

Archaeology Day 2022: Living Together – ABSTRACTS

19 March 2022 | UBC Anthropology and Sociology Building (ANSO 207) in person and online
Everyone welcome, but please [register online](#) in advance

KEYNOTE ADDRESS: Bruce Routledge (University of Liverpool, Archaeology, Classics and Egyptology), “Living Together”

Our efforts to live together while we live with Covid have left behind a material record of facemasks, vaccines, phone apps and social distancing signs. This is very new but also very old. From the beginning, material culture has been central to how we live together as a hyper-social species. To celebrate the privilege of being together for Archaeology Day, I explore two themes from Near Eastern Archaeology, using my own research supplemented by the research of my friends and colleagues in Liverpool and UBC. The first is the relationship between urban infrastructure (especially street networks, public squares, and city gates) and questions of population density and social hierarchy. The second is the relationship between past and present represented by the phenomenon of tell sites, and how rethinking living together with omnipresent physical past provides a means of living more equitably together in the present and towards the future.

SESSION I: CULTURAL HERITAGE IN BRITISH COLUMBIA

Aviva Rathbone (Musqueam Indian Band), **Greg Morrissey** (Ecologic), **Sean P. Connaughton** (Inlailawatash): “Being and Doing Together: Three CRM Archaeologists Take an Honest Look at Our Roles and the Future of CRM”

The future of heritage management in BC is bright, complicated, and in the hands of the next generation of practitioners (is that you?). Aviva Rathbone (Musqueam Indian Band), Greg Morrissey (Ecologic), and Sean P. Connaughton (Inlailawatash) speak candidly about their experiences and responsibilities as non-Indigenous archaeologists working for change in the cultural resource management (CRM) industry. Listen to or participate in a discussion around the highs, lows, excitements and heartbreak that come with working in the archaeological industry.

Liz Campbell, Aeli Black, Kevin Wilson (Musqueam Indian Band), **Andrew Martindale, Steve Daniel** (University of British Columbia, Anthropology): “Listening to Our Ancestors: GPR Use in An Indigenous Context”

Ground Penetrating Radar (GPR) is a relatively new technology as it applies to the Indigenous context. After the many revelations and media coverage of GPR use at various Indian Residential Schools (IRS), there has been a renewed interest in using GPR within Indigenous communities across the country. But many questions surround this nascent tool: How does it work? What do results look like? How does one interpret those results? What kinds of standards exist with GPR? How effective is the technology in an archaeological context, specifically a potential Indigenous archaeology site?

UBC/LOA in partnership with the xʷm̓əθkʷəy̓əm people, are working to answer these questions and to build foundational GPR knowledge within Indigenous communities. Collectively, we are currently working to develop an introductory GPR course at Musqueam for use by Indigenous communities across the country. The course has the involvement of various Indigenous groups such as: Tsawwassen First Nations, kʷikʷəł̓əm First Nation, Sk̓w̓x̓w̓ú7mesh Úxwumixw, Tseil-Waututh Nation, Sq̓'ewá:lxw First Nation, Metlakata, and others.

Our presentation at Archaeology Day will introduce GPR with an archaeological lens, it will then speak to the history of GPR use and the relationship between Musqueam and UBC, followed by an overview of our work, speaking to the successes and challenges of designing an introductory course to GPR built for Indigenous learners.

Morgan Ritchie, Michael Blake (University of British Columbia, Anthropology): “Living Together on the Harrison River: A Social and Demographic History”

The archaeological landscape along the Harrison River, a major tributary of the lower Fraser River in SW British Columbia, is a record of the emergence of a complex Coast Salish riverine settlement system. We show that by 3000 years ago people started to build and live together in large cedar plank houses. Our analysis moves between social, spatial, and temporal scales to examine how people

were socially integrated within nested social groupings of households, local groups, settlement clusters. The changing spatial patterns and styles of the houses clustered along a three-kilometer-long stretch of the Harrison River provides us with a means to detect how the initial small social groupings of the Sts'ailes' distant ancestors increased in size and social complexity over many generations into a large prosperous community constellation. We track the changing settlement patterns and demographic trends to the present day, emphasizing persistent occupational and social continuity.

Rhy McMillan, Morgan Ritchie (University of British Columbia, Anthropology and LoA), **Nicholas Waber** (Terra Archaeology), **Ellery Frahm** (Yale University, Council on Archaeological Studies, Anthropology): "SourceXplorer: An Open Source Statistical Tool for Guided Lithic Sourcing"

Archaeologists' access to analytical infrastructure has grown exponentially over the last two decades. This is especially the case for benchtop X-ray fluorescence (XRF) and portable XRF (pXRF) instruments, which are now practically commonplace in archaeological laboratories and provide users with a non-destructive and rapid means to analyze the trace element compositions of archaeological samples. As pXRF has become more accessible, the volume of analytical measurements available in archaeological datasets as well as the number and diversity of researchers participating in data collection have inherently increased. Those researchers, who have various levels of experience with the nuances of lithic sourcing procedures, are also often the ones attempting to interpret the elemental data they produce. However, while standardized analytical procedures have enabled inexperienced analysts to take accurate and reproducible XRF measurements, interpreting the resulting data is much more challenging to convert and standardize with the same degree of user-friendliness.

To address this challenge, we have bundled a series of statistical approaches and data exploration tools into an intuitive open-source graphical user interface designed to facilitate reproducible and robust outcomes during lithic sourcing studies. Our application, SourceXplorer, permits easy access to and exploration of baseline data using a map interface while facilitating a guided interpretation of source affiliations for archaeological lithics within any natural geologic context using multivariate statistical analyses. Using SourceXplorer, we reveal nuanced evidence for the procurement and use of lithic material from previously undocumented source locations in the production of bifaces at the Sts'ailes-Coast Salish settlement of YāčkEtEl (situated in the Pacific Northwest of North America). We also provide open access to SourceXplorer, including a deployed version of the application that can be used with any Internet browser as well as the script used to develop it in the open-source R statistical programming environment.

SESSION 2: HERITAGE POLITICS IN GLOBAL PERSPECTIVE

Bonnie Effros (University of British Columbia, History): "Living Together? Archaeology, Memory, and Catholic Devotion in the French Protectorate of Tunisia"

In 1874, Alfred-Louis Delattre (d. 1932) joined the Société des missionnaires d'Afrique (White Fathers) in Algiers. From 1876, he received permission from Archbishop Lavigerie to dedicate his time to archaeological exploration in and near Carthage. Lavigerie was enthusiastic about the potential of the ancient city, with its wealth of martyrs, not only to advance research on early Christianity but to support the conversion of the Berber and Arab populations from Islam. Inspired by the example of Giovanni Battista de Rossi in the Roman catacombs, Lavigerie and Delattre believed that religiously grounded archaeological research would hasten the restoration of Christian Africa as it was in the time of Augustine of Hippo (d. 432). Focused on Delattre's excavation and modification of the Carthage amphitheater, this presentation explores the impact of faith-based research in the development of nineteenth-century archaeology in the French Protectorate of Tunisia (established in 1881). Although the plan to convert the Indigenous population to Catholicism was ultimately unsuccessful, Delattre understood the amphitheater as a living and active lieu de mémoire that would play a central role in what he and contemporaries envisioned as a future Christian North Africa.

Sasha Boghosian (University of British Columbia, CNER): "Destruction and Reconstruction: The Cemetery of Jugha and Azeri Claims to Nakhichevan"

After the capture of the city of Shushi in the contested territory of Nagorno-Karabakh by Azerbaijani forces in May 2020, there was a public outcry by Armenians against the destruction of their cultural

heritage by Azerbaijan. This outcry has not been the first: its amplitude and urgency is explained by Azerbaijan's long track record of razing archaeological evidence of Armenian inhabitation of Azeri lands in an attempt to rewrite history and strengthen their claim to the acquired land through the erasure of social memory. The most infamous case of such actions is the cemetery of Jugha located in the Nakhichevan Autonomous Republic.

I argue that Azerbaijan is trying to strengthen their claim to the territory of Nakhichevan through the rewriting of their history and the deliberate destruction of Armenian cultural heritage, most notably including the cemetery of Jugha, which contained over 10,000 khachkars (խաչքար, 'cross-stones'), monuments which hold significant social memory to Armenians. A brief summary of the history and nature of conflict in the Caucasus will precede a discussion on the weaponization of ideology and social memory in the fight for Azeri indigeneity and territorial authority. The targeted destruction of monuments which bear significant social memory especially proves to be a strong tool in the recreation of social memory, as will be shown by the case study of the cemetery of Jugha and its khachkars. Finally, the consequences and social effects of the destruction of this cemetery will be analyzed with regard to the maintenance and creation of social memory by both Armenians and Azeris.

Cara Tremain (Langara College, Sociology & Anthropology): "Living Threats to Heritage: A Story of Stolen Canadian Museum Collections"

Characterized as a polite and friendly nation, seemingly more concerned with hockey than art and antiquities, Canada does not have a reputation as a prominent hub for heritage-related crimes. But with more than 2600 museums, galleries, and heritage institutions across the country, there are ample opportunities for thefts of tangible cultural heritage. As the second largest country in the world, it is important to understand Canada's position regarding the global problem of cultural heritage theft. Unfortunately, research into such crimes is meagre and rarely garner much media interest.

This presentation will report on thefts from Canadian museums over a period of more than a century. It will discuss barriers to such information, including a lack of access to relevant police reports, and reveal that the number of identified thefts represent a financial loss of at least \$6.5 million. It will remind us that when any item of tangible heritage is stolen—regardless of value—the impact on history and culture is very real, and every attempt must be taken to avoid this from happening. A place to start is understanding the problem: which itself is more problematic than not!

SESSION 3: CULTURAL IDENTITY | CULTURAL CONTACT

Elizabeth Sawchuk (University of Alberta, Anthropology), **Kendra Chritz** (University of British Columbia, Earth, Ocean & Atmospheric Sciences): "When Herders Met Foragers? Understanding the Origins of Pastoralism in Eastern Africa"

Recent archaeological research on food production's spread into eastern Africa is raising new questions about how diverse peoples come together and new societies form. This story begins ~5000 years ago at the end of the African Humid Period, when cattle, sheep, and goats first appeared around Lake Turkana in northern Kenya, presumably introduced by herders abandoning the drying Sahara. Global climate change at this time also caused Lake Turkana to shrink, transforming landscapes for newcomer herders and local fisher-foragers alike. As the environment changed and the economy shifted from foraging to herding, people began building megalithic "pillar site" cemeteries around the lake – the earliest monuments in sub-Saharan Africa. These enigmatic sites, which were constructed and used by early herding communities for about a millennium, are unlike anything known in the region before or since. Bioarchaeological and genetic evidence suggest gene flow between northern and eastern Africans around this time, begging the question of whether pillar sites played a role in negotiating new relationships. After all, burying the dead together is a powerful display of unity. Yet many questions remain, not only about who built these sites and why, but also how herding spread around the lake and the extent to which people changed their way of life. Deconstructing this complex process requires integrating archaeological, bioarchaeological, isotopic, and genetic lines of evidence to understand how people coped with change, and the ways this shaped the world we live in today.

Ian Randall (University of British Columbia, Database of Religious History): “Dining Together, Separately: Trade and Consumption on the Byzantine-Islamic Littoral”

With the emergence of Islam onto the Mediterranean stage in the 7th century, many parts of the Byzantine empire that did not change hands found themselves with new neighbors. Tensions between the two polities remained tense for centuries after, with fortification, raids, and counter-raids being the norm. There were areas though that saw more sustained, peaceful contact, such as the islands of Crete and Cyprus.

This presentation examines the material culture of these border areas between the 7th and 10th centuries; how did people negotiate their identities in their reflexive engagement with the physical *stuff* of social life during a period of intense, often stressful culture contact? In particular, how did this manifest in one of the more embodied forms of identity construction: physical consumption? Here, I discuss the dining culture and attendant ceramic vessels of the Byzantine-Islamic littoral, showing that rapprochement and community practice can often take unexpected forms.

Mengyang Wu, Zhichun Jing (University of British Columbia, Anthropology), **Zhanwei Yue** (Institute of Archaeology, Chinese Academy of Social Sciences): “Out of the Ordinary? Multi-isotope Evidence for Human Sacrifice at Yinxu, Late Shang”

Human sacrifice has been an enduring topic in discussing the development of social complexity in Shang. However, the evidence is mainly linked to state power from a top-down perspective. Research on human sacrifices located in non-royal neighborhoods at Yinxu is much less developed. The large assemblage of human sacrificial remains excavated from a non-royal neighborhood, Xin'an Zhuang, has enabled multi-isotope analysis of these rarely represented individuals and the reconstruction of their geographical origins, mobility, and nutritional status prior to death. In compared to the isotope signatures of victims from the royal cemetery, this study shows the differences of victims between the royal and non-royal contexts and discusses how “bottom-up”, social processes involved in forming and maintaining belief systems at Yinxu. We argue the act of human sacrifice was central to the creation and maintenance of ideology and that has implications for how this early, multiethnic city was built and sustained.

Liz Meshel (University of British Columbia, CNERS): “Life Amongst the Tombs: Shaping Social Relations in Tombs 88-90 in the Isola Sacra Complex”

In ancient Rome, tombs served not only as liminal locations in which the living could regularly interact with the dead, but also as loci of social activity amidst collective mourning and annual festivities like Parentalia. The necropolis therefore presents a unique opportunity to explore ancient social interactions. In this paper, I investigate how the built environment shaped these interactions with a diachronic case study of three well-preserved tombs (88, 89, 90) from the Isola Sacra Necropolis using space syntax analysis. A comparison of the syntactic properties and extant inscriptions from the initial erection of tombs 88 and 90 (c. 125 CE) to the later addition of enclosure 89 (c. 160 CE) between them suggests that the built environment substantially impacted the nature of social interactions at the site. In the initial phase, the hierarchical location of the dead, enabled and reified by the varied degrees of decoration and privacy, informed the mourners' spatial location and with whom they were likely to engage. This spatial hierarchy breaks down following the erection of enclosure 89. New families erected additional burial chambers, introducing relational diversity amongst the users, and the changed layout increased opportunities for extended social interaction across different social strata. In this way, my paper reframes the tomb as a site of “lively” interactions.

Setenay Mufti (University of British Columbia, CNERS): “Conspicuous Secrecy, Shared Liminality: Interactions at the Eleusinian Temple of Demeter and Kore”

In her dedicatory Homeric Hymn, Demeter is separated from and later reunited with her captured daughter Persephone; during this time she travels to Eleusis, and upon revealing herself and her Mysteries, instructs the Eleusinians to build her a temple and altar. Generations later, from possibly the Bronze Age to the 4th century CE, Greeks from across the Aegean become initiates of those Mysteries at the Panhellenic sanctuary at Eleusis. The home of this initiation and its Mysteries is the Temple of Demeter and Kore, a temple rebuilt several times over the Archaic and Classical periods with a terminally static interior hall.

We can never uncover the nature of the Mysteries with certainty, and this study will not attempt to. Rather, it will analyze the built environment and performative actions surrounding these Mysteries and argue that they represent the transience and liminality of shared human experience. I argue that the archaeological evidence of rebuilding at this site indicates a shared social memory going back to the Bronze Age; analyze the political motivations for the expansions and rebuilding of the temple as the ceremonies grow over time; and deconstruct the curious popularity of such carefully guarded secrets, as evidenced by accompanying literature in the Classical period. Alongside comparative architectural study, I utilize theoretical approaches to liminality and argue that in addition to the "in-between" nature of the foundational myth (which other scholars have noted), the Temple and its surrounding rituals constitute a liminal space ideal for interaction.

Caroline Barnes (University of British Columbia, CNER): "Living Together Through Time: The Reuse of Ashlar at Kition in the Cypriot Iron Age"

The assemblage of orthogonally cut and fine dressed stones, known as ashlar masonry, was a defining element of place-making and monumentality in the built environment of Late Bronze Age Cyprus (ca. 1750/1700-1050 BCE). The use of ashlar masonry in the 13th century BCE expansion of Kition, a southwestern coastal emporion, is an example of this monumentality par excellence. Four centuries later, these same stones were reused in site refurbishment. The original excavators have proposed this restoration was at the behest of Phoenician colonizers, though this has been reconsidered in light of recent findings; it instead seems that the builders were longstanding members of a Cypriot community. The reclaiming of ashlar from the Bronze Age landscape therefore begets questions about the nature of its reuse. Was this a decision in favor of ergonomic feasibility? Or a deliberate choice to utilize Late Bronze Age motifs? While feasibility certainly could have played a part, this would not have obviated collective memories evoked in their reuse. Moreover, broader Iron Age "archaizing trends" (Fourrier 2015; Papantoniou 2016) around the island suggest that Iron Age identity was legitimized through the visual reminder of Late Bronze Age features (Blackwell 2010; Fisher 2020). I will present the case that reused ashlar was a vector through which social memory was facilitated, and wonder if we might consider architecture as a means by which the inhabitants of Kition lived together not only synchronously, but through time.

SESSION 4: LIVING WITH ANIMALS

Aleksa Alaica (University of Alberta, Anthropology): "Living with Rodents: Exploring Human-Guinea Pig Co-Habitation in the Andes"

Guinea pigs are emblematic of the Andes for their use in foodways, healing practices, and as ritual offerings. As a domesticated commensal species, these animals are kept in household spaces, often fed discarded plant residues from food preparation activities. The co-habitation between Andean communities and guinea pigs provides an insightful proxy for understanding domestic life in the past.

This presentation will explore the use of guinea pigs during the Middle Horizon (600-1000 CE) period that defines the final phase of the Moche culture and the expansion of the Wari state. Often, large-scale sites, mortuary contexts and public settings are the focus of research during this period, so the daily lives of populations remain unexplored. Transformations that can occur from cultural decline and state expansion can impact household activities. Thus, examining the use of guinea pigs, their age profiles, and diets can shed light on the way that populations were reacting to sociopolitical and economic changes.

I will discuss the zooarchaeological and isotopic analyses of guinea pig remains from the Late Moche site of Huaca Colorada on the north coast and the Wari enclave of Quilcapampa in the southern highlands of Peru to interpret the nature of human-rodent co-habitation in the pre-colonial Andes. I will argue that guinea pigs need to be a more closely studied species in projects examining past foodways in the Andes, but also for bioarchaeological research that is interested in the way that peoples' diet and mobility were shifting over time.

Diana K. Moreiras Reynaga (University of British Columbia, Anthropology): “Living with Super-Predators: New Insights on the Interactions between the Mexica and Gray Wolves and Golden Eagles from the Templo Mayor of Tenochtitlan’s Ritual Offerings”

The written and pictographic sources indicate that the Mexica (Aztec) assigned attributes and symbolic associations to a range of animal species. We have also learned that the Mexica used a vivarium to keep and manage exotic animal species. As such, the Mexica managed and interacted with a wide range of animals at their capital city, and in so doing, the Mexica and these animals ‘lived together’. Questions remain about the interactions between the Mexica and these animal species including the length of captivity and overall treatment of these animals prior to their selection in a Mexica sacrificial ritual. In this presentation, I discuss the paleopathological and phosphate oxygen isotope data of an adult golden eagle and three Mexican wolves recovered from the Templo Mayor of Tenochtitlan’s offerings. This study provides new insights to better our understanding about the interactions between the Mexica and these super-predators recovered from ritual contexts.

Camilla Speller (University of British Columbia, Anthropology): “The Secret Life of Pets: Proteomic Insights into Human-Canid Relationships in the Arctic”

Humans and dogs have lived alongside each other for at least 15,000 years. In the North American Arctic, Indigenous groups relied on sled dogs as important sources of transportation, while dogs relied on humans to provide food during the winter. We analysed the proteins preserved in permafrost preserved dog feces from the Nunalleq archaeological site in Alaska to find out what, and how, dogs were fed in the past. We discovered numerous proteins associated with the digestive process, as well as the muscles, bones and guts of multiple Pacific salmon species, providing greater resolution into the short-term diet of dogs and their human providers.

Yuka Shichiza (Simon Fraser University, Archaeology): “Pokna cep rup suma siru, kanna cep rup suku cire: Investigating Ancestral and Current Ainu Interactions with Salmon and Other Fish at Hokkaido, Japan, through Ancient DNA and Ainu Community Knowledge”

In archaeology, the application of ancient DNA (aDNA) analysis enables us to uncover the past on a previously unattainable scale. Due to the potential destruction of the tangible and non-tangible heritage, there is a growing recognition of social context and social responsibility in aDNA research, especially those that engage Indigenous Peoples and their heritage. In some regions of the world including the Pacific Northwest, researchers have developed collaborative research relationships with Indigenous descendant communities by addressing community concerns. Alongside other archaeological records, oral history and ethnographic records, collaborative aDNA studies have shed new light on past human-environmental interactions. However, such application of aDNA is still limited in Japan.

My PhD project will explore long-term human fish interaction by analyzing the aDNA of fish remains from archaeological sites of ancestral Ainu people in Hokkaido, Japan. As this research will explore chronological change and coastal and interior ecosystems, it addresses not only past subsistence but also the fisheries and trade through time. Moreover, this study will be one of the first attempts of conducting biomolecular archaeological research by engaging with Ainu communities. This is not a community-based project as the participation of community members in research design is limited. However, long-term human fish interaction is particularly relevant to the current interests of the Ainu in Indigenous rights in the fishery. Therefore the successful completion of the project may raise further interests in archaeology among Ainu communities, and it may result in future collaborative research.