scholarships. The Society is especially tasked with attending to the vocational interests of archaeologists. This task is to be carried out by taking part in public debate, by influencing public opinion, and by being a body to which proposed measures are submitted for consideration. The Society also arranges discussions and seminars on archaeological topics. The Society's board currently has sixteen members from universities, museums and archaeological institutions in various parts of Sweden. Mikael Eboskog from Bohusläns Museum is the present chair.

In 1993 the Society began issuing its annual journal *Current Swedish Archaeology*. Since then the journal has presented articles mirroring current archaeological research and theoretical trends.

Contents

Elisabeth Niklasson & Ing-Marie Back Danielsson
Editorial 7

ARTICLES

Julie de Vos
Today Emperor, Tomorrow Beggar ... Archaeological Examinations
of the World War II Sølund Camp in Denmark 13

**Kristian Kristiansen, Victor Wåhlstrand, Daniel Brodén, Mats Ahlgren,
Marie Louise Stig Sørensen, Michael Rowlands & Hannes Schroeder**
'Do You Want to Know Who You Are?' The Rise of Genetic Ancestry
Testing and the Search for Genealogies: A Case Study from Sweden 41

Pernille Pantmann & Pernille Bangsgaard
Elks on the Loose: Antique Elk (*Alces alces*) in Funnel Beaker
Culture Deposits from North Zealand, Denmark 67

KEYNOTE

Marte Spangen
Participatory Archaeology for Heritage Preparedness:
Addressing the Wicked Problem of Anti-Democratic Discourse 85

John Schofield
'Something Wicked This Way Comes' 115

Harald Fredheim
Developing Trust Through Participatory Archaeologies?
On the Importance of Playing to Our Strengths 121

| | |
|--|-----|
| Charina Knutson & Mattis Danielsen | |
| Can Indigenous Archaeology Really Teach Us How to Disagree Constructively? | 127 |
| Charlotta Hillerdal | |
| If Not Us – Who? If Not Now – When? | |
| Mobilizing Archaeology to Confront the Wickedness of Our Times | 133 |
| Carl-Gösta Ojala | |
| Connecting Past and Present: The Ethics and Politics of Archaeology in Sápmi | 137 |
| Marte Spangen | |
| Rebaking the Case for Participatory Archaeology as Cognitive Heritage Preparedness | 143 |
| REVIEWS & NOTICES | |
| Nils Anfinset | |
| Review: <i>Christian Horn, Knut Ivar Austvoll, Johan Ling & Magnus Artursson. Nordic Bronze Age Economies</i> | 151 |
| Peter Skoglund | |
| Review: Fredrik Fahlander. <i>Ecologies of Bronze Age Rock Art: Organisation, Design and Articulation of Petroglyphs in Eastern-central Sweden</i> | 156 |
| Christoph Kilger | |
| Review: Sven Kalmring. <i>Towns and Commerce in Viking-Age Scandinavia</i> | 160 |
| Charlotta Hillerdal | |
| Review: Søren M. Sindbæk (ed.). <i>Northern Emporium: Vol. 1 The Making of Viking-Age Ribe & Vol. 2 The Networks of Viking-Age Ribe</i> | 165 |
| Ulla Nordfors & Ronan James O’Sullivan | |
| Review: Daniel Strand, Anna Källén & Charlotte Mulcare (eds). <i>Critical Perspectives on Ancient DNA</i> | 171 |
| Bodil Axelsson | |
| Review: Ulrika Söderström. <i>Kulturarv som resurs i socialt hållbar stadsutveckling: En gestaltad livsmiljö för framtiden</i> | 178 |
| Göran Gruber, Magnus Johansson & Tom Carlsson | |
| Ostlänken – Scientific Coordination | 182 |
| Göran Gruber & Magnus Johansson | |
| Ostlänken – Communication Efforts | 188 |

Editorial

We are excited to share with you a new issue of *Current Swedish Archaeology*. We hope that this year's archaeological research and debates will engage and inspire, generating new insights, fostering reflection and perhaps even prompting action. *Current Swedish Archaeology* has long treated archaeology as a socially embedded practice, and the journal has repeatedly served as a forum for explicit engagement with political, institutional, and cultural debates within and beyond Sweden. Examples include the 2011 keynote that addressed the Swedish political situation in the context of the rise of the radical right, and the 2017 volume's discussions of archaeology's role in museums and in legislative frameworks that shape democratic processes.

This year's keynote, written by Marte Spangen at the Museum of Cultural History, University of Oslo, Norway, continues and develops this long-standing engagement. It concerns the possible roles of archaeology and cultural heritage in contemporary society, and how they may contribute to sustainable and just futures. Entitled *Participatory Archaeology for Heritage Preparedness: Addressing the Wicked Problem of Anti-Democratic Discourse*, Spangen addresses contemporary global challenges posed by authoritarian and anti-democratic movements. She provides an elegant examination of the ways in which archaeology may mediate social and political processes within a multifaceted democratic discourse.

While some archaeologists may be unsympathetic to the idea of the discipline's involvement in contemporary politics and see themselves as neutral researchers (e.g. Knutson 2024), it is important to note that archaeology and archaeologists are always implicated in such processes, in one way or another. Indeed, early archaeologists such as Oscar Montelius (1843–1921) and Hans Hildebrand (1842–1913) were politically engaged, in the sense that they sought to use their societal positions, and, at times, prehistoric material culture as evidence, to influence the political debates of their own time. Both, for example, supported and actively advocated the emancipation of women, including women's suffrage. Later, Hanna Rydh

(1891–1964) made substantial contributions to addressing pressing societal issues related to poverty, equality, and peace, as well as to debates on democracy. She also drew international attention to these concerns, for example through her service as a delegate to the League of Nations, the predecessor of the United Nations, whose central aim was the promotion of world peace (Arwill-Nordbladh 2005). In addition, she observed and commented on the significance of climatic change during archaeological fieldwork conducted abroad. Seemingly, Swedish archaeologists have long been motivated to contribute to the resolution of challenges that, to varying degrees, have threatened democratic and inclusive societies. Today, while some of these threats persist, others have taken new forms, necessitating novel approaches and strategies.

Spangen proposes in her keynote that today's global problems associated with increased anti-democratic and authoritarian forces could fruitfully be addressed through participatory archaeology. She departs from a self-reflexive and purposeful approach, drawing on experiences from Indigenous archaeology and Saami archaeology specifically. In this framework, active knowledge production involves so-called non-professionals working in dialogue with archaeologists, fostering mutual respect and reciprocal learning. Spangen further argues that archaeology must dare to be explicitly political. She introduces *heritage preparedness* as a form of cognitive and social resilience; the capacity to engage critically with contested pasts, identities, and values, rather than merely protecting predefined heritage objects. Framed as a response to 'wicked problems' (complex, open-ended challenges with no clear or final solutions), it is suggested that archaeology cannot "solve" democratic erosion, but can contribute through 'small wins' (modest, concrete interventions that foster dialogue, trust, and tolerance of disagreement). While acknowledging that participatory archaeology in Scandinavia remains limited in scope, she maintains that such practices can establish vital arenas for democratic dissensus and long-term societal resilience.

The messages in the keynote are taken up and productively complicated across the responses, which collectively underscore both the promise and the frictions inherent in participatory and Indigenous archaeology. John Schofield situates contemporary global crises as interlinked 'wicked problems' that demand urgent but non-linear responses, supporting Spangen's claim that participatory heritage practices can strengthen democratic discourse even when problems are ultimately irresolvable. Harald Fredheim expands this discussion through examples drawn, among other places, from New Zealand, examining how heritage practices can foster trust while also raising critical questions about the evolving role of archaeologists in democratic discourse. Wisely, he cautions against uncritical transfers of par-

ticipatory models between different social and political contexts. Together with insights drawn from Tara Johnson-Comerford, Fredheim highlights the demanding nature of participatory archaeology: in fact the emotional and personal labour involved can be so substantial that participants may ultimately choose not to engage. Changes may be challenging and require labour. This might help explain resistance to reform, to the reordering of power relations, and to shifts in sites of knowledge production – challenges that participatory archaeology must confront rather than gloss over.

Several respondents further extend Spangen's argument by situating participatory practice within other urgent contemporary crises. Charlotta Hillerdal foregrounds the urgent threat of climate change. Drawing on long-term collaboration with an Indigenous community in coastal sub-Arctic America, she demonstrates how effective community-based archaeology combines a clear sense of purpose with flexibility, responsiveness, and sustained listening. In this perspective, participation demands humility, patience, and a willingness to remain open to being changed by the collaboration itself. Following, Charina Knutson and Mattis Danielsen emphasise the risks involved when participatory and Indigenous archaeology unfold within unequal institutional frameworks. While such approaches aim to redress colonial power imbalances, they remain limited within development-led archaeology in Sweden and Norway, where most archaeological work occurs. Indigenous archaeology, they caution, is a high-stakes arena for public disagreement, as debate can undermine trust, exclude Saami voices, and expose Indigenous communities to hostility. To mitigate these risks, they call for stronger Saami representation in archaeological practice and education, and for archaeologists to develop cultural competence and conflict-management skills. Carl-Gösta Ojala similarly sees Indigenous archaeology as a critical, decolonizing practice that emphasizes collaboration, power awareness, and engagement with living Saami communities, while also urging continued critical reflection on representation and participation. Importantly, he highlights the responsibility of universities, museums, and archaeologists to act through education, communication, and ethical practice, while also recognizing archaeology's potential to both empower and to do harm in contemporary society.

In her concluding response, Marte Spangen returns to these concerns, stressing that meaningful inclusion must navigate complex political realities, such as land rights and colonial legacies, while avoiding tokenism or the exoticization of minority groups. Ultimately, the exchange reinforces her central claim: that archaeologists inevitably function as social mediators, and by intentionally embracing inclusive practices at the local scale, they can – through small but consequential interventions – help cultivate the tolerance and community-building necessary to sustain modern democracies.

Connecting to the broader theme of anti-democratic forces and violence, the first research article by Julie de Vos, *Today Emperor, Tomorrow Beggar ...*, presents the results of archaeological investigations of the World War II Sølund Camp in Denmark. The camp held German civilians, a category of internees largely absent from public awareness and historical narratives. By foregrounding the material traces of everyday life in the camp, de Vos illuminates the marginalized experiences of these refugees, positioning the camps as tangible manifestations of the institutionalized ‘states of exception’ in modern systems of governance.

Questions of identity and belonging are approached from a different angle in the second research article, *Do You Want to Know Who You Are?* by Kristian Kristiansen et al. Drawing on a nationwide survey of nearly 900 individuals in Sweden, the authors examine why people pursue personal DNA ancestry testing and how test results might shape attitudes towards history. The findings indicate a difference between an interest in individual family genealogies on the one hand and engagement with collective national history or ethnonational identity on the other. It is implied that the connection to contentious discussions regarding ethnonational identity remains subdued in the context of personal DNA testing.

We find *Elks on the Loose* as the third research article. Authors Pernille Pantmann and Pernille Bangsgaard shift the focus of the issue to much earlier periods while engaging with questions of temporality, materiality, and social memory. The authors examine the deposition of antique elements, here elk bones, in Funnel Beaker wetland contexts in North Zealand, Denmark. They demonstrate how direct AMS dating can uncover long-overlooked traditions of temporal reuse, offering fresh insights into how Neolithic societies related to time, physical objects, and the reproduction of meaning across generations.

As always, we also offer insights into exciting new research in the form of reviews and notices. Nils Anfinset makes important observations in his review of *Nordic Bronze Age Economies* by Christian Horn, Knut Ivar Austvoll, Johan Ling and Magnus Artursson. Peter Skoglund, in turn, delves into Fredrik Fahlander’s recent book *Ecologies of Bronze Age Rock Art*. Sven Kalmring’s encompassing book *Towns and Commerce in Viking-Age Scandinavia* is reviewed comprehensively by Christoph Kilger. Keeping to the theme of the Viking Age, Charlotta Hillerdal synthesizes and reflects on the two hefty volumes of *Northern Emporium*, edited by Søren M. Sindbæk. Ulla Nordfors and Ronan James O’Sullivan present thoughtful observations in their review of the book *Critical Perspectives on Ancient DNA*, edited by Daniel Strand, Anna Källén and Charlotte Mulcare. Finally, Bodil Axelsson shares her thoughts on Ulrika Söderström’s recently defended doctoral thesis *Kulturarv som resurs i socialt hållbar stadsutveckling*. Among

the notices, you will find information about *Ostlänken*, a large-scale linear archaeology project involving four counties in Sweden and c. 700 archaeological sites. The first notice, by Göran Gruber, Magnus Johansson and Tom Carlsson, presents the scientific coordination of the project. The second, by Göran Gruber and Thomas Johansson, summarizes the project's communication efforts.

Lastly, a note on the development of *Current Swedish Archaeology*; we will continue to publish research articles online-first but will expand the practice to also include notices and reviews from 2026. You are welcome to submit your manuscripts throughout the year! We offer a speedy peer-review process, complimentary language revision, online-first publication, and Open Access to serve a wide interested international and national audience.

Elisabeth Niklasson & Ing-Marie Back Danielsson
editors of *Current Swedish Archaeology*

References

- Arwill-Nordbladh, E. 2005. Archaeology, Gender and Emancipation: The paradox of Hanna Rydh. In: Díaz-Andreu, M. & Sørensen, M.L.S. (eds), *Excavating women. A history of women in European archaeology*, pp. 155–174. London: Routledge.
- Knutson, C. 2024. *Indigenous Archaeology in Sweden: Aligning Contract Archaeology with National and International Policies on Indigenous Heritage*. PhD Dissertation. Växjö: Linnaeus University Press.

ARTICLES

Today Emperor, Tomorrow Beggar ...

Archaeological Examinations of the World War II Sølund Camp in Denmark

Julie de Vos

Abstract

In 1944, the German Luftwaffe established a regional headquarters in occupied Denmark, located in the forest area of Dyrehaven, Skanderborg. The Wehrmacht cleared the Sølund Psychiatric Institution and constructed bunkers, barracks, trenches, weapons depots and vehicle sites. After Germany's surrender in 1945, these barracks were repurposed as a refugee camp for German civilians – mainly women and children – fleeing the collapsing Reich. While the German occupation has long attracted scholarly attention, the postwar refugees have largely fallen into oblivion. Whether this is because they were defeated, poor, women, children, or considered to be 'victims', their history has only recently begun to resurface. In parallel to historical research, archaeological investigations now aim to recover this hidden narrative of German postwar refugees in Denmark. This article presents the 2022 archaeological excavations at the former Sølund camp, assessing the potential of observing the change of power behind the barbed wire of the camp through an exploration of materiality. Since the physical traces of the soldiers are far more prominent than those of the refugees – and given the lack of 'uncontaminated' contexts or structures used by refugees only – this research argues for a reflexive archaeological approach in order to access the experiences of the displaced inhabitants who lived at Sølund camp.

Keywords: contemporary archaeology, World War II, the German Luftwaffe, concentrations camps, internment, refugee camps, conflict

Independent researcher, Denmark
juliedvos@gmail.com

This is an Open Access article distributed under the terms of the Creative Commons 4.0 International licence (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

April 28, 1946

On the opposite side, the forest is reserved for the German refugees. We could see their wooden barracks, and along the barbed wire fence, the refugees wandered, young and old, with children by the hand. They looked at us indifferently. Some of the men still wore their uniforms, a last remnant of the German Wehrmacht's heyday. They probably hadn't dreamed that they would end up here behind their own barbed wire. I had to laugh inwardly, how strange it is that everything can be turned upside down: Today Emperor, tomorrow Beggar ... (From the diary of the local barber Aage Danielsen (Danielsen n.d.), vol.2, February 1945–September 1946 [author's translation]).

While the wider public is generally well informed about the horrors of the Nazi extermination camps, many other types of concentration camps in Nazi Germany and beyond remain largely unknown (e.g. Banks 2011:113; de Vos 2020; González Ruibal 2020:320–321). This has long been the case for the refugee camps that held German civilians in Denmark. Once seen as temporary solutions to a crisis, they have faded from public memory. Yet, as I argue in this article, they can reveal unsettling truths about the normalization of 'states of exception' in state governance.

In the aftermath of the Second World War's genocide and mass destruction, refugee camps that hosted German civilians on the 'Whipped Cream Frontline' ('die Sahnefront' in German) may have seemed unimportant. 'Die Sahnefront' was a term used by German soldiers not only to denote the relative abundance of dairy products in Denmark, but more generally as a sarcastic reference to the easy life on a frontline without armed conflict and with many comforts, including ample food and drink and access to services and goods (DR 2005 ep. 2; Poulsen 1991). The camps were a pragmatic solution, used to feed and host the great masses of refugees, who could not be sent back to Germany, following orders by the SHAEF (Supreme Headquarters Allied Expeditionary Force) (Harder 2020:138–140). Denmark was part of the British occupation zone, and all negotiations and policy decisions regarding the refugees were made by and through the British military authorities.

The fact that the refugees have escaped general and academic attention (but for exceptions see Gammelgaard 1993, 2005; Harder 2020; Jensen 2020; Lyloff 2006) may be symptomatic of what Giorgio Agamben describes as the permanent state of exception, specifically 'the dominant paradigm of government in contemporary politics' by which the 'camp' becomes normalized as part of the 'biopolitical paradigm of the modern' (1998:117, 2005). Though Agamben treats the camp as a metaphorical space 'that is opened

when the state of exception begins to become the rule' (1998:168–169), as an archaeologist I am equally interested in the physical and social space of the camp. To me, the concept of the camp is more than a metaphor of the 'bare lives' that the state of exception creates; it is a material fact, produced by the biopolitics of modernity. The post WWII refugee camps in Denmark can help to foreground this transition into a permanent state of exception, recycled from totalitarian regimes into liberal democracies, where the camp, as a material manifestation of biopolitical control, remains disturbingly relevant in the context of the unwanted and refugees today.

The complex construction of (camp) space is well explained by Lefebvre (1991): the production of space is based on the triadic relationship between conceptually developed spaces named *the perceived space* (physical and material spatial practice), *the conceived space* (representations of space: conceptualized space linked to the underlying power structures and repressive laws, ordering and control of space), and finally *the lived space* (representational space: shaped by the interns and their encounter with space). Space is therefore not a fixed physical entity, but a cultural production embedded in physical, mental and social relations that are inseparable (see also Bernbeck & Pollock 2018:455). The Sølund refugee camp in Denmark, which forms the focus of this article, was formerly *Sølund Psychiatric Institution* and then a Luftwaffe headquarters, showing how the perceived space can remain intact, while both the conceived and lived space change radically.

In what follows, I present the background and key insights from the archaeological investigations of the former Sølund camp. By examining the material traces left behind and adopting a reflexive approach, the analysis explores the shifting power dynamics enclosed within the barbed wire.

When history failed Nazi Germany

Towards the end of World War II, during the winter of 1944–45, hundreds of thousands of East Prussians had to flee their homes, most of them by foot or horse and cart, due to the Soviet offensive on the Eastern Front (Gammelgaard 1993:9–16). Great parts of the North-Eastern corner of Germany, mainly East Prussia, were sieged by the Soviet troops between February and April of 1945. The railroads were either destroyed or used to move war material and soldiers, meaning that one of the few options for escaping the Soviet army was to cross the Baltic Sea from the ports of the sieged cities. On the 4th of February 1945, the German Führer ordered the civilians from these areas to be transferred to Denmark (Gammelgaard 2005:17; Harder 2020:55), where the civilians could be fed and taken care of by the German Wehrmacht. The passage though the Baltic Sea was dangerous; the ships



Figure 1. German refugees arriving in Denmark before the end of World War II. Photo by: Christoffersen, *Fyens Stiftidende*, Odense. Source: The Museum of Danish Resistance, photo archive reference FHM-215345. No Known Restrictions.

were critically overcrowded and constantly threatened by sea mines and Soviet submarines. The refugees were transported to the Western areas of what was then called the German Reich. Around 250,000 refugees ended up in Denmark during the winter and spring of 1945 (Harder 2020:13).

At this period in time, Denmark was still occupied by Nazi Germany (the German state between the years of 1933 and 1945); an occupation that lasted from April 1940 to May 1945. The German Wehrmacht had to find space for the many German civilians, the majority of whom arrived through the port of Copenhagen. Schools, sport centres and other public buildings all over the country were seized to host the refugees. The process was slow and the state of the civilians, who arrived after journeys of several weeks or even months, was poor. They suffered from malnutrition and – as a consequence of the former – intestinal diseases that massively increased the mortality of infants (Harder 2020:161–163). The agglomeration of people also stimulated the spread of diseases such as typhus, scarlet fever, measles and respiratory diseases. Mortality was generally high among the refugees during the first months of internment, only beginning to decrease in the autumn of 1945 (Harder 2020:161–163).

After the surrender of the German Wehrmacht in Denmark in May 1945, most of the common German soldiers were sent back to Germany, while high ranking commanders were captured. Overcrowding and devastation at the end of the war led to a British ruling that the many civilian refugees

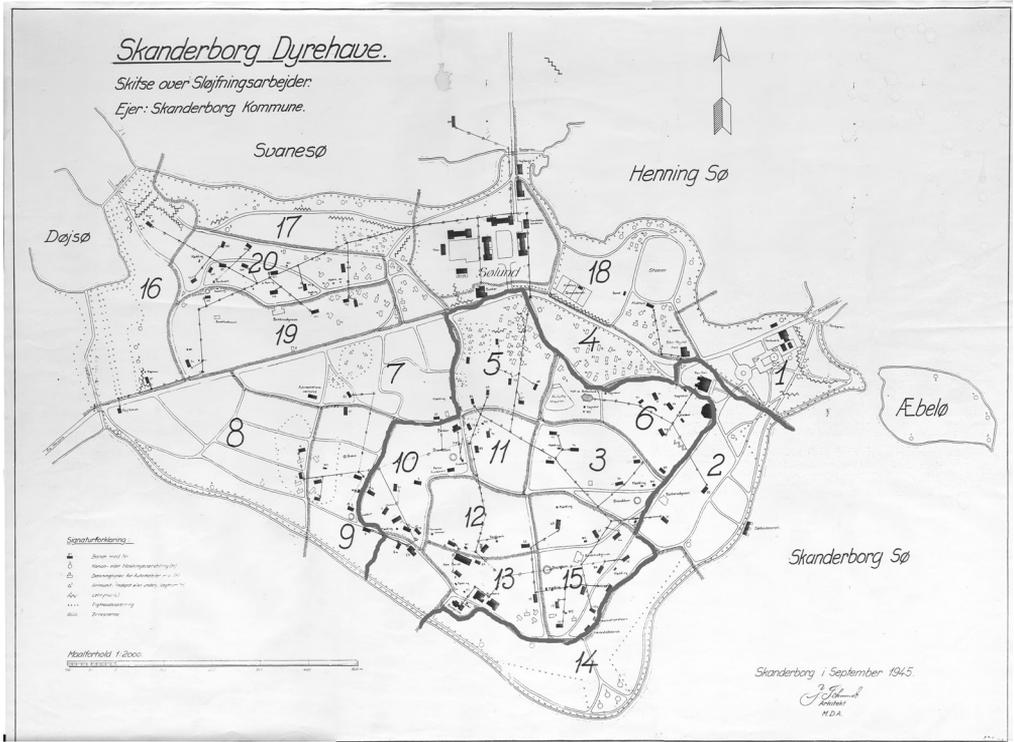


Figure 2. Map by the architect Johan Schmidt of the decommissioning work of the original Luftwaffe camp. The refugee camp was limited to the area within the red line from the autumn of 1945 and to the final dismantlement of the camp during the summer of 1946. Courtesy of the Historical Archive of Skanderborg.

in Denmark could not return to Germany, leaving them stranded indefinitely. What, in May 1945, appeared to be a question of weeks or months of waiting was gradually prolonged (e.g. Harder 2020:138–139), with the last refugees leaving Denmark as late as 1949.

As German military installations all over Denmark were abandoned by the armed forces, they were instead used for the internment of refugees. From 1946, some of these camps grew to a capacity of between 10,000 and 30,000, with the biggest camp, Oksbøl, becoming the 5th biggest ‘town’ in Denmark (Jensen 2020:43). This growth occurred as refugees were transferred from the smaller camps and gathered in the bigger camps, in order to streamline logistics and administration.

For multiple reasons, refugees were not allowed to leave the camps, and no Danish civilians were allowed inside. Key reasons included the prevention of integration of the Germans within Danish society, avoidance of fraternization, and control of both the refugee population and the transfer

of disease. While these orders were put in place by the British, the Danish authorities agreed with these conditions (Harder 2020:130–132). In this context, it is important to keep in mind the enormous hatred and desire for revenge that had flourished against the Germans during their occupation of Denmark. In this sense, keeping the refugees behind barbed wire was also for their own protection, especially during the first months after the German surrender.

While a Danish camp leader was formally in charge, the camps were primarily organized by the refugees themselves. They became societies in miniature, with kindergartens, infirmaries, cinemas, schools, and diverse workshops – similar to structures known from other internment settings, especially in POW (prisoner of war) camps (Banks 2011:123; Carr 2011:142).

Sølund, the Luftwaffe headquarters in Denmark and the refugee camp

The camp where the fieldwork of this research project was conducted (de Vos 2024a, 2024b, 2025a), was the German Luftwaffe headquarters in Denmark, located outside of the town of Skanderborg. This military facility consisted of 87 wooden barracks, four finished bunkers (another three in development), weapon depots, camouflaged vehicle sites, trenches, fire ponds, middens, latrines etc. (Pedersen, L.J. 2017:48–49). The former recreational area and the Sølund Psychiatric Institution (after which the camp was named) were confiscated by the German Wehrmacht in February 1944 (Pedersen, L.J. 2017:41), at which point work commenced on its transformation into Luftwaffe headquarters. In January 1945, the headquarters consisted of 44 officers, 23 officials, and 354 non-commissioned officers and enlisted men (Pedersen, L.J. 2017:88). After the occupation ended, some of the Luftwaffe soldiers were kept at Sølund – not as POWs, but as ‘disarmed Germans’ (Pedersen, L.J. 2017:48) – until the autumn of 1945, in order to teach the British military authorities (in charge since the surrender/liberation) about the secrets of the site and its machinery (Pedersen, L.J. 2017:116–118). Simultaneously, the rest of the camp was transformed into a refugee camp for the civilians. The barracks, and the barbed wire, from the northern side of the road, were moved to the southern side in order to reopen the road for traffic and begin to normalize the situation (Mølgaard & de Vos 2024:38). This small camp lasted for only one year from the summer of 1945, accommodating about 700 refugees (Mølgaard & de Vos 2024:39). In July 1946, the refugees and most of the barracks were moved to the one of the larger camps named for its geographical proximity to the village of Gl. Rye (‘Old Rye’ in English), while the area around



Figure 3. Left: A small barrack, target of excavation. May 2022. Photo by author. Right: Crew barracks in the Luftwaffe headquarters. Winter of 1944–45. Courtesy of the Historical Archive of Skanderborg.

Sølund camp was cleaned up and rehabilitated as the recreational area for the town of Skanderborg (Mølgaard & de Vos 2024:106–111).

The recreational area of Dyrehaven in Skanderborg was chosen as an administrative headquarters for the Luftwaffe, since it was located on an easily defendable peninsula, camouflaged by forest, and surrounded by lakes, should it be attacked (see Figure 2). It was a comfortable distance from the west coast of Denmark, which carried the risk of becoming the frontline of an allied attack, but not as far away as Copenhagen (Pedersen, L.J. 2017:19). Moreover, Skanderborg was close to sites that provided optimal conditions for signal transmission and reception and radar stations, such as Hemstok and Ejer Bavnehøj, and was near to the Gl. Rye airfield (Pedersen, L.J. 2017:26). Gl. Rye airfield was, just like Sølund, an important Luftwaffe site that was turned into one of the biggest refugee camps in the aftermath of the war. Skanderborg was also strategically located close to other key military sites, including the Wehrmacht Headquarters in Silkeborg (Pedersen, L.J. 2017:38).

Unlike the typical layout of internment camps – characterized by long sightlines, spatial efficiency, and tightly packed barracks to facilitate surveillance and control (Banks 2011:123) – Sølund presents a markedly different configuration. Originally constructed for the German Luftwaffe, the camp's barracks were designed to blend into the natural landscape, being dispersed among the slopes and concealed by the trees of the beech forest.

The fact that the Sølund barracks were originally constructed for the German military offered distinct advantages, particularly in terms of quality. Designed for long-term use, the barracks were well-insulated for win-

ter conditions and equipped with at least one stove per unit. This stood in stark contrast to many of the refugee camps hastily built elsewhere in Denmark, where insulation was poor and construction rudimentary (Harder 2020:189, 228), since it had not been determined that the refugees would remain in the camps through the winter.

Comparing the few known testimonies from the refugees, it appears that Sølund was one of the better camps. The Danish camp leader was sympathetic with the refugees, meeting their needs and even small requirements, as Anna Lietzau remembers in her diary (see Mølgaard & de Vos 2024:69). She also describes how the organisation of the camp diminished the feeling of being imprisoned or confined:

On July 16, we too were among the last to move into the beautiful forest, where the scattered small barracks truly made the stay bearable and, to a large extent, erased the sense of being confined. In this way, everyone was able to create a “home” according to their own preferences and means. Clever female hands can, after all, conjure something cozy out of almost nothing, and necessity breeds invention. Thus, in the seclusion of the Sølund forest, a small community emerged—doing its best to overcome the long wait for repatriation (Mølgaard & de Vos 2024:44, 67).

Food was prepared by the refugees themselves in a community kitchen in the camp, while the meals were consumed in the barracks. Portions, or daily amounts of calories, were established by the guidelines of the SHAEF (Supreme Headquarters Allied Expeditionary Force) (Harder 2020:137), with children receiving less calories but, together with pregnant women and refugees at the infirmaries, they were allowed to receive 0.5 l. of whole milk a day.

In the immediate post-war period, and in the light of the known conditions of the German concentration camps, the treatment of the populations in the camps had to be carefully measured: the idea was to appear more generous internationally, but at the same time not to exasperate the Danes who also lived scarcely in the post-war years. The food was repetitive and unexciting, but it was adequate. Margarete Endres, one of the few refugees from Sølund for whom we have a personal written testimony based on her diary, (available in: Mølgaard & de Vos (2024)) wrote about the camp of Sølund, describing how they made use of the forest to supplement their diet, for instance collecting honey fungi that were cooked on the stoves in the evening (Mølgaard & de Vos 2024:78).

In Denmark, the Second World War has always been a topic of interest for both professionals and the broader public. Especially favoured are the heroic tales of an otherwise neutral and occupied country: the important clandestine fight of the resistance movement – viewed as delinquents dur-

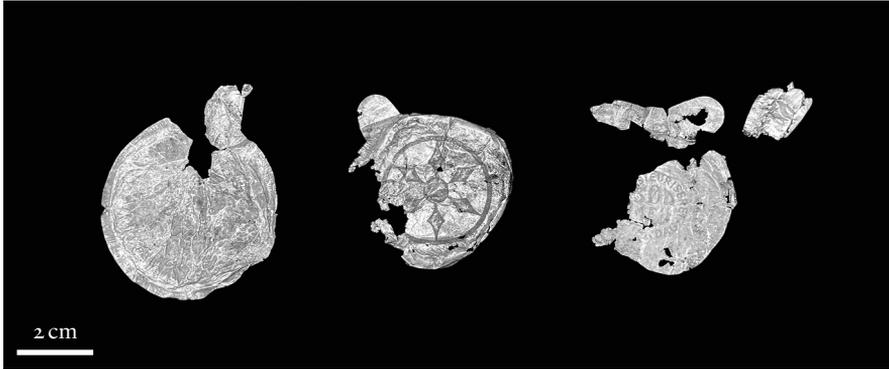


Figure 4. Foil tops from milk bottles. Photo by author.

ing the war but post-war heroes – and their evacuation of the Danish Jews to safety in Sweden in October 1943. Interest in such events appears to be part of the tendency towards ‘remembering the “big men” of politics and warfare’ (McAtackney 2020:99). This is in stark contrast to the stories about the refugees, which have, on the one hand, been largely neglected, and on the other, constitute stories that did not fit very well with Danish self-perception. Perhaps this was the case because of these stories’ ambiguous character, involving both charity and punishment. This kind of selective remembrance has been examined in similar contexts (Burström 2009; Jasinski 2018:647), suggesting a prioritizing of masculine war stories over those of women, children, the defeated, powerless and poor. These same reasons might have had an influence on why these stories apparently did not, until recently, appeal to historians, despite the fact that archives containing a great deal of relevant information have existed and been both available and accessible to researchers.

This article remedies these short-comings by focussing on the change from powerful to powerless – from dominant soldiers to dominated women, children and old men, whose stories and great sufferings have fallen into obscurity. While the stories of German soldiers have traditionally been the focus of attention, the day-by-day stories of the German civilians in the post-war period have not enjoyed the same intense degree of interest.

Archaeological explorations at Sølund

Over the months of March, May and June 2022, and as a part of the two research projects, called *Dis/place* and *Fortrængt* (‘Erased’ in English), archaeologists from Museum Skanderborg excavated in three different localities of Dyrehaven, and made an examination of the Lake of Skander-



Figure 5. Left: The administration barrack seen from the South-Western corner, winter of 1944–45. Courtesy of the Historical Archive of Skanderborg. Right: 2022, before excavation, seen from the North-Eastern corner. Photo by author.

borg, the lake that almost surrounds the peninsula of Dyrehaven. The discussion here will focus on the excavation of the small barrack at Sølund (Figure 3). The excavations at Sølund Camp faced a problem in terms of identifying traces of the refugees' occupation of the space. Being one of the smaller camps, it was reduced rather than expanded; as a result, there are no uncontaminated refugee contexts at the site.

As already noted, the Germans (in this case Luftwaffe) left more than destruction and suffering: they left behind an enormous amounts of things: 'The industrialized German war machine caused unprecedented destruction but was also supported by an enormous extraction, transformation, transportation, and deposition of things [...]' (Farstadvoll 2022:88). The volume of accumulated material at Sølund added to the process of rearranging and cleaning up the site: the German soldiers had two weeks to clean up before the Allies definitively took over on May 19 (Pedersen, L.J. 2017:119–122) and the retreat was therefore less of a rush than can be seen in other locations. All the same, the German soldiers drew their understanding of 'cleaning' from their established 'scorched ground' tactics. The camp was not literally set ablaze in the dramatic fashion known from other contexts (see Farstadvoll et al. 2022:36–37; Seitsonen et al. 2017:14–16), but the intent to destroy was unmistakable. Paperwork and some equipment were deliberately burned, while furniture and tableware were thrown out of the windows of the Sølund building (the former psychiatric institution). Additional items were dumped in a nearby peat pit (Pedersen, L.J. 2017:122), while electronic equipment, including radio devices, were discarded in the lake. In the 1970s, private collectors recovered several of these objects, and

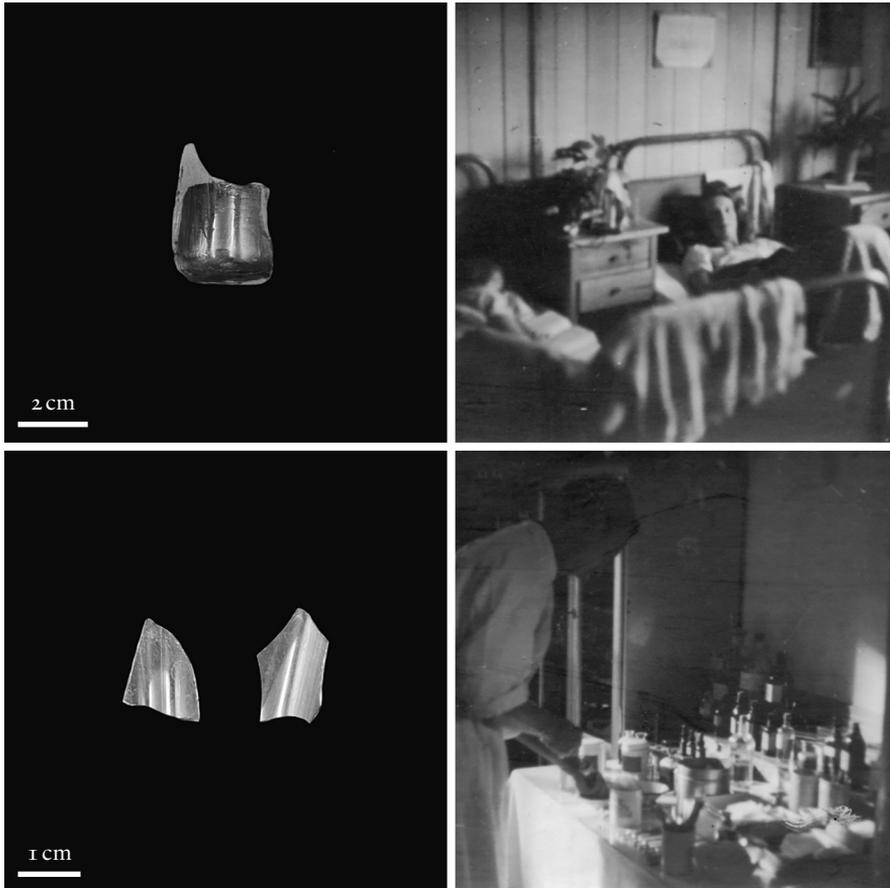


Figure 6. Left: Pieces of medical bottles and tubes. Photos by author. Right: From the infirmary barrack. Photos by Kurt Henke, courtesy of the Historical Archive of Skanderborg.

at least a couple of radios were later documented and registered by the local museum. Refuse was also dumped in pits in certain areas of the camp and this practice was probably also employed during the dismantling of the headquarters, as seen elsewhere (Seitsonen & Herva 2011:184).

Archaeological excavations at Sølund were supplemented by a collaboration with maritime archaeologists from the Museum of Moesgaard, who examined the lake via a ‘sidescan’, followed by diving examinations of the areas highlighted by the scan (Larsen 2022). Unfortunately, the highlighted areas turned out to be shells, meaning that any other objects have either been absorbed by the big layers of muddy lake sediments or swallowed by the earth, and are no longer accessible.

The administration barrack was the largest barrack at Sølund camp, measuring 27m 12,60×28,80m (de Vos 2024b). Built for administrative

purposes, when the camp was used by the Luftwaffe, the interior of the structure was divided in small subdivisions. This barrack was reused as an infirmary for the refugees. A number of discoveries point towards both periods of usage, including a fragment of a telephone receiver and fragments of medical bottles and test tubes.

The foundations of this barrack had not been blown up (see below for a discussion of the use of explosives at the site of the smaller barrack); they consisted of bricks and cement, and gravel/sand. Few artefacts were found within the foundations. This could suggest a more thorough cleaning process and careful use on behalf of the soldiers, indicating clear differences between the usage of this barrack and the small barrack investigated by the excavation team. The use of the large barrack as an administration building, with a bureaucratic use, managing sensitive information and being used only for work, probably encourage better maintenance and prevented people from throwing rubbish out of the window. The small barrack had a more domestic character to it, and the behaviour relating to this structure was quite distinct.

The small barrack

This crew barrack was fully excavated, with the exception of an area obstructed by a large tree that could not be removed (de Vos 2025a). The foundations measured approximately 12.5×5.0 meters, corresponding to the so-called Type A barrack (cf. Mølgaard & de Vos 2024:49). This type of barrack usually features an entrance with three doors leading into two main rooms (left and right), separated by a smaller central space. Both main rooms at Sølund were equipped with chimneys constructed from bricks. During the excavation, concentrations of heat-resistant bricks were found among normal bricks, indicating the area of the stove, while a fragment of a similar stove was identified elsewhere using a metal detector.

Due to the barrack's location on a slope, the site displayed a complex stratigraphy. The foundations had been dug into the terrain and, after the structure's removal, natural erosion had gradually covered the remaining features and traces of post-war clearance. The barrack structure was removed in the summer of 1946 and sent to the bigger camp in Gl. Rye, where up to 10,000 refugees were gathered from the autumn of 1946. The scarcity of building materials for the larger camp led to a communication to the contractor giving them permission to move, reuse and repair any suitable materials from Sølund.

Excavation showed that the foundation of the small barrack had been intentionally destroyed, with bricks and concrete fragments scattered across



Figure 7. East side profile of the small barrack, showing the fundament and the cut into the slope with all the following layers covering that part of the barrack. Photo by author.

the area. Only few bricks were found in situ, with a carefully arranged brickwork, hiding an empty bottle in the foundation, defying destruction (see also de Vos forthcoming 2025b). A crater in the structure confirmed the use of explosives in the dismantling of the barrack. Over the foundation remains, a layer of discarded building materials – such as roofing felt, rock wool, broken bricks, wooden debris, nails, window glass, electric cables and Eternit (fiber cement) – marked the final stage of dismantling the structure. The presence of concrete foundations is testament to the quality of these barracks.

The inhabitants of the barracks appear to have used the windows facing the slope for discarding waste, leading to refuse layers rich in artefacts. Erosion subsequently displaced these materials further downslope, creating better preservation conditions on the eastern side. In contrast, few traces of the barrack survived on the western side. The southern room (assuming the entrance with three doorways was on the northern side) yielded the most artefacts. It is likely that the two rooms were functionally divided into working and living spaces. Overall, the distribution of finds reflects more about the dismantling process than the everyday use of the barrack building.

In contrast to the administration barrack, the excavation team had no prior knowledge of the usage of this barrack, but the results indicated a mixed domestic and workspace, with quite a lot of ‘office supplies’ found at the site.

Rubbish out of the window

The excavations at Sølund revealed what had been lost, hidden or deemed worthless by the Germans when leaving the camp, as well as what was without value for the searchers of scrap metal after the abandonment or by the metal detectorists and collectors who have searched the area for decades. The great majority of finds belong to the category of building materials and unidentified pieces of industrial *matériel* – which could be described as a de-humanised collection of things. By de-humanised, in this context, I refer to materials ‘detached from humanness or the human connection’ though produced by humans, they do not awaken empathy, nor do they show any kind of association to persons, collectives nor do they reveal uses. Though it can be argued that the military identity is also standardised (Herva 2015:306) or ‘mass produced’ and is often associated to certain anonymous practices, there is still a strong human and civilian connection between soldiers and things, as the findings also show.

Through excavation, it was not possible to separate traces of the soldiers’ activities from those of the refugees, since the occupation was continued for a total of only two years and the main layers reveal the moment of dismantling and the posterior erosion of the slope. Stratigraphically, it is therefore uncertain which objects belonged to the soldiers and which ones to the refugees, which is quite normal given the circumstances (Jasinski 2018 for a similar case). Some finds might, perhaps, indicate female or child use, or on the other hand male or military use, or be more likely to belong to a context of ‘emperors’ or ‘beggars’. Naturally, these kinds of interpretations are rooted in biased assumptions, and need to be approached carefully. In similar contexts (though not the same), it has been suggested that the strongest indication of POW presence are the improvised home-made items made to substitute lacking essentials in the camp (Seitsonen et al. 2017:25). At Sølund, an example can be found in the transformation of iron wire into fishhooks – a kind of trench art, defined by Saunders (2000:45) as: ‘any item made by soldiers, prisoners of war, and civilians, from war materiel directly, or any other material, as long as it and they are associated temporally and/or spatially with armed conflict or its consequences’. Most trench art is therefore also categorised as ‘Recyclia’ (Saunders 2003:183–186) that is, material of another purpose reused for making new things. Whether one is a POW, a soldier biding time in the trenches or a refugee isolated from the outside world, the manufacturing of these objects is a process that could be interpreted as therapeutical; supplying momentary occupation for the mind to keep their sanity (Carr 2011:140), and even give a sense of freedom by controlling time and space (Moshenska & Myers 2011:10). Endres testimony from the camp describes how bicycle spokes were repurposed as

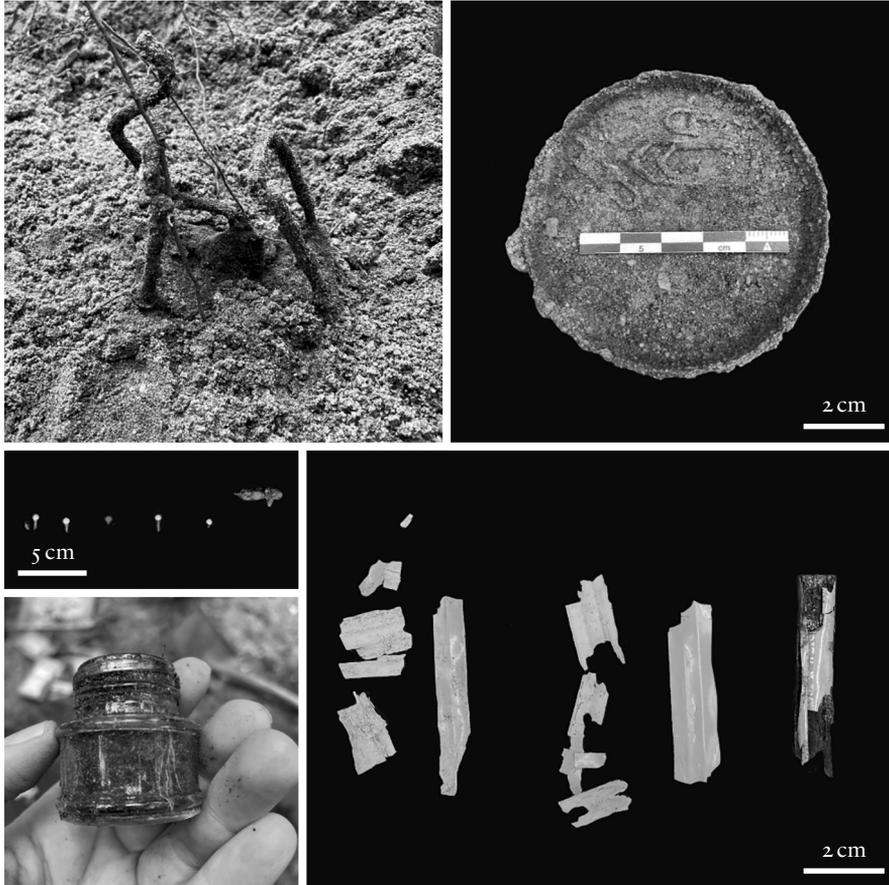


Figure 8. Office supplies mosaic. Photos by author.

knitting needles to knit a jacket from unraveled old clothes (Mølgaard & de Vos 2024:79). In fact, an example of such improvised needles has been recovered from the Gl. Rye camp (Figure 10). Beyond their practical function of producing warm clothing for winter, these objects took on a profound symbolic and emotional significance, representing loss – of freedom, home, and dignity (Dusselier 2008). They have often been interpreted as carriers of memory (eg. Carr 2011), embodying the internees' struggles with loss and suffering (Dusselier 2008).

The small barrack did present a great variety of objects, including alcoholic beverages and personal hygiene objects, indicating both an office-like purpose and a domestic use of the space. This could indicate a barrack of mixed usage and does not necessarily say anything about a change of usage over time. Some distinct military-related artefacts were also recovered, for instance a Luftwaffe cargo identification tag and a clasp linked to day fighter

squadrons. While the ID tag was recovered from the excavation context, the clasp was discovered as a stray surface find during a metal detector survey.

Among the office related materials (Figure 8) are the remains of 5 yellow pencils, one of them spelling '1561 WEIC(H)' and a logo in golden letters corresponding to a Koh-I-Noor 1561 soft pencil, from which the wooden part is partially preserved. The other pencil remains consist of parts of the yellow wax coating, while a couple of graphite sticks belonging to the pencils were also recovered. The wooden part of most pencils had generally rotten away. Colourful plastic heads of pins, the metal rings from three ring binders, the lower part of a round paper clip bin with three clips preserved at the bottom, and the leftovers of a red stamp pad (a surface finding), all show a certain activity of paperwork in the barrack, feasibly carried out by the soldiers. This does not mean that the refugees did not reuse these left-over materials, making the distinction between phases of use even harder (see also Jasinski 2018). An ink bottle must be added to this category, since it has a professional use, but also reaches into the private sphere of homesickness and communication. The ink bottle is, perhaps, one of the most emblematic symbols of displacement in archaeological excavations of mid 20th century war contexts; meaningful because it makes home communication possible and is therefore and often found object in camps and war trenches. The ink bottles are the traces and reminders of the millions of letters written by soldiers; letters that are now been lost (González-Ruibal 2020:152).

Excavations have revealed surprisingly few sherds of broken faience plates or bowls and glasses, suggesting that food was probably prepared and ingested elsewhere, though the archives suggest that meals were ingested in the barracks. Alcoholic beverages, on the other hand, were present in the barrack, a variety of bottles and fragments were found, probably from both cognac and wine, with one example being a perfectly conserved green bottle for Danish cherry wine, produced by the J.J. Jacobsens EFTF. in Odense, Denmark¹ (Pedersen, M.R. 2022). 'Real' wine was already scarce in these northern territories since the outburst of WWII, so the popularity of wine with local ingredients, such as cherries, increased during the occupation. Cherry wine had been a valued export wine since the 19 C., but during the war, a low-quality substitution was also sold on the market and was referred to as 'Pullimut'.

Remains of other bottles and fragments suggest that drinking was habitual in this barrack, with Danish witnesses confirming that the high level of drinking and partying of the soldiers was well-known outside the camp. A

¹ J.J. Jacobsens in Fåborg was sold to Odense Vin Kompagni In 1928 and the production moved to Odense in the 1930s, where this bottle was produced.

local underground newspaper documented the abundance of food and wine among the soldiers at Sølund: on a weekly basis, they had large amounts of smoked eel and salmon, fresh fruit, beer and wine (Champagne, Wine from the Rheine area and French Bourgogne), coffee and tea transported to the camp. Each day, the menu consisted of a variety of cold and warm dishes (meat included), fresh fruit, coffee, and wine (Pedersen, L.J. 2017:99). This really pained the local population, due to the very restrictive food and drink rationing system imposed during the occupation.

On the twentieth century front lines, alcohol was an essential component of the soldiers' daily rations (e.g. González-Ruibal 2020:148; Olsen & Witmore 2014:174). The consumption of alcohol was a way of keeping warm in some contexts, and also a means of coping with the extremely stressful situations of combat. Besides, as was probably the case of Sølund, alcoholic beverages also provided a way of killing time while waiting for combat. It has been noted that waiting is even a bigger part of being on the frontline than the actual time of active battle (e.g. Figenschau 2019:78; González-Ruibal 2020:143). Military life has a civilian and quotidian side to it, that has been overlooked due to the absence of the spectacular (e.g. Farstadvoll et al. 2022:32; Figenschau 2019:75). The remnants from Sølund illustrate some of the coping strategies of the soldiers; with alcohol as a means of controlling and normalising the environment either by soothing the feelings of estrangement towards the environment, the stress of being stationed away from home (Seitsonen 2018:106, 164) or by reality evasion (Figenschau 2019) entering a parallel, sensorial world through inebriation. Curiously, historical studies of concentration camps have focused on coping strategies residing in the structures imposed by the powerful (Bernbeck & Pollock 2018:455) and the coping strategies, in terms of resilience and resistance, formed by POWs. In the case of the soldiers at Sølund, the structures were imposed by themselves upon themselves; the conceived, perceived and lived space coincided. This assertion is, of course, only partially accurate, as the soldiers themselves had minimal influence over the design and construction of the camp. The point here is to underscore that, in contrast to camps built for prisoners or perceived enemies, this facility was deliberately and carefully constructed by those in power for the benefit of their own forces. The German soldiers in the military bases of Lapland created a symbolic barbed wire fence to exclude the wilderness and create an ordered world inside the camp as a way of coping with their displacement (Seitsonen et al. 2017:23). This differs from the Danish cases where the internal camp life had to be protected from the hostility of the local community.

In the camp of Sølund, there can be no doubt about the ability of the German Wehrmacht to obtain luxury products as alcohol. Alcohol was easily available to the Wehrmacht in general (Seitsonen et al. 2017:19), while it was



Figure 9. Hygiene related objects. Photos by author.

unavailable to the Danish population. The reasons for drinking might have been different from the ones that made alcohol a profoundly widespread habit in the German encampments in of the northern periphery (Figenschau 2019; Grabowski et al. 2014; Olsen & Witmore 2014; Seitsonen 2018:97), but the excavations at Sølund show that at more centred, administrative German headquarters, as the Danish Luftwaffe Headquarters, alcohol was also consumed in large quantities.

Testimonies portray the partying of the soldiers and the abundance in this camp of drinking, eating and women as common ways of biding time while waiting. They maybe also have been ways of enjoying life, while turning a blind eye to the German change of fortune; one could only have been relieved about being at the ‘Whipped Cream Front’ and not fighting with their compatriots on the deadly Eastern Front – certain life versus certain death. However, the whipped cream front also became fatal for a few: their

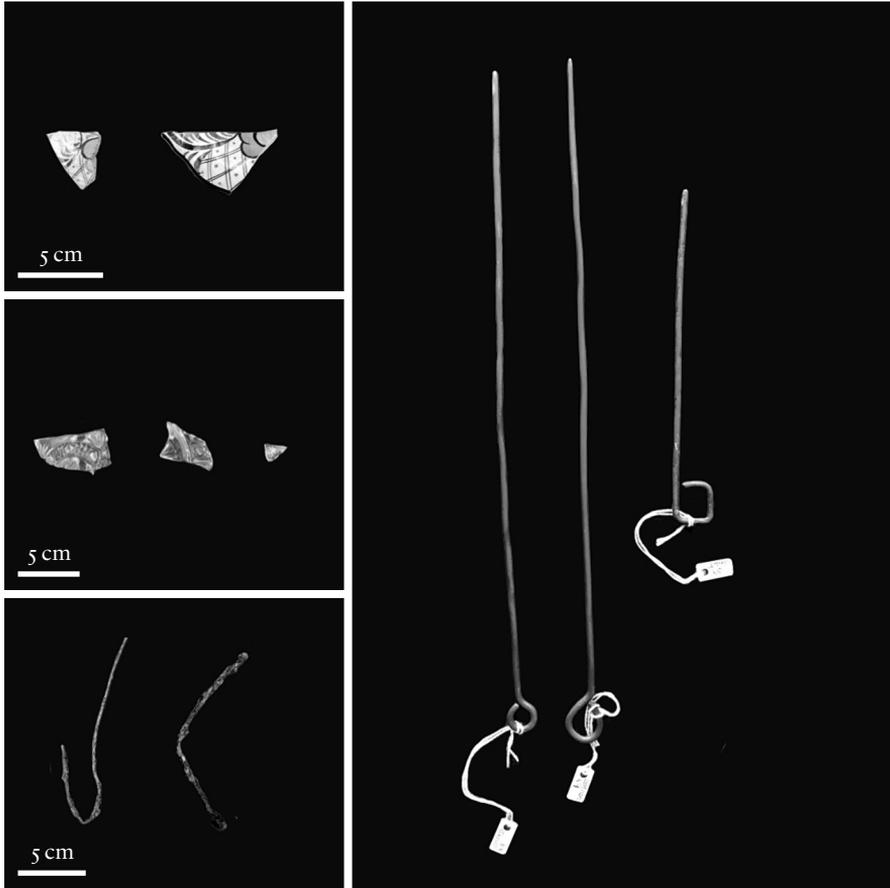


Figure 10. Possible refugee things fishhooks, faience and glass from a bowl from the Sølund camp. Knitting needles and crochet hook made from bicycle spokes or similar from the refugee camp of Gl. Rye. Photos by author.

audacity came to an unexpected end when two reserve officers/majors died from drowning after boating while drunk (in a kayak or a small boat) on Skanderborg Lake during one of their parties in June 1944. Yet another non-commissioned officer suffered the same fate later that summer (Pedersen, L.J. 2017:98–99).

The use of material culture in war situations provided a way of domesticating and controlling a situation of stress and displacement and corporeal hygiene in extreme situations and was a way of keeping human integrity and a sense of control when the world around was in chaos (Seitsonen et al. 2017). The German soldiers were supplied with basic hygiene articles to keep up standards (Figenschau 2019:76), and they did not have problems obtaining what they needed from the grocery stores. The refugees, on the

other hand, were (after the occupation ended) not allowed outside the camp and had no means of buying goods. Their hygiene was institutionalised, with a camp depot available for the collection of toothpaste, soap and shoe cream, while the camp was also equipped with a dental clinic (Mølgaard & de Vos 2024:54–55). Emptied toothpaste tubes are a recurrent find at the site, with the tubes coming from a variety of countries like Denmark, Germany, Italy, France and Holland. The health of the soldiers was important; a soldier with a toothache was not worth much and the care for dental hygiene was of high priority.

Other hygiene products, with a luxurious touch that might point towards the German soldiers, include a perfume bottle and an elegant, green – almost victory bell shaped – bottle spelling ‘IDEAL’, which might have contained Fitch Ideal Hair Tonic, known for its green colour. It is hard to say for sure that these belonged to the soldiers, since some refugees managed to bring a few personal belongings from their homes all the way to Denmark. The perfume bottle was most likely Danish, and definitely not German, since one of the few letters visible on the small piece of golden etiquette left, is an ‘AA’, equivalent to today’s letter of ‘Å’ (a letter used in Scandinavian countries). Nevertheless, there seems to be a much greater presence of material culture relating to the soldiers, compared to the possible material remains of the refugees. Finds of pieces of flower decorated porcelain plates and ornamented glass bowls could be interpreted as belongings of the refugees, however, these kinds of home-making objects were not uncommon in German soldier encampments (Seitsonen et al. 2017:23).

Local community and memory

This project aims for more than making knowledge based on the material evidence in and on the ground. As noted by Burström (2009:169), excavation is not just a means of looking for material evidence, ‘it is also a way of evoking an interest, awakening memories and creating an arena for meeting people and for telling stories’ which ‘contribute to our historical understanding’. The refugees in the Sølund camp have somehow escaped the local memory and there can be many reasons for this. Bernbeck and Pollock (2007:229) state the importance of working within the locality and building links with the local community, instead of working from a distance and with no personal connection, thereby creating a distance between the locals and the research project and obstructing the aims of the latter. The largest barrack of the camp at Sølund was the focus of a one-week community dig and was only partially excavated.

Archaeology has a very special way of instigating memory processes and, in the case of the Sølund camp, the fact that there had been German refugees in the area came as a surprise to most locals, especially the younger generations. The Museum collaborated with a senior year high school class (18 to 19-year-olds) and we had the chance to ask them about their previous knowledge about this recreational area of their hometown. Some students said that they knew that there were bunkers from WWII present in the area around Sølund, but they had never heard about the refugees. The material legacy of the bunkers appears to have sustained memory, while the absence of traces of the refugees may have enhanced their erasure from local histories, whether in terms of ‘unremembering’ or simply forgetting (Starzmann 2016:13). Systematic surveys were not carried out within the whole community, but an impression of local knowledge of the site were gained from conversations with a group of 20 senior year primary school children (c.15-years-old) who participated in the community dig. The memory of the Luftwaffe soldiers, it appears, is consolidated in the concrete monstrosity of the bunkers and seems to indicate a tendency for the material traces of the ‘emperors’ to dominate those of the ‘beggars’.

This suggests the need for a prolonged process of re-materializing the memory of the refugees. Future plans include the excavation of another crew barrack as well as several trash pits or ‘middens’, once again involving local participants in the fieldwork. The Bunker Museum is working to integrate the refugee experience into its narrative and collections, and is now offering guided walking tours that discuss the refugee camp on-site – an expansion from the previous focus solely on the Luftwaffe headquarters. The project’s principal investigator (and author of this article) also aims to extend the research to explore less disturbed refugee contexts in larger camps.

Hatred against the Germans was easier when the objects of hatred were the soldiers; whereas the ambiguity of hating German civilians (as the introductory quotation indicates) might have caused uncomfortable feelings. The archives of refugee administration have always been available for researchers, but it is only in recent years that these have sparked the interest of some historians. Since those locals that actively participated in our community excavation did not seem to find this past specifically uncomfortable, I cannot help but get the impression that this part of history was unable to compete with the excitement of the male stories of war, soldiers, occupation, and resistance; those narratives that confirm national self-understanding. Little attention has ever been paid to the other side of the coin: the darker consequences of victory. There has been little interest in the (female) stories of the, mostly women and children, German civilians (towards whom public opinion at the time was very low), even though these stories were at the same time quotidian and extremely dramatic.

The Whipped Cream Front: normalizing the State of Exception

The lack of attention paid towards the refugees might also be seen in the light of the WWII events more broadly:

If vengeance is a function of power, then true vengeance is achieved only when the power relationship between perpetrator and victim is completely inverted. The victim must become the perpetrator. The powerless must become all-powerful; and the misery inflicted must in some way be equivalent to that suffered (Lowe 2012:125).

The urge for vengeance in the postwar period was strong and was especially accentuated in the areas where Germans had lived side by side with other nationalities (Lowe 2012:126). Denmark is a lesser case than, for instance, Eastern Europe, but the same feelings of hatred and vengeance come to light in the opening quotation from the local barber. He states that he could hardly help laughing when he saw the Germans behind their own barbed wire, while other diary entries depict a kind of pity for the defeated population. In his diary he recounts how, while secretly having a beer at the station hotel on April 25, 1945, he watched a train full of evacuated German soldiers arriving: ‘Nothing had they gotten to eat in three days, miserable and hopeless to look at. What on earth can they do against the Allies? Nothing, so I thought, an ordinary person who is merely a spectator in the great drama. I went quietly home, as so many times before’ (Danielsen, n.d.).

After five years of occupation and at a moment when the barbarities of the Nazi regime were well known and documented, the hatred against the Germans was in many ways publicly legitimate.

‘Information’, a newspaper that started as an underground anti-German paper during the occupation, warned on March 12, 1945, against sympathetic feelings towards refugees. It argued that the Danes should not succumb to the German refugees’ presentation of themselves as subjects of pity (Harder 2020:83–84). Nevertheless, hatred was undoubtedly easier to sustain from a distance. Numerous testimonies indicate that, as individuals came into closer contact with the refugees, they began to look beyond the label of ‘Nazi’ and to recognize their shared humanity. In the case of the Sølund camp, some locals even chose to offer limited assistance to the refugees – despite strict prohibitions against any form of fraternization and the social risk of becoming a target of local disapproval or disgrace. Margarete Endres wrote in her diary of a rumour that a fisherman would cross the lake after sunset, bringing salt to the refugees. Her mother received some of the salt and Margarete notes in her diary how the food started tasting good again (Mølgaard & de Vos 2024:78–79).

Similarly, an older woman (born 1941), interviewed for the project in 2023, narrates how her father was forced to drive goods to the camp for the Germans during the occupation and, when the camp was turned into a refugee camp, he drove wood or peat for the camp. This woman, who was only around 5 years old at the time, sometimes went with her father and she still remembers a refugee girl of about the same age. The girl was often watching them from behind the fence and the local girl's father, who spoke German well, would speak to her. One day, the girl was gone, they asked her mother about her and discovered that she was sick. When asked what she wanted the most, the girl asked for a boiled egg. The local girl's father went to a grocery shop and bought eggs and told the merchant that it was for a young, German refugee girl, which he should not have done. After a few days, the rumour went about that the man was bringing food to the German refugees. This woman ended the interview anecdote saying: 'But they were not Germans, they were refugees'. This last comment could mean something like 'they were not Nazis, they were human beings', or they were simply refugees; nothing but a 'bare life'.

The Danish postwar refugee camps illustrate how swiftly emperors can become beggars, and how power must be continuously enacted to be maintained – underscoring the political logic of 'necessity' that justifies a state of exception, producing 'bare life' in the sense of the *homo sacer*. The Danish camps are a materialization of the idea of a permanent state of exception as a new post-World Wars social paradigm, as Agamben argues (2005). The space of the state of exception, as a space 'devoid of law, a zone of anomie in which all legal determinations – and above all the very distinction between public and private – are deactivated' (Agamben 2005:50), finds its most representative material expression in the internment camps in all their types and shapes, where people live outside of the law and civil rights and become what Agamben refers to as a 'bare life' (Agamben 1998). This same state of exception is closely linked to the concept of Supermodernity (González-Ruibal 2008). As González-Ruibal (2008:247) states, Supermodernity is not about the overcoming of modernity, quite the contrary; it is the excessiveness of Modernity, which in the archaeological record is characterized by industrial ruins, battle fields, mass graves and concentration camps. In Supermodernity, the characteristics of Modernity become so ubiquitous that they become normalized. After a century of genocide and mass destruction, we can no longer idealise the past, and the past has left us passive towards present atrocities: 'The view of Western modernity and its promises has darkened considerably within the West itself' (Huysen 2000:34). Casella (2007, 2011) also emphasizes how modern states can be characterized as 'carceral societies', employing confinement as a tech-

nology of population management in order to draw boundaries between citizens and non-citizens.

Hannah Arendt (1943:265) states that, after WWII, humans lost their ability of keeping other humans safe: ‘Hell is no longer a religious belief or a fantasy, but something as real as houses and stones and trees. Apparently, nobody wants to know that contemporary history has created a new kind of human beings – the kind that are put in concentration camps by their foes and in internment camps by their friends’. The state of exception is politically presented as a necessity, a necessary solution to a problem, and we have now become so used to the state of exception that we can no longer see the bare lives that it produces. The camps have forever changed our measure of how to treat our co-human beings.

Conclusions: hopeful things – collecting for the future

The refugee camp of Sølund is an example of how conceived and lived space are not only two different things, but the lived space can change radically within the same surroundings. The conceived space of the camp was designed by the power – the Luftwaffe (though not the soldiers themselves), to hold their administrative headquarters. The soldiers created a lived space of deployed soldiers, but on a frontline that has been designated the Whipped Cream Frontline, while the refugees lived quite different lives in the same conceived space. The significance of the barbed wire changed from being a self-protecting fence designed to keep out the enemy, to being an inward facing, repressive fence. Both were ways of controlling and ordering space, by separating two radically different spaces.

The most obvious repressive feature in the Sølund camp is therefore imbedded in the fence that separated the refugees from freedom. But what freedom? Their homes were gone, and did not even belong to Germany anymore, since East Prussia became integrated into Polish territory by the end of the war. The fence becomes temporal, a separation from their former lives, that could no longer be accessed, and an inaccessible future. As highlighted above, the spatial design (with the exception of the fence) in this camp was not repressive, but the engagement with material culture is different from camp to camp, according to the conditions, availability and circumstances. We know from the testimony of Endres that the refugees used their time in the camps to prepare for their future lives, collecting and manipulating things (Mølgaard & de Vos 2024:79). Endres recounts that her father made a wooden box to store the materials they were collecting (Figure 11). They left the camps with more things than when they arrived

and, therefore, (in strong opposition to the Nazi concentration camps) there must have been at least a whiff of optimism for the uncertain future somewhere within the despair of having lost everything. As Bernbeck and Pollock (2018:456) observe, there is a marked difference in material engagement between the Nazi concentration camps and the POW camps. In the Nazi camps, the scarcity of food and the extreme conditions of constant threats of death, undermined people's (re)actions to survival, which meant that subversion also faded away (building on Löwenthal 1990:167). In contrast, within the POW camps, research has shown evidence of resistance which changes the material patterns in the camps. There is a – certain/uncertain – future for the refugees on the outside of the fence, which makes them engage differently with things. While in the Nazi camps, the few material things

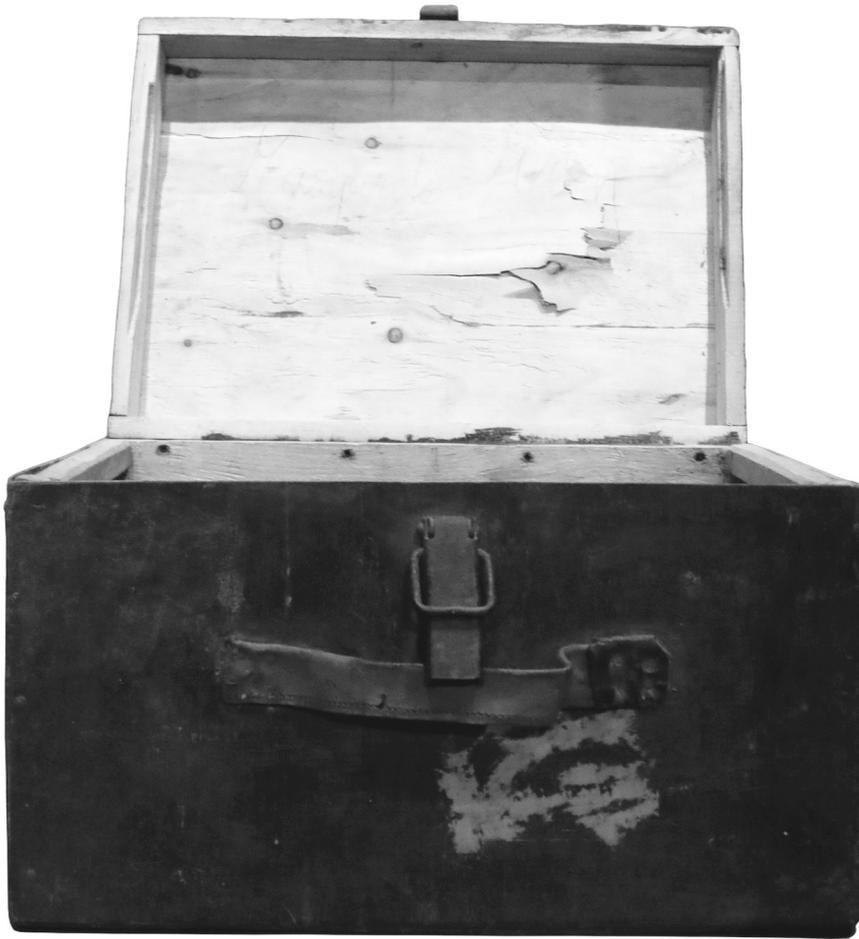


Figure 11. The wooden box of Margarete Endres, Museum Skanderborg. Photo by Christel Riis Orthmann.

available become of uppermost importance for survival in the now (Myers 2011:80), the material world surrounding the German refugees become one of opportunities, of collecting, for the future and might therefore become artifacts of hope rather than artifacts of loss.

Acknowledgements

I would like to thank my fieldwork team Louise Søndergaard and Lise Hjorth Riishede, all the project participants and the two institutions that housed my postdoc project: INCIPIT CSIC (Santiago de Compostela, Spain) and Museum Skanderborg (Denmark). I would also like to thank the two anonymous reviewers for their insightful feedback, which greatly improved this work.

This work was funded by the Independent Research Fund Denmark under Grant 1060-00046B (International Postdoc). *Fortrængt* was supported by The Danish Ministry of Culture's Research Fund (KFU) FORM.2021-0022.

The author reports there are no competing interests to declare.

References

- Agamben, G. 1998. *Homo Sacer: Sovereign Power and Bare Life*. Translated by Daniel Heller-Roazen. Stanford: Stanford University Press.
- Agamben, G. 2005. *State of Exception*. Translated by Kevin Attell. Chicago: The University of Chicago Press.
- Arendt, H. 1943. We Refugees. *Menorah Journal*. Vol. 31(1), pp. 69–77.
- Banks, I. 2011. Control or Repression: Contrasting a Prisoner of War Camp and a Work Camp from World War Two. In: Myers, A. & Moshenska, G. (eds), *Archaeologies of Internment*, pp. 111–128. New York: Springer.
- Bernbeck, R. & Pollock, S. 2018. Quotidian and Transgressive Practices in Nazi Forced Labor Camps: The Role of Objects. *International Journal of Historical Archaeology*. Vol. 22, pp. 454–471, doi:10.1007/s10761-017-0434-1.
- Burström, M. 2009. Selective Remembrance: Memories of a Second World War Refugee Camp in Sweden. *Norwegian Archaeological Review*. Vol. 42(2), pp. 159–172, doi:10.1080/00293650903351045.
- Carr, G. 2011. Engraving and Embroidering Emotions Upon the Material Culture of Internment. In: Myers, A. & Moshenska, G. (eds), *Archaeologies of Internment*, pp. 129–145. New York: Springer.
- Casella, E.C. 2007. *The Archaeology of Institutional Confinement*. Gainesville: University Press of Florida.
- Casella, E.C. 2011. Lockdown: On the Materiality of Confinement. In: Myers, A. & Moshenska, G. (eds), *Archaeologies of Internment*, pp. 285–295. New York: Springer.

- Danielsen, Aa. (n.d.) A1472, Historical Archive of Skanderborg. Unpublished diary.
- de Vos, J. 2020. *The Places Where Nothing Happened*. Ph.D. dissertation. Aarhus University.
- de Vos, J. 2024a. *Beretning for forskningsudgravning – SBM1800 Dyrehaven – Luftwaffe*. Archaeological field report.
- de Vos, J. 2024b. *Beretning for forskningsudgravning – SBM1802 Dyrehaven – Luftwaffe*. Archaeological field report.
- de Vos, J. 2025a. *Beretning for forskningsudgravning – SBM1801 Dyrehaven – Luftwaffe*. Archaeological field report.
- de Vos, J. (forthcoming) 2025b. Excavating the Danish Luftwaffe Headquarters. In: Saloul, I. & Baillie, B. (eds), *The Palgrave Encyclopedia of Cultural Heritage and Conflict*. Cham: Palgrave Macmillan, doi:10.1007/978-3-030-61493-5.DR2005.
- DR (Danmarks Radio) 2005. Flødeskumsfronten. Documentary, https://www.dr.dk/drtv/serie/floedeskumsfronten_509137 [Accessed 7 June 2025].
- Dusselier, J. 2008. *Artifacts of Loss: Crafting Survival in Japanese American Concentration Camps*. New Brunswick: Rutgers University Press.
- Farstadvoll, S., Figenschau, I.O., Olsen, B.J. & Witmore, C.L. 2022. Excavating War and Idleness: The Case of Sværholt. *Journal of Conflict Archaeology*. Vol. 17(2), pp. 87–127, doi:10.1080/15740773.2022.2111539.
- Farstadvoll, S. 2022. A Thorny Past: The After-War Life, and Beyond, of Nazi World War II Barbed Wire in Norway. *Journal of Contemporary Archaeology*, 9(1) pp. 82–103, doi:10.1558/jca.21640.
- Figenschau, I. 2019. The Quotidian, Small and Incomplete: WWII and the Indifference of Things. *Fennoscandia archaeologica*. Vol. XXXVI, pp. 68–86.
- Gammelgaard, A. 1993. *Drivtømmer: Tyske flygtninge i Danmark 1945–1949*. Varde: Blåvandshuk Egnsmuseum.
- Gammelgaard, A. 2005. *På Hitlers befaling: Tyske flygtninge i Danmark 1945–1949*. Varde: Museet for Varde by og omegn.
- González-Ruibal, A. 2008. Time to Destroy: An archaeology of Supermodernity. *Current Anthropology*. Volume 49(2), pp. 247–279, doi:10.1086/526099.
- González-Ruibal, A. 2020. *The Archaeology of the Spanish Civil War*. London: Routledge.
- Grabowski, R., Olsen, B., Pétursdóttir, Þ. & Witmore, C. 2014. Teillager 6 Sværholt: The Archaeology of a World War II Prisoner of War Camp in Finnmark, Arctic Norway. *Fennoscandia archaeologica*. Vol. XXXI, pp. 3–24.
- Harder, T. 2020. *De uønskede: De tyske flygtninge i Danmark 1945–1949*. Copenhagen: Gyldendal.
- Herva, V.-P. 2015. Haunting Heritage in an Enchanted Land: Magic, Materiality and Second World War German Material Heritage in Finnish Lapland. *Journal of Contemporary Archaeology*. Vol. 1(2), pp. 297–321, doi:10.1558/jca.v1i2.18639.
- Huyssen, A. 2000. Present Pasts: Media, Politics, Amnesia. *Public Culture*. Vol. 12(1), pp. 21–38.
- Jasinski, M.E. 2018. Predicting the Past – Materiality of Nazi and Post-Nazi Camps: A Norwegian Perspective. *International Journal of Historical Archaeology*. Vol. 22(3), pp. 639–661, doi:10.1007/s10761-017-0438-x.
- Jensen, J.V. 2020. *Tyskere på flugt*. Aarhus: Aarhus Universitetsforlag.

- Larsen, J.H. 2022. *Skanderborg Sø: Eftersøgning af kulturspor på søbunden af Skanderborg sø 2022*. Archaeological field report.
- Lefebvre, H. 1991. *The Production of Space*. Oxford: Blackwell Publishing.
- Lowe, K. 2012. *Savage Continent: Europe in the Aftermath of World War II*. London: Penguin Books.
- Löwenthal, L. 1990. *Falsche Propheten: Studien zum Autoritarismus*. Vol. 3. Frankfurt am Main: Suhrkamp.
- Lylloff, K. 2006. *Barn eller fjende? Uledsagede tyske flygtningebørn i Danmark 1945–1949*. Aarhus: Aarhus Universitetsforlag.
- McAtackney, L. 2020. Public Memory, Conflict and Women: Commemoration in Contemporary Ireland. In: Ashton, P., Evans, T. & Hamilton, P. (eds), *Making Histories*, pp. 99–112. Berlin: De Gruyter Oldenbourg, doi:10.1515/9783110636352-009.
- Moshenska, G. & Myers, A. 2011. An Introduction to Archaeologies of Internment. In: A. Myers & G. Moshenska (eds), *Archaeologies of Internment*, pp. 1–20. New York: Springer.
- Myers, A. 2011. The Things of Auschwitz. In Myers, A. & Moshenska, G. (eds), *Archaeologies of Internment*, pp. 75–88. New York: Springer.
- Mølgaard, M. & de Vos, J. 2024. *Flygtningelejren Sølund: De tyske flygtninge i Skanderborg 1945–1946*. Aarhus: Turbine.
- Olsen, B. & Witmore, C. 2014. Sværholt: Recovered Memories from a POW Camp in the Far North. In: Olsen, B. & Pétursdóttir, P. (eds), *Ruin Memories: Materialities, Aesthetics and the Archaeology of the Recent Past*, pp. 162–190. London: Routledge.
- Pedersen, L.J. 2017. *Historien om Luftwaffes danske hovedkvarter i Skanderborg*. Aarhus: Turbine.
- Pedersen, M.R. 2022. Jacobsens faaborgensiske kirsebærvin blev et hit: I dag produceres Kijafaen stadig. *Ugeavisen Faaborg*, 28 July, <https://ugeavisen.dk/ugeavisenfaaborg/jacobsens-faaborgensiske-kirsebaervin-blev-et-hit-i-dag-produceres-kijafaen-stadig> [Accessed 7 June 2025].
- Poulsen, H. 1991. Die Deutschen Besatzungspolitik in Dänemark. In: Bohn, R., Elvert, J., Rebas, H. & Salewski, M. (eds), *Neutralität und Totalitäre Aggression*, pp. 369–380. Stuttgart: Franz Steiner Verlag.
- Saunders, N.J. 2000. Bodies of Metal, Shells of Memory: ‘Trench Art’, and the Great War Recycled. *Journal of Material Culture*. Vol. 5(1), pp. 43–67, doi:10.1177/135918350000500103.
- Saunders, N.J. 2003. *Trench Art: Materialities and Memories of War*. Oxford: Berg.
- Seitsonen, O. 2018. *Digging Hitler’s Arctic War: Archaeologies and Heritage of the Second World War German Military Presence in Finnish Lapland*. Ph.D. dissertation, University of Helsinki.
- Seitsonen, O. & Herva, V.-P. 2011. Forgotten in the Wilderness: WWII German PoW Camps in Finnish Lapland. In: Myers, A. & Moshenska, G. (eds), *Archaeologies of Internment*, pp. 171–190. New York, NY: Springer.
- Seitsonen, O., Herva, V.-P., Nordqvist, K. & Seitsonen, S. 2017. A Military Camp in the Middle of Nowhere: Mobilities, Dislocation and the Archaeology of a Second World War German Military Base in Finnish Lapland. *Journal of Conflict Archaeology*. Vol. 12(1), pp. 3–28, doi:10.1080/15740773.2017.1389496.
- Starzmann, M.T. 2016. Engaging Memory: An Introduction. In: Starzmann, M.T. & Roby, J.R. (eds), *Excavating Memory. Sites of Remembering and Forgetting*. Gainesville: University Press of Florida.

'Do You Want to Know Who You Are?' The Rise of Genetic Ancestry Testing and the Search for Genealogies

A Case Study from Sweden

Kristian Kristiansen^{1*}, Victor Wählstrand², Daniel Brodén³,
Mats Ahlgren⁴, Marie Louise Stig Sørensen⁵,
Michael Rowlands (†)⁶ & Hannes Schroeder⁷

1 Department of Historical Studies, University of Gothenburg, Sweden
kristian.kristiansen@archaeology.gu.se (corresponding author)

2 Department of Electrical Engineering, Chalmers University of Technology, Sweden
victor.wahlstrand@chalmers.se

3 Department of Literature, History of Ideas, and Religion, University of Gothenburg, Sweden
daniel.broden@lir.gu.se

4 Swedish Society for Genetic Genealogy, Sweden
ma.ahlgren@telia.com

5 Department of Archaeology, University of Cambridge, United Kingdom
mlss@cam.ac.uk

6 Department of Anthropology, University College London, United Kingdom

7 Globe Institute, Faculty of Health and Medical Sciences, University of Copenhagen, Denmark
hschroeder@bio.ku.dk

This is an Open Access article distributed under the terms of the Creative Commons 4.0 International licence (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Abstract

As the practice and business of personal DNA ancestry testing continue to expand globally, understanding people's interest in their genetic history, and how the results influence attitudes about the past, is being called for. Such insight is especially relevant to archaeologists and heritage researchers. Yet the motivations for taking direct-to-consumer DNA tests and their effects remain poorly understood in a European context. This paper presents the results of a nationwide survey carried out by The Centre for Critical Heritage Studies, University of Gothenburg, in collaboration with the Swedish Society for Genetic Genealogy. The aim was to identify social and cultural attitudes among people who decided to take a personal DNA test in Sweden. Nearly 900 individuals answered the survey. Based on the results, we identify a distinction between family genealogies and personal genetic history versus national history and collective identity. While the majority of respondents are interested in history and archaeology, their interest in family genealogies is specifically linked to individual stories and possible links to existing/unknown family members. This suggests that DNA-testing provides a new and different take on family histories compared to historically-documented genealogies. It also suggests that the link to polarizing debates on ethnonational belonging, highlighted in relation to public responses to ancient DNA studies in archaeology, remains muted as regards personal DNA tests.

Keywords: Direct-to-consumer DNA testing, genealogy, archaeology and genetic ancestry, heritage and identity formation

Introduction

People are commonly interested not just in the past *per se* but also in their own history. This is well known to archaeologists, and over recent decades community archaeology, public archaeology, and other forms of archaeological outreach activities have developed in response to this (Kajda et al. 2017). Moreover, within these initiatives, it is widely recognized that 'the public' is positive about acting as co-producers of their past, rather than passively receiving accounts. In this light, the rapid spread of genetic ancestry testing that can be bought freely and conducted at home is interesting. In such activities, rather than being a passive receiver of expert knowledge, the user becomes much more directly involved and the account produced is a personal one. At the same time, the accounts being produced are based on scientific methods, so they are granted a certain authority.

For people working within archaeology, museums, and heritage management more widely it should, therefore, be important to learn more about what influences people's interest in their own history and whether and how this newly acquired genetic history is connected to their other notions of identity and attitudes about the past. Such insights are useful when these professions plan how to share their accounts of the past and when they design strategies for meaningful involvement of the wider public. With the number of aDNA results now exceeding 5000 alone for Europe (Mallick

et al. 2024), it may become possible to search not only for immediate family relations but also for genealogical links further back in time, even if this is much less personal.

Genetic ancestry testing schemes that people can now access with ease have become a global phenomenon. In 2022, more than 30 million people had taken a direct-to-consumer (DTC) genetic ancestry test (Guerrini et al. 2022). Yet, research on what motivates people to use such tests and whether the results have any cognitive and social impacts is still underdeveloped (Hazel et al. 2021; Parthasarathy 2010; Roberts & Ostergren 2013). National socio-political contexts have some influence on the motivations for learning about one's personal DNA history. The relatively widespread popularity of DNA testing in the US, for instance, is thought to relate closely to ongoing critical debates about race and migrant history (Abel 2022; Carlson 2020; Nelson 2016). These differences have been characterized as 'high' and 'low stake' (Scully et al. 2016), with the former referring to situations where genetic testing can be used to (notionally) place oneself or a group within complex histories, such as slavery and colonialism, and where genetic claims and connections may have financial and legal implications (Abel 2022; TallBear 2013).

This paper, based on a survey in Sweden, is concerned with users who would be expected to fall within the 'low stake' category. For this kind of context, the data and the motivations they reveal may relate to ongoing debates about the role of the individual, family and kin (in this case in northern Europe) and illuminate whether and how a sense of history and time matters to people. In the northern European context, the results may also relate to wider contemporary sociological debates with their distinct concern about the composition of the population and interest in the changing positions of the individual. As regards the latter, it has, for example, been argued that people have become ever more self-centred with their lives detached from 'soil' and family relations (e.g. Fukuyama 2018). This, in turn, raises questions about how earlier notions of lateral relations that anchored people are now disappearing and what the consequences of this may be, including how this may or may not impact people's interest in pastness including their own family history as part of a long-term general history.

In turn, the desire for such connections may have implications for contemporary constructions of identity at individual, community, and societal levels, as well as for shared notions of history and the distant past. It is these desires and curiosities that commercial DNA testing providers address when they promise to place the individual within wider genealogies relations. This means that the survey respondents' accounts of their motivations for using the test provide helpful insight into how individuals reflect on and formulate views when faced with the possibility of learning more about 'who you

are'. In this regard it is important to stress that the promises made by the providers mean that the tests are done with a predetermined sense of what the results are about (Abel 2022; Abel & Frieman 2023).

It is on this background that people's use of these new technologies becomes interesting and revealing, including potentially showing cognitive or ontological shifts. We propose that behind the use of such technologies sits an interest in time, and more specifically a desire to project the Self back in time by operating (new) notions of kin and kinship and even ancestors. What is less clear, however, is how 'time' is conceptualized within such projections and especially whether such notions are individualized or whether certain times, such as the Viking period, are commonly desired as points of connection. The survey aimed to improve our comprehension of such aspects of the users' motivations.

Reacting to these developments, we have seen the quick growth of new research fields focused on issues of identity, kinship, and genealogy, variously combined and using different disciplinary backgrounds ranging from biomedical to heritage (Abel 2022; Brück & Frieman 2021; Carlson 2020; Hazel et al. 2021; Källén 2025; Marcon et al. 2021; Nelson 2016; Roth et al. 2020; Scully et al. 2016; TallBear 2013). This paper seeks to contribute towards this by foregrounding a consumer perspective and pursuing insights that are important for archaeology and heritage. The following analysis is therefore grounded in the survey data and interpretative reflections are directed by the respondent. This approach was selected to achieve nuance in terms of how people think, and to make it possible for future studies to recognize differences across groups or countries. This means, however, that certain kinds of reflections are absent. For instance, notions of blood and kinship are not analysed or discussed because this terminology and associations were not introduced or used by the respondents.

Starting from a large survey conducted in collaboration with the Swedish Society for Genetic Genealogy (SSGG.se) in 2018, we seek to learn more about peoples' motivations for taking a DNA test and the potential impacts of the results they receive. While we have seen discussions of the implications of the geographies of commercial DNA testing (Nash 2015), this paper is probably the first to represent a national survey based on more than 800 anonymized answers.

From traditional to genetic genealogy: the rise of DTC genetic ancestry testing

Sweden has had a long interest in genealogical research. The past 100 years of the Swedish genealogy movement can be roughly divided into three

phases. During the first 60 years, it was an interest exercised by the well-to-do, and it demanded both time and financial means (Skogsjö 1983). The research required many and long visits to archives spread across the country. The interest was largely aimed at producing as “good” a family genealogy as possible and it was not uncommon for genealogists to improve their pedigrees. There were often several preconceived notions built into the results, and in some cases these notions were even based on the fact that it was difficult to follow up and check them.

After the first phase, change in practices happened as a result of materials becoming more widely available through the use of microfilm or microfiche. These could be distributed to significantly more places than the previously limited archival access, and much more research could take place in or near the place of residence. Interest increased and a larger number of genealogical associations were founded. Many people organized themselves into associations although genealogy continued to be considered an activity for a select group. During the third phase, which began around the turn of the millennium, various new developments took place. The use of internet-based services made private genealogical research increasingly common. The former nerd stamp disappeared, and genealogy came to be considered a proper science, even if it did not fit into academic circles (Malm 2016). This development is clearly reflected by the membership of The Federation of Swedish Genealogical Societies, with a slow increase during the 1990s, a noticeable increase around the turn of the millennium, and the number of active genealogists in affiliated associations doubling 10 years later. During this last phase, we also saw a large increase in subscribers who paid for genealogy services on the internet.

After the peak in 2010–2013, the number of active members in The Federation of Swedish Genealogical Societies decreased, and at present it has declined by 20 per cent in comparison to its peak. This is probably largely due to the increased use of social media, including, for example, genealogy groups on Facebook. There is now substantial activity in these groups and the number of members most likely exceeds those who are members of traditional genealogical associations. It seems that an increasing number of people conduct genealogical research by themselves or in loosely composed constellations. Thus, whereas genealogy continues to be of great interest, it is taking place in different forms and platforms than earlier. The use of social media also allows new angles on genealogy to be explored, such as historical events.

DNA ancestry testing as an aid to genealogical research has been around for over two decades. Initially, the tests were limited to a small set of markers on the male Y-chromosome and the hypervariable segment of the mitochondrial genome, called HVR1. Over the years, more markers and larger

parts of the mitochondrial genome were added until, in 2009, *23andMe* launched their first autosomal test. The ‘Relative Finder’ targeted around 600,000 markers or SNPs (single nucleotide polymorphisms) spread across the entire genome and provided test-takers with ancestry, as well as health-specific information relating to disease risk. Other companies, like *FamilyTreeDNA* and *Ancestry*, soon followed suit with their own autosomal tests. With these launches, interest in DTC genetic ancestry testing spread quickly around the globe, first in the US, but not long after also in the UK and Scandinavia (Kennett 2011). Part of the global appeal of DTC genetic ancestry tests, it seems, is their ability to reunite consumers with long-lost relatives (Guerrini et al. 2022), as well as the promise to reconnect them to real or imagined past family members.

Broadly speaking, the method used by DNA ancestry companies takes advantage of the fact that genetic variation in human populations tends to be geographically structured (Nash 2015; Novembre et al. 2008). However, it also stands true that most genetic variation occurs within continents and smaller regions rather than between continents or traditional racial groups (Benn Torres 2020; Graves & Goodman 2021; Lewontin 1972). This might seem paradoxical, but it is not and it all boils down to the fact that genetic ancestry and ‘race’ are not the same (Jobling et al. 2016). There is now broad agreement that traditional racial categories are a product of historically contingent social, economic, and political processes (Lewis et al. 2022). As institutions are re-examining their use of race as a biological or social variable, genetic ancestry is starting to replace racial categories in medical and other contexts. This also applies to the business of DTC genetic ancestry testing as many companies employ continental genetic ancestry categories as a way of describing human genetic variation. However, this practice has many critics who argue that it fails to adequately capture the extent of human genetic diversity (and demographic history) and risks perpetuating essentialized notions of human diversity as purely biological, fixed, and deterministic (Marcon et al. 2021; Nordgren & Juengst 2009; Roth et al. 2020).

Despite the criticisms of using DNA testing as a ‘straightforward route of providing individuals with personally tailored information about their likely ancestry’ (Scully et al. 2016), DTC genetic ancestry testing has continued to gain in popularity. In Sweden, popularity increased shortly after the launch of the first autosomal test in 2010, with strong support from traditional genealogy associations. Today, over 200,000 people have been tested in Sweden, and the Swedish Genealogical Association have even published a handbook on DNA (Sjölund 2016).

Advertising tends to be clear about who it aims at and what is being promised. For instance, *AncestryDNA* advertises its project as a means to ‘Connect to the people and places in *your past*’ further stating that

'AncestryDNA can help deliver the richest family stories – and solve the toughest family mysteries'. Similarly, *Genetics Digest* entices the user by saying that '[...] digging into your family history and ancestry enables you to find out more about who you are personally'. The recognition of peoples' curiosity and interest in themselves does not stop there, and we have seen further commercialization and exploitation of this. In 2018, for example, the music-streaming service Spotify launched a collaboration with AncestryDNA to create customized playlists. Under the heading 'If you could listen to your DNA, what would it sound like?', Spotify promises a 'unique mix of music, inspired by your origins'. It is important to stress, therefore, that these companies are selling a personal history that is largely rooted in biological variation, but with strong cultural and emotional connotations. Therefore, beyond scientific discussions of what exactly a DNA sample reveals about an individual, these commercial DNA testing kits should be recognized as a widespread tool through which people receive and create accounts of their genetic identity and relationships. In turn, novel ways of formulating identity, kinship, and lineage may be emerging with a range of potential impacts from new forms of temporal and spatially distributed identifications to fortress mentalities.

Locating the search for personal genealogy within notions of heritage

Beyond such personal interests and the solving of specific cases, what are the wider reasons for and repercussions of using DNA testing to learn about one's identity? In particular, is there a concern with time and identity that connects this interest to a contemporary formation of heritage? It is generally thought that time is an important aspect of personal identity formation, as it provides a means of orientating the Self through a notion of continuity. Time helps to contextualize self-reflection in the form of the classic 'Who am I' and 'Where do I come from' questions (Breakwell 2015). Various notions of ancestors and genealogies provide the core instrumentalization of this, as they place the individual within a structured order that reaches back in time (including past people) and create connections. At its most basic this is about ontological security. We propose that these tests are primarily attractive because they are concerned with such placement of the Self. Moreover, this seems to be very different to how people may respond to aDNA testing as that does not promise a means of personally gaining a connection to past time.

The needs underwriting these attempts to secure order are substantial and widespread, and they are, arguably, among the formative forces behind

the phenomenon of ‘heritage’ (Macdonald 2013), and the general value given to archaeological enterprises – as the searching for and study of ‘our’ past. The formal structure of this ‘order’ does, however, vary considerably and is part of the formation of particular ontologies, which in turn results in diverse cultured constructions of kinship and lineage, including the social organization that historically characterized northwestern Europe.

The difference between, on the one hand, genealogy as a biological matter of descent and, on the other hand, familial relations as a socio-political system used to not be so easily separated; but this is what has become possible. This makes clear the difference between the universalism of how biological connections are made and the specificity of how social relations are regulated. The new DNA-derived data about identity and relatedness does not address this distinction, and users are invited to trace themselves and find genetically related individuals within the global community without any explicit attention to the range of social regulations and behaviours that caused them. This issue is also affecting how aDNA data is being interpreted within archaeology, and concerns have begun to emerge about how we adjust our interpretations to incorporate this (e.g. Brück & Frieman 2021).

To provide a historical context for our results we wish to stress that Sweden and Scandinavia historically have been part of a northwest European social tradition which has been extensively studied. Until the 1960s historians usually divided the family structures of the region into those of pre-industrialism versus those of industrialism and post-industrialism. The former was associated with large harmonious families while it was argued that these units had later been destroyed due to the effects of industrialism including urbanisation. In the 1960s Peter Laslett challenged this model (Laslett 1969, 2021). Instead, he argued that nuclear family structures had predominated in Western Europe from at least the Middle Ages until the twentieth century. Supporting Laslett’s research, John Hajnal distinguished a pre-industrial northwest European simple family pattern characterized by late marriage for both sexes, neolocality, and the circulation of young people between households, before marriage, as ‘life-cycle servants’ (Hajnal 1965). Later Laslett complemented Hajnal’s research with further characterization of a long-term family structure for northwestern Europe (Laslett 1983). What has become known as the ‘Hajnal line’ separated east European extended family structures from west European nuclear families, and both from Mediterranean complex family structures (Hajnal 1965). The argument for northwest European exceptionalism was also made by Alan MacFarlane in a well-known study of English ‘individualism’ going back to the thirteenth century if not much earlier (Macfarlane 1978).

Criticisms of the absolute nature of these differences have been made, and a greater variety of family forms (stem and extended) are recognized in

a wider European and diaspora setting (cf. Goody 1996; Sovič 2008). Yet the pattern of a northwest European nuclear family structure and neolocal marriage establishing lateral networks with migration to North America is still the dominant interpretation (cf. Hartman 2004; Thornton 2013). Some authors emphasize the importance of late marriage and a high proportion of unmarried in the northwestern family model (e.g. Hajnal 1965). Norwegians, Swedes, Scots and Canadians, for example, did marry unusually late in the nineteenth century (Ruggles 2009). Recent neo revisionist accounts of Laslett, Wrigley and Hajnal, while not disputing evidence of long-term continuity, are keen to emphasize the role of kinship in stories of migration and mobility from the seventeenth century onwards (Tadmor 2010). Kin often migrated in the footsteps of kin, a form recognized as chain migration, emphasizing the importance in migration strategies of kinship created through marriage ties rather than tracing ancestral descent from early modern times. This of course does not mean that objective patterns of nuclear family structures and neolocal residence would not be accompanied also by imagined long-term romantic ideas of ancestry (Scully 2018). Nor, as the results of this survey show, does it deny the flexibility with which changing perceptions of family kinship networks are incorporated into identity narratives. However, as the means of orienting the Self within such descent narratives is changing, we must consider what effects this may have on these same narratives. As Scully et al. state '[...] the very meaning and negotiation of matters like class, family, ancestry and belonging is now happening within contemporary societies through a direct engagement of citizens with practices such as personalized medicine, neurological enhancement and genetic ancestry testing' (2016:1). In their study of YouTube discussions of DNA testing, Marcon et al. similarly found that a common reason for testing was 'the desire to solidify a sense of self' (Marcon et al. 2021:139).

The survey: background, aims, and methodology

There has been little research on people's attitudes towards genealogy, but a survey conducted in 2015 by The Centre for Critical Heritage Studies, University of Gothenburg touched on some of these issues. It used a nationwide survey to analyse socio-demographic and attitude variables related to cultural heritage, including genealogy, in Sweden. The study was carried out in collaboration with the SOM (Society, Opinion and Mass Media) Institute, a university-based research organization and infrastructure for national survey data, and each question was answered by about 2,700 respondents (Brodén 2017). According to the survey, as many as 13 per cent of the Swedish population had researched their genealogy at least once during the past

year. This relatively high number may, however, to some extent be due to different interpretations of the question asking how often they had done genealogy research during the last 12 months; some respondents might have had a wider conception of what sort of things genealogy research includes. The findings also indicate that, as expected, it is more common for older people to conduct genealogy research, with 17 per cent of the 65–85-year-olds stating that they had done some form of genealogical research at least once during the last year (Brodén 2017:47).

The SOM survey data generally indicate the importance of demographic factors in understanding the relations between people and cultural heritage, and this may have some bearing on attitudes to genealogy as well. For example, women are more active than men when it comes to taking part in a wide range of cultural activities, including those that can be related to national cultural heritage, with class and education also being important factors (e.g. Antoni 2008; Weibull et al. 2008). In the context of the present article, it should be noted that the SOM data specifically indicate that Swedes who are negative towards immigration to a lesser extent participate in activities that are associated with their national cultural heritage than those who are not (Brodén 2017:14, 2018). Such findings point to the complexities involved in the interconnections between personal, cultural, and national heritage.

In 2018, The Centre for Critical Heritage Studies, University of Gothenburg, followed up on the SOM survey by conducting a nationwide survey in collaboration with the Swedish Society for Genetic Genealogy. The latter organization, through its networks, distributed the survey to members of a range of different genealogy groups (The Federation of Swedish Genealogical Societies through its webpage ‘*Roots*’, and a selection of key Swedish Facebook groups who at the time were interested in DNA and genealogy and known to the Society) over two months. Almost 900 answered the questionnaire. There were in total 19 questions broadly divided into 1) background factors, such as gender, age and educational background, 2) motivations behind the respondent’s interest in genealogy and DNA testing, and finally 3) their perceptions of their heritage, history and family as influenced by the test. The questions were posed to allow for a degree of interpretation, and it used terms that the respondents from the Society were likely to be familiar with. Through this data it has been possible to capture basic tendencies; the results are summarized quantitatively in Supplementary File 1. The survey also invited the submission of additional personal comments, which we use to further scrutinize certain aspects (Supplementary File 2).

The first group of questions (Q1 to Q4 in Supplementary File 1) aimed to capture the emergent interest in DNA testing: to map the types of tests taken (autosomal, Y-DNA and/or mtDNA), what had prompted the inter-

est in DNA testing, and how much time people would spend on this. The second group of questions (Q₅ to Q₁₁), aimed to map whether and how the results of the DNA test changed people's interests, their relationships to others, and their perception of their own identity. To that group of questions belongs also Q₁₂ and Q₁₄, asking about how the results affected their personal relations as well as notion of identity. For clarity, it should be noted that we will use concepts such as identity cautiously, and only in a general sense to give context to the statistics. We do this to avoid the conflicting issues that might arise when combining complex analytic concepts that have intrapersonal connotations with an analysis of survey data. Question 13 concerns opinions about the ethical sensitivity of the DNA results in the hands of commercial and political actors. Finally, questions Q₁₅ to Q₁₉ document relevant background factors, namely gender, age groups, educational background, as well as residence and membership of other associations to get a better understanding of the population behind the expanding interest in personal DNA.

Results

THE CONSUMERS OF COMMERCIAL DNA KITS

The survey had in total 891 respondents, with respectively 348 (39 per cent) male and 466 (52 per cent) female. A total of 77 people did not state their gender. The slight majority of female respondents is not large enough to warrant a dichotomization of all survey questions, and gender identity affects the responses to most questions very little. The majority are 50–79 years old (see Figure 1 for the age distribution) and most live in larger urban areas. A similar pattern around gender and age has also been seen in other surveys of consumers (e.g. Marcon et al. 2021). Approximately 60 per cent have a university-level tertiary education, which is significantly higher than in the Swedish population overall (Figure 2). More than 80 per cent of respondents aged 65 and above state that they are part of a genealogical society, see Figure 3. This number is below 50 per cent for age 50 and below. Similarly, around 66 per cent of all respondent's state that they are active or involved in an interest organization with 63 per cent stating that they are active in a genealogical, cultural, historical, or local resident association, possibly indicating that a majority of respondents have similar interests in history and heritage. Personal DNA testing seems to have mobilized a distinct, rather well-educated segment of society that has reached an age when they have the time to follow this new interest. It may also indicate a sector of society in which reflection on family and time is explicit. This could well be the same group who visits museums regularly, the so-called 'culture-vultures'

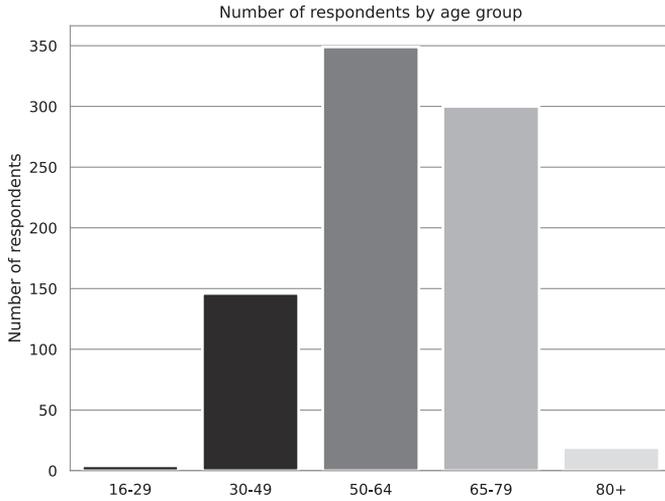


Figure 1. The age distribution of the respondents, showing a majority between 50–80 years old, and few respondents in the ages 16–29 and 80+.

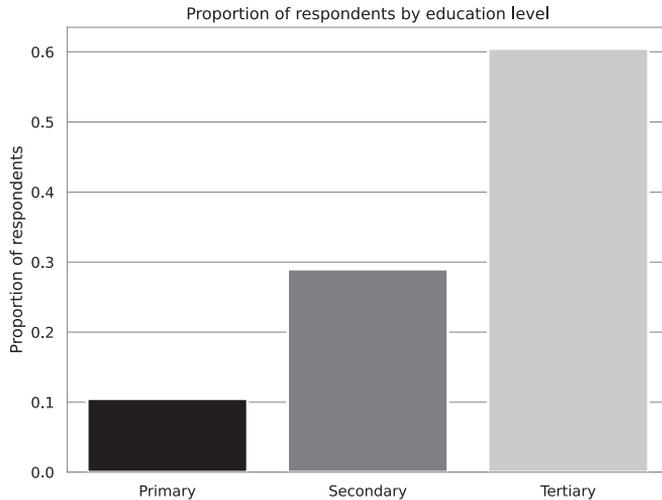


Figure 2. The education level of the respondents, the majority of which have a university-level tertiary education.

(Merriman 2016). Interestingly, our survey did not indicate any significant differences between men and women regarding DNA ancestry testing. This stands in contrast to Swedish national survey data which suggest that in general mature, well-educated women are more active than other groups when it comes to a broad range of cultural activities, including book reading, library visits, and theatre-going (Antoni 2008; Brodén 2013, 2017, 2018; Weibull et al. 2008).

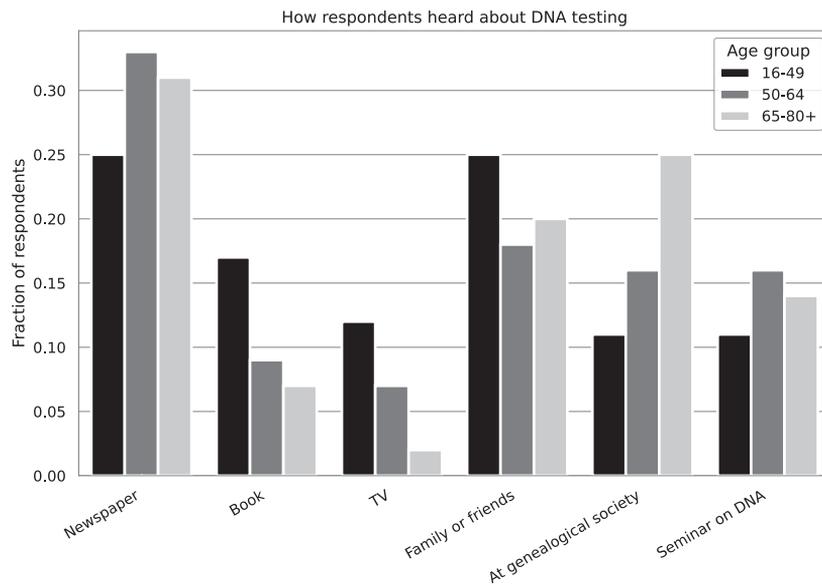


Figure 3. The sources from which respondents first heard about DNA-testing, separated by age group.

There is nonetheless great diversity in where respondents claim to have first heard about DNA testing in genealogy. Figure 4 shows that around 30 per cent of all ages were informed by articles in newspapers. Interestingly, younger people are more often informed through written and televised media, with a significant portion hearing it from their family and friends. However, in the comments 120 respondents referred to the internet and social media as their main source, which conforms well with the younger group, as we did not have these sources in the questionnaire. Meanwhile, older respondents first heard of DNA testing through more formal settings, such as a genealogical society or seminars, which is in agreement with a greater proportion of older members of these societies. Apart from the traditional genealogical society, social media such as Facebook and YouTube are prominent sources of information. Interestingly, comments reveal that two authority figures in Swedish family research, the genealogist Peter Sjölund and the journalist Karin Bojs, influenced a notable share of the respondents. This is possibly due to their widely-read publications and appearances in various media (Bojs 2015; Sjölund 2019). Also, from the comments it is clear that many had continued their readings, and 72 even listed titles of the books.

The share of each gender taking an autosomal test is roughly equal to the gender distribution of the responding surveyed population (Figure 5), but a notably different proportion was taking the tests for Y-DNA (tracing

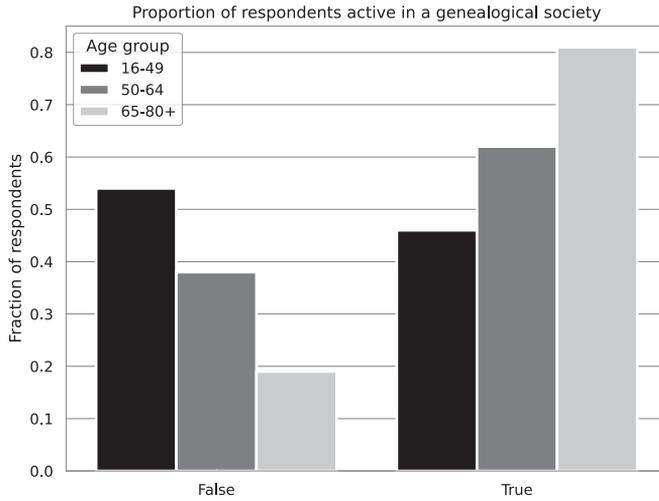


Figure 4. Fraction of respondents active in genealogical societies, divided by age group.

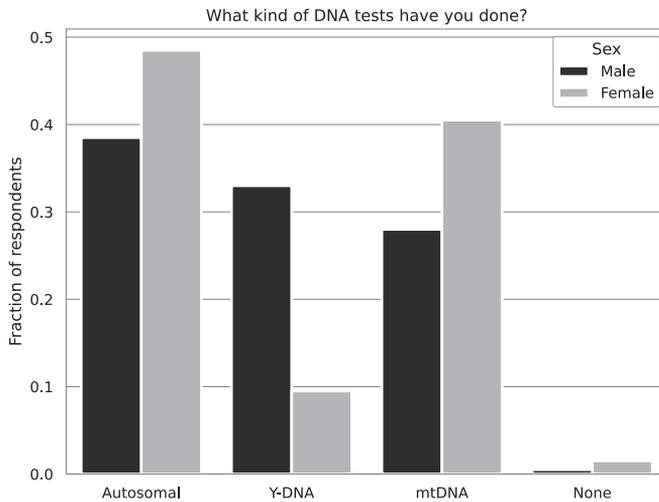


Figure 5. The choices of DNA tests among respondents. Observe that although women cannot take the Y-DNA test, some may let their male relatives take the test as a proxy.

paternal lineage) and the mtDNA (tracing maternal lineage), with a slightly higher difference in the proportion of women taking the mtDNA test. Notably, women cannot take the Y-DNA test, but a sizable share replies that they have done so. While this may seem contradictory, a likely explanation is that female respondents sometimes recruit family members to take a DNA test to gain access to their male genetic heritage.

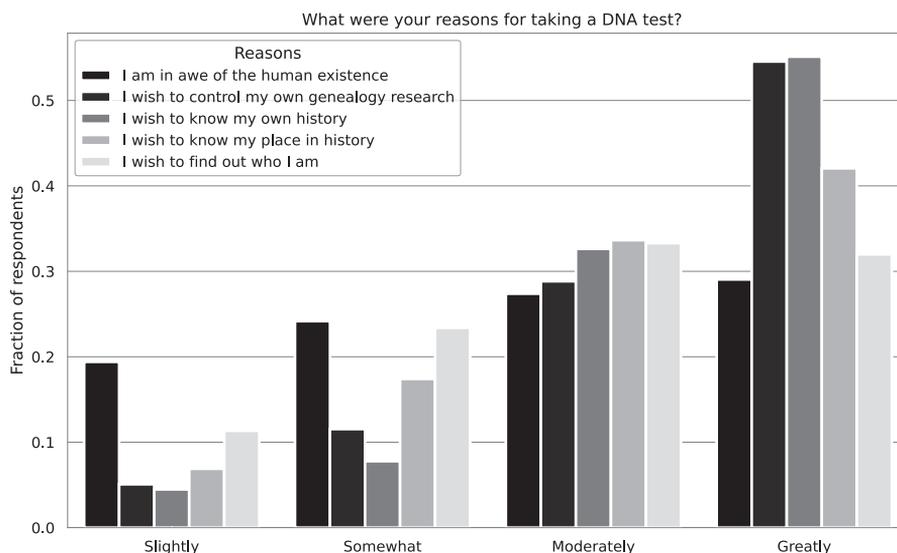


Figure 6. The reasons for taking a DNA test are mainly weighted towards getting to know one's history, rather than an aspect of identity or humanity.

MOTIVATIONS AND PERCEPTIONS

The answers about motivations for taking a DNA test were collected on a scale indicating the degree to which the respondents agreed that the proposed motivations aligned with their own, see Figure 6. The respondents' answers and motivations are similar but clearly dominated by getting to know one's own history and place in history. More introspective motivations such as respondents wanting to know 'who they are' and especially 'being in awe of human existence' played a smaller role in getting the DNA tests. The additional comments also reveal that many are interested in finding unknown relatives, '*unknown*' (Swedish: *okänd*) being the most common adjective in the comments, many looking for potential relatives abroad.

Moreover, comments indicate that many participants were intrigued by the tests' ability to reach further back in time than they had been able to do based on written sources alone. In the comments 40 per cent were interested in getting evidence of unknown kin, and 40 per cent were interested in looking further back in time. Considering that the older population is overrepresented in the survey, younger age groups may have different motivations for taking up genealogical research and taking a DNA test. However, as illustrated in Figure 7, these motivations are similarly distributed across all ages. This indicates that the underlying reason for the skewed age profile of the respondents is not due to this factor.

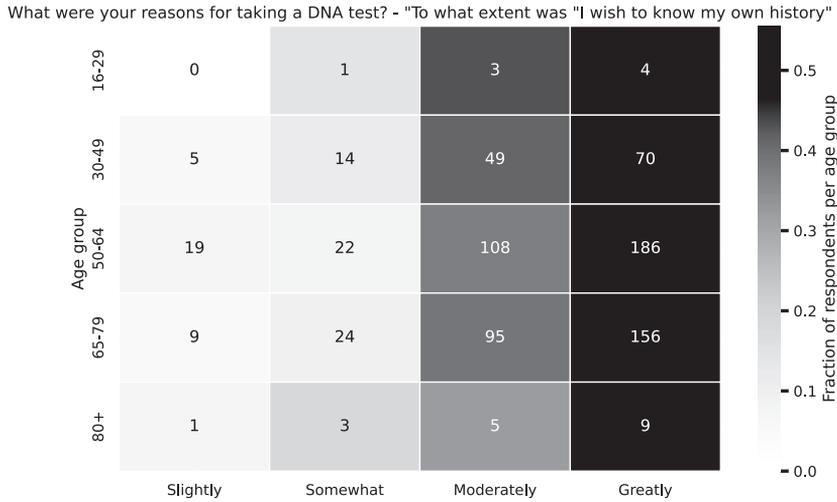


Figure 7. Motivation for taking the test, divided and normalized by age, indicating very little difference between the respondents. Numbers indicate the number of respondents.

The emphasis on learning about oneself and one’s place in history is not surprising. It matches what the commercial kits promise, as discussed above, and it also latches onto and provides ways of expanding on traditional interest in family history. But the answers also reveal how the aims and scope of ‘family’ history have become conceptually expanded due to the possibilities created by DNA research. The ideas of tracing old lineages and of searching for unknown relatives are technologically aided motivations that focus on filling gaps in knowledge. We do, however, propose that beyond harvesting the benefits of new technologies, the perception of self and genetic heritage does not appear radically altered or challenged despite the possibility of making connections to a deeper past.

LEARNING ABOUT SELF AND HISTORY, CONSTRUCTING GENETIC HERITAGE

The respondents were asked to estimate whether their views on certain topics changed post-testing, for example their understanding of their personal history (Figure 8) and whether the result had affected their views relating to notions of nationality, ethnicity, and migration (Figure 9). In general, respondents state that their views have changed little since taking the test. The standout was their views on migrations, where approximately half of respondents claim their views had changed. This is in stark contrast to the views on their own nationality, where more than 40 per cent state that nothing had changed. This was also confirmed in the comments and could indicate a disconnect among the respondents between nationality and

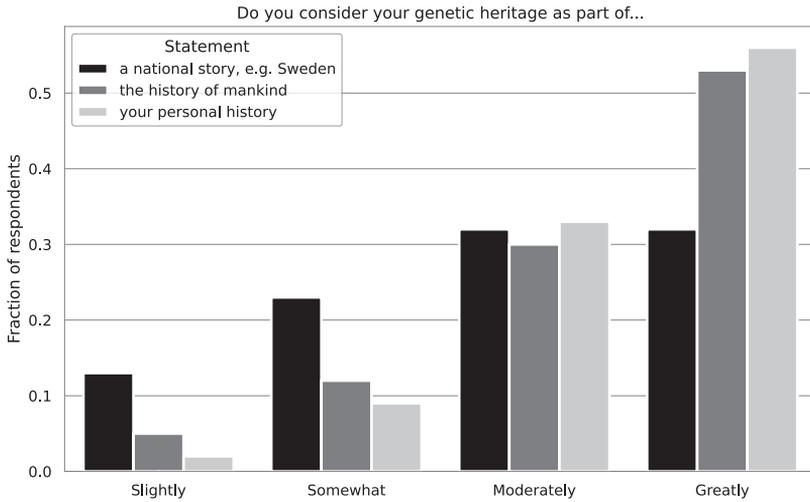


Figure 8. The fraction of respondents who consider their genetic heritage as part of some kind of grand story, indicating that few connect the genetic heritage to national identity.

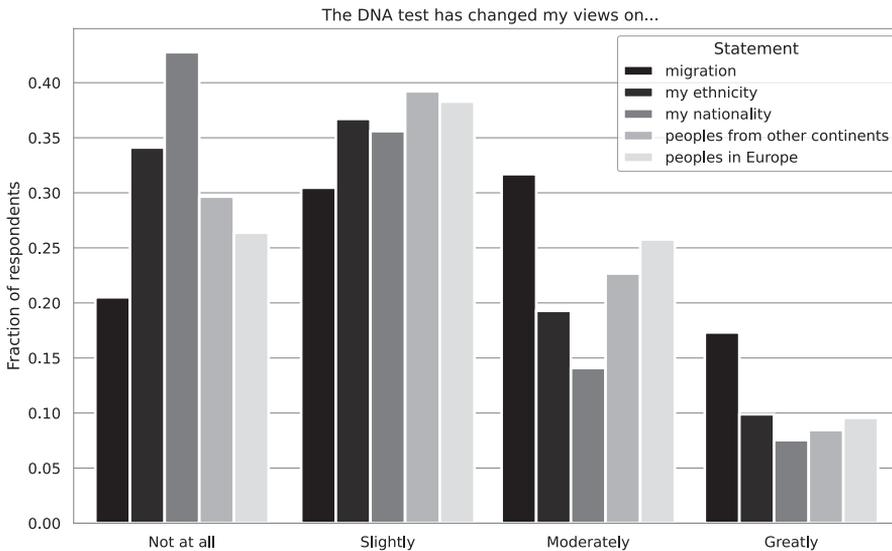


Figure 9. The degree to which the DNA test changed the views of respondents. Most views remained largely unchanged, except for those pertaining to migration.

biology (DNA), or simply that nationality in general is perceived as more fixed than the other subjects listed. Figure 8 supports the former hypothesis, showing that only about 30 per cent of respondents strongly consider their genetic heritage to be part of a national story. To further nuance this, we

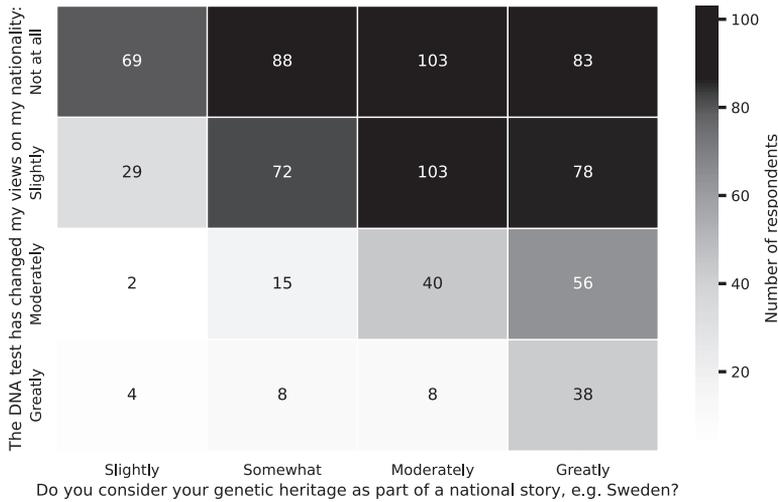


Figure 10. Cross table comparing the intersection of the attitudes of genetic heritage as part of a national story, and whether the test changed one’s views on nationality, indicating that few respondents have changed views on their nationality after taking the DNA test, irrespective of their views on their genetic heritage.

cross-examine the answers of whether people’s genetic heritage is part of a national history with the answers about whether the respondents’ views on their nationality has changed. Figure 10 shows a cross tabulation of these two questions, indicating that a large number of respondents do not think their views on nationality have changed, no matter how they view their genetic heritage. When asked to what degree the DNA test had changed the respondents’ attitudes, for example becoming more humble, tolerant, or broadminded, most respondents gave the same answer to all three questions, with a correlation coefficient between all responses in the range 0.8 to 0.87. This indicates that the options were hard to distinguish from each other. Moreover, most respondents reply that they already consider themselves comparatively humble, tolerant, and broadminded.

Overall, the survey data suggest that getting personal genetic information had only superficial cognitive or social effects in most cases. Moreover, the DNA test results generally did not affect the interviewees’ perceptions of and attitudes towards parents, siblings, and other family members. This attitude was also confirmed by the free text, with 50 per cent missing the option of stating that it had no effect at all. Around 20 per cent claimed finding family members had changed their understanding of their relationships; this seems a natural response and does not in itself suggest that genetic testing alters notions of Self and family, although it may expand both.

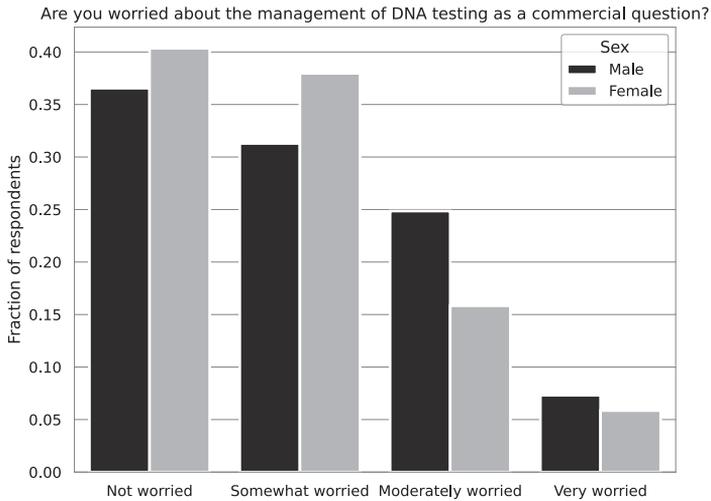


Figure 11. Respondents' concerns regarding ownership of genetic data.

OWNERSHIP AND POLITICS OF GENETIC HERITAGE AND THE PAST

Ownership of genetic information frequently emerges as a political or cultural-rights concern and is often discussed in the media (Reardon & TallBear 2012; Sawyer 2021). Our genomes contain a wealth of sensitive information and how companies are supposed to store, handle, and provide access to these data is subject to regulation and highly contested. But how widespread are such concerns in countries like Sweden, and how do they become articulated vis-à-vis personal DNA data? Respondents were asked to estimate their degree of concern over the management of the tests in the context of ethics as well as political and commercial interests. Figure 11 shows that most respondents were somewhat or not at all worried by this (approximately 80 per cent), but somewhat more worried about commercial influences over political ones. Interestingly, this difference is more pronounced between genders, where women are less worried than men (21 per cent versus 33 per cent being 'moderately worried' or more). Comments reveal that a lot of the concern is centred around genetic disorders, and specifically how the presence of inherited diseases might be used by commercial insurance companies. In terms of concern over political interests, this result is strikingly different from views expressed internationally amongst different indigenous communities, where historical abuse and misuse of biological data have been rife (Reardon & TallBear 2012; TallBear 2013). Without a similarly contested historical legacy, the Swedish respondents did not share, or maybe did not even recognize, this as an issue. There was, however, a distinct concern (50 per cent of comments) about their ability to

understand the information they had received. The nature of this concern was not, however, well illuminated by the questionnaire. The concern about information, or the intelligibility of the information, has also been raised in other surveys (e.g. Marcon et al. 2021; Scully et al. 2016).

Discussion and conclusions

Several themes emerge from the questionnaire results and comments. These complement existing emerging interest in people's reception and enactment of genetic knowledge (e.g. Scully et al. 2016) and help to widen insights into these contemporary practices and concerns, including how they may link to notions of history and the past. Our explicit interest has been whether and how expectations and the subsequent 'performance of genetic knowledge' are being shaped and, also, whether this should be characterized as a (new) form of heritage. More specifically, we ask whether we see new formulations of identity and genetic heritage influenced by popular consumptions of genetic information, or are the genetic information co-opted into existing notions of identity and family?

Understanding the motivations leading people to participate in creating these new kinds of bio-socio-genetic knowledge is a key issue emerging from this study. Although the findings of our study need to be followed up, including comparative studies of other countries and different sectors within society, the results challenge the idea that genetic genealogies merely represent a continuation of earlier rather narrow archive-based family genealogies, while at the same time rejecting easy suggestions that the motivations are largely abstract and about placing oneself in the history of 'mankind'. A striking feature from the survey is, therefore, that whilst it does suggest interest in the more remote pasts, the main motivation is clearly the wish to establish the scale of family networks by exploring the new technology. This argues that it is important to distinguish analytically between the importance of ancestry and relationality as DNA analyses are now able to provide both specific instances of deep past relations (in place of previous, more abstract ideas of ancestry) and searching out direct biological kin. Tracing personal relations appears to be the strongest motivation for taking a test. Thus, in the comments to question nine, 50 per cent of the respondents said they had discovered new family, and 35 per cent had also got new friends, while 10 per cent had lost family. This is a result of the fragmentation of knowledge about kin as a product of historically recent or ongoing migrations, making finding relatives and looking for 'lost kin' a common rationale for using DNA testing (see also Guerrini et al. 2022).

This reason is explicitly personal, and it corresponds directly to what the providers promise in their advertisements.

The further question this raises is whether people (knowable or unknowable) try to activate the data they receive in a manner that aims to convert a biogenetic fact into a sociocultural aspiration. The new technologies might even give people a formulation of their past that can fuel their aspiration to establish new kinds of future relations based on quite traditional ideas of kinship.

The findings also address questions about whether and how the new form of genetic knowledge, or a 'heritage of Self', may influence notions of Self and relationships to others, including the nation. We speculated about whether the DNA testing would make reflections on the Self more complicated and variegated as the differences between social and biological relations are laid bare. We wondered whether these new practices might affect people's notion of belonging with others, including the nation, and thus also articulate ideas about shared heritage in new ways. This seems not to have been the case, as respondents were relatively unaffected in terms of what may be seen as a range of socio-political relations. This suggests that some of the greater complexities that DNA-testing may reveal about the overlap between different identities (e.g. family, ethnicity, nation) are not of great interest or too complex to affect the respondents' consumption of the data. Through these new technologies, genealogy may become a particular articulation of how heritage/inheritance is understood and argued, but not the sole author of them.

The two motives are not contradictory but are distinct. Historical context is clearly a significant issue guarding against excessive generalization. As we discussed earlier, historical demographers view nuclear family, neolocal residence, and late marriage patterns as features that have characterized northwestern European kinship since at least the Middle Ages. This has typically resulted in shallow family genealogies (three-generational); the importance of the new test is that it promises to expand the reach. Moreover, the history of out-migration of junior male members of families provides a strong interest in tracing the spatial extent of potential kinship and marriage networks. Genetic results developed for ancestry studies tend towards the promotion of surprise and discovery. This may equally be true of settler colony communities emanating from northwestern Europe and settled in many parts of the world. Where these communities are dominant over Indigenous peoples or people of non-European origins, how new kinds of bio-socio-genetic data will be adapted and used in conditions of racism and social inequality is an immensely complex topic (Abel 2022; Nelson 2016; TallBear 2013) and lies outside the scope of this paper. However, our results suggest that the popularity of DNA testing in Sweden,

northwestern Europe and North America is also, at least in part, linked to their connected histories.

Finally, it seems that the results of our study do not support previous arguments (Abel & Frieman 2022; Strand & Källén 2021) that the widespread expansion of genealogy DNA testing in the western world might stimulate nationalism and other forms of identity formation, including white supremacy. It should be noted, however, that we are dealing with a particular segment of Swedish society that tends to have higher levels of formal education, and which may not reflect the broader nationalist and anti-migration movements in Sweden and other European countries. In the latter contexts, critical debates appear to be more directly tied to findings from aDNA research (summarized in Kristiansen 2022) and their wide circulation in popular media (Källén 2019). As the number of high-resolution ancient genomes continues to increase, including Medieval and early historical periods, we wonder whether in the future personalized DNA testing will increasingly become connected with ancient DNA results. This will bring new challenges, not least ethical ones (Källén 2025), but also questions about what the desired outcomes and potential repercussions would be from extending the notion of Self.

Acknowledgements

This paper is dedicated to the memory of Michael Rowlands who died in July 2025, and who was a central figure in the collaboration between Gothenburg and UCL at the Centre for Critical Heritage Studies (CCHS) where this article originated.

References

- Abel, S. 2022. *Permanent Markers: Race, Ancestry, and the Body after the Genome*. Chapel Hill, NC: University of North Carolina Press.
- Abel, S. & Frieman, C.J. 2023. On Gene-Ealogy: Identity, Descent, and Affiliation in the Era of Home DNA Testing. *Anthropological Science*. Vol. 131, pp. 15–25, doi:10.1537/ase.2210242.
- Antoni, R. 2008. De mångas kultur. In: Nilsson, L. & Antoni, R. (eds), *Medborgarna, regionen och flernivådemokratien*, pp. 9–106. Gothenburg: SOM Institute.
- Benn Torres, J. 2020. Anthropological Perspectives on Genomic Data, Genetic Ancestry, and Race. *American Journal of Physical Anthropology*. Vol. 171(70), pp. 74–86, doi:10.1002/ajpa.23979.
- Bojs, K. 2015. *Min europeiska familj: De senaste 54 000 åren*. Stockholm: Albert Bonniers Förlag.

- Brodén, D. 2018. Negative to That of Others, but Negligent of One's Own? On Patterns in National Statistics on Cultural Heritage in Sweden. In: Mäkelä, E., Tolonen, M. & Tuominen, J. (eds), *DHN 2018: Proceedings of the Digital Humanities in the Nordic Countries 3rd Conference*, pp. 7–9 March 2018. Helsinki: University of Helsinki.
- Brodén, D. 2013. *Kulturvanor i Sverige 1989–2012*. SOM-rapport.
- Brodén, D. 2017. *Kulturarv i förändring: Mönster och vidgade perspektiv*. SOM-rapport.
- Brück, J. & Frieman, C.J. 2021. Making Kin: The Archaeology and Genetics of Human Relationships. *TATuP: Journal for Technology Assessment in Theory and Practice*. Vol. 30(2), pp. 47–52, doi: 10.14512/tatup.30.2.47.
- Carlson, H. 2020. The Route to Your Roots: New Ethnic Symbols in the Age of the Genome. *Nations and Nationalism*. Vol. 26(4), pp. 826–844, doi:10.1111/nana.12642.
- Fukuyama, F. 2018. *Identity: Contemporary Identity Politics and the Struggle for Recognition*. London: Profile Books.
- Glynis, M. 2015. *Coping with Threatened Identities*. New York: Psychology Press.
- Goody, J. 1996. Comparing Family Systems in Europe and Asia: Are There Different Sets of Rules? *Population and Development Review*. Vol. 22(1), pp. 1–20.
- Graves, J.L. & Goodman, A.H. 2021. DNA and Ancestry Testing. In: Graves, J.L. & Goodman, A.H. (eds), *Racism, Not Race: Answers to Frequently Asked Questions*, pp. 179–196. New York: Columbia University Press.
- Guerrini, C.J., Robinson, J.O. [...] Schuman, O. & McGuire, A.L. 2022. Family Secrets: Experiences and Outcomes of Participating in Direct-to-Consumer Genetic Relative-Finder Services. *The American Journal of Human Genetics*. Vol. 109(3), pp. 486–497, doi:10.1016/j.ajhg.2022.01.013.
- Hajnal, J. 1965. European Marriage Patterns in Perspective. In: Glass, D.V. & Eversley, D.E.C. (eds), *Population in History*, pp. 101–143. London: Hodder and Stoughton.
- Hartman, M.S. 2004. *The Household and the Making of History: A Subversive View of the Western Past*. Cambridge: Cambridge University Press.
- Hazel, J.W., Hammack-Aviran, C. [...] Beskow, L.M. & Clayton, E.W. 2021. Direct-to-Consumer Genetic Testing: Prospective Users' Attitudes toward Information about Ancestry and Biological Relationships. *PLoS One*. Vol. 16(11), e0260340, doi:10.1371/journal.pone.0260340.
- Jobling, M.A., Rasteiro, R. & Wetton, J.H. 2015. In the Blood: The Myth and Reality of Genetic Markers of Identity. *Ethnic and Racial Studies*. Vol. 39(2), pp. 142–161, doi:10.1080/01419870.2016.1105990.
- Kajda, K., Marx, A. [...] Issa, M. & Frase, I. 2018. Archaeology, Heritage, and Social Value: Public Perspectives on European Archaeology. *European Journal of Archaeology*. Vol. 21(1), pp. 96–117, doi:10.1017/ea.2017.19.
- Källén, A. 2025. *The Trouble with Ancient DNA: Telling Stories of the Past with Genomic Science*. Chicago: University of Chicago Press.
- Källén, A., Mulcare, C., Nyblom, A. & Strand, D. 2019. Archaeogenetics in Popular Media: Contemporary Implications of Ancient DNA. *Current Swedish Archaeology*. Vol. 27, pp. 69–91, doi:10.37718/CSA.2019.04.
- Kennett, D. 2011. *DNA and Social Networking: A Guide to Genealogy in the Twenty-First Century*. Stroud: The History Press.
- Kristiansen, K. 2022. *Archaeology and Genetics in European Prehistory*. Cambridge: Element Books.

- Laslett, P. 1969. Size and Structure of the Household in England Over Three Centuries. *Population Studies*. Vol. 23(2), pp. 199–223.
- Laslett, P. 1983. Family and Household as Work Group and Kin Group: Areas of Traditional Europe Compared. In: Wall, R., Robin, J. & Laslett, P. (eds), *Family Forms in Historic Europe*, pp. 513–563. Cambridge: Cambridge University Press.
- Laslett, P. 2021. *The World We Have Lost*. London: Routledge.
- Lewis, A.C.F., Molina, S.J. [...] Neale, B.M. & Allen, D.S. 2022. Getting Genetic Ancestry Right for Science and Society. *Science*. Vol. 376(6590), pp. 250–252, doi:10.1126/science.abm7530.
- Lewontin, R.C. 1972. The Apportionment of Human Diversity. In: Dobzhansky, T., Hecht, M.K. & Steere, W.C. (eds), *Evolutionary Biology: Volume 6*, pp. 381–398. New York: Springer.
- Macdonald, S. 2013. *Memorylands: Heritage and Identity in Europe Today*. London: Routledge.
- Macfarlane, A. 1978. *The Origins of English Individualism: The Family, Property and Social Transition*. Oxford: Basil Blackwell.
- Mallick, S., Micco, A. [...] Patterson, N. & Reich, D. 2024. The Allen Ancient DNA Resource (AADR): A Curated Compendium of Ancient Human Genomes. *Scientific Data*. Vol. 11, 182, doi:10.1038/s41597-024-03031-7.
- Malm, C.J. 2016. Genealogy, Archives and Uses of the Past. Conference paper, ACHS Montréal, Canada. Available at: <https://urn.kb.se/resolve?urn=urn:nbn:se:mau:diva-58405>
- Marcon, A.R., Rachul, C. & Caulfield, T. 2021. The Consumer Representation of DNA Ancestry Testing on YouTube. *New Genetics and Society*. Vol. 40(2), pp. 133–154, doi:10.1080/14636778.2020.1868988.
- Merriman, N. 2016. *Beyond the Glass Case: The Past, the Heritage and the Public*. London: Routledge.
- Nash, C. 2015. *Genetic Geographies: The Trouble with Ancestry*. Minneapolis: University of Minnesota Press.
- Nelson, A. 2016. *The Social Life of DNA: Race, Reparations, and Reconciliation After the Genome*. Boston: Beacon Press.
- Nordgren, A. & Juengst, E.T. 2009. Can Genomics Tell Me Who I Am? Essentialistic Rhetoric in Direct-to-Consumer DNA Testing. *New Genetics and Society*. Vol. 28(2), pp. 157–172, doi: 10.1080/14636770902901595.
- Novembre, J., Johnson, T. [...] Stephens, M. & Bustamante, C.D. 2008. Genes Mirror Geography Within Europe. *Nature*. Vol. 456(7218), pp. 98–101, doi:10.1038/nature07331.
- Parthasarathy, S. 2010. Assessing the Social Impact of Direct-to-Consumer Genetic Testing: Understanding Sociotechnical Architectures. *Genetics in Medicine: Official Journal of the American College of Medical Genetics*. Vol. 12(9), pp. 544–547, doi:10.1097/GIM.0b013e3181e71c70.
- Reardon, J. & TallBear, K. 2012. ‘Your DNA Is Our History’: Genomics, Anthropology, and the Construction of Whiteness as Property. *Current Anthropology*. Vol. 53(S5), pp. S233–S245, doi:10.1086/662629.
- Roberts, J.S. & Ostergren, J. 2013. Direct-to-Consumer Genetic Testing and Personal Genomics Services: A Review of Recent Empirical Studies. *Current Genetic Medicine Reports*. Vol. 1(3), pp. 182–200, doi:10.1007/s40142-013-0018-2.

- Roth, W.D., Yaylaci, Ş., Jaffe, K. & Richardson, L. 2020. Do Genetic Ancestry Tests Increase Racial Essentialism? Findings from a Randomized Controlled Trial. *PloS One*. Vol. 15(1), e0227399, doi: 10.1371/journal.pone.0227399.
- Ruggles, S. 2009. Reconsidering the Northwest European Family System: Living Arrangements of the Aged in Comparative Historical Perspective. *Population and Development Review*. Vol. 35(2), pp. 249–273, doi: 10.1111/j.1728-4457.2009.00275.x.
- Sawyer, A. 2021. Who Owns Your DNA? *BioTechniques*. Vol. 71(1), pp. 355–357, doi:10.2144/btn-2021-0059.
- Scully, M. 2018. Constructing Masculinity through Genetic Legacies: Family Histories, Y-Chromosomes, and 'Viking Identities'. *Genealogy*. Vol. 2, pp. 1–17, doi:10.3390/genealogy2010008.
- Scully, M., Brown, S.D. & King, T. 2016. Becoming a Viking: DNA Testing, Genetic Ancestry and Placeholder Identity. *Ethnic and Racial Studies*. Vol. 39(2), pp. 162–180, doi:10.1080/01419870.2016.1105991.
- Sjölund, P. 2016. *Släktforskning med DNA*. Sveriges Släktforskarförbunds Handböcker 9. Solna: Sveriges Släktforskarförbund.
- Sjölund, P. 2019. *Från DNA-test till släktträd*. Solna: Sveriges Släktforskarförbund.
- Skogsjö, H. 1983. Swedish Genealogical Societies 1883–1983. *Swedish American Genealogist*. Vol. 3:3. Available at: <https://digitalcommons.augustana.edu/swensonsag/vol3/iss3/2>
- Sovič, S. 2008. European Family History: Moving Beyond Stereotypes of 'East' and 'West.' *Cultural and Social History*. Vol. 5(2), pp. 141–163, doi:10.2752/147800408X299602.
- Strand, D. & Källén, A. 2021. I Am a Viking! DNA, Popular Culture and the Construction of Geneticized Identity. *New Genetics and Society*. Vol. 40(4), pp. 520–540, doi:10.1080/14636778.2020.1868988.
- Supplementary File 1. Quantitative results from the survey 'DNA testing as part of genealogy'. Available at: <https://publicera.kb.se/csa/issue/>
- Supplementary File 2. Comments to the survey 'DNA testing as part of genealogy'. Available at: <https://publicera.kb.se/csa/issue/>
- Tadmor, N. 2010. Early Modern English Kinship in the Long Run: Reflections on Continuity. *Continuity and Change*. Vol. 25(1), pp. 15–48, doi:10.1017/S0268416010000093.
- TallBear, K. 2013. *Native American DNA: Tribal Belonging and the False Promise of Genetic Science*. Minneapolis: University of Minnesota Press.
- Thornton, A. 2013. *Reading History Sideways: The Fallacy and Enduring Impact of the Developmental Paradigm on Family Life*. Chicago: University of Chicago Press.
- Weibull, L., Nilsson, Å. & Holmberg, S. 2008. Det myckna bokskrivandet tar aldrig slut. In: Holmberg, S. & Weibull, L. (eds), *Skilda världar: trettioåtta kapitel om politik, medier och samhälle*, pp. 257–268. Gothenburg: SOM Institute.

Elks on the Loose

Antique Elk (*Alces alces*) in Funnel Beaker Culture Deposits from North Zealand, Denmark

Pernille Pantmann¹ & Pernille Bangsgaard²

Abstract

This paper presents two Danish examples from the Funnel Beaker Culture illustrating a practice of depositing antique elements – in this case elk bones. While faunal remains are a well-known aspect of complex Neolithic deposition practices, the scope and nuances of these depositional practices remain unclear, partly due to a general lack of ¹⁴C dates and detailed zooarchaeological analysis. One key outcome of an increased focus on Accelerator Mass Spectrometry (AMS) dating is the identification of deposited antiques. Although the concept of antiques in archaeological contexts is not new, it has rarely been discussed in Neolithic contexts, despite its relevance to theories of social memory and mnemonic materiality. Recognizing the phenomenon of deposited antique animal remains requires both archaeological openness to the idea and sufficient ¹⁴C dating. The two examples discussed here – both involving Maglemosian Elk bones found together with Neolithic domesticated animals – were discovered in wetland contexts in North Zealand, Denmark. Together, they highlight the potential of direct AMS dating in revealing previously unrecognized practices of temporal reuse, as well as shedding new light on Neolithic engagements with time, materiality, and memory.

Keywords: Neolithic animal deposits, ¹⁴C dates, elk, Maglemose period, deposited antiques, mnemonic significance, animal turn

¹ Museum Nordsjælland, Denmark
ppa@museums.dk

² Globe Institute, Københavns Universitet, Denmark
pernille.bangsgaard@sund.ku.dk

This is an Open Access article distributed under the terms of the Creative Commons 4.0 International licence (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

The South Scandinavian Funnel Beaker Culture (TRB) is characterized by a rich and complex repertoire of deposition practices that reflect the multifaceted relationships between people, objects and places. These practices involve the intentional placement of various categories of objects, including bones, ceramics and flint axes. Deposits from the period are commonly located in various types of wetlands, associated with megaliths or placed in pits on dry land. These patterns have attracted scholarly attention, and several studies have investigated the spatial and material characteristics of these deposits, focusing on specific objects, such as ceramics, or on specific sites (e.g. Andersen 2000; Becker 1948; Berggren 2015; Kock 1998; Rudebeck & Macheridis 2015).

Despite this growing body of research, animal deposits from the TRB have only received relatively sporadic scholarly attention. While some pioneering studies have discussed faunal deposits from the Neolithic, these have often been case-specific, with limited synthesis addressing a broader geographic or temporal scale (e.g. Skaarup 1985; Koch 1998; Nilsson 1995; Nilsson & Nilsson 2003; Rudebeck & Macheridis 2015), while other studies have focused on adjacent periods and cultures such as Pitted Ware Culture (e.g. Wincentz 2020). Consequently, our understanding of the role of animals in TRB depositional practices remains fragmented. We still know little about how species were selected, which body parts were preferred or which social, symbolic or mnemonic principles guided the inclusion of animal bodies in ritual contexts.

This lack of synthesis is striking, since animal remains offer a unique interpretive lens through which to explore the human-animal relationship of the period. Animals were not merely by-products of human activity or indicators of economy – they were active participants in social life and ritual communication. As Armstrong Oma (2010:177) has argued, the human-animal relationship can be viewed as a social contract, entailing mutual obligations and forms of trust. When placed in depositional contexts – whether as complete carcasses or selected anatomical parts – animals may thus have operated as agents of transformation, mediating between temporal, spiritual and social domains. Archaeological inquiry into such roles requires sustained analytical attention that integrates zooarchaeological evidence with theoretical perspectives on materiality, memory and human-animal relations.

This study draws attention to one particularly evocative aspect of TRB depositional practices: the deliberate incorporation of antique animal remains or animal elements already ancient at the time of deposition. The Cambridge Dictionary (2026) defines *antique* as “something made in an



Figure 1. Map of the location of all South Scandinavian sites: Salpetermosen Syd 10 (1) Favrholm 5 (2), Dösemarken (3), Saxtorp (4) Skævinge (5) Syltholm Fjord (6) Lindgård/Kildevang (7) Ravsnæs (8).

earlier period that is collected and considered to have value because it is beautiful, rare, old, or of high quality”. Applying this notion archaeologically, we use the term to describe curated faunal remains that were re-contextualized within later ritualized frameworks. This specific term has already been used by other scholars (e.g. Knight et al. 2019:4), while in other studies, the phenomenon is known as ancestral artefacts (Caple 2010:305). Rather than defining these faunal remains as ancestral, we choose to use the term antique throughout the article. Recognizing antiques and the faunal antiques in particular, opens new perspectives on Neolithic engagements with time, ancestry, and material continuity, suggesting that animals themselves could embody connections to a remembered or imagined past.

The current article seeks to improve our understanding of one aspect of the animal role: specifically, curated antique animal remains in TRB depositional practices. It suggests that the inclusion of temporally distant objects may have been an element within TRB ritual and mnemonic frameworks, as is known from other periods of the past. We argue that this aspect of ritual

and mnemonic frameworks should be included in Neolithic studies and be applied to faunal remains as well as artefacts. This approach will, in time, contribute to our understanding of the complexity of the Neolithic societies and examine whether these acts were deliberate attempts to reference or harness the power of the past. By foregrounding the animal as both material and mnemonic agent, we aim to contribute to broader debates about the entanglement of humans, animals and temporality in Neolithic ritual life. Rather than presenting a full catalogue of examples, the intention of this article is to present a new perspective on animal deposits from the TRB.

To investigate these questions, this study introduces two new Danish cases in which juvenile elk bones and antler from the Mesolithic Maglemose period were deposited together with Neolithic bones of domesticated animals in wetland contexts. These examples, identified through systematic AMS radiocarbon dating and detailed zooarchaeological analysis, demonstrate that some animal remains in Neolithic deposits were not contemporary but rather re-contextualized relics of a deeper past. As such, they offer insight into the ways Neolithic communities engaged materially and symbolically with animals and time.

Methods

The study is based on two faunal deposits from wetland contexts in North Zealand—Salpetermosen Syd (MNS50010) and Favrholt 5 (MNS50595), which form the core empirical material for the analysis. Both sites were excavated and documented by Museum Nordsjælland between 2018 and 2021, and all subsequent archaeological and zooarchaeological analyses were carried out by the authors.

Faunal remains were identified to species or the lowest possible taxonomic level using comparative collections at the Natural History Museum of Denmark, University of Copenhagen. Age-at-death estimations were based on dental eruption and wear, as well as epiphyseal fusion, and taphonomic observations recorded preservation and any working traces or burning. Selected bones were sampled for Accelerator Mass Spectrometry (AMS) dating at the Poznań Radiocarbon Laboratory (Poz). Calibration followed OxCal 4.4 with the IntCal20 dataset, and all dates are reported as calibrated years BC at 2 σ (95.4%) probability.

The archaeological context of each deposit was recorded during excavation and subsequently re-evaluated in light of the new chronological data. The integration of stratigraphic observations, species identification and direct dating enabled an assessment of whether the faunal assemblages represented single depositional events or the deliberate inclusion of temporally

distant elements. Comparative data from published Neolithic faunal deposits in Denmark and southern Scandinavia have been used to situate the two cases within a wider interpretive framework (e.g. Koch 1998; Nilsson & Nilsson 2003; Rudebeck & Macheridis 2015; Berggren 2015).

By combining detailed zooarchaeological analysis with direct AMS radiocarbon dating, the study provides an independent and internally consistent empirical basis for interpreting the two assemblages as examples of deposited antiques, in this case animal remains re-contextualized within later ritual frameworks. This integrated approach allows for both fine-grained reconstructions of depositional practice and broader reflections on Neolithic engagements with time, ancestry and the agency of animals.

Secure elk remains and their chronological distribution in Denmark

Elk (*Alces alces*) appears to have disappeared from present-day Denmark by the Neolithic (Aaris-Sørensen 1980). The last secure elk remains on the Jutland peninsula come from Kainsbakke, near Grenå, dated indirectly via associated aurochs bone to around 4800–4400 cal. kyr BP (Richter 1991; Aaris-Sørensen 2010:26). On Zealand, elk disappeared significantly earlier and the last secure remains consist of a young adult bull and a calf found near Favrbø (Krudtmose, ZMK19/1920). The remains were C14 dated to 8632±130 and 8528 BC±150 (OxCal 4.4) respectively (Aaris-Sørensen 1998: 138–139; Møhl 1980, ZMK archive).

‘Secure remains’ refers to bones not exclusively consisting of teeth beads, worked antler or bones from the extremities, which were more often curated, traded or transported over long distances or even periods as part of skins or as valuable raw materials (Aaris-Sørensen 1998:178–179).

The complexity of animal deposits from TRB

The deliberate deposition of faunal remains, whether on their own or in combination with other objects, is considered a relatively common practice during the Neolithic period (e.g. Andersen 2000; Skaarup 1985). Eva Koch observed that 54 out of 100 finds of so-called ‘bog pots’ (deposited prehistoric ceramic vessels within a wetland context) include animal bones, yet she also noted that many wetlands appear to have been used over long time spans, complicating the temporal relationship between the deposited objects (Koch 1998:154). As such, the assumption that animal deposits were relatively common during the Neolithic is rarely grounded in solid 14C dates

from the faunal remains themselves. In truth, we are largely in the dark when it comes to determining the scale and timing of animal deposition practices in TRB wetland contexts and knowing whether certain species or body parts were favoured during this period. Nonetheless, a few published examples from South Scandinavia illustrate the diversity of these practices.

At Dösemarken, in southern Sweden, TRB pits contained articulated body parts of cattle and pigs arranged with flint and ceramics, suggesting deliberate composition (Berggren 2015). At Saxtorp, deposits of mixed species highlight both the complexity and the chronological uncertainty that often surrounds such assemblages, as some bones dated much later than expected (Nilsson & Nilsson 2003). Similar patterns appear in Denmark: at Skævinge Mose a funnel beaker contained a juvenile pig humerus and acorns (Becker 1948; Koch 1998), while the Syltholm fjord 'structure A' comprised of repeated deposits of animal mandibles spanning a millennium and included species such as pig, wild cat, dog, deer, fox, otter, and roe deer (Sørensen 2019). Other examples, such as Lindegård and Kildevang, likewise demonstrate the structured placement of selected animal parts in wet contexts (Skousen 2008).

Comparable Neolithic, ritualized deposits of animals are known beyond Scandinavia. In Britain, over 160 faunal deposits from the Neolithic and Early Bronze Age range from single bones to nearly complete skeletons, but few are directly dated (Serjeantson 2011). Among those that are, several include elements much older than their depositional contexts, such as Mesolithic remains incorporated into Neolithic features at sites including Stonehenge and the Dorset Cursus (Teather 2018).

These indications of temporal disjunction in Britain suggest that some Neolithic animal deposits may have intentionally included older material. In Denmark, antique faunal elements, such as the elk examples presented below, suggest that ancient bones could have been deliberately reintroduced into later ritual contexts, linking the living community to a remembered or imagined past.

TRB Deposition with Maglemosian Elements: The Case of Deposit E

The Salpetermosen Syd site (MNS50010) located south of Hillerød in North Zealand, was originally situated in a landscape of low-lying hills with dead-ice topography and young moraine formations, centred around the former inland lake of Salpetermosen, which gradually transformed into fenland. Smaller fens, kettle holes, creeks and natural springs created a rich wetland environment, inhabited since the Maglemosian period, as evidenced by scat-

Table 1. Overview of all mentioned bones from Salpetermosen 10 SydA793 with AMS dates.

| Context # | Species | Bones | Observations | Dates |
|----------------------|--------------------|---|--|--|
| x1009 A793 Dep. E | <i>Alces alces</i> | 1 kranium fragment, 1 mandible, 2 humeri, 1 metacarpal | Age: 4–4½ months (tooth eruption/wear), distal mtc unfused, minor carnivore gnawing on three elements | 7941–7605 BC (Poz-102905) mandible |
| | Large ungulate | Teeth and ribs fragments | Age: juvenile, probably the same young elk | |
| | <i>Sus</i> sp. | 1 femur | Age: pullus | 3630–3372 BC (Poz-111856) |
| Surface find | <i>Alces alces</i> | 1 radius | Age: distal unfused, similar size to bones in x1009 | |

tered flint and bone artefacts. During the early Neolithic, the area became more densely inhabited with settlements concentrated along the wetland margins, reflecting broader regional trends (Pantmann 2020).

Over the past 150 years, extensive drainage and land levelling have radically altered the landscape, converting it into a relatively flat agricultural terrain. During both the Neolithic and the Iron Age, the area provided critical resources such as water and grazing. Local pollen analyses suggest an open woodland landscape with indicators of grazing during the TRB. Furthermore, the wetlands were used for depositing orchestrated and curated artefacts such as pottery and flint tools. During the Iron Age the use of the wetlands intensified as peat was cut for fuel and wells were dug on the margins, making use of the high water level. So-called ‘mundane trash’ was dumped into the swampy areas, while orchestrated deposits – including animal bones, white stones, pottery and wooden objects – were placed in watery environments.

One such fen, A793, exhibited complex activity patterns from both the Neolithic and the Iron Age. The southern section showed more Neolithic use, while the northern section was predominantly used during the Iron Age. More than 40 peat-cutting pits and over 50 faunal deposits, along with wooden artifacts, whitish stones and ceramics have been documented from the fen (Bangsgaard & Pantmann 2021). On the brink of fen A793, and at the outskirts of the other activities in the fen, lay deposit E (x1009). The bones in this deposit appeared disarticulated, but they were concentrated within an area of 50 x 50cm with no visible disturbance or any other finds in the vicinity. Initially, the collection seemed unremarkable compared to the other bone deposits in A793, but upon closer analysis it was shown to be exceptional (Bangsgaard 2018).

Deposit E (x1009) contained six identifiable elk bones (a metacarpal, two humeri, a mandible, a loose tooth and a cranial fragment) as well as smaller mandibular and rib fragments only identifiable to a large ungulate.



Figure 2. The deposit x1009 (E) from Salpetermosen 10 Syd in situ with a 50 cm scalebar. Photo: Museum Nordsjælland.

The close correspondence in size and morphology suggests that all the bones in x1009 are from a single juvenile elk. Direct comparison of teeth wear and eruption suggest an estimated age of four to four and a half months at death. Notably, concentration E also contained a humerus diaphysis from a very young piglet (*pullus*), suggesting a multi-species composition similar to other TRB faunal deposits.

An additional juvenile elk radius was recovered from the excavated soil (x1721), likely belonging to the same animal, although this cannot be confirmed due to a lack of secure contextual information. However, the age category, size and morphology of the bone suggest that this bone originates from the same deposit and animal.

The bones in deposit E (x1009) along with the radius from x1721 consist of elements from the cranium, extremities and front legs, representing both sides of the body, without any overlap. This further suggests a single animal, either as a near-complete carcass or substantial portion thereof rather than a skin with attached bones.

Initially, the assemblage was thought to belong to the Iron Age, consistent with other deposits in A793. However, since elks were extinct on Zealand long before that period, this interpretation was untenable. Two alternative explanations were considered: either the elk remains originated from an earlier period and were found and redeposited during the Iron Age, or the bones were transported from a nearby region where elk were still present



Figure 3. Mandible from a 4–4½ months old elk calf from deposit x1009 (E). Photo: Globe Institute, KU.

during the Iron Age – such as southern Sweden. A direct AMS radiocarbon date on the elk remains placed them firmly in the Maglemose Period, specifically 7941–7605 BC (Poz-102905 8730±50 BP), a time when elk were still native to Zealand, though likely in reducing numbers.

The associated piglet bone also from deposit E returned with an AMS date of 3630–3372 BC (Poz-111856 4700±30 BP) with a 95.4% probability, placing it firmly within the TRB. No other Neolithic dated bones were found nearby and other Neolithic activity in the fen was concentrated at its opposite end, several hundred meters away.

A methodological concern arises from the palimpsestic nature of bogs. To assess association, each deposit at Salpetermosen was recorded three-dimensionally, and contextual boundaries between peat-cuttings and natural layers were documented. Deposit E was found in situ, embedded in stable peat with no signs of intrusion or redeposition, and the bones were spatially confined within a discrete pocket of undisturbed sediment. These observations make accidental mixing unlikely.

Taken together, the faunal composition, stratigraphic integrity and dual dating results indicate that Deposit E represents a TRB animal deposit containing an antique Maglemosian element. Rather than a random intrusion, it appears to be a deliberate act of inclusion. In this instance, the antique elk remains may have been encountered and incorporated to lend temporal or symbolic depth to the deposit.

Residual Elk: Interpreting Deposit X30

The site of Favrholt 5 (MNS50595), located near the Salpetermosen Syd site, is a part of the same Neolithic wetland landscape, characterised by scattered smaller wet areas. In one such drained fen, A8, several relatively poorly preserved bone deposits were discovered within the peat during the 2019 trial excavation. Based on the types of finds in the area, the depos-



Figure 4. Parts of an elk antler, including the main stem and lower part of the palm from deposit x30 at Favrholt. Photo: Globe Institute, KU.

its were initially broadly dated to either the Neolithic or the Iron Age. The faunal remains included a mix of domesticated and wild animals. Among these were deposit X30, which consisted of 31 fragments of an elk antler and part of a mandible as well as two upper premolars, the latter two from sheep/goat.

Deposit X30 was the first to be found during the trial excavation and was uncovered by the excavator. As a result, no formal photographic documentation was made at the time. However, the bones were reported to be found in close association with one another. Most of the antler fragments could be refitted to form a single left antler, including the main stem, brow tine and lower part of the palm from an adult elk. The remaining fragments are likely from the same antler, as no overlapping was identified (Bangsgaard 2024).

AMS dating of both elements produced strikingly different results: the elk antler was dated to the Maglemosian period 7300–7000 BC, (Poz-118004, 8180 ± 50 BP), while the sheep/goat mandible was dated to the end of the TRB 2800–2400 BC (Poz-150327, 4120 ± 35 BP).

Table 2. Overview of all mentioned bones from Favrholt 5, deposit x30 with AMS dates.

| Context # | Species | Bones | Observations | Dates |
|-----------|-----------------------|--------------------------|--|---------------------------------------|
| X30 | <i>Alces alces</i> | Antler (31 fragments) | Age: adult, no overlap, possible cut-mark | 7300–7000 BC (Poz-118004) |
| | <i>Capra/Ovis</i> sp. | 1 mandible, 2 teeth | Age: 2–6 years (tooth wear), premolar 3–4 | 2800–2400 BC (Poz-150327) mandible |

In both cases, we considered alternative explanations to this specific combination of Maglemosian and Neolithic bones, such as disturbance by flowing water. However, this seems unlikely, as there was no indication of placement in running water or deep bodies of water; rather, the bones were situated at the margins of the fens and embedded in peat moss. No other Neolithic bones were found near the two deposits that could have intermixed with the elk remains. Furthermore, both deposits were described as concentrated when discovered, suggesting that they had not been disturbed. We therefore find it reasonable to conclude that these deposits are genuine and not the result of later mixing or post-depositional processes.

While both deposits stand out as exceptional, they are rooted in a periodical tradition, namely the wetlands' extended use for faunal deposits. The inclusion of ancient elk material may have been an extension of this tradition, in which old materials encountered during activity in the fens were imbued with meaning and re-contextualized in new ritual settings. These examples, therefore, suggest localized acts of engagement with deep time, revealing the ways in which TRB communities in North Zealand occasionally integrated ancient material traces into contemporary ritualized landscapes.

Other examples of deposited antique objects from Danish Neolithic

Although the deliberate deposition of antique elements is rarely discussed within Neolithic studies, the broader phenomenon of depositing antiques is well known from other prehistoric, and later, periods (Caple 2010; Knight et al. 2019). Within Neolithic studies, discussion has focused on the use of antique elements in relation to megaliths and menhirs (Bradley 1998, 2002; Gillings & Pollard 1999). The limited number of dated faunal remains may partly explain why antique bones have not previously been recognized as such. However, a few Danish Neolithic examples of antique elements in deposits indicates that the practice of depositing antiques is not foreign to the period and not confined to faunal remains.

Axes in particular, have been described as being ‘out of place’ by the original excavating archaeologist, when compared to the overall date of a deposit. In one instance they were referred to as “relics”, that is objects that may symbolize social memorability (Skousen 2008:167).

At Kildevang, the site mentioned earlier, eight pits exhibit traces of burning and contain a mixture of so-called mundane refuse and deliberately deposited objects. Among the latter are two core axes with specialized edges, a type associated with the Mesolithic Ertbølle culture – thus several centuries older than the TRB (Skousen 2008:164, 163–167). A similar situation was observed at Ravnsnæs megalithic tomb near Birkerød in North Zealand, where two axes of the Lindham type were found. Becker described these as “foreign objects” in relation to the site and the period of the tomb (Becker 1939:234–235). However, Ebbesen noted that the context of the axes is clouded in uncertainty due to the circumstances of their discovery (Ebbesen 1982:91, note 6).

More recently, a deposit of seven flint axes was uncovered at Skævinge in North Zealand (MNS50715). Six were of the Horneby type, dated to 2500–2350 BC, while the seventh is a type associated with the previous period, 2900–2500 BC. Though the latter axe could hypothetically have been produced around 2500 BC, the deposit might reflect a practice of incorporating an antique element.

Taken together, these examples parallel the faunal evidence from Salpetermosen Syd and Favrhølm. In both cases, older materials were integrated into TRB depositional settings, suggesting a reappropriation of antiques, whether bone or stone, as part of a broader logic of temporal referencing within a TRB ideology. Similar behaviour has been observed within a Viking age context in Dublin, in which a deliberated bent Early Bronze Age halberd was found in a grave with bent and damaged Viking Age weapons (Knight et al. 2019:12). While such acts are rarely identified, they reveal that TRB communities occasionally engaged with remnants of a distant past as meaningful objects within their own depositional traditions. This broader perspective situates the two elk deposits not as anomalies, but as part of a subtle and selective material dialogue with past times.

Discussion

According to Bradley (2002:53–54), archaeology has an embedded paradox: typologies and chronologies are defined and based on closed finds that are assumed to be contemporary, despite numerous examples to the contrary. The comment by Ebbesen on the Ravnsnæs axes illustrates this challenge. While he acknowledged the objects as out of place, his hesita-

tion may reflect a broader discomfort with the idea that antique elements can occur legitimately within Neolithic contexts.

Animal deposition practices from TRB were complex, diverse and embedded in wider social, cosmological and mnemonic frameworks. The archaeological record reveals a variety of deposition practices from the meticulous placement of select skeletal parts, such as skulls, mandibles and horn cores, to the deposition of entire carcasses or disarticulated assemblages representing multiple individuals or species. Domesticated cattle dominate many of these deposits, but wild species, including elk, also feature within this ritual repertoire. Together they form a dynamic repertoire of ritualised interactions with the animal world.

These practices suggest intentionality and cultural encoding beyond mere refuse disposal. Specific body parts or indeed antique bones may have been chosen not only for their visual or symbolic impact, but also for their perceived connection to, for example, the past or their cosmological beliefs or, in this case, out of respect for their relation to specific animals. Unfortunately, due to a scarcity of systematically dated faunal deposits, our understanding of these practices remains limited. The few examples that have been directly radiocarbon dated emphasize how vital such work is for discerning longer-term patterns, such as the possible persistence or reactivation of depositional traditions, as suggested by sites like Saxtorp (Nilsson & Nilsson 2003).

A critical barrier to recognising curated or antique remains in the archaeological record is the reliance on contextual association rather than direct dating. Without routine AMS dating of individual faunal elements, antique elements may pass unnoticed – possibly accounting for their apparent rarity in Neolithic contexts. Indeed, curated antiques are more likely to be dismissed than accepted, since identifying such practices requires not only precise dating methods but also archaeological understanding and interpretive openness. Antique bones in Neolithic contexts are frequently dismissed as ‘outliers’, lab errors or residuality (Teather 2018:202). This tendency is exacerbated by the dominance of Bayesian modelling in chronological analysis. As Teather (2018:203) notes, such methods may be ill-suited for identifying deliberately curated antiques, since their presence inherently challenges the assumption of a clean chronological progression. This calls for a more reflexive approach, in which such ‘outliers’ are not viewed as errors to be corrected, but as potential evidence for practices of temporal reuse and memory.

While the scale of antique deposits in the TRB remains unknown, the practice itself is not implausible. Given the frequency of faunal deposits during the period, it is conceivable that older bones encountered by chance, whether unearthed during activities such as construction, ploughing or

ritual activity, could have been intentionally integrated into contemporary depositional practices. These antique elements may have carried mnemonic significance functioning as links to ancestral times, mythological origins or a deeply embedded respect for the role of animals. Such practices are known from later periods, particularly the Iron Age (Bradley 2002; Wessmann 2009), but it is increasingly plausible that such mnemonic practices may be considerably older. The two Danish elk deposits thus offer rare but compelling evidence of this possibility. These Maglemosian bones, found in TRB contexts, challenge the assumption that older faunal material must be intrusive. Instead, they open a window onto the Neolithic imagination, in which antique animal remains could serve as meaningful components in rituals alongside other artefacts. Whether the elk bones were intentionally curated for some time or encountered and re-contextualised shortly before their deposition, they signal a form of temporal awareness and engagement that has previously been underestimated in TRB studies. As such, they contribute valuable insights into the materialisation of memory and time in prehistoric ritual practice. While the evidence raises more questions than it answers, it opens a promising line of inquiry and highlights the need for further high-resolution studies of animal deposits in Neolithic deposition practices.

Concluding remarks

While we cannot determine precisely how TRB communities came into possession of Maglemosian elk bones, the evidence strongly indicates deliberate deposition rather than accidental inclusions. The pairing of these antique remains with contemporary domesticated animals follows the broader traditions of faunal deposition of the period but adds a distinct temporal dimension. The selective inclusion of these ancient remains indicates a deliberate engagement with deep time, an act that imbued the deposition with temporal depth and illustrates the depth of the human-animal relationship or indicates that the remains held symbolic potency.

The two North Zealand examples highlight how easily such practices could go unnoticed without direct AMS dating. As such, they illustrate the need for renewed attention to the chronological complexity of faunal assemblages and a methodological shift that prioritises direct dating of individual bones as part of routine excavation and post-excavation strategies.

The broader implications are significant. If the deliberate deposition of antique faunal elements was indeed part of TRB ritual practices, it introduces a new dimension to our understanding of prehistoric engagement with the past. Such practices suggest a more nuanced relationship to time

and memory, in which ancient bones may have acted as tokens of history, relational contacts with animals or symbols of enduring landscapes.

While the extent of these practices remains uncertain, examples from both Scandinavia and Britain suggest that the concept of depositing antiques was part of a TRB worldview. Recognising and understanding these practices will require not only more radiocarbon dates but also a fundamental shift in archaeological interpretation: one that embraces the complexity of a curated time-depth and the possibility that some of the materials we recover are not just remnants of the moment of deposition, but deliberate echoes of a more distant past.

Ultimately, these finds invite us to reconsider how Neolithic communities constructed relationships to time, materiality and memory. They call for interpretive frameworks that can accommodate a past-in-the-past: a past actively retrieved, curated and redeposited as part of a living cultural landscape. As such, they offer a powerful reminder that archaeology is not merely the study of what was, but also the study of how people remembered, imagined, and materially engaged with what had already been.

References

- Aaris-Sørensen, K. 1980. Depauperation of the Mammalian Fauna of the Island of Zealand during the Atlantic period. *Vidensk. Meddr. Dansk naturh. Foren.* Vol. 142, pp. 131–138.
- Aaris-Sørensen, K. 1998. *Danmarks forhistoriske dyreverden, om skovelefanter, næsehorn, bisoner, urokser, mammutter og kæmpebjørte*. 3rd edition. København: Gyldendal.
- Aaris-Sørensen, K. 2010. Diversity and Dynamics of the Mammalian Fauna in Denmark Throughout the Last Glacial-Interglacial Cycle, 115–0 kyr BP. *Fossils and Strata*. Vol. 57, pp. 1–59, <https://doi.org/10.18261/9781444334838-2009-01>.
- Andersen, N.H. 2000. Kult og ritualer i den ældre bondestenalder. *Kuml*. 2000, 13–58.
- Armstrong Oma, K. 2010. Between Trust and Domination: Social Contracts Between Human and Animals. *World Archaeology*. Vol. 42(2), pp. 175–187, doi.org/10.1080/00438241003672724.
- Bangsgaard, P. 2018. Den samlede zooarkæologiske gennemgang af et stort knoglemateriale fra Yngre Romersk Jernalderen, Salpetermosen Syd 10-2, MNS50010 (Z.M.K. 5/2013). *ArchaeoScience 2018 vol. XXV*, Natural History Museum of Denmark. [Unpublished report, can be supplied by the author on request.]
- Bangsgaard, P. 2024. Favrholt felt 5, MNS50595 (MNS50525), ZMK 35/2019, *Archaeo-Science 2024, vol. IX*, Globe Institute, Copenhagen University. [Unpublished report, can be supplied by the author on request.]
- Bangsgaard, P. & Pantmann, P. 2021. The Phenomenon of Primary and Secondary Animals within Iron Age Deposits in Denmark. *Danish Journal of Archaeology*. Vol. 10, pp. 1–20, doi.org/10.7146/dja.v10i0.125982
- Becker, C.J. 1939. En stenalderboplads paa Ordrup Næs. *Aarbøger for Nordisk Oldkyn- dighed og Historie*. 1939, pp. 199–280.

- Becker, C.J. 1948. *Mosefundne lerkar fra yngre stenalder. Studier over Tragtbægerkulturen i Danmark*. København: Nordisk forlag.
- Berggren, Å. 2015. Neolithic Depositional Practices at Dösemarken – A Discussion of Categorization. In: Brink, K., Hydén, S., Jennbert, K., Larsson, L. & Olausson, D. (eds), *Neolithic Diversities Perspectives from a conference in Lund, Sweden*, pp. 21–32. Lund: Lund University.
- Bradley, R. 1998: Ruined Building, Ruined Stones: Enclosures, Tombs and Natural Places, in the Neolithic of Southwest England. *World Archaeology*. 30(1), pp. 13–22.
- Bradley, R. 2002. *The Past in the Prehistoric Societies*. London: Routledge.
- Caple C. 2010. Ancestor Artefacts – Ancestor Materials. *Oxford Journal of Archaeology*. Vol. 29(3), pp. 305–318, doi.org/10.1111/j.1468-0092.2010.00350.x.
- Ebbesen, K. 1982. Stenaldergrave ved Sjølsø. *Fra Frederiksborg Amt*. Årgang 1982, pp. 77–91.
- Gillings, M. & Pollard, J. 1999: Non-Portable Stone Artefacts and Context of Meaning: The Tale of Grey Wether. *World Archaeology*. 31(2), pp. 179–193.
- Knight M.G., Boughton, D. & Wolkinson, R.E. 2019. Objects of the Past in the Past. In: Knight, M.G., Boughton, D. & Wilkinson, R.E. (eds). *Objects of the Past in the Past: Investigating the Significance of Earlier Artefacts in Later Contexts*, pp. 1–18. Oxford: Archaeopress.
- Kock, E. 1998. *Neolithic Bog Pots from Zealand, Møn, Lolland and Falster*. København: Det Kongelige Nordiske Oldskriftselskab.
- Møhl, U. 1980. Elsdyrskelletterne fra Skottemarke og Favrbø. *Aarbøger For Nordisk Oldkyndighed og Historie*. 1978, pp. 5–32.
- Nilsson, L. 1995. The Bones from Hindby Votive Fen: Delicate Problems of Interpretation. *Lund Archaeological Review*. Vol. 1, pp. 65–74.
- Nilsson, M-L. & Nilsson, L. 2003. Ett källsprång i Saxtorp. In: Svensson, M. (ed), *I det Neolitiska rummet*, pp. 242–295. Lund: UV Syd, RAÄ.
- Pantmann, P. 2020. *Defining Wetlands New Perspectives on Wetland Living with Case Studies from Early Iron Age in North Zealand, Denmark*. København: Copenhagen University.
- Richter, J. 1991. Aspect of Palaeoecology of Neolithic Man. In: Rasmussen, L.W. & Richter, J. (eds), *Kainsbakke, en kystboplads fra yngre stenalder*, pp. 72–199. Grenaa: Djurslands Museum/Dansk Fiskerimuseum.
- Rudebeck, E. & Macheridis, S. 2015. The Proper Way of Dwelling at the Early Neolithic Gathering Site of Almhov in Scania, Sweden. In: Brink, K., Hydén, S., Jennbert, K., Larsson, L. & Olausson, D. (eds), *Neolithic Diversities Perspectives from a conference in Lund, Sweden*, pp. 173–187. Lund: Lund University.
- Serjeantson, D. 2011. *Review of Animal Remains from the Neolithic and early Bronze Age of Southern Britain (4000 BC–1500 BC)*. Research Department Report Series no. 29/2011. Portsmouth: English Heritage.
- Skaarup, J. 1985. *Yngre stenalder på øerne syd for Fyn*. Rudkøbing: Langelands museum.
- Skousen, H. 2008. *Arkæologi i lange baner: Undersøgelser forud for anlæggelsen af motorvejen nord om Århus 1998–2007*. Højbjerg: Moesgård.
- Sørensen, S.A. 2019. Tabt, kasseret eller ofret? En foreløbig præsentation af et kystbundet deponeringsområde i Syltholmfjorden på Lolland. *Gefjon*. Vol. 4, pp. 152–175.

- Teather, A. 2018. Revealing a Prehistoric Past: Evidence for the Deliberate Construction of a Historic Narrative in the British Neolithic. *Journal of Social Archaeology*. Vol. 18(2), pp. 193–211, doi.org/10.1177/1469605318765517.
- Wessmann, A. 2009. Reclaiming the Past: Using Old Artefacts as Means of Remembering. In: Šnēm A. & Vasks, A. (eds), *Memory, Society and Material Culture: Papers from the Third Theoretical Seminar of the Baltic Archaeologists (BASE) Held at the University of Latvia, October 5–6, 2007*, pp. 71–88. Riga: University of Latvia.
- Wincentz, L. 2020. Kainsbakke and Kirial Bro: The Two Main Sites of the Pitted Ware Culture on Djursland. In: Klassen, L. (ed), *The Pitted Ware Culture on Djursland: Supra-Regional Significance and Contacts in the Middle Neolithic of Southern Scandinavia*, pp. 35–140. Aarhus N: Aarhus University Press.

KEYNOTE

Participatory Archaeology for Heritage Preparedness

Addressing the Wicked Problem of Anti-Democratic Discourse

Marte Spangen

In an era of rising authoritarian and anti-democratic movements globally, participatory archaeology needs to move beyond self-congratulatory ideas about its inherent goodness and take seriously archaeologists' potential role as social and political mediators in a complex democratic discourse. The challenge lies in resisting both external and internal pressure on democratic discourse, while maintaining an inclusive, democratic and multivocal debate about heritage, identity and belonging. Drawing on experiences from Indigenous and particularly Saami archaeology, participatory archaeology in Scandinavia can become more self-reflexive and purposeful. Our subject's strength is that it provides specified and tangible topics and arenas for democratic discourse, building social cohesion by discussing and tolerating diverse perspectives. The aim should not be consensus about heritage and the past but dissensus and communities of disagreement. Such an approach contributes to a cognitive heritage preparedness that transgresses the preservation of predefined physical heritage values, constituting a 'small win' to the 'wicked problem' of sustaining open, accountable and transparent discussions in the face of totalitarian narratives and aggressive "alternative facts".

Keywords: participatory archaeology, Indigenous archaeology, Saami archaeology, democratisation, wicked problems, small wins, clumsy solutions, heritage preparedness

Museum of Cultural History, University of Oslo, Norway
marte.spangen@khm.uio.no

This is an Open Access article distributed under the terms of the Creative Commons 4.0 International licence (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

Archaeology and heritage have always been employed to promote political agendas. In the current tense political situation of the world, an increasing number of these agendas are authoritarian, expansionist and anti-democratic. In contrast, archaeologists have worked for decades to establish practices that are inclusive, multivocal and democratic, including participatory archaeologies. In this keynote, I suggest that these practices should be reconsidered as not only important shifts in how heritage is done, but potentially vital contributions to the protection of democratic states and values. I further claim that, to this end, Scandinavian archaeology must adopt a bolder stance and dare to matter – even dare to be explicitly political. In this context, participatory archaeology can benefit from the example of Indigenous archaeology in general, and Saami archaeology in particular, with its focus on specific social and political aims and fostering of critical, self-reflexive debates about the purpose, methods and challenges of collaborative efforts.

While the debates about and implementation of participatory approaches in archaeology are quite limited in scope in all Scandinavian countries, I will centre my discussion on the situation in Norway. Participatory archaeology has received relatively little attention in Norway so far. Where it is discussed, engaging with communities or non-professional partners is generally perceived as democratic and ‘good’, and participation is typically described as the engagement of people in archaeological investigations in order to educate them in our professional opinions about the past and as voluntary labour (Myrvoll 2010a:80). The archaeology of Saami pasts and heritage has included more pronounced aims of involving non-professionals in active knowledge production. This field has also been more contested and sometimes criticized for being too political. At present, however, we face a global political situation that actualizes precisely the democratic and political dimensions of archaeology.

So, what can archaeology contribute? It has recently been proposed that archaeology, through a ‘small wins’ approach, can be part of the solution for ‘wicked problems’. Wicked problems are complex, often intractable issues where attempts to rectify them can risk creating new or worse problems (Schofield 2024). Participation in archaeological and heritage contexts can itself be defined as a wicked problem (Rosetti 2022:21–22), with its complex entanglements with today’s politics, as well as multiple stakeholders, historical, legal and administrative frameworks, and the danger of (unwittingly) reducing good intentions of empowering participants to tokenism that covers up prevailing power relations (Niklasson & Hølleland 2018:18; Smith 2025; Viita-aho 2025:80–82). These complexities mean that

it is vital for archaeologists to understand the political context in which they operate (Schofield 2024:233) and to acknowledge that participation is thoroughly situational and based in historical power dynamics and forms of governance.

In the following, I will argue that purposeful and self-reflexive participatory approaches in archaeology can contribute to a ‘clumsy solution’ (Verweij & Thompson 2006) to the wicked problem of maintaining an open and democratic debate about the past, identity and belonging in the face of an increasingly anti-democratic discourse. By providing tangible points of departure for collective reflection and discussion, this kind of archaeology might even foster a cognitive heritage preparedness vital to resisting an undermining of our democracies.

Wicked problems, small wins and clumsy solutions

Over the last decades, it has become clear that social, political and environmental problems are not simple cause and effect issues that can be rectified with singular solutions. The complexities of the challenges we face, the ‘mess’ we are in, can only be approached with equally complex strategies. Attempting to control these ‘postnormal times’ is futile, but we can navigate through them by acknowledging that the multitude of problems we are facing simultaneously cannot be solved in isolation. Diverse perspectives are essential for understanding and steering through these wicked problems, managing them with creativity (Sardar 2015, as cited in Schofield 2024:28–29), and hopefully establishing sustainable approaches that can last into the future.

The term ‘wicked problem’ was articulated in a 1960s US multidisciplinary seminar that aimed to solve social system problems. Many definitions have later been proposed, of which a relatively simple one is that wicked problems are complex, intractable, open-ended, and unpredictable. Unlike tame problems, where you identify, for instance, a technical problem and find a solution to this, wicked problems are characterised by the difficulty of defining both what the exact problem is and any possible solution. Instead, solutions can only be evaluated after their effectuation, and then only subjectively in terms of whether they were ‘good enough’ or merely created new problems. Thus, solving wicked problems is often portrayed as a one-shot operation involving potential risk (Alford & Head 2017:397; Churchman 1967; Conklin 2006; Schofield 2024:16–19).

Contrary to this depiction of wicked problems, John Schofield has suggested that archaeology can contribute to solving a variety of wicked problems, such as climate change, health issues and social injustice, through a

‘small wins’ approach (Schofield 2024). He attributes this notion to Graham Hingangaroa Smith and Linda Tuhiwai Smith’s discussion on how we can decolonize and create meaningful space for Indigenous Peoples within the academy. They conclude that this ‘utopian vision’ is not won in a single spectacular event, but perhaps through small and incremental gains (Schofield 2024:31–32; Smith & Smith 2019:1098–1099). ‘Small wins’ thus refer to concrete outcomes of moderate importance that still create traction and can accumulate to bring about transformative change (Schofield 2024:32–35; Termeer et al. 2019:173; Weick 1984). A related term from behavioural science is ‘nudging’, describing how human behaviour, habits, and decisions are frequently influenced by apparently insignificant details that result in minor changes that over time can amount to substantial results (e.g. Taylor 2023).

This hopeful approach is not suggesting archaeology can save the world but that we can at least nudge it in the right direction. However, this entails that ‘we’, as a community or even humanity at large, agree on that direction. On a larger scale, perhaps we do, but part of many wicked problems is that people nudge in all sorts of directions. This may appear random and chaotic, but Marco Verweij, Mary Douglas and others have identified certain cultural structures that allow us to understand and even benefit from these opposing viewpoints. Using diverse approaches to the issue of global warming as an example, they describe how conflicting views on public policy issues (which are often wicked problems) are the result of people adhering to a limited number of fundamental forms of social organisation – egalitarianism, hierarchy, individualism, and fatalism. These basic convictions allow for specific and largely incompatible organising, perceptions and justifications of social relations and humans’ place in the world. Because people argue about policy issues from radically different premises, they will never agree, but each fundamental conviction brings certain elements of experience and wisdom to the discussion that are missed by the others. Each provides valuable contributions to the debate that may otherwise remain omitted, and, significantly, expresses how a (substantial) proportion of the populace thinks (Verweij et al. 2006). Even if these contesting opinions do not comprise a coherent set of values (cf. Shapiro 1988:1561), they represent complementary virtues. By creatively combining such opposing perspectives on what the problems are and how they should be resolved, we can reach compromises or ‘clumsy solutions’ to complex (wicked) problems that are more viable and lasting than ‘elegant’ solutions that assume we have to choose one definite answer (Verweij et al. 2006; Verweij & Thompson 2006).

In addition, both validating and challenging opinions have psychological and practical effects on mutual benevolence and intergroup relations

(Greville-Harris et al. 2016; Livingstone et al. 2024), which can arguably influence democratic discourse and social cohesion. As I will return to below, such validation of opposing opinions and values is both a challenge to and a part of solving the wicked problem of democratic discourse in the face of anti-democratic forces; while aiming to oppose an unwanted external pressure that can destabilise our communities, we need to build the democratic resistance of those communities by acknowledging opinions we do not necessarily agree with or find suitable. The latter position mirrors well-known issues of participatory and Indigenous archaeologies, although such contradictory attitudes and opinions and how to deal with them are not always explicitly scrutinised and discussed in these contexts.

Participatory and Indigenous archaeologies – good, bad or ugly?

Participation has emerged as a pivotal concept in European cultural policies over the past two decades, encompassing diverse strategies aimed at democratization and engagement beyond professional ranks (Bonet & Négrier 2018). This resonates with the 2005 Faro Convention, and its declaration that everyone has the right to benefit from and contribute to the enrichment of cultural heritage (Colomer 2023). Furthermore, participation or collaboration have been central terms in international discussions about the authorised heritage discourse and the power distribution between heritage professionals and Indigenous groups, communities, or ‘locals’ (e.g. Harrison 2013, cf. González-Ruibal et al. 2018; Smith 2006; Smith & Waterton 2009). In general, participation has been promoted as a particularly ethical way of practicing archaeology (e.g. Atalay 2012; Thomas & Lea 2014, cf. Fredheim 2020).

Opinions on what, exactly, this ethical participation should be comprised of are less unanimous. This has created something of a wilderness of labels and definitions of different archaeologies, including participatory or collaborative archaeology (Colwell-Chanthaphonh & Ferguson 2008:10; Kiddey 2020:24–25), public archaeology (Merriman 2004; Moshenska 2017; Svanberg & Wahlgren 2007), community archaeology (Marshall 2002; Kiddey 2020; Thomas 2017), and Open Archaeology (Milek 2018). This variety of terms demonstrates that the specific articulation of participatory archaeology in various contexts depends on aims, and theoretical and methodological preferences, as well as specific political, administrative and legal frameworks (Atalay 2012:49–50; Batory & Svensson 2020; Thomas 2017:15). What most approaches have in common is a wish to promote an archaeology that engages non-professional groups and indi-

viduals in archaeological practices to find out more about archaeological heritage, while also creating social ties and community empowerment (Thomas 2019:149–150).

The distinction between participation and dissemination is not razor sharp, since including school children and others in archaeological work with the aim of educating them is also a form of participation. However, such efforts are usually about ‘us’ teaching ‘them’ how they should understand archaeology and the past. While there is nothing wrong with disseminating expert knowledge to non-professionals who are eager to learn about our research, a participatory activity or study, in my opinion, is where non-archaeologists are actively involved in the archaeological knowledge production and discourse. Participatory approaches can still cover a very broad spectrum of archaeological activities (Colwell-Chanthaphonh & Ferguson 2008), from simple data gathering and analyses to more ‘radical’ collaborations, in which people from outside of the profession contribute to project goals, design, execution, analyses, and/or output. All approaches along this spectrum have their use and value, but it is the radical version that has frequently been promoted as particularly good, ethical and genuine, not least when discussing Indigenous archaeology.

INDIGENOUS ARCHAEOLOGY

The term Indigenous people is defined in a variety of ways, but following the ILO 169 Indigenous and Tribal Peoples Convention of 1989 it points to groups and individuals identified as descendants of people inhabiting land before western colonisation or modern national borders were established and who retain some social, economic, cultural and political institutions that are distinct from those of a majority population (ILO C169 1989, Article 1b). Importantly, (and a qualification that is often misunderstood) Indigenous people are not necessarily identified as the first people ever to have inhabited an area of land, though they may be the descendants of such pioneering groups.

While archaeologists in several parts of the world have been working closely with such Indigenous communities for a long time, Indigenous archaeology was articulated as a specific approach in the 2000s (Nicholas 2010b), following which a substantial body of literature on the subject has emerged (e.g. Atalay 2006; Colwell-Chanthaphonh & Ferguson 2008; Hillerdal et al. 2017; Nicholas 2010a; Nicholas 2024; Ojala 2022; Silliman 2008; Smith 1999; Smith & Wobst 2005; Watkins 2000). Internationally, Indigenous archaeology has developed alongside general collaborative archaeology (Colwell-Chanthaphonh & Ferguson 2008), and it is frequently described as an archaeology with, for, and by Indigenous people (Silliman 2010:218). This may define it as a form of participatory or com-

munity archaeology, and these approaches apply overlapping methodologies and considerations. However, Indigenous archaeology has a different socio-political background, context, premise and effect. While not a unified approach, it constitutes a movement of critical archaeology that challenges and aims to transform traditional archaeological and heritage management through decolonization and the empowerment of Indigenous groups. A fundamental concern within Indigenous archaeology has been the legacies of colonialism in archaeology and the impact of these legacies on descendant communities. Another aim has been to encourage the participation of Indigenous scholars and practitioners in all aspects of archaeology from field work to academic research, and to incorporate Indigenous ontologies and epistemologies into archaeological theory and practice (Atalay 2006; Ojala 2022:121–122; Nicholas 2010a; Nicholas & Watkins 2014). In part this has taken the form of activist archaeologies for social and environmental justice (Atalay 2016).

Common denominators across various Indigenous contexts include the direct involvement of archaeology in crucial issues for current descendant communities. In contrast to other minority rights, which often focus on intangible cultural aspects, internationally articulated Indigenous rights include self-determination and rights to land and water. Disputes over these aspects are contentious matters in which Indigenous archaeology has been given a decisive and political role, often to determine Indigenous presence into the deep past where historical sources are lacking or severely biased by hegemonic colonial interests (Knutson 2024:54; Ojala 2022:126). So even if participatory archaeologies in general can have social impact, Indigenous archaeologies often relate to more fundamental stakes.

Karen Milek suggests that if her Open Archaeology is realized, it would eradicate what are currently seen as distinct archaeological fields, for example collaborative, community, or Indigenous archaeology (Milek 2018:41). This mirrors George Nicholas' call for an end to Indigenous archaeology (Nicholas 2010b). I completely agree that the segregation of various archaeologies based on what are really intersected aspects of human identities and societies should be abandoned (Spangen 2025). However, Indigenous archaeology is not entirely comparable to participatory archaeologies, and its specific socio-political contexts would not be well served by a blurring of this as just another collaborative approach. That said, if archaeology is to contribute to maintaining a democratic discourse in the current politically strained situation, all participatory approaches may have something to learn from the debates about aims, methods and results in Indigenous archaeology. These discussions interlace with an emerging focus on impact, and how to define communities, ethics, power relations and voluntariness.

(WHAT) ARE PARTICIPATORY AND INDIGENOUS ARCHAEOLOGIES GOOD (FOR)?

The focus on participation over the last 20 years has fostered important changes and initiatives in archaeology, but there are some tropes that can be questioned. There has been a growing criticism of the rather self-congratulatory idea that working with communities or the public is inherently good and ethical (Ellenberger & Richardson 2019; Fredheim 2019, 2020; Kiddey 2020; Niklasson & Hølleland 2018; Smith 2025; Smith & Waterton 2009:13–14). Archaeologists that involve non-professionals in their efforts can do good work, but to evaluate ‘goodness’, we need to define it. Schematic definitions of participatory archaeology approaches tend to align good or beneficial outcomes with the amount of power transfer from ‘experts’ to ‘non-experts’ (e.g. Guilfoyle & Hogg 2015), often referring to Sherry Arnstein’s ladder of participation (Arnstein 1969). Originally devised to describe public participation in planning processes in the US, her analysis is an interesting critique of various types of tokenism, whereby citizens are involved under a guise of participation but do not influence the decision-making in any significant way. Similarly, insistent talk of ‘co-operation’ has been criticised for masking an inherent asymmetry in all archaeological endeavours and disguising a patronising and colonialist attitude to ‘locals’ (González-Ruibal 2009, 2010; Olsen 1991). However the collaborations are labelled, they often fail to produce anything other than an imagined power redistribution, while in reality they are reproducing the dominant heritage discourse (Knutson 2024:117; Niklasson & Hølleland 2018:18; Rico 2017; Smith 2025; Spangen 2016:225).

Equating the level of power transfer and public influence with goodness in a participatory archaeological project overlooks the intended aim of the effort and does not measure whether said effort has a positive or wanted effect. If the intention is unclear, it will also be difficult to measure its success, with efforts resulting in participation for participation’s sake or a box-ticking exercise (Kelty 2017). To my mind, this risks the unethical use, or waste, of people’s time and resources.

Furthermore, a focus on power transfer indicates simplified ideas about experts and non-experts as two monolithic and dichotomic entities. In reality, various identities and community affiliations are often interlaced, and communities can be fragmented and multivocal due to internal disputes, power relations, and competing attitudes, politics, and motivations (Kiddey 2020:31–32; González-Ruibal et al. 2018:508; Van Dyke 2020:49–50). In Indigenous contexts, the non-expert ‘People’ tend to equal Indigenous communities. Not only frequently perceived as distinct homogenous units, they are also commonly conceptualised as a homogenous Indigenous com-

munity across the world. ‘Indigenous’ appears as shorthand for people that are inherently disenfranchised, in harmony with nature, of animistic convictions, and protective of their ancestral past. There are even notions of Indigenous people having unconscious knowledge about particular meanings of archaeological finds and cultural heritage, from long before their own time and context, that will mystically reoccur when the individual is confronted with these physical remains (e.g. Domanska 2018; Harris & Cipolla 2017:2; Milek 2018:38–39, cf. González-Ruibal 2019; Spangen 2016). While usually well meant, these perceptions construct specific expectations of what Indigenous participation in archaeology should look like. Of course, the knowledge, skills, resources and interests among Indigenous ‘People’ are as diverse as anyone else’s.

These variations substantiate the critique of broad claims to be working with communities or ‘the People’, as they overlook or undercommunicate the specific selection of people that get involved (González-Ruibal et al. 2018). Participation can be limited by socio-economic and cultural status, as well as money, time and emotional cost (e.g. Burström 2014:105; Fredheim 2020:8; Spangen 2016:224; Ween & Riseth 2011). Active marginalization by other community members can also be an issue (Byrne 2012:29), as well as simple disinterest or a feeling of not belonging in a certain context (Fredheim 2019:42–43). Yet, professionals have tended to ascribe non-participation to a ‘wrong’ attitude based on ignorance. Revealingly, those who do volunteer tend to see themselves as providing a service, while professionals, though acknowledging them as resources, also see the volunteers as lucky beneficiaries due to the perceived inherently ‘good’ components of archaeology and community work (Fredheim 2020). As volunteers frequently include people who are more interested in recognition from peers and experts than monetary gain (Axelsen 2021:168–169), this can result in exploitation of volunteers, potentially feeding into a token economy that takes advantage of their willingness to work for social rewards rather than pay (Gilge 2016:205).

In line with the trope of volunteers as beneficiaries, archaeology and heritage is also claimed to be sources of well-being (Burnell 2022; Dobat et al. 2020; Dobat et al. 2022; Hodder 2010; Pattinson et al. 2023; Smith et al. 2022). The healing power of heritage work has remained a trope since the 1970s, and although it can be argued in certain contexts (Schanche 1993), assertions that involvement in archaeological efforts promote better physical and mental health are largely based on self-reporting and interviews (e.g. Dobat et al. 2022; Pattinson et al. 2023). It is probably unimportant to the participants themselves if their improved health is due to the fresh air, physical activity, social networks, meditative activities, or to the archae-

ology or cultural heritage as such, but it is problematic to claim that archaeology has inherent health and healing benefits.

In summary, participatory archaeologies and work with communities cannot be seen as inherently positive but instead pose a range of challenges that vary between contexts. While these approaches can be both socially and scientifically beneficial, I claim that participation should not be seen as intrinsically valuable and that we should not uphold a systematic correspondence between power transfer and success. The ability of archaeology to add constructive contributions to communities and society at large depends on clear and transparent aims, ethical considerations concerning who participates and on what conditions, and a continuous critical and self-reflexive scrutiny of whether our efforts bring us closer to these described goals. This means recognizing the context-specific and multilayered aspects of each archaeological intervention, stretching across a continuum of voluntary, non-expert engagement versus expert control.

In what follows, I will turn to Norway where, despite a wave of interest in in the 1990s and early 2000s to engage people in fieldwork and meetings between professional and local knowledge systems (e.g. Brekmoe 2004; Krogh 1999; Myrvoll 2010a; Nilsen 2003; Pramli 1999; Solli 1996), there has been little critical debate about participatory archaeology. However, collaboration and participation have been important integrated elements in *Saami* archaeology since its naissance in the 1980s, with the articulation of specific aims for this practice and the identification and discussion of a series of challenges already established in the 1990s. Some of these reflections and experiences might serve as learning points that can further the development of participatory archaeologies in Norway and Scandinavia into more critical, self-reflexive and influencing social and political practices.

The Saami and their archaeology

Indigenous archaeologies are bound together by the fact that Indigenous groups across the world share histories and experiences of violence, oppression, assimilation, and discrimination, as well as the erasure of culture, language, history and heritage – histories that have had and still have consequences for their existences (Ojala 2019:182). Yet, critiques have pointed out that Indigenous archaeologies have been dominated by the experiences and present situations of groups of native descentance in English-speaking settler colonial nations like the US, Canada, Australia, and New Zealand (González-Ruibal 2019). Considering the relatively prominent role the Saami have had in the international Indigenous movement, there has been limited international attention to the archaeology of this Indigenous group

in Scandinavia (though see e.g. Bayliss-Smith & Mulk 1999; Mulk 1994, 2024; Schanche 1994; Ucko 2001). This may be related to the distinctive history and development of Saami archaeology, particularly in Norway.

Unlike the situation in settler colonial nations, the Saami have always lived alongside culturally diverse neighbouring groups in the vast region from the Kola peninsula in the northeast to Mid-Sweden and South Norway in the southwest, engaging in a range of subsistence strategies, including reindeer herding in various forms, hunting, fishing, agriculture, crafts and trade (e.g. Bergman 2018; Hansen & Olsen 2014; Kuusela et al. 2020; Nordin 2023; Spangen in press; Wang 2023). As Saami society was considered to be of a static nature, their cultural heritage remained a topic mainly for ethnography instead of archaeology until the mid-20th century (Hansen & Olsen 2014:1–6). However, various researchers and explorers investigated Saami cultural heritage sites in the 19th and 20th centuries, frequently intruding on sacred sites and graves, in part to obtain skeletal material for physical anthropological studies (e.g. Hallström 1922, 1932; Schanche 1994, 2000). Along with strong assimilation politics (known as Norwegianisation and Swedification) and an earlier history of forced Christianisation in the 17th and 18th centuries (e.g. Minde 2003a; Rasmussen 2016; Rydving 1995), these experiences have made research on Saami pasts politically and emotionally sensitive, resonating with synonymous situations for other Indigenous groups worldwide.

Historical circumstances have resulted in political and legal frameworks for Saami self-government and archaeology in Norway that are quite unique compared to Indigenous groups elsewhere. Saami archaeology was articulated in the late 1970s and 1980s as part of a broader Saami political and cultural awakening (Brantenberg 1985; Minde 2003b; Schanche & Olsen 1985). The political controversies surrounding the government plans to exploit the Alta-Kautkeino river/Áltá-Guovdageaineatnu in Finnmark for hydroelectric power production raised awareness in the Norwegian population about the long-term oppression of Saami culture and rights. The hydroelectric dam was eventually built, but the Saami gained a political momentum that led to the establishment of the Norwegian Sámi Parliament – the Sámediggi – in 1989. Norway was also the first country to ratify the ILO Convention 169 in 1990, acknowledging the Saami as an Indigenous people. In the other countries with a Saami population, Saami rights, archaeology and cultural heritage management have developed differently due to other political, administrative and legal frameworks (Knutson 2024; Ojala 2009), which is why I limit my discussion to the Norwegian situation.

The Sámediggi is an elected body but legitimised through Norwegian law and funded by the Norwegian government. Still, the transfer of a range of responsibilities and funds to the Sámediggi radically changed the relation-

ship between the Saami and the Norwegian state (Falch et al. 2016:130). In 1994, the Sámediggi assumed responsibility for the Saami cultural heritage management (from now CHM), which was important for the cultural revival and the principle of self-government, but also as part of the transferred authority within land-use planning (Falch 1998:36). Much like county archaeologists, the Sámediggi archaeologists record Saami heritage sites and handle planning and building cases as well as making statements on applications for research excavation and other endeavours that will affect Saami heritage sites in an administrative territory stretching from Finnmark to Innlandet counties.

In short, already by the 1990s, the Saami in Norway had gained a level of self-government over Saami archaeology and CHM that was unprecedented for Indigenous groups at the time, fulfilling the subsequently articulated goals for Indigenous archaeology of being by, with and for the Saami, as well as achieving the common success measure of substantial power transfer. However, this has not resolved all challenges, as both internal and external mediation have remained necessary to address conflicting interests, oppositions, and ongoing controversies.

COLLABORATION AND CONTROL IN SAAMI ARCHAEOLOGY

The establishment of a Saami CHM body marked a formal transfer of power and control to Saami people in Norway and was an important recognition of Saami autonomous rights to define their own heritage. But in practice, power still rests with a small number of professionals *within* the Saami community. From the beginning, collaboration with local individuals and groups was an important way of mitigating this. Local experiences and knowledge were integrated into the daily archaeological work through interviews, involvement, and participation to build knowledge and reach good solutions in individual cases. The overall aim was that participation should contribute to cultural engagement, cultural consciousness, and a self-determined cultural development (Falch 1998:36–37). Traditional knowledge about landscape use and conceptualisations has been particularly emphasized, both as a source of information about cultural heritage sites and landscape use and as inspiration to conceptualise archaeological interpretations that are in line with a Saami cultural perspective (e.g. Barlindhaug 2013; Ljungdahl & Norberg, 2012; Schanche 2004; Skandfer 2001, 2009).

Yet, the overall organisation of the Saami CHM is adopted from and integrated with the national Norwegian CHM, so that the ethnopolitical significance is balanced with legal requirements and the needs of planning authorities as well as scientific considerations. This has led to some controversies where local interests have not always been heard. Already in the

1980s, several projects employed local Saami people in recording cultural heritage sites, but there have been disputes about these recordings, in some cases concerning whether to make the partly sensitive information available through national databases and in others relating to the lack of resources to do so (Spangen 2016:113–114). Another issue has arisen surrounding the question of how to incorporate Saami cultural heritage sites and interview information into digital recording systems, and how the ontologies of these systems shape our knowledge production (Myrvoll 2010b). These issues illustrate how a transfer of power is far more complicated than simply transmitting elements of decision making.

In fact, the Saami CHM focus on collaboration and respect for local knowledge was not just shaped by autonomous Saami preferences, but emerged, in part, as a reaction to the focus in majority Norwegian CHM on protection issues and dissemination to those of less knowledge. The Saami approach involved a concern with active listening and receiving of knowledge. Paradoxically, the need to emphasise contrasting cultural values in a Saami CHM, led to these values being indirectly defined by the majority society (Schanche 1993:58–59). In addition, a persistent scepticism in the Scandinavian archaeological community, as well as being called into court cases about land rights where archaeological ‘proof’ of Saami presence is requested, have forced researchers in Saami archaeology to argue again and again that Saami presence in the past can, indeed, be traced archaeologically (Brännström 2020, see also Niezen 2017 for a general discussion on how Indigenous heritage is shaped by legal processes). This has made Saami archaeology prone to a certain strategic essentialism (Spivak 1988) that initially led to the construction of an overly consistent and uniform Saami culture and ethnicity in the past (criticised early on by Schanche 1993 and by Olsen 2001) in opposition to the central myths and stereotypical archaeological expressions of Norse, Norwegian, or Scandinavian past culture and ethnicity. These pressures have also had direct consequences for the categorisation of Saami archaeological remains by, for instance, accentuating rituals and spirituality in interpretations (Spangen 2013, 2016, 2017).

The articulation of a Saami past was further affected by how cultural heritage work served as an important grieving process for the Norwegianised generation of Saami that fronted the cultural revival in the 1970s and who tended to prioritise preserved (recent) local traditions. However, as early as 1993, Saami archaeologist Audhild Schanche warned about the ways in which an understanding of traditions and the past as forged by this 1970s Saami elite might not be relevant to the next generation Saami. Instead, Schanche suggested, the Saami society might need to acknowledge that their history included elements that were not in concurrence with the central myth constructed claiming Saami past societies and culture to be, for

example, inherently egalitarian and peaceful (Schanche 1993:60–62). Such popular myths continue to affect Saami societies today. For instance, the 1970s ethnopolitical movement forged a stereotype about the strength and social power of Saami women in contrast to women's positions in surrounding Nordic communities. These depictions were based on, among other things, an entirely speculative notion of past Saami societies as matriarchal and have served to suppress discussions about women's rights in Saami societies (Bäckman 1982; Eikjok 2000; Kuokkanen 2007:23; Spangen 2025).

Several of these experiences are of interest for a discussion about how to develop valid participatory archaeologies. Firstly, even radical power transfer only shifts power relationships within communities and does not remove the need for continuous conscious inclusion of multiple voices. Secondly, the healing effect of validating someone's past, can risk barring the right to (re)define the past and heritage for other groups within that community, including younger generations. Thirdly, a transfer of power to define one's heritage does not remove systemic frameworks and external influences that continue to impact the articulation of that heritage. Fourthly, this shift of power has a flipside, as promoting participation and local voices should not equal abandoning professional expert knowledge, which offers important insights into variation and change in the past. Fifthly, and importantly in the present context, external pressures risk narrowing and consolidating a template of an essentialist past. Thus, in a situation where democratic research and knowledge-based narratives about the past are under pressure, it is crucial, if challenging, to maintain an open, multivocal discussion of critical questions and reinterpretations.

Participatory archaeology for democracy and heritage preparedness?

The recent escalation of war and violent conflict in the vicinity of Scandinavia has heightened political awareness of the role of cultural heritage in times of crisis. Recent government reports on total defence in both Sweden and Norway include provision for the protection of cultural heritage and cultural life in such situations (Ds 2023: 34:301, NOU 2024–2025: 9:89–90). Academic discussions have so far focused primarily on voluntary civil efforts to safeguard pre-defined, valuable built heritage (Jærnes & Taylor 2022; Jærnes et al. 2023:31; Jærnes et al. 2023), but heritage preparedness is increasingly framed in terms of cultural and cognitive resilience and social cohesion (Vonnák & Jones 2025). I suggest that this requires the shifting of attention from the presumed universal value of certain monuments (cf. Solli et al. 2011) to an acceptance of sometimes incommensurable opinions on

heritage value and the past. The aim of heritage discussions cannot always be to reach consensus or compromise but perhaps rather to encourage the active listening and dialogue that is the foundation and strength of a democratic public discourse that is currently challenged by multiple aggressors.

THE CURRENT STATE OF HYBRID UNREST

Anti-democratic movements have gained power in the US and many European countries (Latona 2025; Muirhead & Rosenblum 2024), while Russia pursues totalitarianism and aggressive expansionism (Aikman 2025). The Arctic and the north, where Norway borders Russia, are zones of particular interest and potential conflict. Symptomatically, a majority of all Russian nuclear warheads are placed on the Kola Peninsula near Murmansk, some 100 km from Norway (Persen et al. 2022), and Russia has recently shown renewed strategic interest in Svalbard (Jakobsen 2025). Civil aircrafts in northern Norway have experienced critical GPS jamming that can be traced to Russian territory for years, so frequently since 2022 that it has become an unwanted ‘new normal’ (Brekke 2025; Furunes 2018; Svendsen 2024).

Russia has long used memory politics and cultural heritage sites to further ideological agendas (e.g. Malinova 2019). In eastern Finnmark, WWII monuments have been co-opted for “patriotic memory tours” – thin veneers for infiltration and propaganda (Myklebost 2024). International fake news campaigns include bizarre but persistent claims about Norwegian Child Welfare removing children from Russian and other foreign mothers over trivialities, only to place them with families allegedly rife with devious sexuality and incest, supposedly due to the Norwegian population’s Viking roots (Aas et al. 2015; Jentoft 2014; Norman 2016; Pavlíková & Mareš 2020:593–594; Sønsteby 2012).

A pro-Russian party ‘Freedom and Justice’ (*Frihet og rettferdighet*, FOR) was founded ahead of Norway’s general election in September 2025. It came to public attention after filling the Oslo subway with posters against Ukraine aid on Constitution Day, an action funded by a partly Russia-based Norwegian billionaire (Drabløs & Foss 2025; Støyva et al. 2025; Valvik et al. 2025). The Police Security Service (PST) warned that Russia might also attempt to influence the Sámediggi election, which was run alongside the general election. The aim was not to achieve a specific outcome but, instead, to amplify existing tensions (Trosten 2025). These tensions include fierce debates in northern Norway about Saami rights, identity, their *urheimat* and their legitimate status as an Indigenous people. Discussions involve prolific newspaper pieces and blog entries with speculative interpretations of history and archaeology, as well as allegations of scientific misconduct, branding academic researchers, in particularly at UiT in Tromsø as “crooked” (a strictly limited sample includes Gabrielsen 2015;

Hellesvik 2022a, 2022b; Handegård 2023; Leijon 2018; Sirkka 2018; Valdermo & Bakke 2024). The rhetoric has become increasingly aggressive in recent years (Knutson 2024:380) and reflects a broader rejection of expert knowledge and an international rise in unchecked opinion (Andersen & Tellman 2018; Clarke & Newman 2017; Nichols 2024).

Hence, we experience both external and internal pressure that affects discussions about heritage, belonging, identity and the past. If social cohesion and democratic discourse is our aim, we have to oppose anti-democratic and anti-factual narratives while building the internal ability to co-exist across our differences. This includes allowing for, if not accepting, opinions and statements we disagree with.

TRUST, DISSENSUS AND COMMUNITIES OF DISAGREEMENT

Norwegian society is famously held together by world-record levels of trust – trust in the state, various institutions, the media, and each other. Destabilising this trust would be an obvious way to create social unrest. Even small local communities often harbour a range of different opinions on any given topic. These differences can potentially be exploited to serve external agendas of destabilising social cohesion and political debates through the amplification of internal oppositions. Opposition to an anti-democratic discourse that dismisses logical reasoning or reliable facts, consequently depends on preserving and building trust as well as understanding, handling the incommensurable mess of opinions within our democracies and insisting on an open, democratic and inclusive debate.

It has been argued that reactionary populism, described as anti-liberal attitudes to identity politics alongside liberal attitudes to economic policies, should be opposed through critical knowledge production in archaeology (González-Ruibal et al. 2018). I agree that we, as academics, should continue to produce reliable research, take to task speculative and populist misrepresentations of archaeology and the past and expose the ideological undercurrents of fake facts, not least for the purpose of public education (Spangen 2022; Spangen & Solheim 2023). However, the effect of this on the actual reactionary populism is dubious, as political and ideological attitudes have relatively little to do with knowledge alone, and substantially more to do with intuitive emotions and fundamental moral values (Enstad & Finseraas 2024; Haidt & Joseph 2004; Graham & Yudkin 2022; Verweij & Thompson 2006). Simply opposing attitudes with provocative facts is unlikely to have a transformative effect; indeed, it is more likely to encourage further opposition (Hall 1987).

That does not mean we should give up nudging towards democratic discourse, but the aims and methods of our efforts may have to be somewhat redefined. The strength of archaeology in this context is that our discus-

sions can evolve over very concrete issues and materials rather than abstract principles. In conversations with Trump voters in 2016, George Saunders noted that talking about political topics with specific (constructed) protagonists in mind, opened up possibilities for mutual respect, trust, and understanding. His aim was not, however, consensus (Saunders 2016; Tringham 2018:61). Considering the conclusions above concerning the unlikelihood of general agreement on any complex issue and the potential benefits of heterogeneity of thought, it may be a more viable and valid goal to generate ‘dissensus’, where multiple and contested perspectives invite participants into further dialogue (Lynch & Alberti 2010). Even when two knowledge categories are in direct conflict, a ‘contradictory conversation’ may lead to interesting results (Beck & Somerville 2005:477; Tringham 2018:61–62). Such discussions in ‘communities of disagreement’ give participants practice in articulating their opinions and promoting them in constructive ways, which is a better tool to further democracy than the (untenable) idea of fostering a common value system across a diverse population (Bettum 2021:56–57; Iversen 2014). The use of archaeology in such efforts offers a chance to develop understandings of our physical surroundings in a way that can supply people with repertoires of knowledge and vocabularies of co-belonging across group and individual variations. This kind of ‘worlding’ is not only an opportunity to explore multiple strands of future-making (Harrison 2020) but an engagement that has immediate effect on dialogue and interaction.

As participatory archaeologies are fundamentally about dialogue and mutual respect and learning, without necessarily adopting each other’s knowledge uncritically (Skandfer 2001:120; Stutz 2018:54), our discipline should be ideally situated to contribute to this maintenance of democratic discourse. In some cases this may include ‘radical trust’ – collaborations in which the power of definition and control of the process and results slips entirely out of the experts’ hands and allows a variety of non-expert voices to dominate (Lynch & Alberti 2010). In other cases, some level of expert moderating may be needed, for instance to avoid harmful confrontations and results or to ensure that subdued (subaltern) voices are heard and given the necessary room for and support in joining the conversation (Bettum 2021; Bettum & Özcan 2018). As mentioned above, the mere acknowledgement of opinions impacts social behaviour and intergroup relations (Greville-Harris et al. 2016; Livingstone et al. 2024). A crucial point is that we, as experts, with the power to initiate such projects, and with ourselves as part of various communities of interest, cannot limit our interaction to people we agree with, like or deem worthy, important or valuable (cf. Kiddey 2020:26). Participatory archaeology is not about promoting all opinions uncritically (González-Ruibal et al. 2018:507–508); equally, it should

not be about pushing our own agendas of ‘mending’ these opinions. Participation and democracy are about enduring differences and oppositions, and participatory archaeology can contribute to strengthening this ability.

FUTURE PREPAREDNESS

In the 1970s–1980s, there was a shift from emphasising how knowledge about the past should build the identity of the nation to how it should build the identity of the individual. During this shift, cultural heritage sites were presented as a solution for the imagined insecurities of individuals in the population and were prescribed as a sort of therapy to create security, identity, and belonging (Berkaak 1992:49; Schanche 1993:56; Skandfer 2001:119). This intended use of cultural heritage has been criticised for connecting a sense of cultural identity to something so old that it would appear to be natural and therefore evident, non-disputable, and difficult to change. Instead, it has been suggested that we should focus on ‘future preparedness’ (*framtidssberedskap*), utilising prognoses, various scenarios, and cultural variations to avoid ‘future shock’, while also gaining awareness of the many possibilities we have to shape our own culture and society (Johansen 1989:236–239). Recently, there have been similar calls for an archaeology that strategically exercises a future-oriented position and promotes a way of thinking that foresees and pre-shapes this future by participating with knowledge building and constructing various scenarios of the future (e.g. Domanska 2018; Holtorf & Högberg 2021).

Audhild Schanche has pointed out that to the Saami population and communities, developing their identity *is* part of a future preparedness (Schanche 1993:62–63), while also discussing that the past may not be or mean the same to everyone in that society. I would say this holds true for many groups and individuals in our diverse national populations, but that social cohesion does not depend on a unified heritage identity. Acknowledging and validating different views of what is important about the places we live and the pasts we inevitably live with, whether through expert opinion, local interpretation or a combination of perspectives, can enhance belonging and community cohesion across variations, as well as training our tolerance for discussion and diversity. This can build the ‘heritage preparedness’ we need in the face of essentialist heritage narratives and anti-democratic, totalitarian approaches to the past. Consequently, I call for more self-reflexive and purposeful participatory approaches in Norwegian and Scandinavian archaeology, approaches that move on from data collection and the aim of engaging people in perceived ‘good’ and ‘healthy’ activities, towards embracing and developing our roles as significant social and political mediators in a complex democratic discourse.

Literature

- Aas, E., Fjeld, I.E. & Honningsøy, K.H. 2015. Norge, gi oss barna våre tilbake! NRK, https://www.nrk.no/urix/_-norge_-gi-oss-barna-vare-tilbake_-1.12385786 [Accessed 1 June 2025].
- Aikman, I. 2025. Donald Trump Says He Believes the US Will 'Get Greenland'. *BBC News*, <https://www.bbc.com/news/articles/crkezj07r2ro> [Accessed 11 February 2025].
- Alford, J. & Head, B.W. 2017. Wicked and Less Wicked Problems: A Typology and a Contingency Framework. *Policy & Society*. Vol. 36(3), pp. 397–413, doi:10.1080/14494035.2017.1361634.
- Andersen, G. & Tellmann, S.M. 2018. Ekspertene i kunnskapssamfunnet. *Norsk sosiologisk tidsskrift*. Vol. 2(5), pp. 357–362, doi:10.18261/issn.2535-2512-2018-05-01.
- Arnstein, S.R. 1969. A Ladder of Citizen Participation. *Journal of the American Institute of Planners*. Vol. 35(4), pp. 216–224, doi:10.1080/01944366908977225.
- Atalay, S. 2006. Indigenous Archaeology as Decolonizing Practice. *American Indian Quarterly*. Vol. 30(3–4), pp. 280–310, doi:10.1353/aiq.2006.0015.
- Atalay, S. 2012. *Community-Based Archaeology: Research With, By, and For Indigenous and Local Communities*. Berkeley: University of California Press.
- Atalay, S. 2016. *Transforming Archaeology: Activist Practices and Prospects*. London: Routledge.
- Axelsen, I. 2021. *What's the Deal With Old Things? An Exploratory Study of Attitudes and Practices Towards Certain Old Things Among Archaeologists and Metal Detectors in Norway*. PhD thesis in Archaeology. Oslo: University of Oslo.
- Barlindhaug, S. 2013. *Cultural Sites, Traditional Knowledge and Participatory Mapping: Long-Term Land Use in a Sámi Community in Coastal Norway*. PhD in Archaeology. Tromsø: University of Tromsø.
- Batory, A. & Svensson, S. 2020. Regulating Collaboration: The Legal Framework of Collaborative Governance in Ten European Countries. *International Journal of Public Administration*. Vol. 43(9), pp. 780–789, doi:10.1080/01900692.2019.1658771.
- Bayliss-Smith, T. & Mulk, I.-M. 1999. The Representation of Sámi Cultural Identity in the Cultural Landscapes of Northern Sweden: The Use and Misuse of Archaeological Knowledge. In: Layton, P. & Ucko, P.J. (eds), *The Archaeology and Anthropology of Landscape*, pp. 358–396. London: Routledge.
- Bäckman, L. 1982. Female – Divine and Human: A Study of the Position of the Woman in Religion and Society in Northern Eurasia. In: Hultkrantz, Å. & Vorren, Ø. (eds), *The Hunters: Their Culture and Way of Life*, pp. 139–142. Tromsø: Universitetsforlaget.
- Beck, W. & Somerville, M. 2005. Conversations Between Disciplines: Historical Archaeology and Oral History at Yarrowarra. *World Archaeology*. Vol. 37(3), pp. 468–483, doi:10.1080/00438240500204403.
- Bergman, I. 2018. *Kulturarv, landskap och identitetsprocesser i norra Fennoskandien 500–1500 e.Kr. Slutrapport från ett forskningsprogram*. Stockholm: Riksbankens Jubileumsfond/Makadam Förlag.
- Berkaak, O.A. 1992. *Ressursbruk, bevaringsideologier og antikvarisk praksis i fartøyvernet*. Kolsås: Norsk Forening for Fartøyvern.
- Bettum, A. 2021. Communities of Disagreement in the Museums. *Nordisk Museologi*. Vol. 32(2–3), pp. 53–63, doi:10.5617/nm.9607.

- Bettum, A. & Özcan, G. 2018. Dialog som metode: Inkluderingsstrategier ved Interkulturelt museum 2006–2016. In: Bettum, A., Maliniemi, K.J. & Walle, T.M. (eds), *Et inkluderende museum: Kulturelt mangfold i praksis*, pp. 181–224. Trondheim: Museumsforlaget.
- Bonet, L. & Négrier, E. 2018. The Participative Turn in Cultural Policy: Paradigms, Models, Contexts. *Poetics*. Vol. 66, pp. 64–73, doi:10.1016/j.poetic.2018.02.006.
- Brännström, M. 2020. The Enhanced Role of Archaeological and Historical Research in Court Proceedings About Saami Land Rights. In: Spangen, M., Salmi, A.-K., Äikäs, T. & Fjellström, M. (eds), *Currents of Saami Pasts: Recent Advances in Saami Archaeology*, pp. 177–188. Helsinki: The Archaeological Society of Finland.
- Brantenberg, T. 1985. The Alta–Kautokeino Conflict: Saami Reindeer Herding and Ethnopolitics. In: Brødsted, J. & Eide, A. (eds), *Native Power: The Quest for Autonomy and Nationhood of Indigenous Peoples*, pp. 23–48. Bergen: Universitetsforlaget.
- Brekke, K. 2025. Har avdekket alvorlige GPS-forstyrrelser i Øst-Finnmark. NRK, <https://www.nrk.no/tromsogfinnmark/har-avdekket-alvorlige-gps-forstyrrelser-i-ost-finnmark-1.17211692> [Accessed 22 May 2025].
- Brekmo, L. 2004. Fortellinger om fortiden: En analyse av kulturminneoppfatninger i marginale kystsamfunn i Nordland. MA thesis in Archaeology. Tromsø: University of Tromsø.
- Burnell, K. 2022. *Archaeology, Heritage, and Wellbeing: Authentic, Powerful, and Therapeutic Engagement with the Past*. Oxford: Routledge.
- Burström, M. 2014. More Than a Sensitive Ear: What to Expect of a Professional Expert. In: Schofield, J. (ed.), *Who Needs Experts? Counter-Mapping Cultural Heritage*, pp. 101–112. Farnham: Ashgate.
- Byrne, S. 2012. Community Archaeology as Knowledge Management: Reflections from Uneapa Island, Papua New Guinea. *Public Archaeology*. Vol. 11(1), pp. 26–52, doi:10.1179/175355312X13311392295513.
- Churchman, C.W. 1967. Guest Editorial: Wicked Problems. *Management Science*. Vol. 14(4), pp. B141–B142.
- Clarke, J. & Newman, J. 2017. ‘People in This Country Have Had Enough of Experts’: Brexit and the Paradoxes of Populism. *Critical Policy Studies*. Vol. 11(1), pp. 101–116, doi:10.1080/19460171.2017.1282376.
- Colomer, L. 2023. Exploring Participatory Heritage Governance After the EU Faro Convention. *Journal of Cultural Heritage Management and Sustainable Development*. Vol. 13(4), pp. 856–871, doi:10.1108/JCHMSD-03-2021-0041.
- Colwell-Chanthaphonh, C. & Ferguson, T.J. 2008. *Collaboration in Archaeological Practice: Engaging Descendant Communities*. Lanham, Maryland: AltaMira Press.
- Conklin, J. 2006. *Dialogue Mapping: Building Shared Understanding of Wicked Problems*. Chichester: Wiley.
- Dobat, A.S., Dobat, A.S. & Schmidt, S. 2022. Archaeology as ‘Self-Therapy’: Case Studies of Metal Detecting Communities in Britain and Denmark. In: Burnell, K. (ed.), *Archaeology, Heritage, and Wellbeing: Authentic, Powerful, and Therapeutic Engagement with the Past*, pp. 145–161. London: Routledge.
- Dobat, A.S., Wood, S.O., Jensen, B.S., Schmidt, S. & Dobat, A.S. 2020. ‘I Now Look Forward to the Future, by Finding Things From Our Past ...’ Exploring the Potential of Metal Detector Archaeology as a Source of Well-Being and Happiness for British Armed Forces Veterans With Mental Health Impairments: 50-Year-Old Male War Veteran and Survey Participant, Suffering From PTSD and Depression, on the Effect of Metal

- Detecting. *International Journal of Heritage Studies*. Vol. 26(4), pp. 370–386, doi:10.1080/13527258.2019.1639069.
- Domanska, E. 2018. Is This Stone Alive? Prefiguring the Future Role of Archaeology. *Norwegian Archaeological Review*. Vol. 51(1–2), pp. 22–35, doi:10.1080/00293652.2018.1553060.
- Drabløs, Ø.T. & Foss, A.B. 2025. Atle Berges milliongave til FOR kom fra selskap med interesser i Russland. *Aftenposten*, <https://www.aftenposten.no/norge/i/pP2byo/atle-berges-milliongave-til-for-kommer-fra-selskap-som-eier-storbedrift-i-russland> [Accessed 11 June 2025].
- Ds 2023:34. 2023. *Kraftsamling: Inriktningen av totalförsvaret och utformningen av det civila försvaret*. Stockholm: Regeringskansliet. <https://www.regeringen.se/rattsligadokument/departementsserien-och-promemorior/2023/12/ds-202334-kraftsamling/> [Accessed 11 February 2025].
- Eikjok, J. 2000. Indigenous Women in the North: The Struggle for Rights and Feminism. *IWGIA Newsletter*. Vol. 2000(3), pp. 38–41.
- Ellenberger, K. & Richardson, L.-J. 2019. Reflecting on Evaluation in Public Archaeology. *AP: Online Journal in Public Archaeology*. Vol. 8(1), pp. 65–94, doi:10.23914/ap.v8i1.141.
- Enstad, J.D. & Finseraas, H. 2024. Moralske intuisjoner og politiske orienteringer blant norske velgere. *Tidsskrift for samfunnsforskning*. Vol. 65(1), pp. 1–23, doi:10.18261/tfs.65.1.1.
- Falch, T. 1998. Sami Cultural Heritage and Cultural Mobilisation. In: Saugestad, S. (ed.), *Indigenous Peoples in Modern Nation-States: Proceedings from an International Workshop, University of Tromsø, October 13–16, 1997*, pp. 33–37. Tromsø: University of Tromsø.
- Falch, T., Selle, P. & Strømsnes, K. 2016. The Sámi: 25 Years of Indigenous Authority in Norway. *Ethnopolitics*. Vol. 15(1), pp. 125–143, doi:10.1080/17449057.2015.1101846.
- Fredheim, L.H. 2019. *Sustaining Public Agency in Caring for Heritage: Critical Perspectives on Participation Through Co-Design*. PhD thesis in Archaeology. York: University of York, doi:10.1080/00293652.2020.1738540.
- Fredheim, L.H. 2020. Decoupling ‘Open’ and ‘Ethical’ Archaeologies: Rethinking Deficits and Expertise for Ethical Public Participation in Archaeology and Heritage. *Norwegian Archaeological Review*. Vol. 53(1), pp. 1–18.
- Furunes, E.W. 2018. Frykter at Russlands GPS-jamming kan føre til ulykker. *NRK*, <https://www.nrk.no/tromsogfinnmark/frykter-at-russlands-gps-jamming-kan-fore-til-ulykker-1.14292013> [Accessed 22 May 2025].
- Gabrielsen, T. 2015. Innledning om de falske tesene. *Finnmark Forlag*, https://finnmarkforlag.no/tese_2015_22juli.html [Accessed 23 May 2025].
- Gilge, C. 2016. Citizen Participation as Microfascism: Marginalizing Labour in Web 2.0. In: Lancione, M. (ed.), *Rethinking Life at the Margins*, pp. 212–226. London: Routledge.
- González-Ruibal, A. 2009. Vernacular Cosmopolitanism: An Archaeological Critique of Universalistic Reason. In: Meskell, L. (ed.), *Cosmopolitan Archaeologies*, pp. 113–139. Durham: Duke University Press.
- González-Ruibal, A. 2010. Colonialism and European Archaeology. In: Lydon, J. & Rizvi, U.Z. (eds), *Handbook of Postcolonial Archaeology*, pp. 37–47. Walnut Creek, California: Left Coast Press.

- González-Ruibal, A. 2019. Ethical Issues in Indigenous Archaeology: Problems With Difference and Collaboration. *Canadian Journal of Bioethics*. Vol. 2(3), pp. 34–43, doi:10.7202/1066461ar.
- González-Ruibal, A., González, P.A. & Criado-Boado, F. 2018. Against Reactionary Populism: Towards a New Public Archaeology. *Antiquity*. Vol. 92(362), pp. 507–515, doi:10.15184/aqy.2017.227.
- Graham, J. & Yudkin, D.A. 2022. Variations in Moral Concerns Across Political Ideology: Moral Foundations, Hidden Tribes, and Righteous Division. In: Vargas, M. & Doris, J.M. (eds), *The Oxford Handbook of Moral Psychology*, pp. 759–778. Oxford: Oxford University Press.
- Greville-Harris, M., Hempel, R., Karl, A., Dieppe, P. & Lynch, T.R. 2016. The Power of Invalidating Communication: Receiving Invalidating Feedback Predicts Threat-Related Emotional, Physiological, and Social Responses. *Journal of Social and Clinical Psychology*. Vol. 35(6), pp. 471–493, doi:10.1521/jscp.2016.35.6.471.
- Guilfoyle, D.R. & Hogg, E.A. 2015. Towards an Evaluation-Based Framework of Collaborative Archaeology. *Advances in Archaeological Practice*. Vol. 3(2), pp. 107–123, doi:10.7183/2326-3768.3.2.107.
- Haidt, J. & Joseph, C. 2004. Intuitive Ethics: How Innately Prepared Intuitions Generate Culturally Variable Virtues. *Daedalus*. Vol. 133(4), pp. 55–66, doi:10.1162/0011526042365555.
- Hall, S. 1987. Blue Election, Election Blues. *Marxism Today*. Available at: <http://www.unz.org/Pub/MarxismToday-1987jul-00030> [Accessed 6 February 2016].
- Hallström, G. 1922. Gravplatser och offerplatser i ryska lappmarken. *RIG – Kulturhistorisk Tidskrift*. Vol. 5(3–4), pp. 162–192.
- Hallström, G. 1932. Lapska offerplatser. In: Svenska fornminnesföreningen (ed.), *Arkeologiska Studier Tillägnade H. K. H. Kronprins Gustaf Adolf*, pp. 111–131. Stockholm: Norstedt.
- Handegård, O. 2023. Feil om samenes opprinnelse. *Nordnorsk debatt*, <https://www.nordnorskdebatt.no/5-124-236100> [Accessed 8 June 2025].
- Hansen, L.I. & Olsen, B. 2014. *Hunters in Transition: An Outline of Early Sámi History*. Leiden: Brill.
- Harris, O.J.T. & Cipolla, C.N. 2017. *Archaeological Theory in the New Millennium: Introducing Current Perspectives*. London: Routledge.
- Harrison, R. 2013. *Heritage: Critical Approaches*. London: Routledge.
- Harrison, R. 2020. Heritage Practices as Future-Making Practices. In: Holtorf, C. & Högborg, A. (eds), *Cultural Heritage and the Future*, pp. 29–45. London: Routledge.
- Hellesvik, J. 2022a. En skamlett i norsk forskningshistorie. *Nordnorsk debatt*, <https://www.nordnorskdebatt.no/5-124-163669> [Accessed 23 May 2025].
- Hellesvik, J. 2022b. Samenes urhjem er i Karelen, ikke på Nordkalotten. *Nordnorsk debatt*, <https://www.nordnorskdebatt.no/5-124-164233> [Accessed 8 June 2025].
- Hillerdal, C., Karlström, A. & Ojala, C.-G. 2017. *Archaeologies of Us and Them: Debating History, Heritage and Indigeneity*. London: Routledge.
- Hodder, I. 2010. Cultural Heritage Rights: From Ownership and Descent to Justice and Well-Being. *Anthropological Quarterly*. Vol. 83(4), pp. 861–882, doi:10.1353/anq.2010.0025.
- Holtorf, C. & Högborg, A. 2021. *Cultural Heritage and the Future*. London: Routledge.

- ILO C169. 1989. C169 – Indigenous and Tribal Peoples Convention, 1989. Available at: http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_INSTRUMENT_ID:312314 [Accessed 27 April 2015].
- Iversen, L.L. 2014. *Uenighetsfellesskap: Blikk på demokratisk samhandling*. Oslo: Universitetsforlaget.
- Jakobsen, H.Ø. 2025. Trump vil ha Grønland. Hva om Putin vil ha Svalbard? *Morgenbladet*, <https://www.morgenbladet.no/samfunn/trump-vil-ha-gronland-hva-om-putin-vil-ha-svalbard/9603857> [Accessed 30 May 2025].
- Jentoft, M. 2014. Russisk kritikk mot norsk barnevern. *NRK*, <https://www.nrk.no/urix/russisk-kritikk-mot-norsk-barnevern-1.12045438> [Accessed 1 June 2025].
- Jærnes, N.K., Flyen, C. & Brevik, I. 2023. *Veileder i sikring, beredskap og krisehåndtering for kulturminner*. [https://riksantikvaren.no/veileder/sikring-beredskap-og-krisehand-tering-for-kulturminner/](https://riksantikvaren.no/veileder/sikring-beredskap-og-krisehant-tering-for-kulturminner/) [Accessed February 11, 2025].
- Jærnes, N.K. & Taylor, J. 2022. Beredskap for kulturarven: Fremtidig nøkkelrolle for frivilligheten. *Fortidsvern*. Vol. 2022(3), pp. 35–39.
- Jærnes, N.K., Flyen, C. & Taylor, J. 2023. Cycles of Change: Enhancing Collaboration and Communication in Norwegian Municipalities to Strengthen Heritage Preparedness for Extreme Events. *Journal of the Institute of Conservation*. Vol. 46(3), pp. 205–223, doi:10.1080/19455224.2023.2257263.
- Johansen, A. 1989. Ting, tid, identitet. *Syn og segn*. Vol. 95(3), pp. 226–240.
- Kelty, C.M. 2017. Too Much Democracy in All the Wrong Places: Toward a Grammar of Participation. *Current Anthropology*. Vol. 58(S15), pp. S77–S90, doi:10.1086/688705.
- Kiddey, R. 2020. I'll Tell You What I Want, What I Really, Really Want! Open Archaeology That Is Collaborative, Participatory, Public, and Feminist. *Norwegian Archaeological Review*. Vol. 53(1), pp. 23–40, doi:10.1080/00293652.2020.1749877.
- Knutson, C. 2024. *Indigenous Archaeology in Sweden: Aligning Contract Archaeology With National and International Policies on Indigenous Heritage*. PhD thesis in Archaeology. Växjö: Linnaeus University.
- Krogh, M.H. 1999. Tradisjoner, landskap og folk: Om kulturminner og -vern i Berlevåg. MA thesis in Archaeology. Tromsø: University of Tromsø.
- Kuokkanen, R.J. 2007. Myths and Realities of Sami Women: A Post-Colonial Feminist Analysis for the Decolonialization and Transformation of Sami Society. In: Green, J. (ed.), *Making Space for Indigenous Feminism*, pp. 72–92. Halifax: Fernwood Publishing.
- Kuusela, J.-M., Salmi, A.-K. & Äikäs, T. 2020. Hunters, Fishers, Traders: An Archaeological and Zooarchaeological Perspective on the Development of the Late Iron Age and Medieval Northern Fennoscandian Trade Network. *Estonian Journal of Archaeology*. Vol. 24, pp. 141–160, doi:10.3176/arch.2020.2.02.
- Latona, D. 2025. Orban, Le Pen Hail Trump at Far-Right 'Patriots' Summit in Madrid. *Reuters*, <https://www.reuters.com/world/europe/orban-le-pen-hail-trump-far-right-patriots-summit-madrid-2025-02-08/> [Accessed 22 May 2025].
- Leijon, W.M.P. 2018. Grensen mellom Russland og Norge i middelalderen. *Nordnorsk debatt*, <https://www.nordnorskdebatt.no/5-124-53202> [Accessed May 23, 2025].
- Ljungdahl, E. & Norberg, E. 2012. *Ett steg till på vägen: Resultat och reflexioner kring ett dokumentationsprojekt på sydsamiskt område under åren 2008–2011*. Östersund: Gaaltje.
- Livingstone, A.G., Bedford, S.L. [...] Makanju, D. & Chayinska, M. 2024. You Get Us, So You Like Us: Feeling Understood by an Outgroup Predicts More Positive Intergroup

- Relations via Perceived Positive Regard. *Journal of Personality and Social Psychology*. Vol. 126(2), pp. 262–281, doi:10.1037/psp10000434.
- Lynch, B.T. & Alberti, S.J. 2010. Legacies of Prejudice: Racism, Co-Production and Radical Trust in the Museum. *Museum Management and Curatorship*. Vol. 25(1), pp. 13–35, doi:10.1080/09647770903529061.
- Malinova, O. 2019. Constructing the ‘Usable Past’: The Evolution of the Official Historical Narrative in Post-Soviet Russia. In: Bernsand, N. & Törnquist-Plewa, B. (eds), *Cultural and Political Imaginaries in Putin’s Russia*, pp. 85–104. Leiden: Brill.
- Marshall, Y. 2002. What Is Community Archaeology? *World Archaeology*. Vol. 34(2), pp. 211–219, doi:10.1080/0043824022000007062.
- Merriman, N. 2004. *Public Archaeology*. London: Routledge.
- Milek, K. 2018. Transdisciplinary Archaeology and the Future of Archaeological Practice: Citizen Science, Portable Science, Ethical Science. *Norwegian Archaeological Review*. Vol. 51(1–2), pp. 36–47, doi:10.1080/00293652.2018.1552312.
- Minde, H. 2003a. Assimilation of the Sami: Implementation and Consequences. *Acta Borealia*. Vol. 20(2), pp. 121–146, doi:10.1080/08003830310002877.
- Minde, H. 2003b. The Challenge of Indigenism: The Struggle for Sami Land Rights and Self-Government in Norway 1960–1990. In: Jentoft, S., Minde, H. & Nilsen, R. (eds), *Indigenous Peoples: Resource Management and Global Rights*, pp. 75–106. Delft: Eburon.
- Moshenska, G. 2017. *Key Concepts in Public Archaeology*. London: UCL Press.
- Muirhead, R. & Rosenblum, N.L. 2024. *Ungoverning: The Attack on the Administrative State and the Politics of Chaos*. Princeton, Oxford: Princeton University Press.
- Mulk, I.-M. 1994. Sacrificial Places and their Meaning in Saami Society. In: Carmichael, D.L., Hubert, J., Reeves, B. & Schanche, A. (eds), *Sacred Sites, Sacred Places*, pp. 121–131. London: Routledge.
- Mulk, I.-M. 2024. My Story as an Indigenous Archaeologist and the Story of Sami Prehistory in Archaeology. In: Nicholas, G. & Watkins, J. (eds), *Working as Indigenous Archaeologists*, pp. 305–318. London: Routledge.
- Myklebost, K.A. 2024. Russian Active Measures in Eastern Finnmark, Norway. *The Barents Observer*, <https://www.thebarentsobserver.com/opinions/russian-active-measures-in-eastern-finnmark-norway/151169> [Accessed May 22, 2025].
- Myrvoll, E.R. 2010a. Når arkeologi møter lokal kunnskap: Etske implikasjoner. *Nordisk Museologi*. Vol. 2010(1), pp.78–95.
- Myrvoll, E.R. 2010b. Kulturminner i Askeladden og kategoriens vold. *Viking*. Vol. 73, pp. 81–102, doi:10.5617/nm.3181.
- Nicholas, G. 2024. Considering the Past, Present and Futures of Indigenous Archaeology. *Archaeological Review from Cambridge*. Vol. 39(2), pp. 138–156.
- Nicholas, G.P. 2010a. *Being and Becoming Indigenous Archaeologists*. Walnut Creek, California: Left Coast Press.
- Nicholas, G.P. 2010b. Seeking the End of Indigenous Archaeology. In: Phillips, C. & Allen, H. (eds), *Bridging the Divide: Indigenous Communities and Archaeology Into the 21st Century*, pp. 233–252. London/New York: Routledge.
- Nicholas, G.P. & Watkins, J. 2014. Indigenous Archaeologies in Archaeological Theory. In: Smith, C. (ed.), *Encyclopedia of Global Archaeology*, pp. 3777–3786. New York: Springer New York.
- Nichols, T. 2024. *The Death of Expertise: The Campaign against Established Knowledge and Why it Matters*. Second edition. New York: Oxford University Press.

- Niezen, R. 2017. Collective Rights and the Construction of Heritage. In: Hillerdal, C., Karlström, A. & Ojala, C.-G. (eds), *Archaeologies of Us and Them: Debating History, Heritage, and Indigeneity*, pp. 19–32. London: Routledge.
- Niklasson, E. & Hølleland, H. 2018. The Scandinavian Far-Right and the New Politicisation of Heritage. *Journal of Social Archaeology*. Vol. 18(2), pp. 121–148, doi:10.1177/1469605318757340.
- Nilsen, G. 2003. *Brytninger mellom lokal og akademisk kulturminnekunnskap: En analyse av fortidsforestillinger i Nord-Troms og Lofoten*. PhD thesis in Archaeology. Tromsø: Universitetet i Tromsø.
- Nordin, J.M. 2023. Spaces of Resilience and Resistance: Sámi Habitation in Southern and Central Sweden During the Late Medieval and the Early Modern Period. *International Journal of Historical Archaeology*. Vol. 27(2), pp. 480–505, doi:10.1007/s10761-022-00659-2.
- Norman, M.G. 2016. Massedemonstrasjoner mot norsk barnevern i 19 land. VG, <https://www.vg.no/nyheter/i/ejxPl/massedemonstrasjoner-mot-norsk-barnevern-i-19-land> [Accessed June 1, 2025].
- NOU 2024–2025: 9. 2025. *Meld. St. 9 (2024–2025) – Totalberedskapsmeldingen*. Oslo: The Norwegian Government. <https://www.regjeringen.no/no/dokumenter/meld.-st.-9-20242025/id3082364/> [Accessed May 2, 2025].
- Ojala, C.-G. 2009. *Sámi Prehistories: The Politics of Archaeology and Identity in Northernmost Europe*. PhD thesis in Archaeology. Uppsala: Uppsala University.
- Ojala, C.-G. 2019. Discussion: Colonialism Past and Present Archaeological Engagements and Entanglements. In: Salmi, A.-K. & Äikäs, T. (eds), *The Sound of Silence*, pp. 182–201. New York/Oxford: Berghahn Books.
- Ojala, C.-G. 2022. Indigenous Archaeology. In: Lindroth, M., Sinevaara-Niskanen, H. & Tennberg, M. (eds), *Critical Studies of the Arctic: Unravelling the North*, pp. 120–144. Cham: Springer International.
- Olsen, B. 1991. Metropolises and Satellites in Archaeology: On Power and Asymmetry in Global Archaeological Discourse. In: Preucel, R.W. (ed.), *Processual and Post-processual Archaeologies: Multiple Ways of Knowing the Past*, pp. 211–224. Carbondale: South Illinois University.
- Olsen, B. 2001. ‘– at ikke Fremmede skulle raade over en Jordbund, som gemmer vore Fædres Been og hvortil vore helligste og ærværdigste Minder ere knyttede’: Problemer knyttet til bruken av fortid og kulturminner i diskurser om opphav, rettigheter og identitet. In: Thuen, T. (ed.), *Fortidsforståelser*, pp. 71–92. Kristiansand: Høgskoleforlaget.
- Pattinson, J., Lapidou, D. [...] Lewis, C., & Siriwardena, N. 2023. Volunteering on Heritage at Risk Sites and Wellbeing: A Qualitative Interview Study. *Health Expectations: An International Journal of Public Participation in Health Care and Health Policy*. Vol. 26(6), pp. 2485–2499, doi:10.1111/hex.13852.
- Pavlíková, M. & Mareš, M. 2020. ‘Barnevernet Steals Children’: An Analysis of Russian Information Warfare Narratives in the Czech Disinformation Media. *TRAMES*. Vol. 24(4), pp. 589–605, doi:10.3176/tr.2020.4.07.
- Persen, K., Furuly, J.G. & Vold, H.B. 2022. I denne havnen ti mil fra Norge ligger Russlands atomknyttneve. *Faktisk*, <https://www.faktisk.no/artikkel/i-den-ne-havnen-ti-mil-fra-norge-ligger-russlands-atomknyttneve/101439> [Accessed May 30, 2025].
- Pramli, M.C. 1999. *Kulturminner i Harstad: Mellom forskning, forvaltning og befolkning*. MA thesis in Archaeology. Tromsø: University of Tromsø.

- Rasmussen, S. 2016. *Samisk integrering i norsk og svensk kirke i tidlig nytid: En komparasjon mellom Finnmark og Torne lappmark*. PhD thesis in History. Tromsø: UiT – The Arctic University of Norway.
- Rico, T. 2017. Stakeholder in Practice: ‘Us’, ‘Them’ and the Problem of Expertise. In: Hillerdal, C., Karlström, A. & Ojala, C.-G. (eds), *Archaeologies of Us and Them: Debating History, Heritage, and Indigeneity*, pp. 38–52. London: Routledge.
- Rosetti, I. 2022. *Participatory Heritage Practices In, For, As Sustainable Urban Development*. PhD thesis in Heritage Studies. Antwerp: Universiteit Antwerpen.
- Rydving, H. 1995. *The End of Drum-Time: Religious Change Among the Lule Saami, 1670s–1740s*. Uppsala: Uppsala University.
- Sardar, Z. 2015. Postnormal Times Revisited. *Futures*. Vol. 67, pp. 26–39, doi:10.1016/j.futures.2015.02.003.
- Saunders, G. 2016. Who Are All These Trump Supporters? *Longreads*. <http://longreads.com/2016/07/06/who-are-all-these-trump-supporters/> [Accessed May 26, 2025].
- Schanche, A. 1993. Kulturminner, identitet og etnisitet. *Dugnad*. Vol. 19(4), pp. 55–64.
- Schanche, A. 1994. Introduction to Sacrificial Places and their Meaning in Saami Society. In: Carmichael, D.L., Hubert, J., Reeves, B. & Schanche, A. (eds), *Sacred Sites, Sacred Places*, pp. 121–123. London: Routledge.
- Schanche, A. 2000. *Graver i ur og berg: Samisk gravskikk og religion fra forhistorisk til nyere tid*. Karasjok: Davvi girji.
- Schanche, A. 2004. Horizontal and Vertical Perceptions of Saami Landscapes. In: Jones, M. & Schanche, A. (eds), *Landscape, Law and Customary Rights*, pp. 1–10. Guovdageaidnu: Sámi Instituhtta.
- Schanche, A. & Olsen, B. 1985. Var de alle nordmenn? En etnopolitisk kritikk av norsk arkeologi. In: Næss, J.-R. (ed.), *Arkeologi og etnisitet*, pp. 87–99. Arkeologisk museum: Stavanger.
- Schofield, J. 2024. *Wicked Problems for Archaeologists: Heritage as Transformative Practice*. Oxford: Oxford University Press.
- Shapiro, M.H. 1988. Introduction: Judicial Selection and the Design of Clumsy Institutions USC Symposium on Judicial Election, Selection, and Accountability. *Southern California Law Review*. Vol. 61(6), pp. 1555–1570.
- Silliman, S.W. 2008. *Collaborating at the Trowel’s Edge: Teaching and Learning in Indigenous Archaeology*. Tucson: University of Arizona Press.
- Silliman, S.W. 2010. The Value and Diversity of Indigenous Archaeology: A Response to McGhee. *American Antiquity*. Vol. 75(2), pp. 217–220, doi:10.7183/0002-7316.75.2.217.
- Sirkka, K.-W. 2018. Sammenheng mellom etnisk slagside i politikktutviklingen og historie- og arkeologimiljøet ved UiT? *Nordnorsk debatt*, <https://www.nordnorskdebatt.no/5-124-45858> [Accessed May 23, 2025].
- Skandfer, M. 2001. Etikk i forvaltning – forvaltning av etikk: Samisk kulturminnevern mellom ‘døde’ strukturer og levende tradisjon. *Viking*. Vol. 64, pp. 113–131.
- Skandfer, M. 2009. Ethics in the Landscape: Prehistoric Archaeology and Local Sámi Knowledge in Interior Finnmark, Northern Norway. *Arctic Anthropology*. Vol. 46(1–2), pp. 89–102, doi:10.1353/arc.0.0029.
- Smith, C., Copley, V. [...] Josephine, & Jackson, G. 2022. Using Archaeology to Strengthen Indigenous Social, Emotional, and Economic Wellbeing. In: Everill, P. & Burnell, K. (ed.), *Archaeology, Heritage, and Wellbeing: Authentic, Powerful, and Therapeutic Engagement with the Past*, pp. 119–144. London: Routledge.

- Smith, C. & Wobst, H.M. 2005. *Indigenous Archaeologies: Decolonising Theory and Practice*. London: Routledge.
- Smith, G.H. & Smith, L.T. 2019. Doing Indigenous Work: Decolonizing and Transforming the Academy. In: McKinley, E. A. & Smith, L. T. (eds), *Handbook of Indigenous Education*, pp. 1075–1101. Singapore: Springer Singapore.
- Smith, L. 2006. *Uses of Heritage*. New York: Routledge.
- Smith, L. 2025. Community Consultation to Co-Creation: A History of Talking Past Each Other? In: Edmundson, A. & Haviland, M. (eds), *Collaboration and Co-Creation in Museums, Heritage, and the Arts*, pp. 19–30. Abingdon: Routledge.
- Smith, L. & Waterton, E. 2009. *Heritage, Communities and Archaeology*. London: Duckworth.
- Smith, L.T. 1999. *Decolonizing Methodologies: Research and Indigenous Peoples*. London: Zed Books.
- Solli, B. 1996. *Narratives of Veøy: An Investigation Into the Poetics and Scientifics of Archaeology*. Oslo: Universitetets Oldsaksamling.
- Solli, B., Burström, M. [...] Smith, L., & Witmore, C. 2011. Some Reflections on Heritage and Archaeology in the Anthropocene. *Norwegian Archaeological Review*. Vol. 44(1), pp. 40–88, doi:10.1080/00293652.2011.572677.
- Spangen, M. 2013. 'It Could Be One Thing Or Another': On the Construction of an Archaeological Category. *Fennoscandia Archaeologica*. Vol. 30, pp. 67–80.
- Spangen, M. 2016. *Circling Concepts: A Critical Archaeological Analysis of the Notion of Stone Circles as Sami Offering Sites*. PhD thesis in Archaeology. Stockholm: Stockholm University.
- Spangen, M. 2017. Anomaly or Myth? Sami Circular Offering Sites in Medieval Northern Norway. In: Bis-Worch, C. & Theune, C. (eds), *Religion, Cults and Rituals in the Medieval Rural Environment*, pp. 39–51. Leiden: Sidestone Press.
- Spangen, M. 2022. Fantasi om kjemper i nord. *Nordnorsk debatt*, <https://www.nordnorskdebatt.no/5-124-200329> [Accessed July 29, 2025].
- Spangen, M. 2025. Dissolving Dichotomies: On the Necessity of Integrating Saami, Nordic, and Feminist Gender Archaeology. In: Pedersen, U., Moen, M. & Skogstrand, L. (eds), *Gendering the Nordic Past*, pp. 203–216. Turnhout: Brepols Publishers.
- Spangen, M. in press. Meetings in Varanger: On Transcultural Exchange in Medieval and Early Modern Northern Fennoscandia. In: Ljungqvist, F.C., Lund, O., Myrdal, J. & Retsö, D. (eds), *Medieval Scandinavia: Contributions to Social and Economic History*. Stockholm: Nordic Academic Press.
- Spangen, M. & Solheim, S. 2023. Nei, det er ikke genene som gjør oss skandinaver turglade. *Aftenposten*, <https://www.aftenposten.no/meninger/kronikk/i/3EAvjP/utdatterte-spekulasjoner-om-dna-og-kultur-blir-presentert-som-fakta-det-er-et-problem> [Accessed June 8, 2025].
- Spivak, G. 1988. Can the Subaltern Speak? In: Nelson, C. & Grossberg, L. (eds), *Marxism and the Interpretation of Culture*, pp. 271–313. Urbana: University of Illinois Press.
- Støyva, A.B., Ekroll, H.C., Bjørgul, V.O. & Foss, A.B. 2025. Det omstridte partiet kommer med mange påstander om Ukraina. Hva vet vi egentlig? *Aftenposten*, <https://www.aftenposten.no/norge/politikk/i/gwIBLo/det-omstridte-partiet-kommer-med-mange-paastander-om-ukraina-hva-vet-vi-egentlig> [Accessed June 1, 2025].
- Stutz, L.N. 2018. A Future for Archaeology: In Defense of an Intellectually Engaged, Collaborative and Confident Archaeology. *Norwegian Archaeological Review*. Vol. 51(1–2), pp. 48–56.

- Svanberg, F. & Wahlgren, K.H. 2007. *Publik arkeologi*. Lund: Nordic Academic Press.
- Svendsen, M. 2024. Sluttet å registrere GPS-forstyrrelser i Finnmark: Uønsket normal-situasjon. <https://www.forsvaretsforum.no/andoya-finnmark-jamming/sluttet-a-registrere-gps-forstyrrelser-i-finnmark-uonsket-normalsituasjon/395824> [Accessed May 22, 2025].
- Sønsteby, C. 2012. Barnevernet er som Gestapo. *TV2*, <https://www.tv2.no/nyheter/utenriks/barnevernet-er-som-gestapo/13328154/> [Accessed June 1, 2025].
- Taylor, J. 2023. Choice Architecture, Nudging, and the Historic Environment: The Subtle Influences of Heritage Through the Lens of Behavioural Science. *International Journal of Heritage Studies*. Vol. 29(3), pp. 199–219, doi:10.1080/13527258.2023.2179100.
- Termeer, C.J. & Dewulf, A. 2019. A Small Wins Framework to Overcome the Evaluation Paradox of Governing Wicked Problems. *Policy & Society*. Vol. 38(2), pp. 298–314, doi:10.1080/14494035.2018.1497933.
- Thomas, S. 2017. Community Archaeology. In: Moshenska, G. (ed.), *Key Concepts in Public Archaeology*, pp. 14–30. London: UCL Press.
- Thomas, S. & Lea, J. 2014. *Public Participation in Archaeology*. Woodbridge: Boydell & Brewer.
- Thomas, S.E. 2019. Doing Public Participatory Archaeology with ‘Difficult’ Conflict Heritage: Participatory Research in Archaeology. *Post Classical Archaeologies*. Vol. 9, pp. 147–167.
- Tringham, R. 2018. A Plea for a Richer, Fuller and More Complex Future Archaeology. *Norwegian Archaeological Review*. Vol. 51(1–2), pp. 57–63, doi:10.1080/00293652.2018.1547920.
- Trosten, I.E. 2025. PST advarer om utenlandsk påvirkning før sametingsvalget. *NRK*, <https://www.nrk.no/sapmi/pst-advarer-om-utenlandsk-pavirkning-for-sametingsvalget-1.17424041> [Accessed May 22, 2025].
- Ucko, P.J. 2001. ‘Heritage’ and ‘Indigenous Peoples’ in the 21st Century. *Public Archaeology*. Vol. 1(4), pp. 227–238, doi:10.1179/pua.2001.1.4.227.
- Valdermo, O.H. & Bakke, J.P. 2024. Ekte og uekte urfolk: Sannheter vi savner fra Sannhetskommissjonen. *Nordnorsk debatt*, <https://www.nordnorskdebatt.no/5-124-296231> [Accessed May 23, 2025].
- Valvik, M.E., Hagesæther, P.V. & Strømdahl, M. 2025. Politisk reklame på 17. mai får folk til å reagere. *Aftenposten*, <https://www.aftenposten.no/oslo/i/MnG77M/politisk-reklame-paa-17-mai-provoserer> [Accessed June 1, 2025].
- Van Dyke, R.M. 2020. Indigenous Archaeology in a Settler-Colonist State: A View from the North American Southwest. *Norwegian Archaeological Review*. Vol. 53(1), pp. 41–58, doi:10.1080/00293652.2020.1778779.
- Verweij, M., Douglas, M. [...] Rayner, S. & Thompson, M. 2006. Clumsy Solutions For a Complex World: The Case of Climate Change. *Public Administration*. Vol. 84(4), pp. 817–843, doi:10.1111/j.1540-8159.2005.09566.x-11.
- Verweij, M. & Thompson, M. 2006. *Clumsy Solutions for a Complex World: Governance, Politics and Plural Perceptions*. New York: Palgrave Macmillan.
- Viita-aho, M. 2025. *Engaging with Wicked Heritage Problems: The Societal Agency of Museums in Flux in Contemporary Finland*. PhD thesis in History and Cultural Heritage. Helsinki: University of Helsinki.
- Vonnák, D. & Jones, S. 2025. *Mobilising Care for Cultural Heritage in Russia’s War Against Ukraine*. Stirling: University of Stirling.

- Wang, S.M. 2023. *Decolonising Medieval Fenmoscandia: An Interdisciplinary Study of Norse-Saami Relations in the Medieval Period*. Berlin: De Gruyter.
- Watkins, J. 2000. *Indigenous Archaeology: American Indian Values and Scientific Practice*. Lanham, Maryland: Alta Mira Press.
- Ween, G.B. & Riseth, J.Å. 2011. Doing is Learning: Analysis of an Unsuccessful Attempt to Adapt TEK/IK Methodology to Norwegian Sámi Circumstances. *Acta Borealia*. Vol. 28(2), pp. 228–242, doi:10.1080/08003831.2011.626944.
- Weick, K.E. 1984. Small Wins: Redefining the Scale of Social Problems. *American Psychologist*. Vol. 39(1), pp. 40–49, doi:10.1037//0003-066X.39.1.40.

'Something Wicked This Way Comes'

John Schofield

'By the pricking of my thumbs, something wicked this way comes', is a quotation from William Shakespeare's *Macbeth*, spoken by the Second Witch in Act 4, Scene 1, to signify Macbeth's approach. In Shakespeare's play, the line uses folklore, where a tingling in the thumbs signals evil, to foreshadow Macbeth's arrival and highlight his transformation into a monstrous figure. As a society, we have had a tingling in our thumbs for decades and, like many mild symptoms that can signify deeper problems, we have been resolute in ignoring it, thinking that it will just go away of its own accord. But that tingling hasn't gone away. It has only become worse over time to the point of criticality. As a society we feel this pain in many different ways, including in many aspects of our daily lives, most of which are universal: the impacts of climate change; social injustice; crime; conflict; food insecurity; environmental harm; and health and wellbeing. We can add to that list the global rise in authoritarian and anti-democratic movements. To make matters worse, and drawing on the influence of Systems Thinking, all of these complex and so-called 'wicked problems' are deeply entangled, making them even harder to resolve without risking further and deeper problems occurring elsewhere. The growth of authoritarian and anti-democratic

Department of Archaeology, University of York, United Kingdom
john.schofield@york.ac.uk

This is an Open Access article distributed under the terms of the Creative Commons 4.0 International licence (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.



SUSTAINABLE DEVELOPMENT GOALS



Figure 1: A neat and uncomplicated representation of the UN Sustainable Development Goals. Source: <https://sdgs.un.org/goals>.

movements, for example, can impact the way people think about and react to some of those other problems, such as climate change.

Responding to Marte Spangen's timely and thoughtful contribution, based in particular around that global rise in anti-democratic movements and archaeologists' potential role as social and political mediators in democratic discourse, I use this opportunity of a response to provide further context to her arguments, offering a wider political framing of the Indigenous perspectives that are the focus of her contribution. In framing Spangen's arguments, I highlight the urgency with which archaeologists must address such wicked problems, and the creativity required to succeed. I also consider what success might look like when the problems are, by definition, irresolvable.

In my recent book *Wicked Problems for Archaeologists: Heritage as Transformative Practice* (Schofield 2024) I outlined the history of wicked problems research, which draws on psychology, planning and policy studies, as well as economics and environmental history, amongst others. I described the way the term 'wicked problems' has been used as well as defining some alternative but related concepts. For example, I explored Systems Thinking and entanglement as ways to understand the complexity of these



Figure 2: A messy depiction of Wicked Problems. Image source: LoraCBR CC BY 2.0. Source: <https://archive.discoversociety.org/2018/07/03/why-i-am-staying-optimistic-about-the-world-and-its-wicked-problems/>

wicked problems, the key to which is their definition; that such problems are, as Spangenberg states, ‘complex, intractable, open-ended, and unpredictable’. I also highlighted ‘super-wicked problems’ where additional factors further complicate matters, such as the urgency of resolution, and the lack of any central authority to help create it.

In teaching this subject I use two graphical illustrations, which I include here (Figures 1 and 2). The first is a well-known and widely used illustration that shows in a neat and ordered form the seventeen United Nations (UN) Sustainable Development Goals, adopted in 2015 as part of the UN’s 2030 Agenda (Figure 1). This is an instantly recognisable and commendably straightforward depiction of those most urgent of problems felt universally and for which resolution is urgently sought. The second illustration was selected from a search-engine ‘image’ search on ‘Wicked Problems’ (Figure 2). The image is complex, entangled, and confusing. One doesn’t know where to begin, or to end. How does one ‘read’ such an illustration? Does it even make sense? My point in showing both of these illustrations

together is twofold. First, terminology. Some scholars and policy makers use terms like ‘goals’ and ‘challenges’ (e.g. ‘global challenges’). This is misleading and unhelpful in this context. Goals and challenges are aspirational; they are things we would like to achieve, like winning a trophy or climbing a mountain. With wicked problems, where there is an existential and, in some cases, an urgent threat to human and planetary health, there is no choice but to act, and fast. We should not be afraid, also, to recognise when problems are likely to be irresolvable and, in those situations, to not lure people into thinking that there is some easy fix. Second, the well-known and widely used UN illustration presents the seventeen ‘goals’ as if they are compartmentalised, with each being separate from and independent of the others. The ‘wicked problems’ graphic, on the other hand, implies the opposite: mess, entanglement, and chaos. This is the reality with wicked problems. It is not tidy, and there are no simple solutions. Presenting them in this neatly compartmentalised way to global audiences is also misleading and unhelpful.

As Spangen states in her essay, wicked problems present a conundrum: they are complex to the point of being irresolvable, yet they are also urgently in need of resolution. But as I describe in my book, and as Spangen states in her essay, there is hope. What scholars, policy makers and citizens can do, to good effect, is to design small wins that gradually erode the problem’s impact on a local scale, thus nudging towards larger-scale resolution. As psychologist Karl Weick (1984:40) states, small wins are ‘concrete outcomes of moderate importance that still create traction and can accumulate to transformative change’. Being a psychologist, Weick recognised benefits in this approach both in terms of eroding the problem, but also giving participants a sense of achievement, increasing the likelihood that they’d want to do more. As Greta Thunberg has famously stated (e.g. 2019): ‘no-one is too small to make a difference.’

Spangen’s essay, and the propositions that it contains, for example around balancing democratic discourse with the need for inclusive, democratic and multivocal debate on heritage, identity and belonging, is essential not least for its urgency. By drawing on experiences from Indigenous and particularly Saami archaeology, Spangen describes how participatory archaeology in Scandinavia can become more self-reflexive and purposeful. Archaeology, alongside the cognate field of heritage studies, provides topics and arenas for democratic discourse, building social cohesion by discussing and tolerating diverse perspectives. Such outcomes would comprise significant small wins in challenging ‘anti-democratic discourse’. As stated in the essay: ‘The aim of heritage discussions cannot always be to reach consensus or compromise but perhaps rather to encourage the active listening and dialogue that is the foundation and strength of a democratic

public discourse that is currently challenged by multiple aggressors'. In this proposition lies a compelling and persuasive argument that promoting 'open and democratic debate about the past, identity and belonging in the face of an increasingly anti-democratic discourse' provides an essential foundation for resisting those wishing to undermine democracies.

The key point of Spangen's argument is vital not least in defining the true purpose of heritage in society: heritage concerns the recognition, discussion, and celebration of difference. There is not, and never has been, a 'unified heritage identity'. As Spangen states, by celebrating diversity in all of its forms and manifestations, we can 'enhance belonging and community cohesion across variations, as well as training our tolerance for discussion and diversity'. Success would take the form of small wins that address what, in my book, I refer to as the wicked problem of social injustice. However, given the deep entanglement of wicked problems, these small wins would also and inevitably be felt elsewhere, in relation to climate action for example, food insecurity, and conflict. Learning how to successfully hold conversations around difference and diversity may be amongst the most pressing of needs across contemporary society. And as archaeologists and heritage professionals it is an area in which we have both experience and the data to help support such conversations, not least around, Indigeneity, human origins, and human capacity to accommodate change over millennia. Spangen doesn't go quite this far in her essay, but I have argued elsewhere that, as archaeologists and heritage practitioners, we have a duty of care to create such small wins, given the privileged insight and the expertise that we hold.

I agree with Donna Mertens (2017), who suggests that researchers are at an important point in history – they can be frozen in their tracks, continuing to do research *on* people, collecting, analysing and reporting and moving on; or they can work in a way that stands a better chance of solving some of the world's wicked problems and help achieve economic and social justice *for* people. It is this proposition, that we prioritise working *for* people, that appears central to the argument presented in Spangen's essay.

As Spangen says, successful small wins such as facilitating 'contradictory conversations', can build the 'heritage preparedness' we need in the face of essentialist heritage narratives and anti-democratic, totalitarian approaches to the past. Perhaps we still have capacity to ensure that 'a pricking of the thumbs' is as bad as it gets; that we recognise the symptoms and act upon them with urgency. This keynote essay offers a novel and vital perspective on how to achieve that outcome.

References

- Mertens, D. 2017. *Mixed Methods Design in Evaluation*. Los Angeles: Sage.
- Schofield, J. 2024. *Wicked Problems for Archaeologists: Heritage as Transformative Practice*. Oxford: Oxford University Press.
- Thunberg, G. 2019. *No One Is Too Small to Make a Difference*. London: Penguin.
- Weick, K.E. 1984. Small Wins: Redefining the Scale of Social Problems. *American Psychologist* 39(1), pp. 40–49, doi:10.1037/0003-066X.39.1.40.

Developing Trust Through Participatory Archaeologies?

On the Importance of Playing to Our Strengths

Harald Fredheim

I enjoyed reading Marte Spangen's keynote on participatory archaeology for heritage preparedness, which engages with many ideas that have been central to my own research and that of close colleagues over the past few years. Spangen's productive focus on the specificities of the Norwegian context, through Sámi archaeology and the Russian border, is an instructive example of what Celmara Pocock and Siân Jones have termed the power of the periphery to contest the centre (2018). She uses these specificities to present a timely critique of participatory ideals, yet does perhaps still fall prey to the participatory critic's trap of perpetuating cycles of critique and naïve hopefulness (Graham 2025). In this response, I will discuss Spangen's critique of participation as a spectrum of power-sharing/goodness, invite further consideration of heritage and archaeology's potential to facilitate trust-building interpretive encounters and question whether archaeologists actually have the skills and motivations to 'move on from data collection' and instead focus on being 'significant social and political mediators in a complex democratic discourse.'

Over the past year, I have been collaborating with colleagues at the University of York and Mahidol University to study participation in British,

Department of Archaeology, University of York, United Kingdom
harald.fredheim@york.ac.uk

This is an Open Access article distributed under the terms of the Creative Commons 4.0 International licence (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Norwegian and Thai heritage contexts (Fredheim et al. 2025). As part of this work, we have used the definition of participatory practices from the Museum Association's *Power to the People* framework: 'museums and communities working together as equal partners' (2018:3). In defining participation as a collaboration between equal partners, this definition evokes typologies of participation, which, as highlighted by Spangen, rank discrete levels of participant agency. Within these typologies, greater levels of participant agency are positioned as being inherently 'better' (cf. Cornwall 2008; Onciul 2015). In our research, most of the collaborations that museum staff highlighted cannot be described as being 'between equal partners'. Yet, by being transparent about their intentions and mindful of participants' needs and motivations, these collaborations do in many cases build trust over time. This ebb and flow of agency through different stages of a partnership mirrors the experiences of our Thai collaborators. They have developed trusting relationships with Karen and Lawa Indigenous communities in northern Thailand through a range of collaborations spread over many years, where the degree of agency held by each party has varied across discrete activities (cf. Cusripituck & Yamabhai 2023; Yamabhai et al. 2021).

Trust is a central theme in much research on participation, but the trust that is developed between partners in long-term collaborations is, I would argue, a slightly different phenomenon to more general levels of trust in society that contribute to maintaining democratic discourse. I think it is worth attempting to disentangle different participatory dynamics and the distinct dimensions of trust they may engender. In her text, Spangen notes that the relationship between Sámi and the Norwegian state is different to that of most other Indigenous peoples around the world, due to the long history of interaction and the devolved powers of the Sámediggi, the Norwegian Sámi Parliament. Another context I have been reading a lot about recently is New Zealand, which is distinctive for its 'bicultural' approach, epitomised by the Museum of New Zealand Te Papa Tongarewa. While Sámi museums in Norway are governed by Sámi and funded via the Sámediggi (Aikio 2021), much has been written about how museums in New Zealand have attempted to navigate the distinct Māori (Indigenous) and Pākehā (settler) approaches to caring for and interpreting collections within shared institutions (cf. Butts 2006; McCarthy 2011; Tapsell 2011, 2017). At Te Papa, this has given rise to new concepts such as *Mana Taonga*, which recognises the living relationships between collections and their cultures of origin, resulting in a dynamic where the museum's 'interpretive authority [is contingent on] its connectivity and meaningful relationships with the communities of origin' (Shorch & Hakiwai 2014:197; cf. McCarthy et al. 2013:8, Tapsell & Arawa 2017). By contrast, Spangen notes that while the 'establishment of a Saami CHM body marked a formal transfer of power

[...] in practice, power still rests with a small number of professionals within the Saami community'. Comparing different Indigenous approaches to heritage is understandably beyond the scope of Spangen's piece, but I would have loved her to delve a bit deeper into the specificities of the distinct relationship between Sámi and archaeology in Norway and how it has impacted trust within the Sámi community, and between Sámi and Norwegians or the Norwegian state. For example, has the creation of distinct Sámi institutions for archaeology and heritage increased or decreased levels of trust? In my mind, this discussion would add to the specificity of what we might learn from the case of Sámi archaeology in relation to using archaeology to promote democratic discourse.

While I see real value in learning from Indigenous approaches to archaeology and heritage, I also think we should be cautious of directly transferring models for understanding participatory dynamics between different contexts. Research on participation in colonial and post-colonial contexts has cast into sharp relief the inherently contested nature of heritage and the power-dynamics that come into play when professionals and publics collaborate. Yet, most citizens in Norway, New Zealand, Sweden or the UK do not view archaeology and museums as sites of contestation for their own self-determination. As Tara Johnson-Comerford at The Barber Institute of Fine Arts told me last December as part of my research on participation:

I don't think everybody is ready for participation. That takes quite a lot on you personally ... I think sometimes there's a sector move to go everything participatory and actually what that does is – it doesn't clearly identify how much of an investment you have to make emotionally and personally in that, and understanding that actually, some people just want to have a nice time (quoted in Fredheim et al. 2025:28).

Non-participation, a reluctance, apathy or active refusal to participate in heritage processes, is arguably an equally important challenge to managing the power-dynamics when publics do wish to participate. Here, transparency in our professional practices, or limited and contained forms of participation may be more effective in fostering the interpersonal and social dimensions of trust that promote democratic discourse. I am reminded of Nicole Deufel's work on dialogic and agonistic heritage interpretation (2017) and participatory interpretive techniques at museums, such as the 'Kitchen Conversations' programme at the Tenement Museum in New York, where visitors discuss contemporary issues around a kitchen table with strangers at the end of their visit (Abram 2007), and the experiments of the EMOTIVE project that invited dialogue within and between groups of visitors to heritage sites (Perry 2019). While Sara Perry draws on the work of Christina Fredengren (2016) to argue convincingly for the potential of

archaeology to ‘enchant’ both professionals and publics, she has also noted significant barriers to realising this potential, maintained by entrenched workflows, data structures and attitudes within the archaeological discipline (Perry 2019, Perry et al. 2025). Some of these challenges appear to mirror Spangen’s reflections on the challenges of imposing established archaeological ontologies and database structures on Sámi archaeology, while others have also featured prominently in Sadie Watson’s research on maximising public benefit from development-led archaeology in the UK (cf. Watson 2023, 2024; Watson & Fredheim 2022). It is also worth noting that, anecdotally, both seasoned professionals and undergraduate archaeology students are often heard making disparaging remarks about public-facing and interpretive work not being ‘real’ archaeology (cf. Perry et al. 2023:155–156). Coupled with the increasingly polarised societies we live in, infused with bad-faith actors, nefarious disinformation campaigns, social media platforms fuelled by outrage and clickbait, resulting in declining levels of trust in institutions and ‘experts’, the problems facing the realisation of archaeology as a vehicle for promoting democratic discourse truly are ‘wicked’ and should not be underestimated.

Spangen’s call for Scandinavian archaeology to ‘move on from data collection and the aim of engaging people in perceived “good” and “healthy” activities’ is provocative. If I were to be provocative in return, I might argue that the call for archaeologists instead to focus on ‘embracing and developing our roles as significant social and political mediators in a complex democratic discourse’ feels a little under-baked – evoking the delicious-looking yet slightly raw cinnamon buns for sale at Oslo Lufthavn Gardermoen. Archaeologists are specialists in many things, but I would argue that facilitating open and democratic discourse that builds trust is not necessarily one of them. I’m also not convinced this is what most professional archaeologists, archaeology students or publics want us to be either, but perhaps this is precisely why we need provocative keynotes, and ‘small wins’. There is exciting work happening in this space. Like Spangen, Watson argues that in some cases, particularly at less archaeologically significant sites, more value can be realised from development-led archaeology through community-focused interventions rather than traditional archaeological data gathering (2023). Colleagues of mine here in York have also been involved in developing a participatory heritage ecosystem impact assessment in Cambridgeshire, drawing on models developed with Indigenous communities in North America (Hoffmann et al. 2025). The work by Perry and colleagues on creating meaningful, reusable archaeological data with local communities (Perry et al. 2025) prompts the appealing idea that archaeologists could collect data differently, engage people in good and healthy activities *and*

develop our role as significant social and political mediators. I certainly share Spangen's vision for an even more socially relevant archaeology, but I do think it's important that we play to our strengths.

References

- Abram, R.J. 2007. Kitchen Conversations: Democracy in Action at the Lower East Side Tenement Museum. *The Public Historian* 29(1), pp. 59–76, doi:10.1525/TPH.2007.29.1.59.
- Aikio, Á. 2021. Sámi-fication and Sámi Museums. In: Junka-Aikio, L., Nyysönen, J. & Lehtola, V.-P. (eds), *Sámi Research in Transition: Knowledge, Politics and Social Change*, pp. 111–129. London: Routledge.
- Butts, D. 2006. Museum Governance, Indigenous Recognition and (In)tolerant Multiculturalism. *New Zealand Sociology*. Vol. 21(1), pp. 89–107.
- Cornwall, A. 2008. Unpacking 'Participation': Models, Meanings and Practices. *Community Development Journal*. Vol. 43(3), pp. 269–283, doi:10.1093/cdj/bsn010.
- Cusripituck, P. & Yamabhai, J. 2023. Mobilizing the (Im)Mobile Museum Through Hybrid Curation: A Story of Hybrid Curation of Cultural Practice During the COVID-19 Pandemic. *Advances in Southeast Asian Studies*. Vol. 16(1), pp. 1–11, doi:10.14764/10.ASEAS-0086.
- Deufel, N. 2017. Agonistic Interpretation: A New Paradigm in Response to Current Developments. *Anthropological Journal of European Cultures*. Vol. 26(2), pp. 90–109, doi:10.3167/ajec.2017.26020.
- Fredengren, C. 2016. Unexpected Encounters with Deep Time Enchantment: Bog Bodies, Crannogs and 'Otherworldly' Sites. *World Archaeology*. Vol. 48(4), pp. 482–499, doi:10.1080/00438243.2016.1220327.
- Fredheim, H., Cusripituck, P. [...] Morris, K. & Mingbualuang, T. 2025. Conversations on Participatory Heritage Praxis: Insights from Thailand, the United Kingdom and Norway. York: University of York, https://pure.york.ac.uk/portal/files/125149546/Conversations_on_participatory_heritage_praxis.pdf [Accessed 14 October 2025].
- Graham, H. 2025. *Deconstituting Museums: Participation's Affective Work*. London: UCL Press.
- Hoffmann, T., Viejo-Rose, D., Davenport, B., Santikarn, A. & Chan, A. 2025. *Heritage Ecosystem Impact Assessment: A pilot study of East West Rail's Preferred Route E (Cambourne to Cambridge), South Cambridgeshire*. University of York and University of Cambridge, https://www.hgc.hosted.york.ac.uk/wp-content/uploads/2025/07/HEIA_FinalReport_Online.pdf [Accessed 14 October 2025].
- McCarthy, C. 2011. *Museums and Māori: Heritage Professionals, Indigenous Collections, Current Practice*. Walnut Creek, CA: Left Coast Press.
- McCarthy, C., Dorfman, E., Hakiwai, A. & Twomey, Á. 2013. Mana Taonga: Connecting Communities with New Zealand Museums through Ancestral Māori Culture. *Museum International*. Vol. 65(1–4), pp. 5–15, doi: 10.1111/muse.12028.
- Museums Association. 2018. *Power to the People: A Self-Assessment Framework for Participatory Practice*, <https://www.museumsassociation.org/campaigns/museums-change-lives/power-to-the-people/> [Accessed 14 October 2025].
- Onciul, B. 2015. *Museums, Heritage and Indigenous Voice*. New York and Abingdon: Routledge.

- Perry, S. 2019. The Enchantment of the Archaeological Record. *European Journal of Archaeology*. Vol. 22(3), pp. 354–371, doi:10.1017/eea.2019.24.
- Perry, S., Dennis, L.M. & Fredheim, H. 2023. A Future for Field-Schools? Integrating Archaeological and Heritage Practice Through Applied (Digital) Field Training. In: Wattrall, E. & Goldstein, L. (eds), *Digital Heritage and Archaeology in Practice: Presentation, Teaching, and Engagement*, pp. 237–259. Gainesville, FL: University Press of Florida.
- Perry, S., Simandiraki-Grimshaw, A. [...] Wright, H. & Clough, A. 2025. Towards New Futures for Archaeological Data Production: Challenging Archaeonormativity through Storytelling. *Journal of Field Archaeology*. Vol. 50(8), pp. 796–815, doi:10.1080/00934690.2025.2504235.
- Pocock, C. & Jones, S. 2017. Contesting the Center. *Heritage & Society*. Vol. 10(2), pp. 99–108, doi:10.1080/2159032X.2018.1457301.
- Schorch, P. & Hakiwai, A. 2014. Mana Taonga and the Public Sphere: A Dialogue Between Indigenous Practice and Western Theory. *Museum International*. Vol. 17(2), pp. 191–205, doi:10.1177/1367877913482785.
- Tapsell, P. 2011. 'Aroha Mai: Whose Museum?': The Rise of Indigenous Ethics within Museum Contexts: A Maori-Tribal Perspective. In: Marstine, J. (ed.), *The Routledge Companion to Museum Ethics: Redefining Ethics for the Twenty-First-Century Museum*, pp. 85–111. Abingdon; New York: Routledge.
- Tapsell, P. & Arawa, T. 2017. Taonga, Marae, Whenua – Negotiating Custodianship: A Maori Tribal Response to Te Papa: The Museum of New Zealand. In: Coombes, A. (ed.), *Rethinking Settler Colonialism: History and Memory in Australia, Canada, Aotearoa New Zealand and South Africa*, pp. 86–99. Manchester: Manchester University Press.
- Watson, S. 2023. Towards a New Project Design Methodology for Archaeological Projects in England. *Archaeological Review from Cambridge*. Vol. 38(2), pp. 58–77, doi:10.17863/CAM.109236.
- Watson, S. 2024. Anti-Social Behaviours: The Struggle to Create Social Value Through Development-Led Archaeology. *Conservation and Management of Archaeological Sites*. Vol. 26 (5–6), pp. 506–513, doi:10.1080/13505033.2025.2513527.
- Watson, S. & Fredheim, H. 2022. Value from Development-Led Archaeology in the UK: Advancing the Narrative to Reflect Societal Changes. *Sustainability*. Vol. 14(5), pp. 3053, doi:10.3390/su14053053.
- Yamabhai, J., Knoop, R. & Cusripituck, P. 2021. Participatory Engagement for Sustainable Innovation in Karen Communities. *Austrian Journal of South-East Asian Studies*. Vol. 14(2), pp. 195–212, doi:10.14764/10.ASEAS-0062.

Can Indigenous Archaeology Really Teach Us How to Disagree Constructively?

Charina Knutson¹ & Mattis Danielsen²

In her article, Marte Spangen highlights several significant perspectives on participation, preparedness, conflict, and democracy. Particular emphasis is placed on Indigenous issues and on the necessity of drawing upon both archaeological and Indigenous expertise in the production of knowledge. Sharing this view, we wish to formulate our comment jointly, allowing the comment itself to serve as an example of co-creation and participation. Mattis Danielsen is a Sámi based in Røros, Norway, with extensive experience of the Sámi cultural landscape. Charina Knutson is a Swedish archaeologist and heritage professional whose primary workplace is the desk.

Many archaeologists enjoy discussing participation – with other archaeologists. Projects and articles are often formulated *about*, but not necessarily *with*, the communities with whom collaboration is envisioned. Embedding ideas of participation is therefore an important task. Is the intended audience actually interested in taking part? On what terms? Who sets the agenda? Who formulates the research questions?

Within Indigenous archaeology, the need for collaboration between Indigenous peoples and archaeologists has been recognised for decades,

¹ The Nordic Centre of Heritage Learning and Creativity, Sweden
charina.knutson@nckultur.org

² Cultural Heritage Registration, Bergstaden Røros, Trøndelag, Norway
danielsen96@hotmail.com

This is an Open Access article distributed under the terms of the Creative Commons 4.0 International licence (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

with particular emphasis since the 1990s. The aim – as Spangen notes – has been to redress the imbalances in knowledge, power, and influence that are the result of colonial structures. In the process, archaeology has also become richer in perspective (Atalay 2012; Van Alst & Shield Chief Gover 2024; Howey et al. 2025).

Collaborative projects and Indigenous initiatives have also taken place in Sámi contexts in both Sweden and Norway. These have included, for instance, local Sámi communities applying for project funding to survey their traditional lands (see e.g. Norberg & Winka 2014), as well as research projects in which museums and/or universities have collaborated with local Sámi communities (see e.g. Barlindhaug 2013; Björck et al. 2021). Such examples align well with the form of participatory archaeology advocated by Spangen. In both types of projects, there is legal scope and practical flexibility to shape the work in ways that suit both the archaeologists and the local communities involved.

One problem is that such research projects remain few in relation to the proportion of archaeology carried out in connection with land development and planning processes. In both Norway and Sweden, development-led archaeology constitutes the majority of all archaeological projects.

In Sweden, development-led archaeology operates on commercial terms, within a framework of strict legislation and regulation. Projects are carried out within a triangle consisting of the developer, the County Administrative Board, and the archaeological company commissioned to conduct the work. Collaboration with additional partners is often regarded as complicated, time-consuming, and costly (Knutson 2024:184–190). If Indigenous participation in cultural heritage management is to increase, both legislation and practice must be developed to enable collaboration with local communities *also* within development-led archaeology.

In Norway, decisions concerning development-led archaeology of Sámi sites fall under the authority of the Sámi Parliament. This may appear to represent a step towards participatory archaeology and power-sharing, yet in practice the situation is more complex. The transfer of authority from the majority society to a minority or Indigenous people is seldom as straightforward as it appears on paper. As Spangen notes, ‘in practice, power still rests with a small number of professionals *within* the Saami community’ – referring to the fact that Sámi archaeology in Norway is now administered by a limited group of archaeologists within the Sámi Parliament.

However, for the system to function effectively and gain the trust of the Sámi community, the cultural expertise of this ‘small number of professionals’ within the Sámi Parliament must be substantial. There must be a fundamental understanding of the Sámi cultural landscape, which is rich, multifaceted, and exhibits significant regional variation. One does not need

to be Sámi to fulfil the task, but one should possess a genuine interest in Sámi culture and be prepared to draw upon Sámi knowledge holders to compensate for areas of limited personal experience.

If archaeologists' dialogue with local Sámi communities is limited or inadequate, it can lead to diminished trust in the Sámi Parliament's management of cultural heritage. Archaeologists risk losing legitimacy among the Sámi population, while the Sámi themselves risk being excluded from participation in the creation of their own history. Traditions and knowledge held by the Sámi, often transmitted orally and accumulated over generations, are thus at risk of not being preserved. In the most extreme cases, this can have negative implications for Sámi historical narratives, rights, and identity.

Although Sámi archaeology in Norway faces its own challenges, it nevertheless upholds Indigenous peoples' rights to manage their own cultural heritage to a greater extent than in Sweden. In Sweden, there is no clear avenue for Sámi participation in development-led archaeological processes, as the Sámi Parliament in Sweden has no mandate to work with cultural heritage. Here, the only opportunities for participatory archaeology lie either in relying on the goodwill of universities and museums, or in attempting to secure project funding from foundations and project structures where decisions are ultimately made by the majority society. It goes without saying that participatory Indigenous archaeology in Sweden is exceedingly limited.

Discussing archaeology, with its material and often ambiguous traces, can be a suitable field for those wishing to develop their argumentative skills and become comfortable with disagreement. Yet – as Spangen also points out – much more is at stake for Indigenous peoples than for others, since discussions of Indigenous archaeology profoundly affect their current social and legal standing.

We are therefore concerned that Indigenous archaeology may be an ill-suited arena for practicing democratic disagreement, as the exercise risks exposing Indigenous peoples to harmful or hostile opinions. In a 'post-truth' era, efforts to work in partnership to bring Indigenous perspectives into public view can expose Indigenous populations to bullying, aggression, and hostility (Atalay 2020).

In western Härjedalen, Sweden, the longstanding historical presence of the Sámi in the landscape has been questioned by the Härjedalen Party. They claim that reindeer-owning Sámi did not arrive in southern Norrland until 'as late as the 18th century', and that the Sámi people themselves are responsible for the colonisation of land that was claimed by mountain farmers (Larsson & Tapper 2025). In a well-mannered, academically framed world, such views could be countered with archaeological scientific evidence, and indeed they have been, for example by Jonas Monié Nordin,

Ann Kristin Solsten, and Anders Hansson (Aronsson 2024; Solsten 2024; Aronsson 2025). Yet the substantive debate has not progressed even a millimeter, while the Härjedalen Party's assertions continue to spread among those in the region who feel disadvantaged by state policy. We would hope for, but cannot see, how this could contribute to a 'clumsy solution' to the situation.

Co-creating archaeology in northern Fennoscandia and fulfilling Spangen's vision places high demands on all of us. Above all, it requires that tomorrow's archaeologists are prepared in two areas.

The first is a foundational knowledge of Sámi archaeology and respect for Sámi cultural expertise. When our colleague, archaeologist and historian Ann Kristin Solsten, is invited to conferences and projects, she is often the only participant with Sámi expertise, which makes the role both exposed and demanding. In project contexts, she has at times felt like a 'token', with Sámi perspectives insufficiently integrated throughout the entire process.

Mattis, who has worked for many years in both documentation and knowledge dissemination, finds that his Sámi cultural expertise is often sought in contexts where cultural heritage is discussed, yet frequently only as a kind of garnish or bonus experience. For example, a university archaeology program might invite Mattis for a half-day field excursion in the Sámi cultural landscape, while the rest of the curriculum contains no Sámi elements. In this way, the perception of Indigenous cultural heritage as something exotic and secondary – treated as an optional extra – is reinforced and reproduced.

It is therefore imperative that Sámi archaeology becomes an integral part of archaeological education in the Nordic countries, especially given the high mobility of archaeologists, who are expected to be able to work across a variety of cultural landscapes.

The second area requires archaeologists themselves to develop a deeper understanding of, and gain more practice in, conflict management and mediation.

For participatory archaeology to become a space in which we can cultivate heritage preparedness, we must train ourselves to engage in difficult discussions, encounter people acting emotionally, and have the courage to speak up when boundaries of racism and populism are crossed.

Archaeologists in the Nordic countries generally shy away from seeing themselves as political or activist actors. They have no desire to be public figures – they have chosen the work because they love archaeology. They prefer to see themselves as neutral researchers presenting neutral facts for others to interpret (Harlin 2019; Knutson 2024:151–157). It is therefore a long road to motivate archaeologists as a collective to act as 'social and

political mediators'. In a world marked by rising tensions, security threats, and polarization, how can we hope to inspire archaeologists to step into the line of fire?

References

- Aronsson, T. 2024. Härjedalspolitiker gör antisamiska utfall i TV. *Jämtlands Tidning*, September 26, <https://www.jamtlandstidning.se/harjedalen/harjedalspolitiker-gor-anti-samiska-utfall-i-tv/241116> [Accessed 21 November 2025].
- Aronsson, T. 2025. Chefsarkeologen om samedebatten. *Jämtlands Tidning*, January 2, <https://www.jamtlandstidning.se/lanet-samer/chefsarkeologen-om-samedebatten/251979> [Accessed 21 November 2025].
- Atalay, S. 2012. *Community-Based Archaeology: Research With, By, and For Indigenous and Local Communities*. Berkeley, California: University of California Press.
- Atalay, S. 2020. Indigenous Science for a World in Crisis. *Public Archaeology*. Vol. 19(1–4), pp. 37–52, doi:10.1080/14655187.2020.1781492.
- Barlindhaug, S. 2013. *Cultural Sites, Traditional Knowledge and Participatory Mapping: Long-Term Land Use in a Sámi Community in Coastal Norway*. PhD Dissertation. Tromsø: University of Tromsø.
- Björck, M., Blennå, I., Nordin, J.M., Ulfhielm, B. & Wehlin, J. 2021. Härdar och husgrunder: Arkeologi i det samiska kulturlandskapet i Syd- och Mellansverige. *META – Historiearkeologisk tidskrift*. Vol. 2021(3), pp. 85–108.
- Harlin, E.-K. 2019. Sámi Archaeology and the Fear of Political Involvement: Finnish Archaeologists' Perspectives on Ethnicity and the Repatriation of Sámi Cultural Heritage. *Archaeologies*. Vol. 15(2), pp. 254–284, doi:10.1007/s11759-019-09366-7.
- Howey, M.C.L., Fiske, D.J. & Damon, A.R. 2025. Cascade Effects of Community Archaeology. *Advances in Archaeological Practice*. Vol. 13(2), pp. 151–166, doi:10.1017/aap.2024.46.
- Larsson, O. & Tapper, P.-A. 2025. Samiska privilegier måste ifrågasättas. *Jämtlands Tidning*, April 22, <https://www.jamtlandstidning.se/jt25v17/samiska-privilegier-maste-ifragasattas/265542> [Accessed 21 November 2025].
- Knutson, C. 2024. *Indigenous Archaeology in Sweden: Aligning Contract Archaeology with National and International Policies on Indigenous Heritage*. PhD Dissertation. Växjö: Linnaeus University Press.
- Norberg, E. & Winka, U.S. 2014. *Sydsamer – landskap och historia: Ett dokumentationsprojekt på sydsamiskt område under åren 2012–2014*. Östersund: Gaaltije.
- Solsten, A.K. 2024. Samerna uppfyller definitionen av urfolk. *Jämtlands Tidning*, November 11, <https://www.jamtlandstidning.se/berg-harjedalen-ostersund/samerna-uppfyller-definitionen-av-urfolk/243042> [Accessed 21 November 2025].
- Van Alst, E.C. & Shield Chief Gover, C. 2024. Indigenizing Archaeology: Putting Theory into Practice. In: Van Alst, E.C. & Shield Chief Gover, C. (eds), *Indigenizing Archaeology: Putting Theory into Practice*, pp. xix–xxxi. Gainesville: University Press of Florida.

If Not Us – Who?

If Not Now – When?

Mobilizing Archaeology to Confront the Wickedness of Our Times

Charlotta Hillerdal

Marte Spangen’s keynote articulated many of my own sentiments. The ‘wickedness’ of our contemporary times can indeed feel overwhelming, and the urge for archaeology to make a difference, to truly matter, has rarely been greater.

Diverse perspectives, Spangen points out, are essential for tackling wicked problems. However, one issue is that populists are looking for simple solutions. How are we to remain relevant in a society that is reduced to simple binaries?

Spangen identifies a way toward greater social relevance through what she terms participatory archaeology, her preferred label for community-based research. Crucially, she argues for a participatory archaeology that follows self-reflexive principles and is conducted with a clear purpose. Rather than seeking consensus about the past, she proposes an inclusive participatory approach that makes room for opposing views and cultivates discensus. Such open and transparent dialogue between experts and communities, she suggests, may serve as a counterweight to anti-democratic tendencies shaping contemporary society.

Department of Archaeology, University of Aberdeen, United Kingdom
c.hillerdal@abdn.ac.uk

This is an Open Access article distributed under the terms of the Creative Commons 4.0 International licence (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Building on Spangen's point, we cannot expect to 'do good' with archaeology in a purely altruistic sense, but we can mobilize our discipline as a tool for improving sociopolitical conditions and promoting democratic values. Doing so, however, requires deliberate effort (e.g. Samuels 2017).

I agree that we need to let go of the idea of consensus, but even the communities of disagreement that Spangen envisions rely on a commitment to work collaboratively towards a mutual goal. If such communities of disagreement are to function, there must be a basic respect for opposing opinions. Not everyone will participate – authoritarianism, after all, is partly defined by its refusal to tolerate dissent. In a totalitarian regime, there is no space for communities of disagreement.

Given the growing disconnect between research communities and political leadership today, I would argue that an even more explicit stance is necessary. Archaeologists can no longer hide behind claims of neutrality and objectivity. Indeed, the ideal of objectivity is not only unattainable, but may also be damaging. At a time when supporting facts-based statements is perceived as taking a political stance, defending science has itself become a political act (Rekker 2022).

The problem with the past is that what lessons we draw from it are not inherently good. Spangen's 'tangible points of departure' can easily be manipulated for anti-democratic purposes (e.g. Niklasson 2023). Thus, to be an effective counterweight, dialogue may not always be as inclusive and fluid as one would wish, and assigning the professional the role of facilitator and mediator might not be enough. If we are to understand and benefit from oppositions, we as archaeologists must impose directionality and take on a critical role within these communities of disagreement.

Spangen's hope is that engagement, dialogue, and interaction will promote democratic discourse and create 'heritage preparedness' against essentialist and anti-democratic uses of the past. This is where, however, I feel Spangen's call for action falls slightly short. There is a time to be introspective, and there is a time to join the resistance.

Based on my long-term and ongoing collaboration with an Indigenous community in coastal sub-Arctic America, it is clear that climate change represents the most glaringly wicked problem of all (Hillerdal et al. 2025). Its impact is further amplified by a political establishment that prioritizes profit over people, and by ongoing socioeconomic marginalisation and inequity (Chang et al. 2023). Wickedness intersects. I fear that building preparedness for the future does not respond to the violence of the present. In the face of anti-democratic movements, growing fascism, escalating capitalism and climate breakdown – how do we matter?

Indigenous archaeology has the questionable advantage of operating within a morally defined space: working with and for Indigenous groups

to explore and reclaim their past from a Western-dominated history gives it immediate significance (e.g. Nicholas 2025). We can all agree that decolonizing archaeology is important (e.g. Lemos et al. 2025). I have found that working with Indigenous communities necessarily positions me, as an archaeologist, in the contemporary, and, by extension, the political. This, I contend, is one of Indigenous archaeology's strengths.

In their introductory chapter to *Transforming Archaeology* (Atalay et al. 2014), the editors argue that archaeology which aims only to advance the discipline is misguided and potentially harmful. They call for an archaeology that 'at its core, serves communities in the present and with long-term considerations for the future' (Atalay et al. 2014:11). Archaeology then, has the social responsibility to matter.

Transferring this approach to less clearly defined communities and power relations demands a different kind of engagement from archaeologists – one in which we actively take part and introduce, not only clear aims, as Spangen suggests, but also direction to any collaboration. Additionally, it demands that we state our position. Dialogues can be open-ended, but not ambiguous. In successful community-based projects, even if aims are not shared between researcher and community, they can still align, and different knowledge systems can coexist and inform one another. Sonya Atalay (2020) introduces a model of 'braiding knowledge', creating space for multiple, and complementary, ways of knowing. This, she suggests, extends the reach of sciences and strengthens scientific resilience, especially in a contentious political climate. Ultimately, it makes for better science.

We need to remember that collaboration is a practice – not a theory. Community-based projects are always local, embedded and intrinsically contextual. Relevance and success are measured against locally defined needs, and global values are perceived through the local lens. Thus, effective community-based archaeology requires both a defined purpose and a flexible and responsive approach to collaboration. When mutual aims and objectives are agreed, collaboration must allow the community to define the terms of participation in accordance with their expectations. It may not require archaeology to be only self-reflexive but also humble – to listen and to learn. The result is a truly interdisciplinary archaeology that can advance knowledge and strengthen social cohesion based on local values. When properly integrated, archaeology tells richer stories, reaches deeper, and matters more – not as a neutral mediator, but as a mobilizing force capable of using heritage to confront the wicked.

References

- Atalay, S. 2020. Indigenous Science for a World in Crisis. *Public Archaeology*. Vol. 19(1–4), pp. 37–52, doi: 10.1080/14655187.2020.1781492.
- Atalay, S., Clauss, L.R., McGuire, R.H. & Welch, J.R. 2014. Transforming Archaeology. In: Atalay, S., Clauss, L.R., McGuire, R.H. & Welch, J.R. (eds), *Transforming Archaeology: Activist Practices and Prospects*, pp. 7–29. London and New York: Routledge.
- Chang, A., Bare, G. [...] Schmitt, N., & Dyjack, D.T. 2023. Impact of Climate Change on Alaska Natives. *Journal of Environmental Health*. Vol. 86(5), pp. 36–47.
- Hillerdal, C., Knecht, R. [...] Gleason, S. & Strehlau, H. 2025. In it for the Long Haul: Community-Based Archaeology and Heritage in Quinhagak, Alaska. In: Dillian, C.D., Clary, K.S. & Bello, C.A. (eds), *Collaborative and Community-Engaged Archaeology*, pp. 44–66. Gainesville: University Press of Florida.
- Lemos, R., Mbeki, L., Owoseni, B., Rai, N. & Moffett, A. 2025. How Can Archaeology Help Shape Decolonial Futures? *Antiquity*. Vol. 99(404), pp. 291–302, doi:10.15184/aqy.2025.29.
- Nicholas, G. 2025. Considering the Past, Present and Futures of Indigenous Archaeology. *Archaeological Review from Cambridge*. Vol. 39(2), pp. 138–159, doi:10.17863/CAM.120382.
- Niklasson, E. 2023. Heritage and Belonging in Times of Political Polarization. In: Niklasson, E. (ed.), *Polarized Pasts Heritage and Belonging in Times of Political Polarization*, pp. 1–23. New York and Oxford: Berghahn.
- Rekker, R. 2022. Political Polarization over Factual Beliefs. In: Strömbäck, J., Wickforss, Å., Glüer, K., Lindholm, T. & Oscarsson, H. (eds), *Knowledge Resistance in High-Choice Information Environments*, pp. 222–236. London and New York: Routledge.
- Samuels, K.L. 2019. Deliberate Heritage, *The Public Historian*. Vol. 41(1), pp. 121–132, doi:10.1108/S0065-283020230000052024.

Connecting Past and Present

The Ethics and Politics of Archaeology in Sápmi

Carl-Gösta Ojala

Marte Spangen invites us to think critically about the possible roles of archaeology in a society characterized by complex problems and conflicts. She raises many important issues that need to be discussed among archaeologists.

In my response, I will focus on archaeology and heritage, and debates on land and cultural rights, in Sápmi – which is my main field of study. As an archaeologist working at a university, Uppsala University, I will also focus on the roles and responsibilities of universities. In my view, there is a great need to discuss the ethics and politics of archaeology and heritage management in Sápmi.

My response will focus mainly on the situation in present-day Sweden, although it is essential to keep in mind that Sápmi stretches across the current state boundaries. These boundaries are basically colonial constructions, but they have had and still have a large impact on notions of history, identity and belonging in Sápmi. They are also of great importance for heritage management, as the legislative frameworks differ in the different countries.

Archaeology in Sápmi has often been considered as a more controversial and political activity than archaeology in the southern parts of Sweden,

Department of Archaeology, Ancient History and Conservation, Uppsala University, Sweden
carl-gosta.ojala@arkeologi.uu.se

This is an Open Access article distributed under the terms of the Creative Commons 4.0 International licence (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Norway and Finland, with connections to conflicts over land and cultural rights. Debates on Sámi archaeology illustrate the complexities of inter-relations of archaeology, identity, heritage and politics – and highlight the need to discuss power dynamics in archaeology and heritage management.

Archaeology can play an important role in the much-needed critical examination of colonial histories and relations in Sápmi, offering new perspectives and dimensions (Ojala & Nordin 2015). Archaeology can also contribute to decolonization movements in contemporary society. By opening up the field of study and engaging with people and communities, archaeology can be a positive, transformative force in the contemporary world.

Internationally, there has been much discussion on what is often called Indigenous archaeology. In recent years, more discussions have also taken place in Sweden, concerning Indigenous archaeology in Sápmi (Knutson 2024). Indigenous archaeology can be described as a movement of critical archaeology, challenging and transforming traditional archaeology and heritage management, aiming to work towards decolonization and the empowerment of Indigenous groups (Atalay 2006; Nicholas & Watkins 2024; Ojala 2022). Proponents of Indigenous archaeology have promoted alternative ways of doing archaeology, with a strong focus on the development of collaborative and participatory methodologies, and community-based and community-initiated research. In these approaches, power relations, participation, representation, archaeological ethics and Indigenous rights have been central themes.

Native American archaeologist Sonya Atalay (2006:302) writes in her seminal work *Indigenous Archaeology as Decolonizing Practice*, that a decolonizing archaeology ‘must include topics such as the social construction of cultural heritage, concerns over revitalization of tradition and Indigenous knowledge, issues of ownership and authority, cultural and intellectual property, and the history and role of museums, collections and collecting’.

Indigenous archaeology thus entails a much wider engagement and commitment than in traditional archaeology and heritage management, involving many current social, cultural and political issues and debates.

However, I agree with Spangen that, no matter how important the ambitions are, it is still important to think critically about collaborative and participatory archaeology. We need to continuously ask difficult questions about community collaboration and representation. What is a community? Who defines it? Who speaks? Who is allowed to speak, who is not allowed to speak? Who has the power to speak on behalf of others? And what is collaboration? What does it entail, and how can it be evaluated? How can we envision positive community collaboration, and how can we avoid supporting extractive and exploitative practices and relations?

As archaeologists, we need to better understand heritage processes, the importance of the past in the present, and the complex and varying ways of relating to the past and valuing remains from the past in the present. This is important in, for instance, current debates on Indigenous cultural rights, and demands for repatriation of Sámi heritage and Sámi ancestral human remains in collections.

In debates on Indigenous cultural rights, discourses on human rights and international law play an important role. One important document is the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) from 2007, which contains several paragraphs dealing with cultural rights of Indigenous peoples, including “the right to maintain, protect, and have access in privacy to their religious and cultural sites; the right to the use and control of their ceremonial objects; and the right to the repatriation of their human remains” (UNDRIP, Article 12.1).

UNDRIP is increasingly referred to in heritage discourses in Sweden. How to understand and implement these points in archaeology and heritage management is something that we need to consider and discuss in all fields of archaeology, in contract archaeology, research, museums and university education.

In my view, there is a need for archaeological perspectives on current issues. For instance, there are deep historical roots of many current conflicts over land rights, and archaeology can play a role in examining these roots (Ojala & Nordin 2015). Archaeology has also been part of court cases dealing with land right conflicts in Sápmi, with archaeological arguments and archaeological experts in court proceedings – which creates a very challenging work environment (Brännström 2020; Ojala 2009; Vogels 2025).

Opening up archaeology and engaging and cooperating with people outside of academia, for instance with community experts, such as local and traditional knowledge holders, can enrich archaeology and heritage management. But archaeological expertise can also contribute to local community processes, cultural and identity revitalization.

Museums and other heritage institutions can be important arenas to help archaeologists to connect with people outside of academia. Archaeology can learn from the museum world. Internationally and nationally, many museums are exploring and developing new relations, especially in reviewing their own histories of colonial and imperial collecting and possible futures of contested collections, in repatriation and cultural revitalization processes. This is also the case in Sámi contexts, where Sámi museums and cultural institutions have important roles in cultural revitalization and the development of Sámi perspectives on heritage management (Nylander 2023).

Universities also need to deal with their difficult histories, such as connections with racial research, colonial and extractive collecting, especially in Indigenous contexts. This includes examining and engaging with the history of the discipline of archaeology. How can we deal with our discipline's difficult academic past and heritage? Serious critical engagements with histories of archaeology will make us better prepared to deal with current and future challenges.

In my view, university teaching is central to discuss the challenges raised by Spangen. This is an arena where we can discuss futures of archaeology and heritage management, social and cultural engagements, and the ethics and politics of archaeology. What are we teaching our students? What do we consider to be important? What do we want our students to learn? We also need to talk with our students about the existential dimensions of archaeology and the engagement with the past and the people of the past.

Spangen rightly emphasizes the complexities involved and the difficulties of evaluating how collaborative and participatory approaches actually work. Doing this kind of work is not a simple task. As it is about opening up archaeology and engaging with living communities and cultures it will always be dynamic, contested and difficult. Furthermore, we should consider how we value practical community-based, collaborative and participatory work – which takes much time and effort – in academic records and merits.

Another central issue that I want to raise concerns communication within archaeology. How do we communicate and talk with each other, across the borders of the increasing number of subfields and specialties of archaeology? Do we listen to each other, although we might have different starting-points, interests and opinions?

Facing the complex and contested issues of history, identity and heritage – in Sápmi and elsewhere – we need manifold perspectives and experiences and we need to collaborate, inside and outside of the archaeological field. The borders of archaeology are constantly shifting and the field is in constant flux. New challenges will appear and old ones will continue to haunt us. We need to be flexible, but we also need to understand that the past matters to people in different ways, that there are rights and responsibilities, and that archaeology can empower people as well as cause damage and pain.

In my view, archaeological perspectives and engagements are needed in today's society, for a wide range of reasons, some of which have been mentioned in Spangen's text and in this response. It is about decentering the present, and the human arrogance which causes so much trouble, in order to help us to prepare for the future. Engaging with society and fac-

ing complex societal problems forces us to rethink, reconnect, act and find new paths forward.

After all, we need each other. We need to communicate across the borders of the different sub-disciplines that exist in archaeology, listen to each other and together try to understand the power and potential of archaeological approaches and their complex entanglements with people, communities and cultures/natures.

Can we do it? Maybe. At least we must try our best.

References

- Atalay, S. 2006. Indigenous Archaeology as Decolonizing Practice. *American Indian Quarterly*. Vol. 30(3-4), pp. 280-310.
- Brännström, M. 2020. The Enhanced Role of Archaeological and Historical Research in Court Proceedings about Saami Land Rights. In: Spangen, M., Salmi, A.-K., Äikäs, T. & Fjellström, M. (eds), *Currents of Saami Pasts: Recent Advances in Saami Archaeology*, pp. 177-188. Helsinki: Archaeological Society of Finland.
- Knutson, C. 2024. *Indigenous Archaeology in Sweden: Aligning Contract Archaeology with National and International Policies on Indigenous Heritage*. Kalmar: Linnaeus University.
- Nicholas, G. & Watkins, J. 2024. *Working as Indigenous Archaeologists: Reckoning New Paths Between Past and Present Lives*. London: Routledge.
- Nylander, E.-K. 2023. *From Repatriation to Rematriation: Dismantling the Attitudes and Potentials Behind the Repatriation of Sámi Heritage*. Oulu: University of Oulu.
- Ojala, C.-G. 2009. *Sámi Prehistories: The Politics of Archaeology and Identity in Northernmost Europe*. Uppsala: Uppsala University.
- Ojala, C.-G. 2022. Indigenous Archaeology. In: Lindroth, M., Sinevaara-Niskanen, H. & Tennberg, M. (eds), *Critical Studies of the Arctic: Unravelling the North*, pp. 99-122. Cham: Palgrave Macmillan.
- Ojala, C.-G. & Nordin, J.M. 2015. Mining Sápmi: Colonial Histories, Sámi Archaeology, and the Exploitation of Natural Resources in Northern Sweden. *Arctic Anthropology*. Vol. 52(2), pp. 6-21, doi:10.3368/aa.52.2.6.
- UNDRIP. 2007. *United Nations Declaration on the Rights of Indigenous Peoples*. http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf [Accessed November 15, 2025].
- Vogels, R. 2025. *Strengthening Indigenous Land Right Cases: Exploring the Role, Methods and Impact of Archaeology*. MA thesis in archaeology, Uppsala University.

Rebaking the Case for Participatory Archaeology as Cognitive Heritage Preparedness

Marte Spangen

I wish to thank everyone who read and commented on my keynote on participatory archaeology as a contribution to heritage preparedness in the face of the wicked problem of anti-democratic discourse. The responses provide food for thought and a welcome opportunity to ‘rebake’ my suggestions and arguments, which Harald Fredheim compares to delicious-looking but underbaked cinnamon buns. In the space available here, I cannot address every point raised, but I will elaborate on a selection of them in the hope of inspiring further debates, or bake-offs, around these crucial issues in the times ahead.

Fredheim is entirely correct that my thinking on this topic remains a work in progress, and I therefore welcome John Schofield’s broader contextualisation of my text in his comment. Schofield’s book *Wicked Problems for Archaeologists* (2024) was an important source of inspiration during the writing of my keynote, so it is unsurprising that we agree on the principal points of how archaeologists may address the wicked problem of anti-democratic discourse. To further the discussion, I draw attention to his

Museum of Cultural History, University of Oslo, Norway
marte.spangen@khm.uio.no

This is an Open Access article distributed under the terms of the Creative Commons 4.0 International licence (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

mention of ‘super-wicked’ problems as characterised by additional complicating factors such as the absence of a central authority capable of coordinating a solution. Although presented only as an example, the question of authorities serves to highlight how situational, complex and unpredictable (super-)wicked problems and their potential solutions can be. Concerning anti-democratic discourse and heritage preparedness, the typically slow or lacking response of central authorities in Ukraine over decades appears to have forged what, in times of crisis, can be seen as a fortunate ability to initiate effective informal and private initiatives for heritage rescue (Vonnák & Jones 2025). In an ongoing debate about whether to establish a governmental Psychological Defense Agency in Norway, similar to the existing one in Sweden, military experts stress that such an agency cannot substitute for our collective responsibility to identify and resist manipulations of democratic processes and public discourse (Seip 2025; Sivertsen & Buvarp 2025). Thus, solutions in some situations may depend on central authority, while its absence, though not ideal in itself, can result in unforeseen benefits in other contexts. In all cases, the complementary actions of individuals and communities can be equally decisive and represent necessary small wins of preparedness and resistance.

My keynote presented participatory archaeology as one potential contribution to such small wins. By participatory archaeology, I do not mean only explicitly communal projects but any archaeological undertaking that engages non-professionals in discussions and the co-production of knowledge about archaeological issues. As pointed out by Charlotta Hillerdal, any concrete participatory efforts must be articulated through practice in locally embedded contexts. My central claim, however, is that all such encounters have the potential side effect of enabling people to discuss tangible issues in constructive ways. The label ‘participatory archaeology’ is not merely my preferred term for community-based research, as Hillerdal suggests; it also signals that such meetings may involve people who do *not* initially perceive themselves as a community or as a coherent group with obvious common denominators – aside from, presumably, a shared interest in the past. It is through discussion around this shared interest that archaeology, I argue, can help foster tolerance and communality, if not consensus, across social and ideological divides. Contrary to Hillerdal’s dismissal of such ‘communities of disagreement’ in the context of totalitarian regimes and her assertion that building preparedness for the future does not ‘respond to the violence of the present’, I contend that creating such spaces for disagreements, such pockets of trust and dialogue, is precisely one form of contribution archaeology can make to resisting, or resistance within, such grim situations.

Alongside Schofield (2024:297), I recognize that a small wins address can seem unambitious to those who prefer more activist approaches, yet

there need not be an opposition between these choices. Hillerdal's wish to 'join the resistance' seems to assume that a resistance always exists in a joinable form. In practice, resistance has to be defined through a process that requires precisely the kinds of dialogues and mediation I think archaeologists can productively contribute to. If we are to pursue articulated aims when addressing a reality of opposing interests, they need to be framed in more specific terms than 'against climate change' or 'for social justice'. And if the resistance is to go beyond tokenist interventions, articulation will have to involve co-creation with fellow citizens who potentially, or even likely, disagree on the particulars (Verweij & Thompson 2006). My claim is that practising such discussions and co-creation on archaeological questions constitute a pertinent and practical contribution.

My keynote also introduced Saami archaeology as a potential source of inspiration for participatory archaeology more broadly. This was to suggest that Saami archaeology is a field in which collaborations have been tested and discussed over time, leaving us with relevant lessons for how to effectuate participation in other contexts. Carl Gösta Ojala's comment also emphasises the importance of the Saami perspective in archaeology and archaeological thinking, highlighting complex social and political issues in Sápmi, including land rights conflicts, colonial legacies, and decolonisation. Concerning participation, I concur with Ojala that museums can offer valuable insights into inclusive practices.¹ Local museums are especially important points of access for engaging wider publics, in Saami contexts and beyond (as illustrated by Fredheim's example from his project partners in Thailand). I also agree with Ojala's, Charina Knutson's and Mattis Danielsen's calls for stronger integration of Saami archaeology into archaeological teaching and practice – supported by increased resources (Spangen et al. 2020:10–11; Spangen 2025).

Knutson and Danielsen further highlight the importance of administrative and financial frameworks to participatory approaches, pointing out that most archaeological projects today are development-driven. In Sweden, such projects are commercial, which constrains resources for Saami participation in the absence of a legal framework that promotes it. Comparable structural limitations arguably restrict participatory efforts in development excavations more broadly, although the Indigenous dimension accentuates the problem. Saami contexts certainly raise distinct concerns, as exemplified by the aggression evident in land-use disputes such as the Härjedalen case described by Knutson and Danielsen. They express concern about mak-

1 Participatory approaches and citizen science in museums is the topic of my ongoing national network project SAMMEN FF, see <https://www.khm.uio.no/forskning/prosjekter/sammenff/> (Research Council Norway no. 349576).

ing Indigenous archaeology an arena for practicing democratic discourse because it risks ‘exposing Indigenous peoples to harmful or hostile opinions’. I share this concern. My argument does not frame Saami archaeology as a forum for radical opinions or abuse. Rather, I suggest that Saami and other Indigenous experiences provide important guidance for developing participatory processes that are carefully designed to meet their intended purposes. These experiences also underscore the need to attend to the concrete social, political, and economic implications of archaeological practice.

Clearly, resources to strengthen Saami participation in archaeological endeavours are also necessary. Knutsson and Danielsen describe the costs of participating in archaeological contexts as a Saami individual, or rather as a representative or, at times, simply a token of ‘Saaminess’. Besides being counterproductive for building both knowledge and trust, being cast in exoticized and secondary roles is understandably taxing and infuriating. I am glad this debate provided an opportunity to flag this problem. I would add to this that we need to involve and cultivate greater consciousness about Saami perspectives beyond contexts that are perceived as explicitly Saami. Obviously, Saami people are not only experts on Saami culture but fellow citizens. Acknowledging this more explicitly may help mitigate tendencies to exotify and facilitate identification of both shared and divergent interests. It may also counter the tendency to frame concepts such as resilience and (heritage) preparedness through uniform messages that assume homogenised meanings across national populations – an approach that risks reproducing colonial logics (Kuokkanen & Sweet 2020; Lindroth et al. 2025). The current situation in Greenland (Adler 2026; Bryant 2026) poignantly illustrates how the meaningful inclusion of Indigenous populations and other minorities, grounded in full recognition of their citizenship rights and epistemic contributions, is not merely a matter of redressing historical atrocities but constitutive of our current democracies.

Knutson and Danielsen further call for informed and genuine engagement with Saami history, culture and participation among the relatively small number of staff in the Norwegian Sámediggi cultural heritage administration as a condition for sustaining trust and legitimacy. This concern intersects with Harald Fredheim’s question of how the establishment of distinct Saami institutions for archaeology and heritage has shaped levels of trust within Saami society, between Saami and non-Saami Norwegians, and between the Saami and the Norwegian state. As Fredheim correctly observes, addressing this enquiry requires disentangling the multiple levels of inclusion, participation and trust discussed in my keynote.

Although this merits further discussion, participatory archaeology can, in my view, deliver small wins against anti-democratic forces by cultivating competence, trust and tolerance at the local scale. The transfer of authority

over political and administrative heritage decisions offers a complementary route for nurturing trust and tolerance more broadly across a national population. Yet, these levels intersect, and Saami and non-Saami attitudes to both Saami cultural heritage management, the Sámediggi and the state depend on many crossing influences. Trust in Saami cultural heritage management has not been investigated as such, but evidence indicates that the Saami in Norway generally express higher levels of trust in state governance than in the Sámediggi – a pattern that may reflect both the Sámediggi’s political output and the practices of its administration as the implementing body (Falch & Selle 2022). Trust in the Sámediggi nevertheless varies within the Saami population, shaped by differences in expectations, experiences and individual identity (Nilsson & Möller 2017; Bergmann 2025). At the same time, the Sámediggi retains a unifying quality in that it is broadly acknowledged to advocate Saami rights and interests within the wider framework of Norwegian state governance (Falch & Selle 2022).

Thus, questions of trust are complex, and political science studies of general trust – often based on electoral participation and attitudes towards the Sámediggi political system and Norwegian state governance – do not necessarily address the issues raised by Knutson, Danielsen and Fredheim. These concerns warrant further investigation, likely using different methodologies from those employed in the research cited above. Even so, it is difficult to see how the findings would undermine the importance of involving a diverse range of people in heritage and archaeology in Saami contexts, as well as in other contexts – particularly if these practices are to contribute to community building and heritage preparedness by facilitating an open and democratic discourse on identity, belonging and the past.

Several respondents question the realism of this objective, pointing to its practical difficulty (Ojala), and that archaeologists are reluctant to act as political actors (Knutson and Danielsen), or arguing that such engagement lies outside archaeologists’ core expertise or interest (Fredheim). I would suggest, however, that this is not a matter of choice: archaeologists already function as social and political mediators through the projects we bring into the world. Not every archaeological project needs to be explicitly participatory, and participatory modalities may be adopted to different degrees. Nonetheless, all archaeological projects affect individuals and communities in one way or another. By recognising this fact and purposefully exploring participatory possibilities, we may be able to nudge our projects so that their potential positive effects are more likely to be realized.

Crucially: taking the social impact of our work seriously does not preclude enjoyment. On the contrary, enthusiasm, curiosity, and humour can be effective ways of creating pockets of trust and dialogue. I remain confident that participatory archaeology has the potential to contribute to such

small wins and thus foster cognitive heritage preparedness in the face of anti-democratic discourse.

Acknowledgements

I would like to extend my gratitude to the editors of *Current Swedish Archaeology* for inviting me to initiate this debate and for their patience and valuable input during the writing process. I also wish to thank Associate Professor Camilla Brattland for her reading of a final draft for this debate comment.

References

- Adler, K. 2026. Greenland Residents Fear for Future as Island Embroiled in Geopolitical Storm. *BBC*. <https://www.bbc.com/news/articles/cgrd2e7p9reo> [Accessed January 13, 2026].
- Bergmann, F. 2025. Beyond the Obvious: A Nordic Tale of the Raveled Relationship Between Political Inequality and Indigenous People's Satisfaction with Democracy. *Ethnic and Racial Studies*. Vol. 48(16), pp. 3267–3292, doi: 10.1080/01419870.2024.2388677.
- Bryant, M. 2026. Why is Donald Trump Renewing Calls for Takeover of Greenland? *The Guardian*. <https://www.theguardian.com/world/2026/jan/06/why-is-donald-trump-renewing-calls-for-takeover-of-greenland> [Accessed January 13, 2026].
- Falch, T. & Selle, P. 2022. Sametingets relevans og rekkevidde. *Norsk statsvitenskapelig tidsskrift*. Vol. 38(2), pp. 43–59, doi:18261/nst.38.2.1.
- Kuokkanen, R. & Sweet, V. 2020. Indigenous Security Theory: Intersectional Analysis from the Bottom Up. In: Gjørøv, G.H., Lanteigne, M. & Sam-Aggrey, H. (eds), *Routledge Handbook of Arctic Security*, pp. 80–90. London: Routledge.
- Lindroth, M., Rantala, H., & Sinevaara-Niskanen, H. 2025. Resilience in Finnish security and defence rhetoric: Examining colonial underpinnings. *Journal of Language and Politics*. <https://www.jbe-platform.com/content/journals/10.1075/jlp.25.100.lin> [Accessed December 8, 2025].
- Nilsson, R. & Möller, T. 2017. Tillit och förtroende bland sametingsväljarna i Norge och Sverige. In: Josefsen, E., Mörkenstam, U., Nilsson, R. & Saglie, J. (eds), *Ett folk, ulike valg: Sametingsvalg i Norge og Sverige*, pp. 220–237. Gyldendal Akademisk: Oslo.
- Seip, H. 2025. Norge trenger et psykologisk forsvar. *Forsvarets forum*. <https://www.forsvaretsforum.no/meninger-miljopartiet-de-gronne-politikk/norge-trenger-et-psykologisk-forsvar/453553> [Accessed November 19, 2025].
- Sivertsen, E.G. & Buvarp, P.M.H. 2025. Frykt og fakta om psykologisk forsvar. *Forsvarets forum*. <https://www.forsvaretsforum.no/beredskap-ffi-forsvarets-forskningsinstitutt/frykt-og-fakta-om-psykologisk-forsvar/455444> [Accessed November 19, 2025].
- Spangen, M. 2025. Dissolving Dichotomies: On the Necessity of Integrating Saami, Nordic, and Feminist Gender Archaeology. In: Pedersen, U., Moen, M. & Skogstrand, L. (eds), *Gendering the Nordic Past*, pp. 203–216. Turnhout: Brepols.

- Spangen, M., Salmi, A.-K., Äikäs, T. & Fjellström, M. 2020. Introduction: Currents of Saami Pasts. In: Spangen, M., Salmi, A.-K., Fjellström, M. & Äikäs, T. (eds), *Currents of Sámi Pasts: Recent Advances in Saami Archaeology*, pp. 2–15. Helsinki: Archaeological Society of Finland. http://www.sarks.fi/masf/masf_9/masf_9.html.
- Verweij, M. & Thompson, M. 2006. *Clumsy Solutions for a Complex World: Governance, Politics and Plural Perceptions*. New York: Palgrave Macmillan.
- Vonnák, D. & Jones, S. 2025. *Mobilising Care for Cultural Heritage in Russia's War Against Ukraine*. Stirling: University of Stirling. <http://dspace.stir.ac.uk/handle/1893/37015>.

REVIEWS & NOTICES

Christian Horn, Knut Ivar Austvoll,
Johan Ling & Magnus Artursson

Nordic Bronze Age Economies

Cambridge Elements in Ancient and Pre-modern Economies

Cambridge University Press

Cambridge 2024

84 pages (16 figures)

ISBN: 978-1-009-47583-9 Hardback

ISBN: 978-1-009-42142-3 Paperback

ISSN: 2754-2955 (online)

ISSN: 2754-2947 (print)

Reviewed by Nils Anfinset

This newly published book on *Nordic Bronze Age Economies* by Horn et al. is part of the Cambridge University Press series on Ancient and Pre-modern Economies to provide innovative and interdisciplinary views on culture and comparative economies. With this in mind, this small book of 60 pages, including illustrations and additional references, aims to describe the basis of regional economic development in the Nordic Bronze Age (NBA –the authors use NordicBA, though the more common abbreviation of this period is now NBA, see for example Vankilde 2014). The book is divided into six chapters, where the first chapter introduces us to the NBA, its geographical scope emphasizing the ecological diversity of the region, although argued to form a relatively homogeneous cultural expression. The premise

University Museum, University of Bergen, Norway
nils.anfinset@uib.no

This is an Open Access article distributed under the terms of the Creative Commons 4.0 International licence (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

is the development of an interweaved relationship between domestic and political economy during the NBA (p. 1).

At first, we are briefly taken back to the earlier parts of the Neolithic in order to explain the significant changes that are to come in the NBA, emphasizing especially the development of pastoral economy around 2800 BCE, which is connected to migration of groups from the steppes in the east, and the later maritime expansion of a metal-based economy represented by Bell Beaker groups. These changes developed into a uniform Nordic Bronze Age almost a millennia later, where the primary cause for this development was the engagement in long-distance metal trade based on new boat technology and elite control. Based on this, the authors develop models of chiefdoms based on various resources and archaeological material in Scania, Bohuslän and Western Norway (Fig. 2). From there a brief description of the NBA and its periodic development is given, summarizing it down to a distinctive specialized seafaring economy based on an agropastoral economy creating an economic surplus generating domestic and political economies.

The second chapter deals with the macroeconomic perspectives where the economic condition of the NBA with a farm- and boat-based economy, and a local contrasting economy, develop into a political economy particularly based on bronze and other exotic products. Here the authors draw a historical outline from the late 19th century to the early 2000s, illustrating how different theoretical and methodological changes have influenced the understanding and interpretation of the Bronze Age economy. Based on this, the authors suggest an approach centred on independent (self-sufficient) and decentralized farms with the concept of marine mode of production (MMP) to understand the development of institutional formation. This development of micro-regional systems with low density populations is connected to the long-distance trade of metal, weapons, slaves and other valuables where the local farms and agriculture are the fundamental premises for the developments in the NBA (also illustrated in Fig. 5).

From here the book takes us to the domestic economy in chapter 3, which briefly presents selected empirical examples on farms and settlement organization suggesting among others that the increase in house size is connected to increase in social complexity (p. 18). This is illustrated by the domestic economy from plant material to herding, fishing and hunting, where the produced surplus supported the ruling elites and their social agenda.

Chapter 4 deals with the broader economic picture within the region discussed in the book. Here three different spheres of exchanges (micro-, macro-regions and long-distance contacts) for goods and interaction are suggested, highlighted with several examples such as flint, soapstone, tar, metal, amber and other products. These spheres are linked to the signifi-

cance, production and use of boats, enabling raiding as well as trading and gift-exchange. This created opportunities within the NBA societies, although there were clearly both economic and logistical challenges with long-distance travels.

In chapter 5 the issues of conflict and alliances are further described and discussed with reference to the economic perspective of the book using both economic theories as well as ethnographic examples. The Limfjord region is used as an example, illustrating that uneven distribution of resources and the strategic location made it easy to control trade and raids, which created economic imbalances within the NBA-region.

Chapter 6 follow this up with micro-regional case-studies from the Limfjord, Jæren, Inner Sogn and Tanum areas, suggesting that the Limfjord area was a major hub between the other case-regions and central parts of Europe. In chapter 7 it is described how the NBA societies developed and could have taken part in maritime expeditions encountering European communities using boats. This is exemplified by boat finds and rock carvings, and the authors concludes that the NBA societies encountered European societies by boat, in a system of domestic and political economies which developed in the NBA.

One of the major premises in this book is the issue of domestic economy, that is used as a point of departure to understand the significant investments in building houses and agriculture, as it is perceived as generating an agropastoral basis for self-sufficiency and surplus production diverted to political economy (p. 15). We are presented with a view that the NBA-societies were driven by rational societies where individuals were acting by their own economic interest in order to optimize wealth and prosperity (larger crew, more cargo, technological development) as a *homo economicus*. Here we are really at the core of NBA-economies, and what would constitute pre-modern economy and wealth, and did (all) NBA societies really optimize their production and technological development? As it is clearly stated throughout the book that questions regarding economy are political, it is surprising to find that the book lacks major explanations and discussions of what economy is in this specific pre-monetary setting. No doubt, the NBA is a time of transition in large parts of Scandinavia, but the book fails to bring forward alternative economic models, as we are left with an extreme focus on economic rationality. As the authors point out in the beginning, this region of Europe was highly diverse, but did this diversity lead to cultural and economic homogeneity? Were there other means of wealth and values beyond creating an economic surplus and a built-in (cultural) desire for material prosperity? Here the issue of complexity is relevant, as the authors present us with complex decentralized chiefdoms and complex constellations. As the cases presented represent very different

ecological, cultural and geographical contexts, one would expect different modes of social and political complexity. All societies are complex social, economic and political systems irrespective of social organization or size. Here we are left with arguments suggesting that complex boat construction and seafaring created a distinctive and complex economy (p. 7–8). We are presented with a picture of a political economy and complexity going hand in hand, while it would be useful for the reader to discuss the concepts of complexity more broadly, especially in the context of NBA and the diversity both in terms of ecology and culture within this region and how this change over time. It is an oversimplification to state that increase in house size indicates increase in social stratification (p. 17), as there are a number of factors which affects the size of a house such as local climate, the geographic setting, resources, household size, etc.

This brings me to the second issue with this book, who is this aimed at? The authors states that this book will ‘[...] provide a readable and easy-to-use account that helps to understand the economies of the NordicBA [...]’ (p. 1). If the receivers and readers of the book are students, the book would have benefited from being more consistent and precise with references also using page numbers. This would clearly help others to navigate and check references for further readings. In addition to this, some of the references are actually wrong cited. To point out one familiar example, metal finds in (Western) Norway are not found in settlement context, nor is the Veim hoard found in loose gravel, but in a scree (p. 49). My point here is that the level of precision clearly could have been better, but this is also seen in the way the interpretations are presented. Too often we are presented with tentative or loose interpretations not well funded using ‘perhaps’ (41 times), ‘could have’ (34 times), ‘may have’ (48 times) which leads to sentences like this; ‘People caught up in hostilities were perhaps killed or injured, including the elderly woman who could have played an important role, for example, as mediator or expert in the proper, that is, customary conduct of such encounters.’ (p. 54). Precision, reliability and accountability are significant values of research which we all should aim at.

The book would have benefitted from a much tighter editing of the text presented, the structure of the book, and indeed the illustrations and maps. Names on the maps are hardly readable in the physical book nor in digital format, while other names in the text do not occur on the maps (e.g. Stjørdal and Alta). Other placenames on the map are not relevant for the text (e.g. Lappvallen?), and illustrations are sometimes hard to understand and lack clear descriptions (e.g. Fig. 2).

Archaeology, like any other science, must dare to challenge prevailing perceptions and push and present new knowledge. Unfortunately, the book is neither innovative in their approach to Nordic Bronze Age Economies,

nor highly interdisciplinary, as much of what we find in this small book the authors have written elsewhere, and the interdisciplinary approach is not well funded neither in economic nor ethnographic studies. That is a pity, because a book like this should clearly dig deeper into this highly important theme in one of the most formative periods in Scandinavian prehistory grasping the complexity and diverse economies.

Reference

Vandkilde, H. 2014. Breakthrough of the Nordic Bronze Age: Transcultural Warriorhood and a Carpathian Crossroad in the Sixteenth Century BC. *European Journal of Archaeology*. Vol. 17(4), pp. 602–633, doi:10.1179/1461957114Y.0000000064.

Fredrik Fahlander

Ecologies of Bronze Age Rock Art: Organisation, Design and Articulation of Petroglyphs in Eastern-central Sweden

Swedish Rock Art Research Series 9

Oxbow books

Oxford 2024

171 pages

ISBN: 979-8-88857-139-2

Review by Peter Skoglund

Fahlander's book on rock art in Eastern-central Sweden sets out to explore one of the most prominent rock art clusters in Scandinavia. We are presented with an overview of the rock art surrounding Lake Mälaren in Sweden covering the counties of Västmanland, Stockholm and Södermanland. However, the most important contribution is not the material presented, but the theoretical approach, where the author systematically applies the perspective of material articulation which implies that rock art motifs acted as tools and devices to *do* something. Fahlander and other colleagues have written about these matters previously, but for the first time in Scandinavian rock art research, this perspective is now applied systematically to a larger study area. Thus, the book is a must-read for anyone with an interest in how theory is a precondition for novel and interesting interpretations of rock art imagery.

Department of Cultural Sciences, Faculty of Arts and Humanities, Linnaeus University, Sweden
peter.m.skoglund@lnu.se

This is an Open Access article distributed under the terms of the Creative Commons 4.0 International licence (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

The book is divided into seven chapters. Chapter 1 sets the scene and introduces the main theoretical concepts and outlines the book. Chapter 2 presents the study area and provides a spatial overview of the rock art distribution. A generalized chronology is presented which builds on, but simplifies, established chronologies presented by Kaul (1998) and Ling (2014). Chapter 3 focuses on the articulation of the motifs and the relationships between different motifs. The connection between motifs and features in the panels such as cracks and fissures are also investigated. The distribution of different types of motifs is presented and discussed.

Chapter 4 is a key section in the book since it deals extensively with the core theme of the book namely the articulation of the motifs. In this chapter Fahlander explores topics like partial and incomplete motifs, reworking and enactments of motifs, large-scale and hyperbolic motifs and finally the relationship between the motifs and the rock canvas. Throughout this chapter theory works implicitly to guide the author to identify interesting patterns in the material. Chapter 5 builds on the observations made in Chapter 4 and now Fahlander broadens the scope and elaborates upon the interpretations by including ethnographic perspectives in the discussion. In this chapter Fahlander explores the motifs as devices with a potential for both visual and material agency. According to Fahlander the rock art motifs had different aims which were altered and adjusted with the help of mediality, design and articulation. These concepts are explored through an analysis of the size of the images and how images are related to each other and also how they are positioned in relation to characteristic features in the rock surface. Chapter 6 places the Mälaren rock art in a wider geographical perspective with comparisons to other Scandinavian regions and beyond. Chapter 7 is a summary of the main conclusions drawn in this study of the Mälaren rock art.

The seven chapters making up the book are all well-written with a lot of high-quality illustrations and maps. The author addresses complicated matters in a straightforward way which invites the reader to take part in the discussion.

Moreover, *Ecologies of Bronze Age Rock Art: Organisation, Design and Articulation of Petroglyphs in Eastern-central Sweden* introduces a novel perspective on rock art challenging the idea of rock art as a passive reflection of ideology and cosmology. Instead, the author emphasizes its generative potential with properties and agencies of its own. The theoretical perspective is combined with a deeply rooted notion of the importance of empirical data. The rock art motifs are quantified and presented in tables and maps providing an excellent overview of rock art in this part of Scandinavia. In my judgement the application of theory onto data in general works very well and makes this book stand out as a model for other researchers.

This is especially true for Chapter 4 where Fahlander's perspective enables him to identify several interesting features in rock art motifs and their landscape context which add new understandings compared to more classical mimetic approaches. I am especially intrigued by how the author identifies hyperbolic motifs, i.e. very large images, as a subgroup with a limited chronology restricted to the very beginning and the end of the Mälaren rock art tradition. In these periods, when the rock art format was adjusting to new circumstances, size was used to increase visibility and to maximize the image's effect on people.

However, Chapter 5, where Fahlander presents more precise interpretations involving also ethnography, I find more challenging to read. I get the impression that the author is sometimes overinterpreting the material and presents explanations that are to a lesser extent anchored in the theoretical discussion and the empirical data. Examples could include the notion of podomorphs as representing living standing entities and anthropomorphs as representing dead lying down humans, or that certain cupmark localities were designed to encapsulate water and stir the flow of running water in certain directions.

These examples point to a general problem with rock art studies that goes beyond Fahlander's book, namely the tendency to think of individual motifs and panels to represent visual and material remains of distinct importance. Given that the material remains of other activities potentially taking place at rock art sites such as gatherings, feasts, rituals and storytelling are gone, or have always been nonexistent, we are forced to study what is left namely the images. These visual and material remains may well be of secondary importance and a kind of extemporary outcome compared to other activities that took place at the site. This view on rock art is influenced by my own ethnographic fieldwork studying the ongoing rock art tradition among the Samburu in northern Kenya. In this tradition, the main activity in the rock art shelters is the feast where meat is consumed, and rock art production sometimes evolves out of this activity as a rather spontaneous, unrehearsed and informal activity (Goldhahn et al. 2021).

Despite these differences in opinion regarding the significance of rock art in general and certain specific interpretations, I must emphasize that Fahlander's book sets the stage for a new theoretical understanding of Scandinavian rock art. The book presents a theoretical approach that complements and challenges other well-established notions such as the idea of rock art representing visual narratives or rock art as a outcome of maritime rituals and activities. Instead, we are presented by a variety of examples and interpretations on how images by their design and position interfere with their environment and creates new material relationships that acts and impose something on people, making this book an interesting example of

how to approach the ecology of rock art. The way the author deals with both larger datasets and sophisticated theory represent great professional scholarship, and that is why this book will serve as inspiration for anyone with an interest in how to use theory in rock art studies.

References

- Goldhahn, J., Labarakwe, S.L., Skoglund, P. & Westergren E. 2021. 'I Have Done Hundreds of Rock Paintings': On the Ongoing Rock Art Tradition among Samburu, Northern Kenya. *Cambridge Archaeological Journal*. Vol. 31(2), pp. 229–246, doi:10.1017/S095977432000044X.
- Kaul, F. 1998. *Ships on Bronzes: A Study in Bronze Age Religion and Iconography*. Copenhagen: National Museum.
- Ling, J. 2014. *Elevated Rock Art: Towards a Maritime Understanding of Bronze Age Rock Art in Northern Bohuslän, Sweden*. Oxford: Oxbow Books.

Sven Kalmring

Towns and Commerce in Viking-Age Scandinavia

Cambridge University Press

Cambridge 2024

277 pages (26 figures, three maps and four colour-plates)

ISBN: 978-1-009-29809-4 Paperback

Review by Christoph Kilger

The phenomenon of Viking Age towns has been a central topic in Viking Age research for a considerable time, with various approaches employed by both archaeologists and historians, resulting in a vast body of literature. The biographies of Viking Age towns such as Ribe, Birka, Kaupang, and Hedeby span a period of 250 to 300 years, starting across Scandinavia after 750 and ending with the demise of Hedeby, the largest and most powerful of them all, after 1050. In this monograph, the author Sven Kalmring aims to delve into the inner core of the research problem: – What was their specific purpose, why did Viking Age towns emerge, and why did they disappear? The primary objective is to explore the very essence of Viking-Age urbanisation. A hypothetical baseline that runs throughout the book is to view these sites with their urban communities as special economic and legal zones, which create unique social environments that were distinctly novel to earlier Iron Age central places, but also different from later high medieval towns. The book is structured both chronologically and thematically, with eleven chapters and a final summary.

Department of Archaeology, Ancient History and Conservation, Uppsala University, Campus Gotland, Sweden
christoph.kilger@arkeologi.uu.se

This is an Open Access article distributed under the terms of the Creative Commons 4.0 International licence (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Chapter two presents a comprehensive historiographic overview of scholarly approaches to Viking-Age urbanism that goes beyond the constraints of definitions and terminologies that have often limited earlier approaches. Kalmring traces the evolution of thought from Jankuhn's concept of *See-handelsplätze* in the 1950s to the economically anthropological notion of elite-controlled trade hubs in the 1960s and 1970s, which informed Richard Hodges' influential Emporia model for interpreting early medieval urban sites. He further engages with Scandinavian scholarship on early urbanisation, and incorporates theoretical frameworks such as central place theory and network theory. The chapter also broadens the discourse on urbanism by integrating a broad range of perspectives and researchers.

What is not addressed in this overview, however, is how concepts within economic and social anthropology significantly shaped urban and Viking Age studies in the 1980s and 1990s. Theories such as gift exchange, substantivism and notions of the social embeddedness of trade challenged the applicability of market exchange models in premodern societies. Until recently, these frameworks have offered powerful alternatives to economic determinism and have been instrumental in reframing economic relations in the early Middle Ages as socially embedded and politically regulated.

A crucial aspect of Viking Age urbanism, developed in chapters three to five, involves examining rural Iron Age society – its farmsteads and villages – as well as regional variations in territorial organization, cultural norms, and religious practices. Viking-age society tended more toward social seclusion than inclusion, which hindered foreigners from engaging with rural populations. Within this context, the author emphasizes the importance of legal protections for trading networks, which expanded globally during the Viking Age period, highlighting the growing need for safeguarded spaces. He argues that the legal capacity of towns to offer secure environments for foreign merchants and craftsmen – situated on the fringes of a potentially hostile rural society – was likely a key factor in their establishment.

Another innovative approach to understanding Viking Age urbanism is presented in chapter four, "Cult, Jurisdiction and Markets", where Kalmring explores the role of legal systems and things in rural society. This chapter effectively highlights recent studies on the social and political significance of thing assemblies in Scandinavian societies. Thing assemblies, which also had a clear religious and cultic component, provided social arenas for regular gatherings. Like Viking Age towns, thing assemblies were pivotal points in society, where large numbers of people gathered in a confined space and engaged in ritual, judicial, and, importantly, economic activities. The author presents a vast number of sources from Medieval Scandinavia and wider Europe, which connect things with markets and traders in different constellations. In this context, he also discusses reli-

giously charged centres of power and the cult, such as Old Uppsala, as well as royal or manorial estates like Jellinge or Tissø, and the connections between religious festivals and seasonal fairs.

In chapter five, “Local Society and Viking-Age towns”, Kalmring develops further the idea that emerging Viking Age towns presented a novelty in Scandinavia, with reference to Augé’s concept of super modernity. As neutral zones, Viking Age towns developed outside rural agrarian society and existing power structures. A peculiar feature is that royal estates or manors were located outside the towns. A famous example is the royal palace Hovgården on the island of Adelsö, within eyesight of Birka; this opposition is accentuated as Birka also had its own thing assembly. Another feature of Viking Age towns, which is discussed further in this chapter, is their liminal placement in border zones between ethnic and political formations, transport zones or landscape units.

One characteristic common to all Viking-age towns is their pronounced connection to the sea and maritime activities. As points of contact between land and water, harbours were a prerequisite for the development of these urban centres, a theme explored in chapter six, “An Urbanisation based on Harbours”. This chapter provides an overview of how seasonal landing sites, which also functioned as coastal marketplaces, began to emerge in the North Sea and Baltic Sea regions between the 6th and 8th centuries. Recent historical scholarship and archaeological investigations present a significantly more complex picture of the establishment of emporia in the North Sea region. A consistent finding is that Viking Age towns, including Ribe, Birka, Kaupang, and Hedeby, also originated as seasonal coastal markets.

Another more contentious issue discussed concerns the role of royal influence in the founding of Viking Age towns. One conclusion is that commercial activity served as the primary driving force behind the establishment of seasonal and local coastal markets; however, political authorities – often royal – intervened and directed their development at a later stage. This so-called “heyday phase,” marked by the emergence of a limited number of dominant trading centres, occurred consistently during the second half of the 8th century.

An overarching and recurring theme in Kalmring’s work is to address legal dimensions in the governance and administration of Viking Age towns. This is excellently developed in chapter seven, “Jurisdiction and Taxes” and further explored in chapter eight “Free Trade within Narrow Boundaries”, which examines the legal protections afforded to merchant diasporas by rulers across various geographical and political contexts. Kalmring connects archaeological evidence – such as shallow ditches encircling trading sites, likely marking symbolic boundaries of marketplaces – with historical discussions on juridical zones, customs, tax revenues, restrictions, entry

fees, and time limits imposed on foreign merchants for visiting and residing in towns. There is substantial evidence for such commercial legislation in textual sources from the late Roman Empire, Byzantium, and the Frankish-Merovingian and Anglo-Saxon kingdoms. Later Medieval maritime law codes in Scandinavia, such as the Bjarkey laws, appear to reflect the diversity of legal practices of towns like Birka and Hedeby, but this is not easy to prove. The author revisits and analyses these primary sources in impressive detail, convincingly arguing that they offer a valuable framework for understanding Viking Age towns as special legal zones.

Viking Age towns served as catalysts for innovation within a previously conservative and underdeveloped rural society. Chapter nine explores these towns as special economic zones and addresses the classical question of their relationship with surrounding hinterlands, particularly in the context of emerging long-distance trade between Scandinavia and Continental Europe during the 9th century.

Chapter ten examines the evolution of Viking Age towns between 850 and 1000, with a deliberate focus on identifying turning points and disruptions in the archaeological record. This chapter is the longest in the book and more challenging to summarise, as it spans 150 years and encompasses a wide array of topics. One subchapter investigates the consequences of the breakdown of global trading networks in the latter half of the 9th century, including the decline of the North Sea emporia and the subsequent recovery of Viking Age towns following the silver crisis. Another subchapter explores the decline of Birka, the transformation of Hedeby, and the second wave of urbanisation marked by the emergence of new Christian towns such as Sigtuna in the late 10th century. The chapter offers compelling archaeological evidence of conflict and crisis in urban settings.

The final chapter eleven is devoted to a discussion of the abandonment of late 11th-century Hedeby and the relocation of the town to medieval Schleswig. According to textual sources, the move occurred within a relatively short period of time between 1050 and 1075, specifically following the destruction of Hedeby in 1066 by the Norwegian king and the Slavic Obotrites. The chapter summarises earlier hypotheses regarding the reasons for this relocation. In addition to presenting recent excavation results from both Schleswig and Hedeby, as well as metal detector surveys in Hedeby that yielded an exceptionally rich assemblage of finds and new dating evidence, Kalmring proposes that the decision to move to Schleswig was made by the Danish king Sven Estridsen after 1059, in connection with the reorganisation of the Danish church and the establishment of new bishoprics in Jutland. The argument is compelling. Further evidence may lie in the dramatic decline in the import of Western European coins to Scandinavia after 1050/1055. At the same time, rulers in Denmark and Norway debased

and reorganised their coinages, which likely had far-reaching consequences for both long-distance trade and urban economies. The demise of Hedeby might also be interpreted within this monetary context.

The research effort in this book is well-grounded, with approximately 660 titles in the bibliography, out of which 50 are primary sources. The book provides not only a long-needed update of the debates on early medieval urbanisation in Scandinavia and Europe, but also a compilation of the growth of knowledge in archaeological research on Viking Age towns, excavation results, and material publications. Kalmring's achievement lies in his comprehensive approach, which connects different topics in Viking Age and early medieval research to the framework of urban studies, as well as broader questions about economic and social relations in Viking Age society.

Søren M. Sindbæk (ed.)

Northern Emporium

Vol. 1 The Making of Viking-Age Ribe

Jutland Archaeological Society

Højbjerg 2022

463 pages

ISBN: 978-87-93423-74-9

ISSN: 0107-2854

Vol. 2 The Networks of Viking-Age Ribe

Jutland Archaeological Society

Højbjerg 2023

429 pages

ISBN: 978-87-93423-82-4

ISSN: 0107-2845

Review by Charlotta Hillerdal

As the earliest Scandinavian ‘emporium’ (to use Sinbæk’s term of preference, more commonly these sites are referred to as ‘towns’), Ribe can hardly be overvalued. Equally, as the most recently excavated Viking Age town, one that makes use of the full range of novel analytical and recording methods offered by contemporary archaeology, the impact of the Ribe excavation can hardly be overstated. As very accurately pointed out by Sindbæk himself in

Department of Archaeology, University of Aberdeen, United Kingdom
c.hillerdal@abdn.ac.uk

This is an Open Access article distributed under the terms of the Creative Commons 4.0 International licence (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

the introductory chapter (Vol. 1, p. 13), Ribe (established around 700 CE) is the reference site for much of Viking Age chronology and development. It is therefore highly welcome that the excavations have been published in such meticulous detail. These volumes promise to become the new ‘bible’ for Viking Age researchers, not often read cover to cover, but frequently cited for decades to come.

Sinbæk’s network theory (2007) has been profound in the last decades’ reconceptualization of the Viking era. Ribe is foundational to this, both theoretically as a ‘type example’ of a network nodal point, and quite literally as the first of the ‘Viking’ emporia. These volumes contribute to advancing this idea, and not least, to anchor it within material culture and empirical data.

It has long been recognized that these sites are characterized by long-distanced sea trade and crafts. But the origin and intent of their establishment are debated. The network model has provided the most effective critique against the, often assumed, link between urbanity, regal power and state formation (e.g. Ambrosiani 1990; Ambrosiani & Clarke 1991; Skre (ed.) 2007; Skre 2008).

Sinbæk sees Ribe’s foundation as the northernmost extension of a Frisian tradition, rather than a Scandinavian initiative, something that is supported, at least partially, by the artefact material (e.g. Vol. 2, Chapters 2, 3, 6–14). Underlining that these places are there to serve a purpose, in a very practical sense, rather than advancing an agenda or ideology.

This too changes the ‘dynamic’ of the Viking Age, moving away from notions of isolated northern communities suddenly appearing on the (British) world stage at the end of the eighth century CE, towards that of continuous interaction and gradual intensification and integration into a growing trade network.

Despite the (somewhat surprising) loyalty shown to traditional chronology (e.g. Vol. 1, pp. 50, 158–159), this book contributes to the feeling of it becoming increasingly outdated. Ribe’s continuous occupants from 700 CE, or a little earlier, seem to take little note of the rise of the Viking Age in 793. Rather, they go about their business according to their now century-long tradition of craftsmanship and trade, contacts across the seas, south, north, and east, well established. Trade in products from the North, the western Scandinavian peninsula, can be seen already in the 730s (Vol. 2, Chapters 7, 14), abundance of amber suggest the Baltic Sea area is extensively involved in trade in the 740s (Vol. 2, Chapter 15), and it is even probable that a traveller from England visited the emporium in the early eighth century (Vol. 2, Chapter 9). If anything, Ribe shows us the need to break the hegemonic narrative of The Vikings (see also Vol. 1, p. 18).

Volume 1 The Making of Viking-Age Ribe offers a detailed focus on the Posthustorvet excavation 2017–2018. The excavation made use of new field-work and documentation techniques to achieve a high-definition approach to the chronology and context of the finely sequenced stratigraphy of up to 2.5 meters depth.

High-definition excavation is presented in a high-definition publication. This certainly does not make it the most intriguing read for the casual reader but will be immensely beneficial for anyone with a special interest.

The backbone of this volume consists of a summary of the excavation results, followed by ten specialists' reports detailing different analytical aspects of the excavation. These are generously illustrated by multiple site plans, images, and detailed data tables. The volume also includes 5 plates detailing the matrix of principal phases and constructions (Plate 1), section drawings, and photogrammetric reconstruction of sections (Plates 2–5).

The introductory chapter by Sindbæk sets the scene outlining the research history of Ribe and the motivation for undertaking a new excavation in Ribe, including research questions and aims.

The second chapter explains the excavation methodology, recording protocols, sample strategy, etc. in clear detail. It also critically evaluates the success of this approach, with important advice for future excavations on similar sites.

Chapter 3, the most substantial chapter in the volume, an 'Excavation atlas' of 170 pages, navigates through the stratigraphy phase by phase, relating the chronological history of a site from the scantily used grasslands that preceded the establishment of the emporia, until the much-disturbed modern urban deposits at phase 18.

Each phase is interpreted in relation to: artefact finds, ecofacts, micromorphology, and entomology – each category represented by its own symbol. This is an efficient way of presenting the distinct phases and comprehensively organizing the significant data, where the reader could easily have gotten lost in the amount of available information.

The chapter also include five 'Focus' sections that offers a more in-depth look at certain structures or phenomena that stood out in the excavation.

The Excavation Atlas is followed by ten specialists' reports, ranging from 3D spatial recording to radiocarbon chronology.

To highlight a few, Chapter 5 on soils and sediment micromorphology by Barboura Wouters is extremely informative, especially considering the important contribution micromorphology made towards understanding the site. Micromorphology solved some of the longstanding 'Ribe conundrums', such as identifying stratigraphy in the seemingly homogenous 'dark earth' layers.

This chapter also demonstrates the highly varying preservation conditions across the site, and a very uneven accumulation rate throughout the decades, something that is further discussed by Søren M Kristiansen and Anna K. E. Tjellden in Chapter 8 and by Pieterjan Deckers in Chapter 6. Decker's chapter is also a well needed reminder that the chronological assumption behind stratigraphic relationships expressed in single context recording is not always as straight forward as one would like to assume.

Chapter 11 by Jacob Kveiborg is another immensely useful addition to the book, since zooarchaeology is not very prominent in the 'Excavation Atlas' (Chapter 3). Unsurprisingly, the assemblage is dominated by local domestic animals, predominantly cattle but also pig and sheep. However, Kveiborg shows a great variety of animal resources were utilized by Ribe's inhabitants, including locally available gamebirds and fish, even though fish is probably severely underrepresented in the faunal assemblage. The use of local wild resources is also evidenced in Chapter 13 discussing plant material.

Insect remains (Chapter 12) were incremental in establishing the permanent character of occupation in the earliest phase of Ribe's existence, but a detail that really brought the site to life for me was the detection of honey-bees and evidence of bee keeping in the mid-8th century (p. 441).

The high-definition approach must be considered very successful. Not least resulting in a refined chronological framework where settlement phases have been identified down to 10–20, occasionally 30, year-spans between 690/70 and 900/920 CE. The uncertain end-date of the Viking Age sequence (Phase F14) is due to highly disturbed settlement layers (p. 200). As no decline in craft activities can be discerned in this phase, the interpretation opens for the possibility of continued activity beyond the early 900s.

Geoarchaeology in combination with archaeoentomology has resolved some of the outstanding questions, for example that of Ribe's probable origin as a seasonal market, as suggested by previous excavations (Feveile 2006). Instead, it is concluded that Ribe had a permanent occupation from the very start, albeit with shorter-lived, less sturdy, wattle walled houses.

Microporphology is also able to put an end to speculation of seemingly homogenous 'dark earths', previously interpreted as quickly accumulated organic deposits, probably linked to cattle markets (Bencard & Jørgensen 1990). Analysis showed that these are highly compressed stratified layers of houses build from organic materials such as wattle, reeds and turf. The high level of preservation is explained by local conditions created by the large amount of compressed organic matter (Vol. 1, pp. 116–117; Chapter 5).

These finds attest to interesting shifts in building traditions throughout Ribe's existence. Initially, the site is marked by light wooden buildings of wattle and wood, permanent but rather short-lived. For about two decades

positions of buildings, fences and boundaries seem to shift around, contradicting ideas of a planned settlement and original plot-division. However, following this a very stable building pattern and plot-division is established, with a continuous sequence of buildings for almost 200 years. Craft production, evident already in the earliest occupation phase, also seem to follow a similar pattern with large short-term variability in the earliest phases shifting towards a series of specialized craft activities continuously practiced on the same plot for decades.

Volume 2 The Networks of Viking-Age Ribe comprises 20 chapters focusing on different finds- and materials categories, framed by an introduction and conclusion by Søren Sindbæk. This is the book where Sindbæk's network theory is mapped onto the artefact material and actualized, to some effect.

Naturally, given the amount of finds and the limitation set by a comprehensive volume, presentations of artefacts have to be summarized, but find categories and approach has been designed with usefulness for research in mind (Chapter 1), and it shows. These categories include but are not limited to: pottery, stone products, numismatic evidence, non-ferrous metal working, beads, bone and antler working, textile production, and wood. There are also a couple of chapters focusing on more unique finds, such as the only sherd of Samian ware (with probable origin in Roman period Rhine area) ever found in Ribe (Chapter 5), and remains of musical instruments (Chapter 21). The chapters are largely descriptive and includes detailed tables, drawings, and multiple artefact photographs – for example, 128 pictures of 124 individual Ribe type beads (Chapter 13, Figs 13.24, 13.25, 13.26). This is a hugely helpful reference book for anyone working with Viking Age material.

The underlying focus is on movement of things and people, and the emerging image is of a settlement with both domestic and international character, depending on which material you focus on. Imported pottery suggest early ties with Frisia and the Rhineland, but the dominating pottery tradition is domestic (Chapters 2, 3). Early comb production overwhelmingly points to Frisian artisans (Chapter 14), but brooches and pins follow local tradition (Chapter 9). Consistently, throughout the settlement's history, there is a conversation between foreign and local, and large and small movements. Sindbæk concludes that Ribe should be understood, not as a 'community of people of widely different origins' (p. 419) but as embedded in the region and with an explicit function to fulfil.

What is striking is the everyday character of this, for its time, extraordinary settlement. Barrel wood reused as floorboards (Chapter 20), imported raw material for craft production (e.g. Chapter 13, 14), and household production of textiles (Chapter 18), for instance, does not point towards a 'high

status' community, but a well-connected society of artisan families living rather mundane lives. Far less spectacular than the Viking Age emporium often imagined.

Emporia emerged, Sindbæk concludes in Chapter 22, as places to facilitate sea traffic. Originally, in the case of Ribe, sea traffic from Frisia, but then expanding both north and east. They are nodal points in a social network around trade and movement, serving both long-distance and hinterland, easing and driving the expansion and development that became characteristic for the Viking Age.

These volumes are not for a lay audience, and the dry report-like writing style might be criticized. However, they are clearly designed by researchers with further research in mind, and as such they are extremely useful, far more so than a glossy popular version would be. The granularity and extent of data made available from such a significant key-site excavation is commendable, and I hope will serve as an example for similar key-site excavations in the future. Surely there are many more intriguing stories to be told about Ribe – and with the aid of these volumes, they will be.

References

- Ambrosiani, B. 1990. Den svarta jorden i Birka: En nyckel till förståelsen av stad och omland under vikingatiden. *Fornvännen*. Vol. 85 pp. 1–7.
- Ambrosiani, B. & Clarke, H. 1991. *Towns in the Viking Age*. London: Leicester University Press.
- Bencard, M. & Jørgensen, L.B. 1990. Excavation and Stratigraphy. In: Bencard, M., Jørgensen, L.B. & Madsen, H.B. (eds), *Ribe Excavations 1970–1976*. Vol. 4, pp. 15–136. Esbjerg: Sydjysk Universitetsforlag.
- Feveile, C. (ed.) 2006. *Ribe studier. Det ælste Ribe: Udgravninger på nordsiden av Ribe å 1984–2000. Bind 1.1*. Højbjerg: Jysk Arkæologisk Selskab.
- Sindbæk, S.M. 2007. Networks and Nodal Points: The Emergence of Towns in Early Viking Age Scandinavia. *Antiquity* Vol. 81 pp. 119–132.
- Skre, D. (ed.) 2007. *Kaupang in Skiringsal*. Aarhus: Aarhus University Press.
- Skre, D. 2008. The Development of Urbanism in Scandinavia. In: Brink, S. & Price, N. (eds), *The Viking World*, pp. 83–93. London & New York: Routledge.

Daniel Strand, Anna Källén & Charlotte Mulcare (eds)

Critical Perspectives on Ancient DNA

The MIT Press

Cambridge, Massachusetts & London, England 2024

206 pages

ISBN: 978-02-62548-09-0

Review by Ulla Nordfors¹ & Ronan James O’Sullivan²

As the title suggests, the book offers a series of critical reflections on ancient DNA (aDNA) research. The edited volume examines how genetic interpretations shape narratives of the past, and focuses on epistemological tensions, ethical challenges, and power structures in archaeogenetics. The chapters approach these questions primarily through anthropological and sociological perspectives without many contributions from geneticists themselves.

In their introduction, Strand and Källén outline the central themes of the entire volume. While the topic is timely and relevant, some of the text reads somewhat aggressive, such as the critique of the term ‘revolution’ (pp. xii–xiii). Archaeogenetics has been described as revolutionary for introducing new types of data that has the potential to expand and challenge traditional interpretations of the past (e.g., Crellin & Harris 2020; Heggarty 2018; Kristiansen 2022). Strand and Källén invoke Thomas Kuhn’s theory of scientific revolutions (p. xii), noting that the absence of an articulated

School of History, Culture and Arts Studies, University of Turku, Finland
ulla.nordfors@utu.fi

Department of Biology, University of Turku, Finland
ronan.osullivan@utu.fi

This is an Open Access article distributed under the terms of the Creative Commons 4.0 International licence (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

paradigm shift in archaeology to justify this label. Yet, one could argue that carefully done integration of genetic information into archaeological interpretation has the potential to reshape or at least refine understanding of identity, mobility, and population histories (e.g., Crellin & Harris 2020; Gregoricka 2021; Matisoo-Smith & Horsburgh 2016; Pohl et al. 2021). Nevertheless, it is very true that without the interpretative lens of archaeology (and possibly the integration of other scientific methods), genetic results alone can remain decontextualized, or be overinterpreted, highlighting the essential role of archaeological expertise in grounding aDNA findings in historical and social contexts. We argue that this is precisely what modern archaeogenetics does. Particularly controversial is the editors' claim that no clear line can be drawn between population geneticists and political actors (p. xx), which may oversimplify the relationship between scientific research and its societal interpretations. We will return to this point when discussing chapter 7.

Chapter 1, *Gained in Translation: Interdisciplinary Challenges in Ancient DNA*, by Charlotte Mulcare and Mélanie Pruvost, calls for ethical reflection and sustained dialogue across disciplines. While the chapter raises important concerns, particularly regarding the need to incorporate Indigenous and marginalized perspectives into research design and interpretation, it tends to present a somewhat simplified picture of the current state of archaeogenetics. The valuable point about inclusion might have been strengthened by acknowledging recent developments in North America and elsewhere, where collaborative models involving Indigenous and African American descendant communities are increasingly shaping research practices (First Rider et al. 2024; Fleskes et al. 2023; Moltke et al. 2021, and even chapter 4 in the volume). Similarly, caution in overinterpreting genetic data is valid, but the chapter does not address the extent to which contemporary archaeogenetics already seeks to engage with methodological limitations, uncertainty, theory-laden inference, and interdisciplinary cooperation. However, given the young age of archaeogenetics as a discipline, its epistemological framework is still in its infancy, and therefore, discussions of standards, ethics, and genuine inclusivity are timely. Equally important is maintaining a dialogue among disciplines to ensure that archaeology is not reduced to a subordinate or purely supportive role within archaeogenetic research.

Chapter 2, *Diagrams of Human Genetic Kinship and Diversity* by Marianne Sommer and Ruth Amstutz, critiques widely used visual tools in archaeogenetics, such as PCA and ADMIXTURE plots. The authors argue that these diagrams may reinforce simplistic or racialized ideas of origins, ancestry and, implicitly, ethnicity. This is an important concern, especially when visual outputs are isolated from their interpretative context. However,

many of the examples cited are from older publications and do not reflect how such tools are now routinely accompanied by demographic modeling, functional studies, cautionary explanation, and critical reflection and debate (e.g. Barton et al. 2025; Chevy et al. 2023; Durvasula & Sankaraman 2020; Klunk et al. 2022; Teixeira et al. 2021; Vilgalys et al. 2025). The critique of two comparative figures (2.5 and 2.6) appears technically imprecise, as it fails to acknowledge that the diagrams depict different analytical levels (individual vs. population) and are not meant to be directly comparable. Since the publication of the book, new approaches, such as identity-by-descent (IBD) network analyses and collaborations integrating genetic data with social and cultural understandings of kinship have emerged (e.g. Gnecci-Ruscone et al. 2024; Wang et al. 2025), and these studies demonstrate how archaeogenetics is evolving to address many of the very concerns the authors raise.

In Chapter 3, *Past Pathogens and Precarious Futures*, Venla Oikkonen examines how the study of ancient pathogens is entangled with culturally and politically charged imaginaries. Oikkonen focuses on how narratives of risk and vulnerability are constructed through the scientific and public framing of pathogen aDNA research. While this offers an interesting humanities-based perspective on the symbolic dimensions of science, the chapter blurs the line between speculative cultural discourse and real-world biosecurity risks. Scenarios such as the reawakening of pathogens from thawing permafrost are presented with limited differentiation from actual scientific debates, and the core aim seems to be a critique of how science is used to express collective anxieties about contamination, control, and the future. However, the chapter would have benefited from a more grounded engagement with the current aims, methods, and limitations of ancient pathogen research, especially given the increasingly cautious and reflective approach of many practitioners in the field.

Chapter 4, *Twisting Strings: Hopi Ancestors and Ancient DNA* by Stewart B. Koyiyumptewa and Chip Colwell, is an excellent contribution. The authors offer a nuanced comparison between Hopi notions of kinship and genetic ancestry frameworks employed in archaeogenetics. They argue convincingly that for communities like the Hopi, identity and belonging are culturally constructed and cannot be reduced to genomic affinity. The chapter presents a strong case for archaeogenetic research to engage thoughtfully with Indigenous epistemologies and to acknowledge that genetic data is only one strand in a much larger narrative. Koyiyumptewa, writing from within the Hopi community, and Colwell raise important concerns around biocolonialism, drawing attention to how states have at times used genomic findings to undermine Indigenous sovereignty. Their central message is clear: ancient DNA research must be conducted collaboratively, with clear

benefits to descendant communities, rather than simply seeking to confirm cultural histories that Indigenous people already understand through their own traditions.

Chapter 5, *Whitewashing the Neanderthal: Doing Time with Ancient DNA* by Amade M'charek is another valuable contribution. The chapter provides an insightful analysis of how visual and rhetorical representations of ancient hominins, particularly Neanderthals, can perpetuate racialized and Eurocentric conceptions of human evolution. M'charek notes that Neanderthals are commonly depicted as white, contrasting them with darker-skinned, more 'primitive' African ancestors. This reflects a deeper, often unconscious tendency to associate progress and modernity with whiteness and Europe. A particularly compelling example is the Neanderthal Museum's postcard *Werde Teil der Menschenfamilie*, in which the visual arrangement places light-skinned individuals as the culmination of humanity. M'charek places this pattern within a broader critique of Enlightenment-era scientific frameworks and colonial legacies that have shaped genetics and anthropology. By highlighting how skin colour can become a gatekeeper of historical belonging, where individuals can only identify with the past if it visually resembles them, the chapter warns of the dangers of superficial identification and the erasure of diversity in human history. Rather than reinforcing narrow phenotypically-based notions of our ancestors, ancient DNA research should highlight the cultural, social, and lived complexity across time and space.

Chapter 6, *The Lagertha Complex* by Andreas Nyblom, critically examines the media reception of the 'Birka female warrior' aDNA study (Hedenstierna-Jonson et al. 2017) and cautions against speculative narratives in public discussions of aDNA research. While the chapter raises valid concerns about sensationalism in popular science communication, it occasionally overstates the role of researchers in shaping media narratives. Some criticism of the research team borders on personal, and the chapter lacks comparative examples that could have contextualized its claims. For example, the research on the Suontaka grave (Moilanen et al. 2022 [available online in 2021]), another case involving contested gender identity and extensive international media coverage, is conspicuously absent. Including additional examples would have allowed for a more balanced discussion of how media portrayals vary across studies and how researchers can influence, and on the other hand, lose control of public interpretation. This loss of control over narratives can occur even when researchers act responsibly and communicate their findings with care, as media can shape interpretations in ways that diverge from the original intent.

Chapter 7, *Ancient DNA and the Politics of Ethnicity in Neo-Nationalist China* by Magnus Fiskesjö, shifts focus from media reception to the delib-

erate instrumentalization of archaeogenetic research by state actors. The chapter is an important account of how aDNA research can be co-opted for nationalist and authoritarian agendas. Focusing on contemporary China, Fiskesjö outlines how genetic narratives are selectively appropriated to delegitimize minority groups like the Uyghurs. While the chapter powerfully illustrates the dangers of scientific findings being mobilized to justify state violence, one passage (p. 147), in which prehistoric interactions are described using phrases such as Denisovans ‘moving in to sleep with the natives’ and ‘packing their bags to move across the landscape’ strikes as an oddly flippant tone in an otherwise serious analysis. Importantly, the way Fiskesjö’s chapter is presented in the book’s introduction (suggesting that no distinction can be made between geneticists and political actors) risks misrepresenting the chapter’s careful treatment of the constraints under which many scientists operate, particularly in politically oppressive environments. Although focused on China, the chapter’s warnings are globally relevant. Recent studies have shown that archaeogenetic narratives, particularly those related to migration and ancestry, are increasingly appropriated by far-right actors to support exclusionary and racialized notions of identity (Frieman & Hofmann 2019; Hakenbeck 2019). This reminds researchers to be aware of how their findings may be interpreted or misused in politicized contexts, both within and beyond academia.

The volume ends with K. Ann Horsburgh’s concluding commentary, which reiterates many of the book’s key concerns, calling for truly interdisciplinary collaboration and critical reflection in aDNA research. Her emphasis on listening to archaeologists and heritage professionals is well-founded, but her language occasionally generalizes the motivations and epistemic positions of geneticists. Terms like ‘molecular chauvinism’ imply that geneticists uniformly disregard the humanities, a claim that does not do justice to the diversity of researchers in the field. Also, the inclusion of discussion on direct-to-consumer genetic testing companies feels somewhat misplaced in a volume dedicated to ancient DNA. While these companies also reflect public interest in ancestry and genetics, conflating these distinct domains may obscure rather than clarify the responsibilities and practices of academic researchers. It is essential to distinguish between media representations, consumer genomics, and peer-reviewed archaeogenetics. This complexity merits a calibrated discussion, one that recognizes both the pitfalls and potential of aDNA research when conducted in mutual respect across disciplinary boundaries.

Overall, the volume is a welcome contribution to the broader conversation around ethics, interpretation, and interdisciplinary collaboration in archaeogenetics. Despite its occasionally uneven tone, it raises important questions that merit careful reflection. Researchers in archaeogenetics, espe-

cially those early in their careers, would benefit from reading and reflecting on these critiques. Even though criticism that focuses only on problems without acknowledging strengths risks polarization rather than dialogue, the concerns raised in the book should be taken seriously by all those involved in aDNA research, from project design to public communication.

References

- Barton, A.R., Santander, C.G., Skoglund, P., Moltke, I., Reich, D. & Mathieson, I. 2025. Insufficient Evidence for Natural Selection Associated with the Black Death. *Nature*. Vol. 638, pp. E19–E22, doi:10.1038/s41586-024-08496-5
- Chevy, E.T., Huerta-Sánchez, E. & Ramachandran, S. 2024. Integrating Sex-Bias into Studies of Archaic Introgression on Chromosome X. *PLoS Genetics*, doi:10.1371/journal.pgen.1010399.
- Crellin R.J. & Harris, O.J.T. 2020. Beyond binaries. Interrogating ancient DNA. *Archaeological Dialogues*. Vol. 27(1), pp. 37–56, doi:10.1017/S1380203820000082.
- Durvasula, A. & Sankararaman, S. 2020. Recovering Signals of Ghost Archaic Introgression in African Populations. *Science Advances*. Vol. 6, eaax5097, doi:10.1126/sciadv.aax5097.
- First Rider, D., Crop Eared Wolf [...] Lindo, J. & Malhi, R.S. 2024. Genomic Analyses Correspond with Deep Persistence of Peoples of Blackfoot Confederacy from Glacial Times. *Science Advances*. Vol. 10(14), doi:10.1126/sciadv.adl6595.
- Fleskes, R.E., Cabana, G.S. [...] Ofunniyin, A.A. & Schurr, T.G. 2023. Community-Engaged Ancient DNA Project Reveals Diverse Origins of 18th-Century African Descendants in Charleston, South Carolina. *PNAS*. Vol. 120(3): e2201620120, doi:10.1073/pnas.2201620120.
- Frieman, C.J. & Hofmann, D. 2019. Present Pasts in the Archaeology of Genetics, Identity, and Migration in Europe: A Critical Essay. *World Archaeology*. Vol. 51(4), pp. 528–545, doi:10.1080/00438243.2019.1627907.
- Gnecchi-Ruscione, G.A., Rácz, Z. [...] Krause, J. & Hofmanová, Z. 2024. Network of Large Pedigrees Reveals Social Practices of Avar Communities. *Nature*. Vol. 629, pp. 376–383, doi:10.1038/s41586-024-07312-4.
- Gregoricka, L.A. 2021. Moving Forward: A Bioarchaeology of Mobility and Migration. *Journal of Archaeological Research*. Vol. 29, pp. 581–635, doi:10.1007/s10814-020-09155-9.
- Hakenbeck, S.E. 2019. Genetics, Archaeology and the Far Right: An Unholy Trinity. *World Archaeology*. Vol. 51(4), pp. 517–527, doi:10.1080/00438243.2019.1617189.
- Hedenstierna-Jonson, C., Kjellström, A. [...] Götherström, A. & Storå, J. 2017. A Female Viking Warrior Confirmed by Genomics. *American Journal of Physical Anthropology*. Vol. 164, pp. 853–860, doi:10.1002/ajpa.23308.
- Heggarty, P. 2018. Indo-European and the Ancient DNA Revolution. In: Kroonen, G., Mallory, J.P. & Comrie, B. (eds), *Talking Neolithic: Proceedings of the Workshop on Indo-European Origins Held at the Max Planck Institute for Evolutionary Anthropology, Leipzig, December 2–3, 2013*, pp. 120–173. Washington, D.C.: Institute for the Study of Man.

- Klunk, J., Vilgalys, T.P. [...] Poinar, H.N. & Barreiro, L.B. 2022. Evolution of Immune Genes Is Associated with the Black Death. *Nature*. Vol. 611, pp. 312–319, doi:10.1038/s41586-022-05349-x.
- Kristiansen, K. 2022. *Archaeology and the Genetic Revolution in European Prehistory*. Cambridge: Cambridge University Press.
- Matisoo-Smith, L. & Horsburgh, K.A. 2016. *DNA for Archaeologists*. London: Routledge.
- Moilanen, U., Kirkinen, T. [...] Onkamo, P. & Salmela, E. 2022. A Woman with a Sword? Weapon Grave at Suontaka Vesitorninmäki, Finland. *European Journal of Archaeology*. Vol. 25(1), pp. 42–60, doi:10.1017/ea.2021.30.
- Moltke, I., Korneliusen, T.S. [...] Billeck, W. & Willerslev, E. 2021. Identifying a Living Great-Grandson of the Lakota Sioux Leader Tatanka Iyotake (Sitting Bull). *Science Advances*. Vol. 7(44): eabh2013, doi:10.1126/sciadv.abh2013.
- Pohl, W., Krause, J., Vida, T. & Geary, P. 2021. Integrating Genetic, Archaeological, and Historical Perspectives on Eastern Central Europe, 400–900 AD: Brief Description of the ERC Synergy Grant – HistoGenes 856453. *Historical Studies on Central Europe*. Vol. 1(1): 213–228, doi:10.47074/HSC.2021-1.09.
- Teixeira, J.C., Jacobs, G.S. [...] Cooper, A. & Helgen, K.M. 2021. Widespread Denisovan Ancestry in Island Southeast Asia but No Evidence of Substantial Super-Archaic Hominin Admixture. *Nature Ecology & Evolution*. Vol. 5, pp. 616–624, doi:10.1038/s41559-021-01408-0.
- Vilgalys, T.P., Klunk, J. [...] Poinar, H.N. & Barreiro, L.B. 2025. Reply to: Insufficient Evidence for Natural Selection Associated with the Black Death. *Nature*. Vol. 638, E23–E29, doi:10.1038/s41586-024-08497-4.
- Wang, K., Tobias, B. [...] Krause, J. & Hofmanová, Z. 2025. Ancient DNA Reveals Reproductive Barrier Despite Shared Avar-Period Culture. *Nature*. Vol. 638, pp. 1007–1014, doi:10.1038/s41586-024-08418-5.

Ulrika Söderström

*Kulturarv som resurs i socialt hållbar
stadsutveckling: En gestaltad livsmiljö för
framtiden*

*(Cultural Heritage as a Resource in Socially
Sustainable Urban Development: A Designed
Living Environment for the Future)*

Doctoral dissertation in Archaeology
Department of Archaeology, Linnaeus University
Dissertations No 537/2024
Linnaeus University Press
Växjö 2024
340 pages
ISBN: 978-91-8082-189-6 (print)
ISBN: 978-91-8082-190-2 (pdf)

Reviewed by Bodil Axelsson

Ulrika Söderström's thesis is situated at the intersection of cultural heritage and urban planning. It explores how contract archaeology can contribute to the creation of sustainable future cities – something that is not (yet) happening on a significant scale. The thesis can therefore be said to examine a phenomenon through its absence, and consequently more general claims on heritage are a key research interest of the thesis. The relationship between

Department of Culture and Society, Linköping University, Sweden
bodil.axelsson@liu.se

This is an Open Access article distributed under the terms of the Creative Commons 4.0 International licence (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

heritage and socially sustainable cities is examined both retrospectively, and to some extent speculatively, exploring ‘future consciousness’.

The thesis’ research context is heritage conventions and practices, as well as relevant international heritage research. From this sounding board, Söderström emphasizes the difficulties of achieving democratic participation and conceptualization sustainability. To investigate these challenges, Söderström develops a multi-theoretical analytical framework. First, social sustainability is defined as the creation of socially just cities, including equal rights to public space, recognition and preservation of diversity, and democratic participation in the management of common resources. To analyze participation, Söderström draws on Arnstein’s (1969) ‘ladder of citizen participation’, a theory that provide a way of assessing participation, rather than explaining it. The third theoretical framework modifies Smith’s (2006) theory of authorised heritage discourse (AHD) and adds institutional theory. Convincingly, the author argues, following Pendlebury (2013), that heritage discourses vary even within heritage management, and that versions of AHD are also practiced by urban planners and policy makers. Understanding the institutions involved therefore requires accounting for actions informed by laws and regulations, as well as professional norms, values and shared beliefs. The final theoretical underpinning comes from the field of futures studies. Future literacy, according to this perspective, can create an understanding of how decisions, actions and developments today will affect the future. When implemented as future awareness, future literacy provides opportunities to test alternative decisions and adjust established courses of action to mitigate the risks of failure and unexpected challenges.

The first two empirical chapters set the scene for three case studies. Chapter five analyzes documents to show the ways in which heritage management is intertwined with a range of policy areas. The analysis also looks at the recent Swedish policy on architecture, form and design (Regeringskansliet 2018, Prop. 2017/18:110), and its potential positive impact. Chapter six approaches urban planning through a survey of public servants in urban planning offices in 19 municipalities and interviews with four public servants in this area in three municipalities.

The following chapters (7–9) deal with three very different cases that beneficially shed light on the aim of the thesis. In the Caroli district of Malmö, old buildings were demolished and redeveloped in the late 1960s in a top-down process guided by the norms of modernization. Today, efforts are being made to create an attractive living space by making use of the remaining heritage. But according to Söderström, the futures envisioned both then and now seems to have been already squandered. The second case study is the block Valnötsträdet in Kalmar. Here there are two legacies: archaeological excavations of medieval remains and hospital build-

ings from the late nineteenth century. The redevelopment of the latter has contributed to the gentrification of the area. The former resulted in a public art installation in support of Kalmar's preferred medieval identity.

The third case study is Kiruna, a city well known for the ongoing relocation caused by the activities of the mining company LKAB. Here it seems difficult to imagine a future that is not determined by mining. Söderström emphasizes how the built environment from the early mining days, the 'model town', has been chosen to represent memory and identity. As a result, the process tends to exclude both the views of the Sami population, and the intangible 'spirit of Kiruna'. Two recent archaeological investigations of the area before the mining town was built were also not taken into account in the planning process. Söderström acknowledges the artistic and architectural design of the Mining Town Parks, a recreational area with temporary installations. In particular, the design of a dismantled building block Ullspiran bridges the past and the future, and is discussed in terms of Caitlin DeSilvey's (2017) concept of 'palliative cultural heritage practices'.

In the conclusion, Södergren emphasizes the contradictory relationship between the Cultural Heritage Act's focus on the preservation of the built heritage and the forward-looking objectives of the Planning and Building Act. The implementation of the former often leads to normative practices that lock in the value of heritage in ways that may not support social sustainability. Participation of the public in urban planning processes is not yet taken for granted. Current practices seem to be based on an understanding of preferred pasts and futures chosen by institutions. Enduring heritage values such as belonging and community are widely recognized, but can also lead to socially unsustainable gentrification. Without taking into account lived experiences and developing future literacies, heritage values risk closing off equitable futures.

Söderström's thesis is written within the Graduate School in Contract Archaeology (GRASCA) at Linnéus University. It relies on a pragmatic mix of methods and materials. However, the use of social science methods in a context of archaeology raises some questions about travelling methods. The concept of triangulation is invoked as a way of validating the sources. But, in the case studies, it seems to me that the sources are used for different purposes. And in the case of Kiruna, there are at least a couple of studies that could have nuanced the conclusions regarding the positive response to the design of the dismantled building block Ullspiran (Boyd 2023), or the public conception of the planning process (López 2021). If this had been a social science thesis, one would also have expected a discussion of the representativeness of the two web surveys and the interviews.

That said, the many qualities of this thesis outweigh these methodological remarks. Its structure is clear, the text is easy to read and well argued.

The analytical framework serves its purpose throughout the work, and Söderström makes productive use of her diverse material. The extensive analyses of official documents such as government investigations, legal texts, policies and guidelines are impressive. The selection of cases is highly beneficial, and the case studies emerge as analytically sound, compelling narratives. There are also some interesting discussions on the role of design for conveying heritage that could be developed in future research. Overall, the thesis argues for more socially inclusive, participatory, future-aware planning processes, including archaeology and design, and offers its analytical model as a tool to achieve this goal.

References

- Arnstein, S.R. 1969. A Ladder of Citizen Participation. *Journal of the American Institute of Planners*. Vol. 35(4), pp. 216–224.
- Boyd, E. 2023. Memorialisation and its Denial: Slow Resistance through Derealisation in Kiruna, Sweden. *Journal of Political Power*. Vol. 16(2), pp. 158–176, doi:10.1080/2158379X.2023.2251110.
- López, E.M. 2021. *Transforming Kiruna: Producing Space, Society, and Legacies of Inequality in the Swedish Ore Fields*. Uppsala Studies in Cultural Anthropology, 62. Uppsala: Acta Universitatis Upsaliensis.
- Pendlebury, J. 2013. Conservation Values, the Authorised Heritage Discourse and the Conservation-Planning Assemblage. *International Journal of Heritage Studies*. Vol. 19(7), pp. 709–727, doi:10.1080/13527258.2012.700282.
- Regeringskansliet. 2018. *Politik för gestaltad livsmiljö*. Prop. 2017/18:110. <https://www.regeringen.se/rattsliga-dokument/proposition/2018/02/prop.-201718110> (Accessed: 15 December 2025).
- Smith, L. 2006. *Uses of Heritage*. New York: Routledge.

Ostlänken – Scientific Coordination

Göran Gruber¹, Magnus Johansson² & Tom Carlsson³

This notice accounts for the scientific coordination of the archaeological project “Ostlänken”. On 7 June 2018, the Swedish government granted the Swedish Transport Administration (*Sw. Trafikverket*) permission to build *Ostlänken*, a new 160-kilometer double-track railway between Järna and Linköping in the southeast of Sweden (Regeringsbeslut 2018). The railway passes through three counties – Stockholm, Södermanland, and Östergötland – and five municipalities: Södertälje, Trosa, Nyköping, Norrköping, and Linköping (Figure 1). *Ostlänken* is built to enable sustainable transport, increase passenger train capacity, reduce travel times, and contribute to regional expansion. The railway is planned to open in 2035, with an estimated cost of SEK 110.3 billion (price level 2025).

Approximately 700 archaeological sites are directly or indirectly affected by *Ostlänken*. It is well established that large-scale linear projects, such as *Ostlänken*, offer enormous scientific potential for archaeology as well as other disciplines, both at regional and national levels. Some early indications of this potential emerged during the initial archaeological investigations, called Step 2, which began in 2015 (Figures 2–4). Among other findings, a previously unknown Stone Age landscape was discovered along the Mesolithic archipelago between the cities of Norrköping and Linköping. Bäckeby, a site south of Norrköping, is one such cultural environment that

1 Trafikverket, Sweden
goran.gruber@trafikverket.se

2 Trafikverket, Sweden
magnus.r.johansson@trafikverket.se

3 Arkeologerna, SHM, Sweden
tom.carlsson@arkeologerna.com

This is an Open Access article distributed under the terms of the Creative Commons 4.0 International licence (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.



Figure 1. The stretch of Ostlänken. Map: Trafikverket.

during the Early Stone Age was an island with multiple settlement locations (Sjölin & Westermark 2019).

Kardonbanan and Godsbangården in Norrköping are side systems to *Ostlänken*, and have already been completed. Extensive archaeological investigations were conducted in preparation for these two projects, including studies of the settlement at Ströja, which revealed Vendel Period hall buildings and finds of golden foil figures (so called “guldgubbar”) (Arkeologikonsult). Additionally, the Late Iron Age cemetery at Bådstorp was investigated – one of the few fully excavated cemeteries from this period in the region (Seiler & Sjölin 2022).

System-critical?

Managing this large number of archaeological sites is a challenge. Against this background, the Swedish National Heritage Board (*Sw. Riksantikvarieämbetet*) analysed how the contract archaeology system might be affected by *Ostlänken* (RAÄ 2020). The report concludes that *Ostlänken*'s scale risks creating time pressure and heavy workloads for archaeology officers at county boards, which may reduce decision quality and thus affect the scientific quality of investigations. The Board calls for coordina-



Figure 2. Mesolithic axe finds from the site at Bäckeby, between Norrköping and Linköping. Photo: Arkeologerna.

tion of the scientific issues. Without such coordination, there is a risk that the production of new knowledge about prehistory and history from *Ost-länken* may be limited. A weak influx of new knowledge in such a costly infrastructure project could lead to questioning the contract archaeology system in its current form (RAÄ 2020).

When it comes to the contract archaeology system's role in generating new relevant knowledge, a formal responsibility lies with the county administrative boards. At the same time, this responsibility concerns the entire archaeological sector.

Coordination

In the early 2020s, the county administrative boards of Östergötland and Södermanland produced regional knowledge bases for the Stone Age, Bronze Age, and Iron Age (Hallgren & Molin 2020 ms; Eriksson 2023; Hällans et al. 2023). In 2021, the three affected county boards – Stockholm,

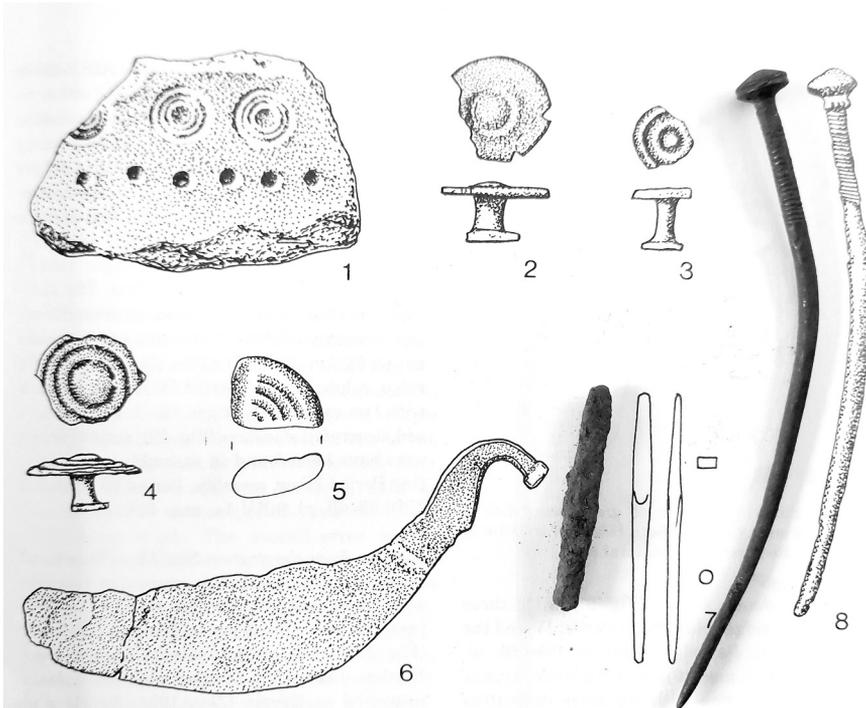


Fig. 9. Hallunda (Sites 13 and 69). Datable artifacts from the occupation debris. Natural size. 1, 69:400680; pottery sherd with a burnished surface, decoration stamped with a button. 2, 13:319561 (Find 517); bronze double button. 3, 69:440639 (Find 418); bronze double button. 4, 69:409646 (Find 124); bronze double button. 5, 69:414633 (Find 107); fragment of a clay mould for casting a bronze button (*Rapport III*, fig. 20:F107); 6, 69:448767 (Find 29); bronze razor. 7, 69:414630 (Find 232); bronze awl. 8, 69:377665 (Find 113); bronze pin.

Figure 3. Finds from the settlement/burial ground at Rogsta, Nyköping. A similar bronze pin was found during an excavation in Hallunda, south of Stockholm. Photo: Trafikverket.

Södermanland, and Östergötland – jointly decided that *Ostlänken* should be treated as one project rather than three separate county projects. This decision enables cross-county decision-making according to the Swedish Cultural Heritage Act (KML). In 2022, the county administrative boards jointly decided that a scientific coordinator was needed for the archaeology along the *Ostlänken* project. Initially, Dr. Fredrik Andersson compiled a report (2023) on behalf of the county boards, which called for concrete, cohesive, and realistically feasible archaeological themes, including related research questions as well as methodological and analytical choices.

Based on Andersson's report, which argued that scientific themes provide a viable path to good and sustainable science, a scientific coordinator was appointed on January 1, 2025. The work of this coordinator initially runs for one year and is funded by Trafikverket. The project includes a full-time coordination position and funding for meetings of five different forum groups. These groups are primarily divided chronologically: Stone



Figure 4. Preliminary archaeological investigation of burial mounds at Bönsta outside Nyköping. Photo: Trafikverket.

Age, Bronze Age, Iron Age, Historical Period. There is also a documentation forum group that develops proposals aimed at making documentation more consistent across archaeological actors.

The choice to work with forum groups, whose participants include archaeologists from both contract archaeology and universities, allows some 40 researchers to participate in shaping the direction of the scientific work. This creates both breadth and depth in the scientific questions addressed. In brief, the various themes developed will be used by county board officers when drafting requests for proposals for upcoming investigations and procurements, by archaeological firms in designing investigation plans, in reports, and in future in-depth studies. Naturally, this approach also contains flexibility to accommodate unexpected results as well as the individual investigator's creativity in formulating new questions that can lead to good and sustainable knowledge.

Abbreviations

RAÄ = Riksantikvarieämbetet; Swedish National Heritage Board

SHMM = Statens Historiska Museer; National Historical Museums

References

- Andersson, F. 2023. *Underlag till vetenskapligt program. Inför arkeologiska undersökningar längs Ostlänken*. Rapport 2023:5. Nyköping: Länsstyrelsen i Södermanlands län.
- Arkeologikonsult. n.d. *Sensationella arkeologiska fynd av en centralplats i Ströja i Östergötland Ströja*. <https://www.arkeologikonsult.se/aktuella-projekt/stroeja>. Checked 2025-12-04.
- Eriksson, T. 2023. *Kunskapsunderlag för bronsålder i sydöstra Södermanland*. Rapport 2023:1. Nyköping: Länsstyrelsen Södermanlands län.
- Hållans, A-M, Peterson, M. & Seiler, A. 2023. *Kunskapsunderlag Ostlänken. Järnåldersboplatser i åkermark och järnåldersgravfält*. Rapport 2023:19. Nyköping: Länsstyrelsen i Södermanlands län.
- Seiler, A. & Sjöling, M. 2022. *Gravar och gårdsmiljöer vid Bådstorp*. Arkeologisk undersökning Rapport 2022:3. Stockholm: Arkeologerna, SHMM.
- Sjölin, M. & Westermark, A. 2019. *Ostlänken delsträckorna Bäckeby till Fredrikslund och Fredrikslund till Göta kanal*. Arkeologisk utredning, etapp 2. Rapport 2019:18. Stockholm: Arkeologerna, SHMM.

UNPUBLISHED SOURCES

- Hallgren, F. & Molin, F. Ms. 2020. *Kunskapsunderlag om Mesolitikum i Östergötlands län*. Länsstyrelsen Östergötland.
- RAÄ 2020. PM. *Hur kan det uppdragsarkeologiska systemet påverkas av Ostlänken?* Case number RAÄ-2020-843.
- Regeringsbeslut [Decision of the Swedish Government]. 2018. Miljö- och energidepartementet. Case number: M2015/03829/Me.

Ostlänken – Communication Efforts

Göran Gruber¹ & Magnus Johansson²

The government emphasizes the importance of Trafikverket [...] working to communicate archaeological results to promote understanding of historical traces and fulfill national cultural heritage goals (Regeringsbeslut 2018).

This notice accounts for the communication efforts within the archaeological project “Ostlänken”. The new railway, *Ostlänken*, directly or indirectly affects approximately 700 archaeological sites. Against this background, Trafikverket early on identified a range of challenges, including practical, logistical, and formal decision-making processes. As noted by the Swedish National Heritage Board, *Ostlänken* challenges the contract archaeology system. To ease the workload and facilitate the work of county administrative boards’ case officers and archaeological companies, Trafikverket established an internal Archaeology Project in 2020. The project acts as a link between construction contractors’ schedules and the administrative processes of the county boards, while improving accessibility and logistics for archaeologists working in the field.

In the government’s permit decision for *Ostlänken*, public communication efforts from Trafikverket regarding archaeological findings are requested. Based on this, the *Ostlänken* Archaeology Project focuses on two main communication efforts: measures to strengthen cultural heritage and traditional public communication.

¹ Trafikverket, Sweden
goran.gruber@trafikverket.se

² Trafikverket, Sweden
magnus.r.johansson@trafikverket.se

This is an Open Access article distributed under the terms of the Creative Commons 4.0 International licence (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

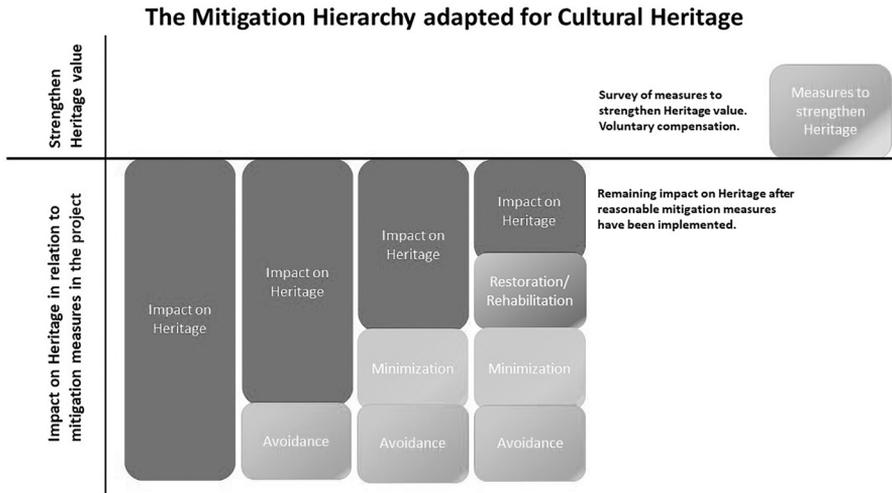


Figure 1. Damage Mitigation Hierarchy. Illustration: Trafikverket.

Measures to Strengthen Cultural Heritage

New transport projects impact cultural heritage, including ancient monuments. To counter this, Trafikverket follows the Damage Mitigation Hierarchy (Figure 1) during railway location, route alignment, design, and detailed planning. The aim is to avoid, minimize, and restore impacts on cultural heritage. Directly affected ancient monuments are managed according to the Cultural Heritage Act and contract archaeology system. Beyond legal obligations, Trafikverket voluntarily carries out measures to strengthen cultural heritage, easing the debt caused by infrastructure (Trafikverket 2019).

These measures differ from nature-sector compensations (e.g., species protection) and are not legally required except within cultural reserves or permit/environment rulings. Methods include (Toreld et al. 2023):

- Restoring and recreating (functions, connections, or values)
- Making accessible (enhancing values near affected areas)
- Making visible (information campaigns and physical actions)
- Improving or developing (creating or strengthening functions or values)

Studies indicate these measures can promote sustainable, inclusive perspectives and add value by making environments more accessible. This requires shifting from an object- or environment-focused approach to a more people-centred perspective (Holtorf & Smits 2023).



Figure 2. StoryMap, Ostlänken – Stories about Cultural Heritage. Website: Trafikverket.



StoryMap

Within Ostlänken, cultural heritage strengthening is still early, and mainly focused on creating an interactive StoryMap (Figure 2). The Map highlights cultural heritage and archaeological work directly affected by Ostlänken's land use, plus cultural heritage near its route. This is done through short texts, images, and videos. Updates occur twice yearly but will become more frequent, including presentations of ongoing excavations. By way of writing, the StoryMap holds about 130 stories/sites and has had 11,000 visitors since February 2024.

Participatory Archaeology

In central Norrköping, the old Vulkan industrial block, partly affected by Ostlänken, housed AB International Harvester, known for agricultural machinery. Near the factory, housing and a consumer cooperative store for workers were built early in the 1900s, but was demolished in the 1970s. As part of strengthening cultural heritage's position in society, a small public

participatory excavation of these remains is planned (Sabel, 2025). Since the remains date to after the year 1850, they are not regulated by the Cultural Heritage Act. Map and archive studies are also ongoing. The goal here is a popular science publication, highlighting the area and industry from the perspective of employees and families.

Traditional Public Communication

Trafikverket's other communication work for Ostlänken involves traditional communication of archaeological investigations and results through web news, lectures, exhibitions, short social media films, and more.

At the same time, public activities are held by contract archaeology firms following county administrative boards' decisions under Chapter 2 of the Cultural Heritage Act. Currently, there is no coordination among the county boards for public communication as there is for scientific research. Instead, each archaeological firm carries out its own efforts per ancient monument or investigation. Perhaps Trafikverket's StoryMap can assist the county boards in coordinating public archaeology communication in the future?

References

- Holtorf, C. & Smits, V. 2023. *Kulturmiljöstärkande åtgärder i transportinfrastrukturprojekt*. En förstudie för Trafikverket, Rapport. Kalmar: Linnéuniversitetet.
- Ostlänken. 2025. *Ostlänken: Berättelser om kulturmiljöer*. <https://gis.trafikverket.se/portal/apps/storymaps/stories/2e69b68623294455b1d8a03efb48104c> [Accessed 20 December 2025].
- Sabel, E. 2025. *Deltagande Arkeologi*. Växjö: Linnaeus University Press. Diss.
- Toreld, C., Claesson, P., Ottander, J., Blom, K. & Synnestvedt, A. 2023. *En mångkulturell kulturmiljö tillgänglig för alla: Vägledande strategi för kulturmiljöstärkande åtgärder*. Förstudierapport. Uddevalla: Bohusläns museum.
- Trafikverket. 2019. *Trafikverkets kulturmiljöstrategi*. Publikationsnummer: 2019:188; published electronically 2019-11-22. <https://trafikverket.diva-portal.org/smash/get/diva2:1372257/FULLTEXT01.pdf> [Accessed 4 December 2025].

UNPUBLISHED SOURCE

- Regeringsbeslut [Decision of the Swedish Government]. 2018. Miljö- och energidepartementet. Case number: M2015/03829/Me.

