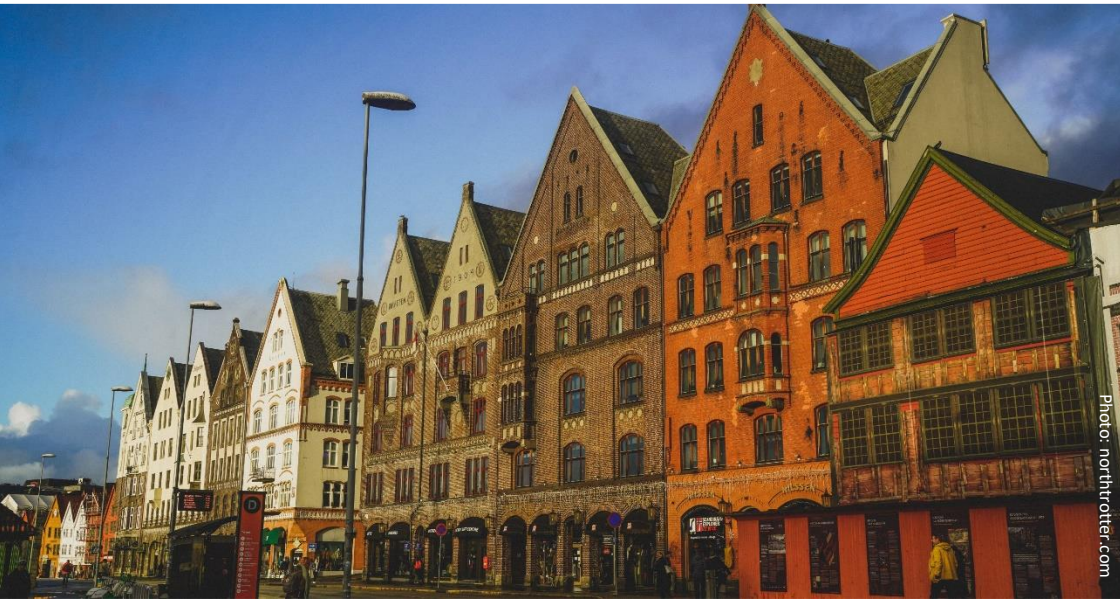
Human Agency and Global Challenges

Re-Centering Social Change in Archaeology



How does change happen? What role do human relationships and decisions play? Are societal changes only generated by external and uncontrollable large-scale events that predict certain types of inevitable trajectories, or do they on the contrary result from small-scale decisions and interactions between multiple and different human and non-human actors?
This conference offers a platform for scholars of all theoretical persuasions to discuss these questions together.

Dates: 15th to 17th of September 2022

Venue: Auditorium, Bryggen Museum

BYMUSEET. BRYGGENS MUSEUM

L. MELTZERS HØYSKOLEFOND

UNIVERSITAS BERGENSIS

Conference programme

Thursday 15th September

13:00–13:15 Welcome

13:15–16:15 **Block 1: Resilience and Adaptation I**

13:15–13:45 **Keynote Lecture:** *Mads Dengsø Jessen (National Museum of Denmark)*: *"Resilience and Breakpoints - Exploring linkages between societal, agricultural and climatic changes in Iron Age Denmark".*

13:45–14:00 *Caroline Heitz (University of Bern)*: Theorizing resilience and vulnerability for social archaeology – First thoughts

14:00–14:15 *Astrid J. Nyland, James Walker, Håvard Kilhavn (University of Stavanger)*: Vulnerable vs. resilient coastal societies in Mesolithic Norway? Or how to discover the social impacts of the Storegga tsunami 8200 years ago

14:15–14:30 *Jan Turek, Petr Krištuf (Charles University, Prague; University of West Bohemia, Pilsen)*: The tradition and palimpsest of Neolithic ancestral monuments in the ritual landscapes of Bohemia

14:30–15:00 Coffee break

15:00–15:15 *Victor Lundström, Knut Andreas Bergsvik (University Museum of Bergen)*: Continuity and change at the Mesolithic-Neolithic transition: Insights gained from prehistoric demography and cultural evolution

15:15–15:30 *Rosie R. Bishop, Darren R. Gröcke, Mike J. Church (University of Stavanger and University of Durham)*: Resilience and adaptation of cultivation strategies in Neolithic Scotland

15:30–15:45 *Zarko Tankosic, Paschalis Zafeiriadis (Department of Anthropology, Indiana University Bloomington and The Norwegian Institute at Athens)*: Embracing insularity: Cycl(ad)ic social changes in Final Neolithic Greece

15:45–16:15 Discussion

16:15–16:30 Break

16:30–17:15 **General keynote lecture:** *Kristina Sessa (Ohio State University)*: The concept of disaster in historical perspective: Meanings and material evidence

17:15–18:00 **General keynote lecture:** *Marianne Hem Eriksen (University of Leicester)*: Change, politics and the body: Intimate histories on multiple scales

From 18:00 Wine reception

Friday 16th September

09:00–12:00 **Block 2: Resilience and Adaptation II**

09:00–09:15 *Arne Anderson Stamnes (NTNU Trondheim)*: The PastCoast-project. Interdisciplinary methodical approaches to the study of resilience in prehistoric marine coastal environments

09:15–09:30 *Christina Leverkus (Midgard Vikingsenter)*: Grave Developments – a chronological review of social changes at Borre

09:30–09:45 *Simon Malmberg (University of Bergen)*: The city of Rome as a case study in urban resilience, vulnerability and sustainability

09:45–10:00 *Christina Videbech (University of Bergen)*: How the dove saved the eagle's nest. Christian activities and the resilience of the Forum Romanum during the 4th to the 6th century

10:00–10:15 Discussion

10:15–11:00 Coffee break

11:00–11:15 *Marie Ødegaard (University of Stavanger)*: To arms! Viking war and military preparedness

11:15–11:30 *Meinrad Pohl (Western Norway University of Applied Sciences)*: Medieval tuff stone churches: Indicators of continuity in worship and response to change?

11:30–11:45 *Sigrid Samset Mygland (Bymuseet i Bergen)*: Change or continuity? Women and gender at medieval Bryggen

11:45–12:00 Discussion

12:00–13:00 Lunch

13:00–17:00 **Block 3: Trajectories to/from inequality**

13:00–13:30 **Keynote lecture:** *Leonardo García Sanjuán, Marta Cintas Peña (University of Seville)*: Dawning Inequalities. Social Dissymmetries, Big Men (and Women) and the sources of power in Late Neolithic and Copper Age Iberia (c. 4200-2200 cal BC)

13:30–13:45 *Charlotte Brysting Damm (Arctic University of Norway)*: Being fluid, dividual and multiple: why stratification is hard amongst small-scale foragers

13:45–14:00 *Axel Mjærum, Anette Sand-Eriksen (University of Oslo)*: Late Neolithic and Early Bronze Age agricultural developments in the Oslo Fjord area, Norway

14:00–14:15 Discussion

14:15–15:00 Coffee break

15:00–15:15 *Hallvard Bruvoll (University of Oslo)*: Towards fine-grained temporal dynamics of social inequality in the Early Neolithic

15:15–15:30 *Daniela Hofmann (University of Bergen), Marton Szilágyi, Gisela Grupe, Franziska Schreil, Anna Perutka, Britta Ramminger, Markus Helfert, Nicole Kegler-Graiewski*: King for a day? Mobility and hierarchy at the enclosure of Riedling, southern Bavaria

15:30–15:45 *Andreas Ropeid Sæbø (Independent researcher)*: Hundorp: the agency of a chief or the anxiety of the commons?

15:45–16:00 *Kjetil Loftsgarden (University of Oslo)*: The wonderful 7th century

16:00–16:15 *Lars Erik Gjerpe (University of Oslo)*: Viking Age Vestfold – a society against the state?

16:15–16:30 *Gitte Hansen (University Museum of Bergen):* New neighbours in town. Keeping up with the Joneses? Communication, consensus and town life in early Bergen

16:30–17:00 Discussion

19:00 Speakers' dinner at Fløien Folkerestaurant

Saturday 17th September

09:00–12:15 **Block 4: Rapid change**

09:00–09:30 **Keynote lecture:** *Bryan Ward-Perkins (University of Oxford):* Rapid change, slower change: Britain and Italy at the end of the Roman Empire.

09:30–09:45 *Pir Hoebe, Stijn Arnoldussen, Hans Peeters (University of Groningen):* Data before the deluge: North-west European hunter-gatherer responses to Late Glacial and Early Holocene climate fluctuation and abrupt environmental change

09:45–10:00 *Ingar Mørkestøl Gundersen (University of Oslo)*: Iron Age vulnerability. An analytical approach to the Fimbulwinter hypothesis

10:00–10:15 *Solveig Chaudesaigues-Clausen (University of Bergen)*: Traditions in transformation – The Neolithisation process in southern Scandinavia, viewed from the perspective of the osseous industry

10:15–10:30 Discussion

10:30–11:00 Coffee break

11:00–11:15 *Svein Vatsvåg Nielsen (University of Oslo)*: Rebels without a cause? Re-visiting old and new approaches to the de-Neolithisation in southern Norway (c. 3000 BCE)

11:15–11:30 *Krisztián Oross, Tibor Marton, János Jakucs (Hungarian Academy of Sciences, Budapest)*: Community dynamics in 6th millennium cal BC western Hungary

11:30–11:45 Joseph Ryder (University of Bergen): Power, ethnicity, and settlement in the Norse-period landscape of Skye and the Western Isles

11:45–12:00 *Ramona Harrison, Árni Daníel Júlíusson (University of Bergen, University of Reykjavik):* The mechanisms of social change in medieval Iceland: A regional case study in Two Valleys

12:00–12:15 Discussion

12:15–13:15 Lunch

13:15–16:00 **Block 5: Scales of transformation**

13:15–13:45 **Keynote lecture:** *Liv Nilsson Stutz (Linnæus University)*: A return to the human scale. Recentering human action and human responsibility in the era of big data

13:45–14:00 *Jutta Kneisel, Stefanie Schaefer-Di Maida, Jan Piet Brozio (Kiel University)*: Scales of transformation during the Neolithic and Bronze Age in northern Germany

14:00–14:15 *Barbro Dahl (University of Stavanger)*: Evidence of change in burials: Bronze Age and Iron Age burial practices at Hålandsmarka in Rogaland

14:15–15:00 Coffee Break

15:00–15:15 *Laurine Albris (National Museum of Denmark):* Sacral topography and social configurations on an Iron Age island

15:15–15:30 *John Robb (University of Cambridge)*: Rooms in the mansion of History, or Social Evolution: general rules, local rules, rubber walls and escape routes

15:30–16:00 Discussion, rounding up and conference ends

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ABSTRACTS

- Resilience and Adaptation I

Much change happens slowly, sometimes in spite of considerable social or environmental challenges. What strategies can societies develop to counter change? Under which circumstances are balanced relations (between people and with the environment) achieved? Can we characterise how societies adapt to new and potentially challenging landscapes?

Keynote lecture

Resilience and Breakpoints: Exploring Linkages between societal, agricultural and climatic changes in Iron Age Denmark

Mads Dengsø Jessen, *National Museum of Denmark*

It has only recently become possible to reconstruct changes in sunlight and precipitation at a sufficient level of detail to allow a reliable assessment of climatic effects on prehistoric agriculture. A new analytical method using the isotopic fractionation of $\delta^{13}C$ and $\delta^{18}O$ in the cellulose of individual tree rings now makes this possible. Studies applying the method to modern material show that the fractionation of $\delta^{13}C$ correlates with the number of sunshine/overcast hours and that of $\delta^{18}O$ correlates with precipitation/water availability.

By analysing the isotopic fractionation of individual growth rings from preserved oak wood from the present Danish area and combining the results with existing palaeoecological data it has been possible to build a high-resolution and robust reconstruction of the climatic fluctuations impacting the terrestrial ecosystems in the Danish region during the transition from Late Bronze Age to the Early Iron Age and in particular so with regards to a climatic oscillation – the so-called 2.8 BP event.

Combined with an archaeological assessment of the overall organizational development of Iron Age agricultural society, such as landscape utilization and settlement patterns, it is now possible to approach long-term regional trends as well as allow for a site-specific evaluation of resilience potential and for an estimation of what kind of changes (adaptation, transformation, robustness) could have driven the variation registered at a given location or region.

Thus, the paper will aim at describing interactions between human and natural systems, i.e. linking changes in settlement patterns and technology with changes in agricultural strategy and climate.

Theorizing resilience and vulnerability for social archaeology – First thoughts

Caroline Heitz, *University of Bern*

In this paper I would like to propose a social archaeological approach to climate change archaeology that re-inserts human-thing-relatedness, agencies and practices as well as materiality in vulnerability and resilience research. The question of climate-induced challenges and social transformations has been discussed in archaeology since the 1980s. The “Resilience Theory” and the “Adaptive Cycle Model” by Holling and Gunderson (2002), derived from ecology, are amongst the most widely used approaches.

Arguing from a system-theoretical perspective, this theoretical framework is most suitable for environmental archaeology and the examination of socio-ecological systems.

However, disciplines in the social sciences and humanities, like social and cultural anthropology, sociology or human geography, as well as risk management studies, offer a variety of alternative concepts that argue from different epistemological and theoretical standpoints. I would like to explore some of these socio-spatial approaches by combining concepts like spatial mobility, translocality and (in)security with a materiality of resilience and vulnerabilities.

Vulnerable vs. resilient coastal societies in Mesolithic Norway? Or how to discover the social impacts of the Storegga tsunami 8200 years ago

Astrid J. Nyland, **James Walker**, **Håvard Kilhavn**, *Archaeological Museum, University of Stavanger*

Around 8200 years ago, the Storegga tsunami hit the coasts of the Norwegian Sea. The tsunami itself has been well established through geological and palaeobotanical work, but archaeological evidence of its social impact remains unclear. Nevertheless, the event has often been described as a disaster for the coastal societies.

Archaeological considerations of the dynamics between people and environment have long been a prominent concern in Mesolithic research. The scale of environmental instability associated with the cumulative effects of the 8.2 climatic downturn, and the sudden chaos of a major tsunami event, throw a long-held interpretive paradox into focus. Mesolithic hunter-fisher-gatherers are often portrayed as highly adaptive and flexible. In light of these extreme natural phenomena, however, it is commonly assumed that they were dangerously vulnerable, despite a lack of unambiguous archaeological evidence. But what would make a coastal Mesolithic society vulnerable? And how is vulnerability or social resilience expressed in the archaeological record? Most assessments of this have relied upon inferring scale of impact from scale of magnitude, or from top-down approaches to big data, but given that impact would have varied at a local scale, is it possible to understand what happened to Mesolithic communities through a more nuanced perspective?

The tradition and palimpsest of Neolithic ancestral monuments in the ritual landscapes of Bohemia

Jan Turek, *Center for Theoretical Study, Charles University in Prague*

Petr Krištuf, *Department of Archaeology, University of West Bohemia, Pilsen*

In a recent project, we focus on reconstruction of the sequence of Neolithic ancestral worship and representation of communal and personal identities in the landscape of north Bohemia. The phenomena of long barrows and causewayed enclosures connected vast areas of central and north-western Europe during the late fifth, fourth, and third millennia BC. The purpose and meaning of these great monuments remain issues for debate. The long barrows are commonly interpreted as funerary/religious sites, perhaps erected as part of a system of ancestor cults. Sometimes they are viewed in economic or socio-political terms, as territorial markers delineating the areas controlled by different farming communities and perceived as landmarks of previous habitation enduring for millennia after their construction.

We investigate the dynamics and timespan of the monumental traditions in Bohemia represented by the sequence of ancestral worship and its changing forms:

- 4500-3800 BC **causewayed enclosures** – Public way of burial within the super-communal ritual space emphasizing a broader shared cultural identity.
- 4000-3300 BC **long barrows** – Burials particularly emphasizing the familial local ties and more private and intimate relationships towards ancestors.
- 2900–2300 BC Individual burials under **round barrows**, emphasizing personal/gender identity and creation of **natural shrines** with sacrificial evidence of ancestral worship.

Continuity and change at the Mesolithic-Neolithic transition: Insights gained from prehistoric demography and cultural evolution

Victor Lundström, **Knut Andreas Bergsvik**, *University Museum of Bergen*

Some cultural traditions last for centuries or longer, some go out of fashion and disappear, whereas some emerge rapidly, and seemingly out of nowhere. Understanding why these patterns emerge is an important task for archaeology and many of them are particularly pronounced on the west coast of Norway during the transition from the Late Mesolithic (8500-6000 cal BP) to the Early Neolithic (5950-5250 cal BP). Although hunter-fisher-gatherer subsistence patterns persisted across the transition and old and long-standing modes of lithic blade production and axe production either continued or disappeared, completely new technologies also emerged. Furthermore, some lithic raw materials continued to be used, while others were introduced during the transition. These changes have, so far, only been described rather than explained and often along the lines of being adaptations to externally changing conditions.

However, the idea that changing environmental conditions should prompt new and appropriate cultural responses effectively and ultimately side-lines the notion that cultural variability is generated as a result of socially transmitted information between individuals that can take on Darwinian properties. In this contribution, we wish to open up a discussion on cultural change that is grounded in an evolutionary approach to the social transmission of cultural knowledge and how it might manifest in the archaeological record in terms of artefact variability. In doing so, we wish to particularly highlight how different strands of evidence from the archaeological record can function as proxies for long-term changes in demography which, as we will argue, is a key variable for understanding cultural change.

Resilience and adaptation of cultivation strategies in Neolithic Scotland

Rosie R. Bishop, *Archaeological Museum, University of Stavanger*

Darren R. Gröcke, *Department of Earth Sciences, Durham University*

Mike J. Church, *Department of Archaeology, Durham University*

Scotland presented a diverse and relatively challenging environment for the establishment of early agriculture and was one of the last areas of Europe to which agriculture spread. Scotland therefore provides a useful case-study area for examining the resilience and adaptation of early agricultural practices to new and changing environments. After the introduction of agriculture at the beginning of the 4th millennium cal BC, the Neolithic economy of Scotland has been characterised by some as stable and well-adapted, despite the relatively marginal conditions for agriculture and evidence for Late Neolithic climate deterioration.

On the other hand, the later Neolithic has also been portrayed as a time of instability, with some arguing for agricultural and population collapse coupled with climate change. The evidence for differences within and between regions with regards to agricultural and societal adaptations at this time, as well as for temporal change in agricultural practices, also highlights potential interactions between local short-term human decisions and the impact of longer-term climate change.

This paper will consider the evidence for resilience and adaptation of cultivation strategies in Neolithic Scotland using an extensive archaeobotanical synthesis from across Scotland, together with new crop stable isotope evidence from several major assemblages from Orkney and mainland Scotland.

Embracing insularity: Cycl(ad)ic social changes in Final Neolithic Greece

Zarko Tankosic, *Department of Anthropology, Indiana University Bloomington*

Paschalis Zafeiriadis, *Norwegian Institute at Athens, University of Bergen*

During the last phases of the Neolithic in Greece (ca. 5000-3000 BCE), the Aegean islands, previously visited mostly for their natural resources, were settled on a more permanent basis. This phenomenon, known in the relevant literature as “island colonisation”, offers a unique backdrop to explore how new communities established themselves in adverse environments and how they maintained and (re)produced themselves in challenging new conditions while participating in expanding regional interaction networks. We look at the long-term patterns of social change, resilience, and adaptation and the varied societal and material responses to both insularity and connectivity that resulted in the establishment of a distinct maritime and insular culture in the prehistoric Aegean. Finally, we briefly examine how different scales of interaction could have been expressed in the material record.

We base our discussion partly on our own fieldwork in the Aegean, particularly in the southernmost part of the island of Euboea, which has long figured as one of the possible staging areas for the prehistoric movement of people to the Cycladic archipelago. We also include in our analysis the islands of the north-western Cyclades and the neighbouring coast of mainland Greece (eastern Attica). These areas are both divided and connected by the sea, which is reflected in the similarities and differences of their prehistoric material culture record.

- General keynotes

General keynote lecture

The concept of disaster in historical perspective: Meanings and material evidence

Kristina Sessa, *The Ohio State University*

Historians have long turned to the concept of periodization – the notional segmentation of the past into discrete units of time and place (e.g. "the Mediterranean Bronze Age," "The European Middle Ages") – in order to organize their research into coherent narratives. For those of us who study premodern history, periodization is often constructed around putative societal ruptures, whereby scholars posit the "collapse" of one historical era in order to demarcate the emergence of another. In this paper, I will interrogate this academic exercise by putting the very concept of historical "collapse" under the microscope. First, I will explore the conceptual framework by investigating whether the concept of societal "collapse" had meaning for persons living in premodern cultures, especially those that took root around the Mediterranean. Did our premodern actors conceptualize their own large-scale histories as a series of rises and falls punctuated by catastrophic "breaks"? If not, how did they characterize or measure historical change, especially during periods of acute crisis? Second, I will examine the modern fascination with "collapsology," and the fact that narratives of historical rupture continue to be written (e.g. Kyle Harper, *The Fate of Rome: Climate, Disease, and the End of Empire*, 2017) even as scholars in more materialist disciplines such as archaeology widely caution us against drawing conclusions about wide-scale, catastrophic change from highly localized archives.

General keynote lecture

Change, politics, and the body: Intimate histories on multiple scales

Marianne Hem Eriksen, *University of Leicester*

Many scholars now question conventional narratives in which history is perceived as a unidirectional timeline punctuated by series of changes, a clear progression from the simple towards increased complexity. This postulated trajectory of increased sophistication inherently ends with “us”, implicitly asserting the modern West as the epitome of historical development.

Within these narratives, change, especially political change, is often seen to occur through rapid and spectacular events that drive historical trajectories: introduction of new technologies that ripple through society; battles and development of kingship; large-scale migrations or climate events that rupture the world and render it different.

None of these conventionally acknowledged moments of change can, however, be divorced from politics of more intimate scales. Where do politics and social change happen? Is it only on medieval battlefields, in Neolithic (male-led) migration, in contemporary board rooms? Who and what are the drivers of change, and how does change occur on multiple scales?

This paper will draw on assembled moments of change in first millennium CE Scandinavia, moments that are quick and slow, that have immediate ramifications and cumulative outcomes over longer timescales, in an attempt to *trouble* our understandings of historical change.

- Resilience and Adaptation II

The PastCoast-project. Interdisciplinary methodological approaches to the study of resilience in prehistoric marine coastal environments

Arne Anderson Stamnes, *NTNU Trondheim*

The effect of sea-level change, flash floods, coastal erosion, and drift sand are all factors that affect settlements and cultural landscapes in both the past and the present and pose a risk to settlements and land use in the future. These effects also impose a threat to coastal heritage sites all over the world. Studying prehistoric coastal settlement and activity sites provides a very good source of knowledge regarding human responses to landscape changes over time. The PastCoast-project studies changes and breakpoints in the use of marine coastal environments in the past and identifies causes for changes. One of the main aims of the project is to create an interpretive framework to identify potential human responses to changing environmental settings. The challenges to be overcome are many:

- We do not know the archaeological characteristics and makeup of many of the sites known from metal detecting. What type of sites are these, how can they be used to study past landscape use patterns, and do they show any form of resilience to changing natural landscapes?
- We do not know if there are any chronological relationships between the assemblages, any preserved archaeological activity in the ground and if so, their relationship to other sites in the landscape

The PastCoast-project will therefore combine the studies of coastal archaeological sites known from metal detecting assemblages with state-of-the-art high-resolution geophysical surveys on a large scale. This presentation showcases the methodological choices that the project will apply, including how geophysical methods can aid in detecting subsoil features and interpret them from an archaeological perspective, how to study spatial relationships of sites by means of GIS modelling and the creation of very fine chronologies of landscape change through the study of past palaeolandscapes using geophysical information.

Grave Developments – a chronological review of social changes at Borre

Christina Leverkus, *Midgard Vikingsenter, Vestfoldmuseene*

Based on the phases and mound development concluded from the Bayesian chronological analysis, the force of social solidarity has likely played an important role in the construction of the large Iron Age mounds at Borre. The transition from phase one to phase two likely occurred as a solidaric response to changes experienced by the society. This is seen in the social construction of the monumental mounds which focus on sacrifices that affect the whole society. It is first in phase three that the large mounds begin to reflect a greater degree of individualism. This is seen in the secondary burials within the large mounds and their elaborate grave goods. Finally, phase four represents the abandonment of the site and a conclusive change in the society at Borre. The development of the landscape at Borre therefore, rather than simply being the result of the manipulation of a royal elite, is the result of several social reactions, resilience and adaptation or lack thereof, to change over a millennium.

The city of Rome as a case study in urban resilience, vulnerability and sustainability

Simon Malmberg, *University of Bergen*

This contribution will look at the interplay between urban resilience, vulnerability and sustainability to see how these concepts might give us a better understanding of urban developments in the city of Rome in the millennium from c. 200 BCE to 800 CE. The paper will stress the need to use resilience in conjunction with vulnerability and sustainability to more fully understand it: resilience of what, when, and how much?

The incorporation of overseas resources, from Spain to Egypt, into the economic hinterland of Rome increased the demographic sustainability level of the city, and led to a fast growth in population in the last two centuries BCE. Simultaneously, it also increased the vulnerability of the city's essential food supply. On the other hand, in the fifth and sixth century CE, Rome experienced a catastrophic demographic decline. What forces propelled the city to these heights and lows, and what allowed it not only to survive, but to remain the largest city in the Latin world until the eleventh century, even without the support from an empire?

How the dove saved the eagle's nest: Christian activities and the resilience of the Forum Romanum during the 4th to the 6th century AD

Christina Videbech, *University of Bergen*

The Christianisation of the Curia on the Forum Romanum in the 7th century is often regarded as the culmination of Christian presence in the symbolic centre of Rome. Finally, the Christians had conquered this last pagan bastion. However, this portrayal of Christian presence on the Forum Romanum is a simplification of reality. Christians had for a long time been present among the symbolic monuments of Rome. This is documented in both literary and archaeological sources dating back to the 4th century. This presentation will account for the evidence and explain how collective memory and resilience theory can help us understand Christian actions on the Forum Romanum as human strategies to cope with the social and demographic changes taking place during the period. By analysing all our source material, not just the grand monuments, I will highlight how human actors, both high and low, gradually adapted the city space to their needs. These adaptations simultaneously legitimised Christianity as a religion and secured the Forum Romanum's resilience as one of the most important spaces in Rome until the 7th century.

To arms! Viking war and military preparedness

Marie Ødegaard, *Archaeological Museum, University of Stavanger*

What strategies did Viking societies develop when facing recurrent attacks? This paper will investigate how fear of an outsized rival posing an existential threat can act as a catalyst for response, making leaders and communities take on strategies to reduce risk and build resilience. This will be studied through the material remains of the Vikings' fear and preparedness: beacons set up in high or prominent positions in the landscape as a warning or signalling system of imminent threat. Beacons were ignited at the risk of attack and war and played a crucial role in alerting the population, mobilising military responses and communicating between places.

Medieval tuff stone churches: Indicators of continuity in worship and response to change?

Meinrad Pohl, *Western Norway University of Applied Sciences*

Churches are among the medieval buildings with the longest continuity of usage and are therefore the group of medieval buildings that are most likely to have survived until today. Building stone churches in areas that lack natural deposits of stone, like the Lower Rhine, and the North Sea coast of the Netherlands, Germany, and Denmark, required import of building material. One of the sources of imported stone were the tuff stone deposits of the eastern Eifel area in Germany. The distribution of this building material is currently being mapped and the results will be published soon. Even though the inventory is limited to churches built of this particular stone, it showed more than the distribution itself. It reflects resource scarcity in the Early Middle Ages, the demographic and economic boom of the High Middle Ages and the 19th century, catastrophic environmental events like storm floods, as well as war and resource exploitation in the 20th century.

Religious worship appears to have been a fundamental human need in Europe from the Middle Ages until the middle of the 20th century. It required particular buildings which due to the long continuity of religious worship often are still in use today. Even though the scope of the inventory of the mapped buildings is limited, it sheds light on some rapid and slow changes over a long time span, as well as on the human response to the changes.

Change or continuity? Women and gender at medieval Bryggen

Sigrid Samset Mygland, *Bymuseet i Bergen*

This paper concerns the socio-economic conditions and development regarding particularly women and gender at Bryggen ("the Wharf"), Bergen, in the Norwegian High and Late Middle Ages. Both archaeological and written sources single Bryggen out as the very centre of the medieval town, initially with a somewhat small and fragmented settlement established based on local initiatives and inhabited primarily by individuals with roots in a rural society and rural traditions. By the end of the Middle Ages, this settlement – consisting of men, women and children – had been replaced by a fully developed, international trading area with a well-functioning infrastructure, apparently dominated by the German Hanse, a male-dominated enclave or diaspora.

How and in what ways did this transformation happen? Issues of change and stability are at the centre of attention when pursuing the presence, activities and roles of women in Bergen. Especially seen in relation to medieval towns in general and Bergen in particular, the concept of gender includes aspects of change, possibly representing social arenas where traditional gender roles could be challenged and overridden. To what degree, then, were social structures in general and gender roles in particular changed or conserved at the increasingly commercial area of Bryggen throughout this 300-year long period – not least in the meeting between rural and urban society, and between different ethnic groups? Did traditional rural gender roles take on new shapes or remain more or less the same in this changing urban environment?

- Trajectories to/from Inequality

How close are we to defining the factors that contribute to (un)equal social relations? What is the role of worldviews, social and ritual traditions and technological innovations in altering power balances? Is a decrease in hierarchical relations always a “collapse” and is it possible to write narratives of resistance?

Keynote lecture

Dawning inequalities. Social dissymmetries, Big Men (and Women) and the sources of power in Late Neolithic and Copper Age Iberia (c. 4200-2200 cal BC)

Leonardo García Sanjuán, **Marta Cintas-Peña**, *University of Seville*

Towards 4200 cal BC, Iberian Neolithic societies entered into a remarkable phase of social and cultural expansion. Early Neolithic caves were gradually abandoned, and open-air settlements spread out across regions endowed with fertile alluvial and sedimentary soils. This was connected with demographic growth, economic intensification and the rise of monumentality. Social aggregation and ritual practices led to the creation of an increasingly complex material record of ditches (sometimes in the form of enclosures), pits and megaliths in which death played a major part. In some specific regions, particularly in the Guadalquivir and Guadiana rivers basins, in south-west Iberia, those processes peaked by c. 3000-2900 cal BC, with the formation of very large (in some cases enormous) mega-sites. These mega-sites hosted remarkable monuments in which high-end artefacts made with exotic raw materials were deposited. By c. 2300-2200 cal BC, this two-thousand-year cycle of "Neolithic lifeways" came to an end. In this paper we will attempt to explore how social inequalities dawned and unfolded during this period. Although the evidence is scant and fragmentary, we will examine the extent of social dissymmetries, including gender inequality, the sources wannabe-leaders may have drawn upon to sustain their claims to prestige, influence and power, and the factors that made such claims inherently unstable.

Being fluid, dividual and multiple: why stratification is hard amongst small-scale foragers

Charlotte Brysting Damm, *Arctic University of Norway*

The paper will focus on the very limited indications of stratification amongst the mid-Holocene hunter-fisher-gatherers of northern Norway. Despite a semi-sedentary lifestyle, and the rich and predictable resources available year-round, there is little to suggest any strong stratification. There is no evidence of rich burials, no significant difference in dwelling sizes, no monumental structures, little evidence for esoteric knowledge and practices and few exotic objects.

It will be argued here that the contemporary ontologies, inferred from artefacts, rock art and settlement patterns, led to fluid, dividual and multiple identities which were contradictory to a hierarchical social structure that required bounded and permanent identities.

In adjacent regions, particularly Ostrobothnia, there is more to suggest increasing stratification, with greater differences in dwelling sizes and inventory, presence of more monumental structures, burials and exotic goods. The different environmental and ontological background for this is touched upon briefly.

Late Neolithic and Early Bronze Age agricultural developments in the Oslo Fjord area, Norway

Axel Mjærum, **Anette Sand-Eriksen**, *Museum of Cultural History, University of Oslo*

Like in most other parts of north-west Europe, the transition to the Late Neolithic (c. 2350 BC) was a time with large-scale cultural and economic changes in the Oslo Fjord area, Norway. A significant part of this watershed was the final breakthrough of farming. Over the last decades, scholars have strongly argued that these changes were initiated by a northward migration of agro-pastoral people.

For a long time, there has been a lack of data from the Late Neolithic and Early Bronze Age farming societies in the Oslo Fjord area, and therefore also an absence of detailed information that can be used to study the outcome of the Late Neolithic transition. However, recent archaeological excavations have provided data that bring nuances to the developments in these early farming communities. As we will argue, this could point towards a more complex developmental trajectory than hitherto stated.

Drawing from cases studies and aggregated data from the region, our aim is to provide a better understanding of the agricultural developments in the aftermath of the Late Neolithic revolution. With two newly excavated complex settlements at Løveskogen and Opstad as vantage points, as well as by implementing the historical process prior to the Late Neolithic transition, we seek to demonstrate how farming societies gradually and in (balanced?) steps adapted to their new environment in the Oslo Fjord region.

Towards fine-grained temporal dynamics of social inequality in the Early Neolithic

Hallvard Bruvoll, *University of Oslo*

In recent years, the distribution of house sizes within and between settlements has received increasing attention in the study of social inequality in archaeology. However, establishing the contemporaneity of houses in larger settlements remains a recurring problem, which in turn can influence our interpretations regarding levels of inequality. It is rarely possible to date all houses and construction features in a settlement by means of absolute chronology, and the number of concurrent houses at any given time also depends on the use-life of each house.

It was recently shown that the axial orientation of houses in the Linear Pottery culture of the Early Neolithic in central Europe correlates with their absolute construction date within settlements. Applying Bayesian statistical modelling for estimating median house duration, and using house orientation as a proxy for construction date, it is then possible to evaluate the rate of house construction and abandonment within entire settlements over time. This again can constitute the foundation for discussing the temporal dynamics of house-size distributions, and their implications in terms of social inequality.

An example is proposed here from an ongoing excavation project at Vráble in south-west Slovakia, where a Linear Pottery settlement with more than 300 houses developed between 5.250 and 4.950 BCE, through phases of population growth, peak and decline, and with varying levels of inequality.

King for a day? Mobility and hierarchy at the enclosure of Riedling, southern Bavaria

Daniela Hofmann, *University of Bergen*

Marton Szilágyi, **Gisela Grupe**, **Franziska Schreil**, **Anna Perutka**, **Britta Ramminger**, **Markus Helfert**, **Nicole Kegler-Graiewski**

The enclosure at Riedling (c. 4300-4000 cal BC) in Bavaria stands out due to many human remains and several striking examples of depositional practices involving large amounts of complete vessels and animal bone. As previously established for the Münchshöfen culture, the pottery shares many elements with cultural groups to the east, in modern-day Hungary and the Czech Republic. In addition, isotopic analysis has indicated that many of the human individuals buried here were at least regionally mobile. One possible reading of this scenario is as part of emerging hierarchies, in which central places aid the development of hierarchical social relations connected to the redistribution of prestige goods (metals, axes) travelling long distances. Yet other strands of evidence do not fit this narrative. For instance, there is no correlation between dietary intake, isotopic origin and mode of burial, precluding simple divisions into status categories. Items generally classed as prestige goods are absent from Riedling, and the site does not appear to have retained a regionally prominent position for long. This paper discusses how these different indications could be brought together into a more dynamic model of social relations, in which increasing personal mobility and investment in communal feasts may have served as counterpoints to the stabilisation of emergent hierarchies.

Hundorp: The Agency of a Chief or the Anxiety of the Commons?

Andreas Ropeid Sæbø, *Independent Researcher*

At Hundorp in Fron lies the second largest cluster of great mounds from the Late Iron Age of south-eastern Norway. Researchers in the 19th and early 20th centuries saw the mounds as proof of a dynasty of chiefs. Later research has tended to accept this interpretation, and to focus attention on how and why the financial basis of a chiefdom emerged at this specific place. I start by reviewing possible answers within a traditional framework, but find that the material does not fit traditional models of explanation. This leads me to explore Hundorp in new ways.

While the size and number of the Hundorp mounds makes them stand out in a regional context, they are not so unique in a local context. On the contrary, the Fron area was dotted with big mounds in the Late Iron Age. This was a time when the area was under constant threat from a variety of natural hazards. The main part of my presentation explores how failure of crops, flooding and landslides may have encouraged Iron Age people to construct grave mounds and to interact with them in various ways.

The wonderful 7th century

Kjetil Loftsgarden, *Museum of Cultural History, University of Oslo*

The 6th century AD has been deemed the worst in human history, with societal unrest, major volcanic eruptions resulting in a global climate crisis, as well as the outbreak of a deadly pandemic. In Scandinavia, there is a decline in burials and farms are laid waste.

Nevertheless, for those who made it through, the consequences of the turbulent 6th century may have been more positive than negative – and led to *greater happiness for a greater number.*

Several factors affect happiness and contentment, but an important factor is the level of equality. Far from their modern counterpart, Iron Age Scandinavia was a hierarchical society with limited prospects for social mobility. However, violent shocks may disrupt the established order and initiate social and economic equalisation. I will explore if and how the crises of the 6th century could have acted as a great leveller, where the gap between the haves and have-nots decreased.

The pre-Christian burial practice with furnished graves constitutes an extraordinary quantitative dataset of the past population, and will be deployed in this paper in order to track and understand societal development, as well as the evolution of wealth distribution in Iron Age Scandinavia.

Viking Age Vestfold – a society against the state?

Lars Erik Gjerpe, *Museum of Cultural History, University of Oslo*

Pierre Clastre (1989) claimed that states were failed stateless societies, not an evolutionary improvement. If so, large parts of Europe failed in the wake of the Roman Empire. Vestfold on the other hand, stayed stateless until the eleventh century. This is apparently a paradox, as several scholars interpret the archaeological and written sources of Iron Age Norway as evidence of a hierarchical society where lords of large estates controlled elite warriors – the pathway to state formation. Studying the resilient Viking Age Vestfold as an "inverted pear-shaped society" in the light of anarchy theory demonstrates how worldviews that valued autonomy and decentralisation, as well as social traditions such as communal decision-making and warfare, were integrated parts of the resistance against state formation. As a bonus, viewing Viking Age Vestfold as a pear-shaped society explains why the proportion of medium-to-richly equipped burials in Vestfold is so large, and also brings the Oseberg burial back into the political models.

If freedom and autonomy of individuals as well as groups, decentralisation, communal decision making and justified authorities are a good idea, then states are "failed stateless societies".

New neighbours in town. Keeping up with the Joneses? Communication, consensus and town life in early Bergen

Gitte Hansen, *University Museum of Bergen*

Medieval towns were, as other urban communities, reliant on migrators to uphold their population. With new townspeople of different backgrounds, whether social, geographical, ethnic or other, the possibilities for tension and conflict between newcomer and the established townspeople must have been many. In urban studies the multitude of possibilities given in an urban community and the notion of 'Stadtluft macht frei' have left a mental image of medieval towns as dynamic and exciting places full of different kinds of people, hustle and bustle, social competition and climbing the ladder. In this paper, hte focus is not on conflicts and deviation, but on collaboration, consensus and similarities in lifestyle. With Bergen's early history as a case study, new townspeople's low-level entrepreneurship is investigated: did people take measures to fit in and adjust? Or was the urban environment characterised by individuality, social mobility and competition between the townspeople?

- Rapid Change

Rapid change, in the form of climatic events, migrations and demographic collapse is making a come-back in our explanations. But is rapid change always catastrophic? How good are our methods at identifying timing and speed of changes and their correlation with other factors? How do individuals and societies deal with or bring about quick transformation?

Keynote lecture

Rapid change, slower change: Britain and Italy at the end of the Roman Empire

Bryan Ward-Perkins, *University of Oxford*

The dissolution of the Roman Empire in the fifth to seventh centuries CE saw economic regression, and with it considerable social change, in almost all regions of the empire: a highly complex economy and society, for better or worse, became much simpler, with less specialisation of labour, less durable goods for archaeologists to uncover, and a far smaller state. In some regions – such as Britain in the fifth century – the change was dramatic and swift and encompassed almost every area of life that we can document, both archaeologically and through textual sources. In others – such as Italy – change happened much more slowly, and with evidence of far more political, cultural, social and economic resilience. This paper will (necessarily with very broad brushstrokes!) outline the nature of these changes, discuss the central issue of chronology, and consider reasons why change happened at different speeds and with different final outcomes in these two regions of the former empire.

Data before the Deluge: North-west European hunter-gatherer responses to Late Glacial and Early Holocene climate fluctuation and abrupt environmental change

Pir Hoebe, **Stijn Arnoldussen**, **Hans Peeters**, *University of Groningen*

The Late Glacial and Early Holocene is characterised by rapid changes in climate and environment. It is often hypothesised that such changes affected hunter-gatherer behaviour and demography. The extent to which hunter-gatherer societies where impacted can be studied through summed probability distributions of radiocarbon dates (SPDs) as a proxy for the intensity of human activity. Data density is a key factor that influences an SPD's power to reflect past events. As part of the first author's PhD, this paper presents a large radiocarbon dataset for north-west Europe with sufficient density to detect abrupt events at different spatial scales. We carry out SPD analyses using the R package rcarbon. Our model testing results show significant negative deviations from hypothesised exponential and logistic models of increased activity through time that correspond to cold phases GI-1b, GS-1 (Younger Dryas), the 11.3ka event and the 8.2ka event. Next, we explored the significance of regional differences in response to these climatic events using permutation tests. Additionally, we demonstrate how preservation and investigation biases influence large radiocarbon datasets and explore the pros and cons of methods that deal with such biases.

The density of radiocarbon dates does correlate significantly with key climate and environmental events during the Late Glacial and Early Holocene. We hold the position that at this level of analysis, this will often lead towards environmental determinism, but we should keep in mind the limitations of big data approaches when it comes to elucidating the cause of change in societies, which can be complex and interconnected. Contextualising large geospatial datasets with socio-cultural information and palaeolandscape reconstructions is necessary to better understand human-environment interaction in this period.

Iron Age vulnerability. An analytical approach to the Fimbulwinter hypothesis

Ingar Mørkestøl Gundersen, *Museum of Cultural History, University of Oslo*

The last decades have witnessed a significant growth in archaeological studies offering environmental perspectives on the past, through which rapid cultural and material change is often interpreted in catastrophic terms. Although sometimes offering novel perspectives on age-old questions, crisis narratives often lack coherent methodologies able to substantiate the claims of profound social impact from environmental events. The discussions have been mainly concerned with chronological issues, in particular whether concurrency can be identified between environmental events and major changes in the archaeological record, whereby claims of a causal relationship remain for the most part unexplored. This also applies to the Fimbulwinter hypothesis – the idea that widespread cooling, caused by distant major volcanic eruptions, resulted in crop failure, famine, plague, and social unrest in the 6th century AD, ultimately leading to major socio-political change throughout the Scandinavian peninsula. Critics argue that the Fimbulwinter hypothesis is rife with the uncritical use of archaeological and environmental data, and deterministic conclusions.

By using the concept of “vulnerability” as an analytical tool, I attempt to move beyond mere concurrency between geoscientific and archaeological datasets, and study the possible effect of a cooling event on prehistoric farming societies by taking regional social and environmental characteristics into consideration. I conclude that climate cooling had the potential to become critical in some areas, while others were seemingly less affected. Thus, the approach opens up for considerable spatial and temporal diversity in disaster impact. The Fimbulwinter hypothesis is up for revision, but the crisis narrative still cannot be fully discounted.

The talk is based on my recently submitted doctoral research.

Mesolithic persistence and Neolithic emergence at Sylthom – Osseous artefacts before and after 4000 BC on the coast of Lolland, Denmark

Solveig Chaudesaigues-Clausen, *University of Bergen*

Extensive research has been carried out in southern Scandinavia to approach the changes happening during the transition between the Late Mesolithic and the Early Neolithic around 4000 BC. Based on varied material evidence, narratives of creolisation, migration and resistance have been proposed. They suggest complex patterns of change, in which rapid change may have happened in some areas, whereas in others a gradual mixing between foragers and farmers took place between 4000 and 3700 BC. However, artefacts made from bone and antler have so far been overlooked, leading to great uncertainty around their role in the Neolithisation process.

Osseous artefacts from the Sylthom sites on the southern coast of Lolland (Denmark), which are dated between the Late Ertebølle culture (4600–4000 BC) and the end of the Early Funnel Beaker culture (4000–3300 BC), can contribute to discuss the role of osseous industries during the Neolithisation period. The aim of this paper is to introduce a short typology and technology of Mesolithic and Neolithic osseous artefacts, as well as to present the results from 18 radiocarbon dates that were performed on a selection of artefacts from the Sylthom sites. The results suggest the continuity of some Mesolithic osseous traditions and practices after 4000 BC, the late emergence of Neolithic industries on the site, as well as the possible cultural negotiation (Gron and Sørensen 2018) between hunter-gatherers and farmers. This study suggests that Sylthom may have been an enclave for continued hunter-gatherer practices, possibly up to 400 years after the start of the Neolithic.

Rebels without a cause? Re-visiting old and new approaches to de-Neolithisation in Southern Norway (c. 3000 BCE)

Svein Vatsvåg Nielsen, *Museum of Cultural History, University of Oslo*

Rapid events, such as natural catastrophes, climate disasters, migrations etc., generate an experience of displacement in the subject. We see reality not as subjects or as others, but as if from a different and derailed place. The experience is known as parallax, and the study of prehistoric societies can itself induce it, for instance, when scholars face two or more reasonable but contradictory explanatory models of a single phenomenon (antinomies). The so-called "de-Neolithisation hypothesis" has become one such model in Norwegian research. It was introduced in 1955 by Erik Hinsch, who argued that the first farmers in southern Norway experienced a rapid "cultural process" in the MN III-V (3000-2700 BCE), away from a Neolithic economy towards hunting, fishing and gathering. Hinsch described the process almost like a rebellion, the result of which was the Pitted Ware culture ("not really Mesolithic, not really Neolithic"). The hypothesis has since been a subject of debate, leading to multiple explanatory models, each with its own rationale. This paper focuses on the structural interstice between different positions within this research ("asserts antinomy as irreducible", see S. Zizek, *The Parallax View*). Based on our current knowledge of the Early and Middle Neolithic periods in southern Norway, the paper discusses three core elements of Hinsch's de-Neolithisation hypothesis: Was it a rapid event? Was it a catastrophe ("lacuna" in Hinsch)? Did it really involve a turn away from a Neolithic economy?

Community dynamics in 6th millennium cal BC western Hungary

Krisztián Oross, **Tibor Marton**, **János Jakucs**, *Hungarian Academy of Sciences, Budapest*

The first westward terrestrial expansion of farming in Europe reached the southern limits of the Carpathian basin in the last centuries of the 7th millennium cal BC. The northernmost area hosting south-east European type Early Neolithic material culture (Starčevo) lies roughly on Lake Balaton in the western part of present-day Hungary. The following gradual expansion and infilling took place from a limited number of initially inhabited niches. In the meantime, the area also served as the basis of the Neolithisation of central Europe from about 5350 cal BC.

Evidence of regional developments gained from various recent research projects includes site-based studies, micro-regional surveys, modelled series of AMS radiocarbon dates and bioarchaeological data. Archaeogenetic studies have revealed that the earliest farmers of the western Carpathian basin descended from Anatolian populations, as well as exhibiting a strong continuity over the entire 6th millennium cal BC and a very limited amount of admixture with local hunter-gatherer groups.

We are seeking answers to what extent new data can modify previous interpretations on the pace of the dispersal and the social structures of the related communities. How far has the regional scenario expanded beyond the concept of two significant and rapid mass population movements and a consolidation phase between them? Furthermore, has earlier clustering and evaluation of data sets according to a series of transformations in material culture, particularly those of pottery styles, proven to be self-fulfilling in the course of the analyses?

Power, ethnicity, and settlement in the Norse-period landscape of Skye and the Western Isles

Joseph Ryder, *University of Bergen*

According to archaeological and place name research, Skye and the Western Isles were settled by Scandinavian-speaking peoples throughout the Norse period (800-1250 AD). Place name evidence suggests that the Norse speakers replaced the native, pre-Norse Celtic-speaking peoples, who could be called Picts. Archaeologically, Pictish culture seems to disappear around the interface of the late 8th/early 9th century AD. Past scholarship has often been dedicated to answering if the transition from Pictish to Norse was peaceful or violent. Yet questions of settlement patterns, power structures, and ethnicity throughout Skye and the Western Isles have not been explored in detail.

My Ph.D project sought to answer these questions. After synthesizing all available archaeological Norse-period data in the region, I utilised a landscape methodology to place the data in context through place names, topography, and pre-Norse settlements and monuments.

The results show that the Norse imported their settlement system into the islands, and only re-used pre-Norse settlement sites if they fit into a Norse settlement pattern. I developed a centre-periphery model using the Scandinavian concept of the infield/outfield system, which was imported by the Norse. A settlement hierarchy existed within Skye and the Western Isles, with a considerable spread of wealth and elite sites that likely represented individual territories. Maritime routes, harbours, and natural boundaries such as islands likely aided in demarcating territory that led to the establishment of multiple elite centres of varying rank throughout the region. This is highly suggestive that the pre-Norse peoples were marginalised during the Norse period, since there is an overall lack of acculturation or ethnic plurality in the Norse powerscape.

The mechanisms of social change in medieval Iceland: A regional case study in Two Valleys

Ramona Harrison, *University of Bergen*

Árni Daníel Júlíusson, *University of Reykjavik*

The Two Valleys Project investigates how a basically egalitarian Icelandic settler society in 870-1100 AD transformed thereafter into an increasingly complex class society dominated by landowners, with tenants subjected to them. Research into this phenomenon is at present lacking, but there is increasing evidence that a major effort is needed to understand it. In 1402–1404 Iceland was hit by a major catastrophe, the Black Death, with a severe decline in population size. How did this affect society, for example the relationship between tenants and landowners? The Two Valleys project deals with these problems through an analysis of historical, anthropological, archaeological, palaeoecological, and geomorphological data from north-east Iceland. One of the main foci is placed on the consequences of the Black Death in the area. The project employs a historical ecology perspective to allow for a constructive co-production of knowledge between the various disciplines that include the social sciences, the humanities, and the natural sciences. This paper introduces the project and presents results from initial interdisciplinary investigations into the medieval social landscape in Hörgárdalur and Svarfaðardalur-Skíðadalur, two adjacent valley systems in the Eyjafjörður region.

- Scales of Transformation

Archaeological research has always focused on different scales of social action, yet it is rare that multiple scales are brought together. How do the same processes differ when we look at them from a micro or macro perspective? What can big data models gain from site or regional narratives (and vice versa)? And how can complex multi-scalar models best be modelled and presented?

Keynote lecture

A return to the human scale. Recentring human action and human responsibility in the era of big data

Liv Nilsson Stutz, *Linnæus University*

Currently, archaeology is undergoing a transformation at both the methodological and theoretical level. Recent digital developments have made the processing of big data possible at a level that was impossible only a few years ago, and new methods in the lab sciences (including DNA, isotope analysis, paleobotany, histology, etc.) have unlocked new sources about the past, which has steered archaeology as a field increasingly toward a natural science epistemology focusing on larger datasets, broad perspectives, and long chronologies. In the field of "theoretical archaeology", new materialism and posthumanism have simultaneously directed attention away from the human scale and instead come to focus on larger systemic patterns, in which humanity is but a small piece in a complex system.

There is, of course, a point in de-centering humanity, if by that we mean that we apply a perspective where we place humanity within a system of reciprocal entanglement with the world. However, I argue that current trends in archaeology, if not practiced critically and with caution, run the risk of making humanity, human experience, and perhaps most importantly, human individual agency, irrelevant. This talk makes a case for the recentering of humanity in archaeology by emphasizing the importance of a balanced transdisciplinary archaeology, one that relies on understanding humanity as bio-cultural and archaeology as political. Only by centering humanity and human experience in the past and in the present, can we address emerging issues of inequality, suffering and climate change.

Scales of Transformation during the Neolithic and Bronze Age in Northern Germany

Jutta Kneisel, **Stefanie Schaefer-Di Maida**, **Jan Piet Brozio**, *Kiel University*

In order to make changes and transformations visible in the archaeological record, it is necessary to examine the existing archaeological material for its potential informative value and, if necessary, to employ a multi-level perspective. The case of the CRC 1266 Scales of transformation project cluster shows that the results can vary considerably depending on whether quantitative or qualitative data are used. Different scales of analysis also produce different results: if only rough tendencies can be determined at a macro level, such as the regional one (e.g., the research area of Schleswig-Holstein, northern Germany), things look different at the meso or micro level of an individual site. An essential factor in such a multi-scalar analysis are supplementary studies on the environment or geology, which can further complete the picture and thus allow more precise statements about decision-making and transformation processes. Even if transformations are clearly recognisable at individual sites, for instance, they might not necessarily reflect the results of the analysis at a macro level. An essential aspect in such cases would be the exact dating and the use of statistical methods (such as aoristics), enabling an effective comparison of natural science data with archaeological material at different levels.

Further difficulties arise from the comparison of different time periods: which artefacts or features should be chosen across time periods of more than 3000 years and which social changes could they represent? Here, different research traditions play an essential role, providing different interpretations for similar patterns.

Our contribution deals with the problem of compiling data at different scales and over a long timeframe, as well as pattern recognition and interpretation, using examples from cooperative projects within the CRC 1266.

Evidence of change in burials: Bronze Age and Iron Age burial practices at Hålandsmarka in Rogaland

Barbro Dahl, *Archaeological Museum, University of Stavanger*

The burial site at Hålandsmarka in south-western Norway provides an opportunity to gain insights into burial customs through a time span of nearly 3000 years. Graves can be viewed as places of recurring engagement between the living and the dead, and as opportunities to explore the importance, duration and entanglement of material culture. The findings from Hålandsmarka call attention to the multi-temporal and gathered nature of burial sites in particular, as well as the archaeological record in general. There is a tension between the multi-temporal burial site and our archaeological practice of identifying and dating traces of use along a timeline, as series of successions and replacements. Can we approach change from a micro scale level, through identified burials, and gather the traces of use into multi-temporal narratives of change through a period of nearly three millennia? The long-term use of the site emphasizes the necessity of long-time perspectives to change. Rather than focusing on detecting abrupt changes at the transition between archaeological periods, there is a need for a more complex approach to change. Change is constant and happens in different scales and speeds. The varied ways societies faced death represent balancing between their past, present and future.

Sacral topography and social configurations on an Iron Age island

Laurine Albris, *National Museum of Denmark*

How does social change happen on an island? The term *islandness* comprises the special qualities and identities of islands. As both isolated and central entities, they can be both resilient and susceptible to local and global change. This paper presents the research project Landscape of the Gods, a study of sacral landscapes on the island of Bornholm in the Baltic Sea c. 100 BC-900 AD.

From the perspective of sacral topography, the project seeks to uncover the mechanisms and internal logic within which the prehistoric islanders on Bornholm lived and acted.

In prehistory, Bornholm had a prominent position along Baltic Sea trade routes and the island has an internationally unique archaeological record with an exceptional density of Iron Age localities and finds. Through interdisciplinary studies of place names, archaeology and landscape on Bornholm, it is possible to explore different facets and interplays of religious activities in the island's pre-Christian landscape. Starting from this investigation, the project poses a set of questions with the purpose to encourage reflection rather than to provide definitive answers. What was the role of such interplays in the social development of the period at both local and supra-regional levels? Can we trace social configurations in the local populations of Bornholm through the sacral landscape? In other words, as a geographically defined entity, was the island characterised by social unity or fractions, and were some communities connected to certain cult places? Are traditional dichotomies between private and public cult, natural and built sanctuaries meaningful in a pre-Christian Iron Age context? Or can we challenge them by looking at interchange between types of cult sites in time and space? Finally, how can studies like this bring historical depth to contemporary issues about local identities, globalisation and religion?

Rooms in the Mansion of History, or Social Evolution: general rules, local rules, rubber walls and escape routes

John Robb, *University of Cambridge*

Does history have a shape? If so, what shape and why? This paper first reviews traditional answers to this, particularly in theories of social evolution. It then argues that history is neither progression through a limited set of evolutionary "stages" nor entirely free-form and undirected. Instead, the basic building blocks of history are "bauplans" (in Zeder 2009's term), or coherent sets of basic structural principles and constraints that define social regimes and their economic, political and ecological settings. These define particular ways of life which often have built-in mechanisms for coping with expected crises and for limiting potential change. Conversely, each also has directions in which it is open to instability and transformation – escape routes into adjacent social worlds The result is a kind of modular history in which there are a few structural meta-rules which cut across social worlds, and more principles of social change which are specific to a particular module. This is illustrated with an interpretation of European prehistory, particularly the transition to farming, the transition to the Bronze Age, and the transition to historic periods. The paper concludes with some general thoughts about the possible shapes of history.

PRACTICAL INFORMATION

Conference venue: **Bryggen Museum**, Dreggsallmenningen 3, 5003 Bergen.

Wine reception venue (for all the participants in the conference): **Dyvekes Vinkjeller**, Hollendergaten 7, 5017 Bergen

Conference dinner venue (for keynote speakers and those who signed up in advance): **Fløien Folkerestaurant**, Fløifjellet 2, 5014 Bergen

How to get there:

From Bergen airport:

By tram: Line 1 Bergen Lufthavn - Bergen Sentrum, Ride to byparken stop (ca. 40 min.). Walk 900 meters (13 min.) towards Bryggen Museum.

By bus: Flybuss Bergen Lufthavn Flesland – Bryggen (ca. 30 min.). Walk 140 meters (2 min.) towards Bryggen Museum. Check details at: www.flybussen.no

From Bergen train station:

By tram: Line 1 Nonneseter towards Byparken (1 stop). Walk 900 meters (13 min.) towards Bryggen Museum.

By walking 1.2 km (ca. 15 min.) towards Bryggen Museum.

The tickets for the tram and the bus can be purchased at the machines at the tram stops, the Skyss Billett app and the online shop in www.skyss.no. You must have a ticket before getting on board (so, if the machines let you down – they sometimes do – try the app). For further information about the public transport options and trip combinations check the website www.skyss.no

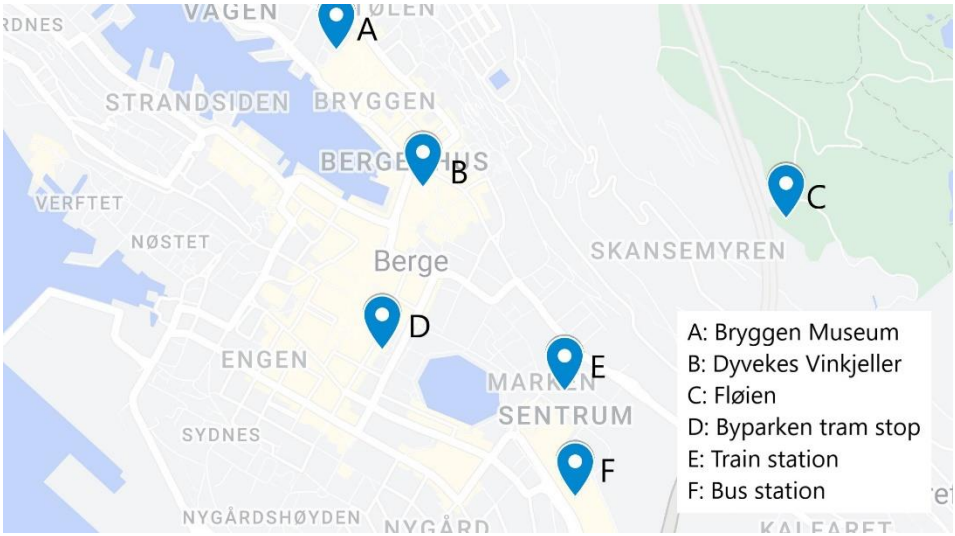
Taxi services:

Bergen Taxi phone number: (+47) 0700

Norges Taxi phone number: (+47) 0800

This QR code takes you to a map where you will find the venues, restaurants, cafés, museums and other places of interest.

You can also find the map at the link: t.ly/PNB_



Places of interest:

Cultural places and museums:

The **University Museum** contains an excellent collection divided between the Natural History and the Cultural History (incl. archaeology) exhibitions. The two buildings are next to each another at Muséplassen 3. The **Culture Historical Museum** may still be closed following a fire safety assessment, please check the website for up-to-date information.

Other monumental highlights of the city include **Håkonshallen**, the 13th century royal hall, and the **Cathedral Mariakirken**, both at a walking distance from **Bryggen Museum**.

Fantoft stave church interior is closed from the 15th of September, yet the sight of the building from the outside is worth a visit (ca. 20 min. tram from Byparken to Fantoft + 15 min. walk).

Nature and beautiful spots:

You may also want to enjoy the panoramic views of the city and the fjord from **Fløien**, one of the "city mountains" in Bergen situated 320 m above sea level. You can get there by hiking (50 min. approx.) or by taking the Fløibanen funicular departing each 15-30 min. (Opening hours Monday – Friday 07:30 to 23:00/

Saturday – Sunday 08:00 to 23:00. The single trip costs 90 kr., the round trip 150kr.). For further information check www.floyen.no.

We also recommend a walk to the picturesque **Sandviken**, **Fjellsiden** and **Nordnes** neighbourhoods to soak up the most authentic "Bergenske" ambiance.

After so much walking, you may want to relax in the tepid seawater open-air **swimming pool** in **Nordnes** (www.nordnessjobad.no).

Food:

The **Bondens marked** is a seasonal market celebrated 17th of September in Fisketorget. Here you can buy seasonal food specialities directly from the producers.

Lerøy Mat in the basement of **Galleriet** (Torgallmenningen 8) is a high-profile grocery store that aims to have a large selection of fresh produce, fruit, cheese and specialties.