President’s Welcome – Mike Elvidge

To all the new students: Welcome to the Department of Archaeology, and a heartfelt welcome back to all the returning undergraduate and graduate students. As the current president I look forward to the opportunity to meet all the new students to the department and I welcome everyone to stop by the Archaeology Student Office (EdBd9643) to say hello. Over the last year our student society has been at the frontline of fighting for the return of grants to assist in conference travel and in the creation of the (hopefully) annual Student led Faculty of Environment Symposium where students can exhibit their research projects, prospective works, and interests. Throughout this year we hope to continue this by asserting the needs of our society into the formation of the new Student Union Building to ensure that our society maintains and extends the progressive nature of our faculty.

The Archaeology Student Society is back up and running and I and the executives are looking forward to creating more social and professional events to have a successful year. Over the next semester we are hoping to send students to conferences, create more social opportunities, and to have a series of workshops to help craft the professional skills needed to be a successful archaeologist. We will be hosting meetings on Thursdays at 1:30pm in the museum so if you have any questions or just really want something done please come make your voice heard. Down the road, we look to host another Student led social for faculty, staff, graduates, and undergraduates and we welcome suggestions on other events that need to be held.

Thank you to all for the wonderful two years you have given me as Student President and I look forward to spending my last semester with all of you.

Cheers,
Michael
Meet Your New Archaeology Student Society Executives

President, Mike Elvidge

Coming into my final semester of studies at Simon Fraser University I have graciously been provided the opportunity to continue my time as the Student Society President. In my time as President I have continued the traditions of past cohorts, created new traditions, and had the opportunity to pioneer a student-led symposium with other members of the Faculty of Environment. I am greatly interested in geoarchaeology, south pacific archaeology, Palaeolithic archaeology, and lithic technology and I am always eager to discuss these with people. Over the past summer I spent my time working as a Consultant Archaeologist in North Eastern British Columbia and I am looking forward to graduating and exploring the prospects of graduate school or a professional career.

Vice President, Kristen McLaughlin

Hi everyone! My name is Kristen McLaughlin and I'll be serving as your Archaeology Student Society Vice-President for the 2013/2014 school year! I plan on helping as much as I can getting undergraduates integrated into real archaeology, preparing for our futures, having fun, and enjoying the time we have in this lovely department. We have lots of great ideas for the coming months! Last summer I was a participant in a field school in Peru and this past spring semester I studied abroad in Nottingham, England. I'm also a co-president of the SFU Chamber Orchestra (playing flute)! I hope to take part in some more archaeology this coming year. I hope everyone has a great year and remember: your ASS is here for you.
Treasurer, Courtney Rix

As the newly elected treasurer I am excited to try my hand at something new by managing the finances of our student society as well as getting to know new students and fellow undergrads that I haven’t met already. Having participated in two SFU field schools so far, I am more than willing to talk about my experiences with anyone interested, just send me an email! I’m also available to talk about the Debitage (I’m one of the editors!). If you have any ideas for archaeology related activities or field trips you would like to do, please don’t hesitate to contact me or any of the other execs!

Secretary, Alyssa Ball

The name’s Alyssa Ball. I am a first year Archaeology major with a tireless desire to travel the world. I hail from the small town of Castor, Alberta; of which the only notable landmark is a namesake beaver statue. In my spare time I enjoy running, reading and preparing for the possibility of a Zombie Apocalypse (which for the time being I will pretend not to be all that excited about). My claims to fame are my green turtle backpack, and sarcasm; only one of which often goes unnoticed. I will be ringing in this semester as your A.S.S secretary and hope in the process to get to know those of you in our department!
Faculty Liaison, Matthew Go

My name is Matt, and I am entering my 4th year at SFU. Archaeology for me is the responsibility of giving a voice to the past, especially for those who cannot speak for themselves anymore. Thus, my focuses are in human osteology, bioarchaeology and forensic anthropology. Aside from my archaeology honours, I am minoring in biology and have completed the certificate in forensic studies. I have done work in Peru since 2012, and have had the opportunity to both conduct research there for my Honour’s thesis and instruct a lab and field course in bioarchaeology. Currently, I am working under Dr. Hugo Cardoso building regression models for juvenile dental and cranial development. I am also in the final stages of my honour’s research, and am in the midst of preparing to work in China with Dr. Dongya Yang. Come talk to me about bones, Peru, graduate school, and forensics. And as your faculty liaison, don’t hesitate to contact me about any comments or concerns you would like me to raise with faculty and the department. I look forward to another fruitful academic year with the A.S.S.

Forum Representative, Chris Nichols

After attending three painstaking years of film school, Christopher Nichols had an epiphany in 2010: "You know what, I think I want to be an archaeologist." Three more years later, he is nearly finished his Bachelor’s degree, with a specialization in palaeoanthropology and human evolution, and a special interest in Neolithic-Iron Age Europe. After this year, he plans to complete an Honours Thesis to round off his time at SFU, at which point he will probably decide he wants to be a villainous cattle baron and move to New Mexico. But until then, he is thrilled to be your new Forum Representative, and looks forward to meeting you soon!
**ARCHAEOLOGY STUDENT SOCIETY (A.S.S.) AND SFU ARCHAEOLOGY ANNOUNCEMENTS**

**Movie Nights:**

**Wednesday**, October 9th – Watch movies with fellow students that are loosely related to archaeology or has archaeological references! Past examples include: Planet of the Apes, Indiana Jones, Jurassic Park, and Stargate. The 5th Element has been nominated for this event but feel free to bring along other options!

Time and location TBA, look for upcoming emails.

**Workshops:**

**Thursday**, October 24th – How to apply for a job in archaeology as an undergrad: CV and cover letters.

Time and location TBA, look for upcoming emails.

**Meet and Greet:**

**Friday**, November 15th – Come and meet others who share your passion for archaeology! This is a fun social event where you can meet other archaeology undergrad students, graduate students, and faculty and staff. Believe me, you don’t want to miss this event, they are legendary. Food, beverages (alcoholic and non-alcoholic will be present), and don’t forget some change for raffle prizes!

Time: TBA

Location: SWH 9152.

**Graduate Seminar Series:**

Thursdays at 3:30 – 5:00 in SWH 9152 – Interesting lectures by archaeologists and other professionals from all over the world!

[http://www.sfu.ca/archaeology/events/seminars.html](http://www.sfu.ca/archaeology/events/seminars.html)

Remember to join the Facebook group (SFU – Archaeology Student Society) for future events, impromptu pub nights, and other fun archaeology stuff!
Interview with Dr. Francesco Berna
By Chelsea Muirhead

We sat down with one of our newest faculty members to find out all about his research and introduce him to the undergraduate cohort.

D: What are your areas of study?

FB: So my principal line of research is on understanding who the first human groups were and how they started to control fire. This is very similar to what Dr. Dennis Sandgathe is trying to do with Neanderthals. I’ve been working mostly with Homo erectus because there’s been controversial evidence that Homo erectus may have been the first one to use fire, about maybe 1.8 million years ago. It’s hard to believe but there are some people who believe so. Working in South Africa at Wonderwerk Cave, we found evidence of artifacts of Early Acheulean tradition and conventionally associated with Homo Erectus and evidence of fire in the same cave burning basically at the same time. So it appears that at Wonderwerk there’s an intimacy between fire and humans being found in the same place and we are investigating that further. Caves are a protective environment, so at Wonderwerk we have evidence of fire burning in situ in the cave about 1 million years ago. More important than the date itself are the lithics associated with the fire that are Acheulean, and should be related to Homo erectus. That’s really my major line of research. I also work with geomorphology, stratigraphy, sedimentology and site formation processes starting from the Romans, and Bronze Age, Neolithic and Paleolithic sites in Italy, Israel, South Africa, Georgia and the former Soviet Union.

What is FT-IR?

“FT-IR stands for Fourier Transform InfraRed, the preferred method of infrared spectroscopy. In infrared spectroscopy, IR radiation is passed through a sample. Some of the infrared radiation is absorbed by the sample and some of it is passed through (transmitted). The resulting spectrum represents the molecular absorption and transmission, creating a molecular fingerprint of the sample. Like a fingerprint no two unique molecular structures produce the same infrared spectrum. This makes infrared spectroscopy useful for several types of analysis.

So, what information can FT-IR provide?

• It can identify unknown materials
• It can determine the quality or consistency of a sample
• It can determine the amount of components in a mixture”

Information from: Introduction to Fourier Transform Infrared Spectrometry
http://mmrc.caltech.edu/FTIR/FTIRintro.pdf
D: Why did you get into archaeology?

FB: More than archaeology, I am interested in prehistory and since I was a kid I always liked it; it’s just a passion. It is hard to tell why really. I guess to understand the present we need to understand the past— but really the question I’m interested in is what made us human? And I think the prehistoric period is still pretty unclear; that’s where we have to focus, more than proto-historical and historical archaeology. That’s what fascinated me about archaeology. When I was a kid I was attracted by prehistoric people, prehistoric archaeology and prehistoric cultures— I was always fascinated by hunter gatherers and I don’t know why.

D: Is archaeology something you decided to do in high school or university?

FB: I think when I was really young I always liked archaeology and prehistory in particular. Growing up I started to be really interested in the environment and environmental conservation issues. My university career went from studying environmental science to pre-historical archaeology and trying to combine the two; my undergrad was in natural history/sciences, physical anthropology and prehistory. For my PhD, I studied environmental science— it was related to soil, soil chemistry and environment. At the same time, when I was conducting my major research in environmental science I always had a side project in archaeology. Eventually, when I graduated I realized my real passion and drive was in trying to answer archaeological questions, to understand early humans and what their relationship was with the environment.

D: So, you mentioned Wonderwerk Cave before can you elaborate more on your work there?

FB: Wonderwerk Cave is a site in the North West of South Africa, at the margin of the Kalahari. What is fascinating there is that the cave offers a deep sequence: it starts about 2 million years ago with Oldowan tools and continues up until basically when the Boers came in. We have evidence of more than 2 million years of occupation, the sequence is fantastic and it’s in a cave, which is rare for such an early site. It is a fantastic opportunity to understand first human evolution in West South Africa, rather than East African sites. Also because the cave traps a sequence of environmental proxies that we can track, use and correlate. The big question is how early the hominin
get to that part of Africa and what kind of people they were. At the moment we don’t have any human fossils there we only have a few tools. We do have a clear sequence however, so my role was to help with trying to figure out the site formation process, understanding dating and human activities. Fourier Transform Infrared Spectroscopy (FT-IR) is one tool that you can do mineralogy with, and look for how clays in soil and bones are preserved and if they were heated or not heated. When we were working at the whole stratigraphic sequence by FT-IR we could say that at Wonderwerk a large portion of the bone fragments— either big chunks or microscopic fragments inside thin sections, were heated above certain temperatures. These finds led us to look for where the fire was. Was it inside or outside the cave? Eventually there were other indications that there was fire inside the cave, for instance lithic tools looked altered as if they were heated, some of the clay that was associated with the bones look heated too, and a lot of the bones were heated or even calcined. We decided that it was really important to publish those findings separately and not with the whole site formation story.

D: You also did work in Sibudu with ancient bedding, tell me about that?

FB: My role there was marginal but using FT-IR we could tell what was the most probable mechanism that led to the preservation of 77,000-year-old vegetation bedding. We coupled the FT-IR to a microscope to analyze the very small plant remains; the plant itself was an aromatic variety and apparently an insect repellent. We realized that the preservation of this particular bedding wasn’t due to burning but it was from some sort of silica impregnation, the water that was very rich in silica inside the cave impregnated the plant material to create fossilization.

So FT-IR is a fantastic technique, what you do is you shine your sample with infrared radiation and that will excite bonds inside the molecule, most of the molecules you have in any compound, those excitations will be absorbed and that allows you to know what kind of molecules are vibrating inside your sample and from that you get information on what kind of mineral or organics are included or composing your sample. FT-IR is really good for archaeology for instance is that it allows you to identify different clay minerals or phosphates; you can see the difference between phosphates that are formed from decomposed bones or that are digenetic. You can also tell small differences for each compound, for example you can tell if the clay is burnt or not, if calcite contained in archaeological features is pyrogenic (formed after the combustion of wood or calcination of geological calcite or if it is geogenic calcined and you can investigate hydration or dehydration of minerals and organics. So FTIR is very useful for instance to work on
ancient Pyrotechnology but it’s also very good for identifying minerals that are proxies for different environmental (diagenetic) conditions. In fact, with FTIR it is possible to distinguish between different types of phosphates which are very indicative of very different chemistries or pHs in the soil, FTIR, is used for databases or libraries of organics to, for instance trace or source ambers.

**D: Is it a fairly new technology to archaeology?**

**FB:** It’s not new, it depends how you define new. The first person that used it a lot in archaeology was Steve Winer with the help of Paul Goldberg— I believe they started in the late ’80s. So it is relatively new, but I’ve been using it now for more than 10 years, so for me it’s very old. For people who deal with bones and bone isotopes, it’s one way to determine whether a bone is well preserved or not. From a very small sample you can get a lot of information. For example, if there’s collagen you can understand the state of preservation of the collagen— whether it’s well preserved or not. You can also look at phosphates and carbonates and understand the “diagenetics” (i.e. the preservation stage of collagen and bone mineral). In isotope studies, it’s probably been used since the 1990s or 1980s; for other applications, it’s fairly new. The latest applications are probably three or four years old, related to work on the preservation of the mineral calcite, as an application on pyrogenic calcite, for example, for the study of ancient lime plaster, geological raw materials (chalk, limestone, marble) and shells. It’s been used a lot since the 1990s for site formation processes because it gives you a quick screening of minerals and especially phosphates, which are important to stratigraphic correlation and understanding fossilization and human activities.

**D: Tell me about the work you’ve done with the Maya and cooking balls?**

**FB:** That was when I was working at Boston University and a PhD student, Stephanie Simms, came up with the idea and appreciated the integration of the FT-IR and micromorphology. Basically I just helped her out; she was excavating at Escalera al Cielo (Mexico) and found in a kitchen context all these clay balls or stones (she wasn’t sure in the beginning). Through research, she found out that modern Maya use big pit ovens where they bury embers and use clay balls mixed with it. Stephanie’s specialization is residue analysis, especially phytoliths and starch grains, so she analyzed the balls for starch grains and phytoliths. The starch grains of edible plants (such as corn) especially supported her hypothesis that they were somehow associated with food preparation. Next she ran some experiments to understand how and what the balls were made of. One hypothesis was that they were made of local soil and clay, so she sampled clays and soils from around the area; we analyzed them and realized that indeed it was the raw material that the balls were formed from,

"About 1-2 inches in diameter and more than 1,000 years old, these clay balls contained microscopic pieces of maize, beans and squash". Stephanie Simms
or at least the most common material, in fact some were made of calcrete or limestone, but only few were made of those materials. When we looked at the cross section of some of these balls we saw that there was a weird discolouration with a red rim on the outside and clear tan inside (or some were black inside), so we wanted to understand what the conditions were that produced that; one idea is that maybe after they were fired they were put into water to boil it. After a few experiments, we realized that they were simply fired over and over again and that’s how they got the red colour rim. So we figured this out by obtaining local soil and making experimental clay balls and then firing them in different conditions— in controlled conditions— like in muffle ovens and experimental BBQs. So with the FT-IR we could determine what the terminal history of some of the clay balls was by sectioning them and then mapping the clay mineralogy in cross section. Some were clearly homogenously burnt below 700 degrees Celsius and others were not completely burnt, so for the latter we could trace where the source of the heat was. At the end of all the analysis by integrating petrography, FT-IR, and residue analysis we could tell that they were used in fires with not very high temperatures (maybe 600-700 degrees Celsius, like a cooking fire), and the balls were used more than one time and were not directly used for grinding vegetables (e.g., for the preparation of flours from seeds) but they had evidence of spills over since the residue were in trace amounts. That was a really cool project and both Stephanie and I still get asked about it today, by even people outside of archaeology. Methodologically, it was interesting to get the history of an object, from the raw material, to how it was prepared, fired and used during its time; it’s a complete picture and you don’t always get that.

D: What is your current research focus?

FB: I’m still working with the Wonderwerk Cave project, which is my main research. Then Manot Cave, in Israel, in Upper Paleolithic site that has a long time depth, so everyone is really excited; there I will take on a little bit of the pyrotechnology. There is just one paper that came out so far; we started research there three years ago, there is potential for more— we believe there maybe 20 metres of sediment, we hope. Next, I’m almost done with the site formation at a Neolithic site in Israel: Beisamun, which was very important when it was discovered in the 1970s because it had a plaster floor and plaster skulls; it was a typical PPNB pre-pottery site of the Neolithic, but what we are looking at now is the

For more on the sites Dr. Berna worked on and more about Dr. Berna:

ACHEULEAN FIRE AT WONDERWERK

Quest for Fire Began Earlier Than Thought

http://news.sciencemag.org/2012/04/quest-fire-began-earlier-thought?ref=hp

MSA BEDDING AT SIBUDU

77,000-Year-Old Evidence for ‘Bedding’ and Use of Medicinal Plants Uncovered at South African Rock Shelter


MAYA KITCHEN AT ESCALERA AL CIELO

Scientific analyses and experimental archaeology determine that mysterious, 1,000-year-old balls of clay found at Yucatán site were used in cooking


Dr. Francesco Berna’s personal website:

https://sites.google.com/site/francescoberna/
transition into the pottery Neolithic where there was a change in the lithic industry but also the pottery. It’s a transitional site, but generally in Neolithic sites once you have pottery, no one cares anymore. We are actually interested to see who the first potters were; are they coming from Asia? Because now we know the earliest pottery is from China and Japan, there is some influence from Asia into the Iron Age so we want to look at that. I’m also working on a very cool site in Southern Italy: Oscurusciutu. It is a Mousterian site, probably Neanderthal and there is a lot of fire making, maybe ritual, some of the hearths are round, 10 cm, pit-like and filled with ash from grass; some have twin features, it’s very interesting with amazing preservation of the features. Those are my current major projects, but I’m very open to provide help to any student who comes in with ideas; I can advise them. By helping in different projects I’m learning so much. I’ve also done collaboration in North America with Chris Rhoos, at Texas Southern Methodist University; he’s working on fire in archaeological contexts, looking at wild fire from the Holocene and trying to understand human-environment interaction. I would love to— in time—start working on this part of the world (B.C.), particularly in the North— it really attracts me, especially the peopling of Americas.

The Debitage team would like to thank Dr. Francesco Berna for his contribution to this issue.
Conferences / Symposia Highlight

Cultural and Intellectual Property Issues, Indigenous Rights and Archaeology
John Vandergugten

Intellectual Property (IP) rights play an important part in the modern world, and permeate virtually all aspects of society including the archaeological discipline (Nicholas and Bannister 2004). Cultural resource/heritage management needs to respond to, and incorporate means to address issues of intellectual property. While the issues surrounding ownership may be complex, considerate and careful communication and dialogue are necessary and possible. The interdisciplinary project Intellectual Property Issues in Cultural Heritage (IPinCH), under the direction of Dr. George Nicholas and based at SFU, has proactively engaged with these issues since its inception in 2008.

On May 2, 2013, the “Cultural Commodification, Indigenous Peoples and Self-Determination” symposium was held at the University of British Columbia (UBC). The public symposium was organized by IPinCH and the Liu Institute for Global Issues based at UBC.

Attendees of the conference were warmly welcomed with a prayer and traditional drumming given by Victor Guerin of the Musqueam Indian Band. George Nicholas introduced essential ideas surrounding heritage, including the issues of appropriation, commodification, and the inseparability of tangible and intangible characteristics of heritage. Nicholas noted the, “pressing issues facing descendent communities, especially indigenous [peoples]” both locally and globally. What may be termed, “cultural borrowings” are evident throughout social infrastructure in architecture, art and beyond. Although appropriation and commodification may not always be negative, they can have harmful costs to those peoples with whom the heritage is associated; such crucial costs include the loss of access and loss of control over ancestral knowledge and property. The issues connected to cultural and intellectual property are clearly complex and require a conversation with clear communication between stakeholders.

The first session, “Processes of Cultural Commodification: Selling What, To Whom, Why?” focused on ways in which cultural bases have been and may be commoditized, as well as the reactions toward its wholesale use. Susan Rowley (UBC) presented an animated presentation surrounding the case of the lovable sealskin toy Ookpi, in which Indigenous and government parties in Canada cooperated to produce revenue. The name for the figure which won the hearts of people worldwide is derived from the Inuktitut ukpik, meaning snowy owl.
Alexis Bunten, an ethnographer and IPinCH postdoctoral fellow, provided a thought-provoking talk on “The Limits of Cultural Commodification”. She referred to the Marxist definition of a commodity, which is something that has an exchange value in the context of trade; the reality is that anything can be commodified, regardless of whether it should be or not. Pointing to the sale of sacred Hopi kachina dolls in the United States, and the commodification of the Australian Aborigine Dreamtime concept by the Australian government as a marketing tool, Bunten illustrated how cultural property may be misappropriated.

Nicole Aylwin (York University), a doctoral candidate in the area of Communication and Culture, discussed the notions of heritage and creative economies. In essence, culture can be (and is) used as a commodity to fuel economies.

The second session, “Framing Cultural Commodification: Marks, Labels, Licenses, and Appellations”, concentrated on the regulation of cultural heritage use. Rosemary Coombe (York University) provided a useful definition of the term ‘commodity’ in her talk on the values of production, explaining that, “commodities move, travel, [and] communicate”. For this reason, the authentication of goods plays an important role in the world of commerce, manifest in marks indicating conditions of origin (MICOs). Coombe and Aylwin (2011) discuss MICOs and the various ramifications for heritage protection.

Kim Christen (Washington State University) introduced an innovative project involving the design of ‘fair use’ labels as a means of educating and communicating about traditional knowledge (TK) and cultural property in the digital arena. The Mukurtu project (http://www.mukurtu.org/) intends, “to empower communities to manage, share and exchange their digital heritage in culturally relevant and ethically-minded ways”. To clarify, the software is a ‘content management system’ (CMS) in which users may manage digital heritage by regulating its use through cultural protocols, and TK licenses and labels. The licenses and labels are said to be customizable, so that users of the software can communicate how a digital file should be treated. Though TK labels are not legally binding, they may help notify the public that a digital file contains culturally sensitive information and encourage responsible use of such files. Christen (2012) explored reactions to the CMS concept and the idea of access to information, which is well worth a read. Mukurtu’s projected goal is to be valuable software for archivists, libraries, museums and other groups.

Deidre Brown (University of Auckland) described how cross-cultural appropriation is common practice. This is evident in more tangible ways through art and architecture, though it is also somewhat intangibly present in philosophies, and performance activities like dance. Some heritage may be culturally-sensitive and its appropriation considered offensive or inappropriate. It is courteous to consider whether cultural appropriation is proper and to act in an ethical manner.

The third and final session, “Indigenous Responses to Appropriation: Negotiation, Protection, Care”, focused on ways in which Indigenous peoples have been challenged and yet persevere. Shannon Martin (Ziibiwing Center of Anishinabe Culture and Lifeways) discussed difficulties of heritage management. Known more widely as the Sanilac Petroglyph Site, the Anishinabe people call it
ezhibiigaadek asin, translated as “knowledge written on stone”. The place is considered sacred by the native peoples of the area and was used by them in the past, and is used in the present, for ceremonial and educational purposes. Unfortunately, the site has faced vandalism and what the Saginaw Chippewa Indian Tribe of Michigan considers the indecent commercialization of its images. Community-based participatory research using ethnographic methods has been practiced to evaluate ways to best manage the site (Hollowell and Nicholas 2009).

Figure 2. A Panel of speakers, including Alexis Bunten, Nicole Aylwin, and Sue Rowley, convenes following the first session “Processes of Cultural Commodification: Selling What, to Whom, Why?”, moderated by Jennifer Kramer. Photo: Kristen Dobbin, used by permission.

Violet Ford (University of Lapland), a practicing lawyer, examined the misappropriation of the inukshuk in its use as a symbol of the 2010 Winter Olympics. Customarily, inuksuit function as markers on the landscape for travellers and hunters. As Ford noted through a video clip, stone structures in the form of humans are actually called inunguak. Structures of human form have special meaning to the Inuit and are functionally different. Here a cultural artifact of the Inuit has been misappropriated, turned into a commodity, and inaccurately named. This case should serve as a reminder that caution should be taken and the wishes of peoples should be considered carefully before appropriating cultural symbols as there is a risk of offending cultures.

Maui Solomon (Barrister, Kawatea Chambers, New Zealand), an experienced lawyer, advocated for the rights of indigenous people. A Moriori Māori himself, Solomon spoke of the use and misuse of cultural icons. Drawing from examples in New Zealand, he described how cultural treasures, or taonga, have been belittled through use without the consent of cultural leaders. In Māori ideology, traditional
guardians, or kaitiaki, protect taonga; only the kaitiaki can authorize usage of cultural icons. Such icons are associated with the identity of living culture and persons who comprise it. The concept of reciprocity is a principal part of Indigenous philosophy, and often an exchange of gifts, or koha, is made in return for its use. As Eliade explored in his seminal *The Sacred and the Profane*, not all things may be considered ordinary nor are they treated as such by certain cultural groups.

Musqueam First Nation Band member Victor Guerin told a story in song of the need to respect others. The symposium concluded with a synthesis of the ideas that were expressed by the various presenters.

In addition to the symposium, IPinCH hosted three other presentations on April 30 and May 1, in collaboration with SFU’s Department of Archaeology and Department of First Nations Studies. On April 30, Maui Solomon, a Moriori Māori barrister, discussed the challenges that indigenous peoples, in particular the Māori and Moriori, face in New Zealand’s current legal climate. On the following day, archaeologist Susan Thorpe and Maui Solomon presented on the IPinCH initiative to document and preserve Moriori cultural heritage.

Solomon spoke of the history of Moriori settlement in New Zealand, namely Rekohu, or the Chatham Islands. Early in their history, the Moriori endorsed a Peace Covenant, *Nunuku’s Law*, in which they prohibited violence and warfare, maintaining peaceable relations with one another. In 1835, however, several Māori tribes invaded Rekohu and victimized the Moriori through killing and enslaving them; the Moriori peoples maintained their covenant throughout these trying times. European colonists expanded upon this callousness by disseminating lies about the Moriori within the public education system. Through the actions of the Māori and Europeans, the Moriori suffered loss of identity as their “life, land, liberty, and language” were denied them. In 1840, the Treaty of Waitangi was signed by the British Crown and chiefs of the Māori, recognizing ownership of land by the Indigenous, and declaring them British subjects. Nonetheless, the unfortunate legal case of *Wi Parata v Bishop of Wellington* (1878) illustrates the disrespect of Indigenous by the colonial English powers, as its judgment ruled the Treaty of Waitangi void; since then, the validity of the treaty has been re-examined and in 1975 the Waitangi Tribunal was formed as a result of the Treaty of Waitangi Act (1975) to study the Crown’s violations of the Treaty and provide recommendations for reparation. Numerous claims have been brought by the indigenous peoples before the courts in New Zealand yet many remain unsettled. Despite the hardships of the Moriori peoples, their culture has persevered and initiative is being taken by them to reclaim their identity. For example, the landmark *Wai 262* claim sought to establish a means to guard and govern the use of Indigenous cultural heritage manifest in traditional knowledge and environmental resources. However, progress on this initiative by the Indigenous peoples has met a poor response from the government. The report can be found online at the Waitangi Tribunal website (*www.waitangi-tribunal.govt.nz*).

The obstacles encountered by the indigenous peoples in New Zealand echo those that First Nations and aboriginal peoples have faced at home in Canada. It has taken a long time for the current climate of relatively more constructive dialogue to develop. Still, progress needs to be made. Local First Nations peoples suffered when the dominion of Canada took root in their land, and their cultural practices and life-ways have been threatened in the past. The spirit of First Nations peoples is alive, and their hand in the past is visible through the landscape in their traditional-use practices. For instance,
culturally modified trees (CMTs) dot the landscape in British Columbia (B.C.) and serve as a lasting reminder of the activity of this land’s first peoples. Notably, the landmark legal case *Delgamuukw v. British Columbia* (1997) confirmed the existence of aboriginal title in B.C.

The Moriori have worked with IPinCH and the Hokotehi Moriori Trust (www.moriori.co.nz/home/) in their efforts to reclaim their identity, through recording traditional knowledge and surveying their cultural landscape. Thorpe spoke of instances in which treasures of Moriori cultural heritage have been divorced from their intended context and confined in museums overseas; repatriation efforts have been taken to return the precious heritage. The Traditional Knowledge Revival Pathways project (www.tkrp.com.au/) has aided the Moriori, among other Indigenous peoples, in the preservation of traditional knowledge for future generations.

In another talk, Susan Thorpe expanded on the case study with a focus on the islands’ longstanding dendroglyphs, known as rakau momori, explaining how they represent the identity of the indigenous Moriori. The conservation of these structures is important for the Moriori as they are markers of identity and each hold special meaning. The features have not been immune to the effects of a changed environment, nor the callous disregard of vandals who have reportedly damaged several of them. It is important to fight against the social ill of vandalism and apathy and promote civility and respect for fellow persons. Conservation includes non-invasive laser scanning, and work to prevent their decay from the elements, where deemed appropriate. One can refer to the publication by Solomon and Thorpe (2012) for further information on the recording project.

The case studies and ideas raised by speakers of the symposium and other talks demonstrate the far reaching significance of cultural property. Each issue may need its own approach as situations and concerns are unique, but all cases should be dealt with respect. There are bound to be future developments in IP and cultural heritage laws as issues arise. It should be noted that there is a lack of effective federal heritage laws in Canada (see Burley 1994). Part of the reason for this may be explained as the outcome of poor politics. Across Canada, each province has its own heritage laws, where some are arguably stronger than others.

Much more has been said about IP rights, law, and heritage. Though challenges exist in the protection of cultural property in a time of “digital democracy”, novel ways of managing material and associated data have been developed; for instance the Reciprocal Research Network, a partnership between several Indigenous parties and UBC’s Museum of Anthropology has brought together digitized material from around the globe (Brown and Nicholas 2012). Many additional examples of successful collaborations exist (see Nicholas et al 2011). Indigenous archaeology – the practice of archaeology “with, for, and by Aboriginal peoples” (Nicholas 2001:31) has developed over the years, and positive working relationships have been established with archaeologists.

Unwelcome appropriation of another’s culture is insensitive to the meanings and values attached to the cultural act or object. This is because cultural appropriation removes the article in question from its intended context. When a cultural treasure is treated with disrespect, it is really the identity of the people who rightfully own this property that is being disrespected. Although different cases of cultural misappropriation were explored, the resounding theme was that of the need for respect.
The whole point of the field of archaeology should not be about objects but the people who created, used, and venerated them. Archaeologists and anthropologists have a great role to play in educating the public and easing issues of cultural property rights, and should work with indigenous peoples. IP rights can be used as a tool to resolve issues that arise, and the interests of all invested individuals should be considered carefully before any action is taken. In summary, the IPinCH symposium was a fantastic forum of sharing, learning and collaboration, which welcomed academics and the public alike in the ongoing discussion on heritage and its manifold meanings.

More information about the IPinCH project and its initiatives, including videos, can be found at http://www.sfu.ca/ipinch/. One may refer to two articles in particular for a brief overview and recommended reading on IP issues and heritage management: Nicholas et al 2009 and Nicholas et al 2010.
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Solomon, Maui, and Susan Thorpe

*Wi Parata v Bishop of Wellington* (1878) 3 NZ Jur (N.S.) S.C. 72.
The Walk for Reconciliation
by Courtney Rix and John VanderGugten

September 22nd saw Canada’s first Walk for Reconciliation in Downtown Vancouver, B.C. The walk concluded Reconciliation Week, organized by Reconciliation Canada (reconciliationcanada.ca), an event intended to address the need for a wide-spread opportunity to tell the stories of survivors of the residential-school system.

The initial thought behind the inception of the Walk for Reconciliation was to be a healing event between Aboriginal peoples and all Canadians, a new way forward. This was certainly accomplished as thousands of people braved the cold and extremely wet conditions to show support and solidarity in the process of healing.

Spectators and participants were treated to a modern expression of gilskamili, a traditional ceremony performed during potlatches by the Kwakwaka’wakw First Nations, whose traditional territory lies on the northern tip of Vancouver Island. It is not a dance but a poetic expression whose purpose is to reveal true identities and see one's true self. This gilskamili was created by artist Beau Dick and was inclusive of neighbouring nations and intended to lift all people.

Fifty years ago, Dr. Martin Luther King, Jr. delivered his “I Have a Dream” speech; this year, the human rights icon’s daughter Dr. Bernice King spoke in support of the reconciliation cause, echoing the calls for the recognition of and equality for all peoples. At one point in her poignant speech, Dr. King asked those listening in the audience to look to their neighbours and proclaim “you are a first class citizen,” connecting and opening the dialogue to all participants.

The expression 'Namwayut, a Kwakwaka’wakw word rendered in English as “We are all one”, illuminates the drive behind the need for reconciliation.

Check out the links below for more information on Reconciliation Canada and the Walk for Reconciliation.

Online news article of the Walk:

A video with powerful images from the Walk and an inspiring message from Chief Robert Joseph: https://www.youtube.com/watch?v=YJZWN0egfo

Images of event by Courtney Rix; “Walk With Us” image by Reconciliation Canada.
Adventures in the Field...

The SFU Don and Lion Islands Field School

Eric Simons

We gave Lion Island four of the best weeks of summer, and two of the rainiest. We offered it our inexperience, our shiny new tool bags and our then-pale necks. In turn, it extruded ceramics, charcoal, glass bottles and enough rusty nails to last an archaeologist’s lifetime.

Perhaps you’ve already heard a little about the field school on Lion Island? The historical archaeology; the perpetually rubber-booting bogginess of the place; the profusion of colourful china and glassware, wet-cell batteries, smoking pipes and old leather boots; the boat rides, concomitant prayers for motors to start (or not stall), and occasional futile paddling against the flow of the Fraser River.

We dug for six weeks, kept our trench walls mostly straight, lifted with our knees. We bailed fish from our units in the morning, listened to the resident hawk couple at lunch, and when we headed home before evening we cut carefully through the wake from tugs and barges. The river is still busy with industry, over a century after our island became the newest hub of British Columbia’s fish production.

Lion Island, located just west of Annacis Island in the south arm of the Fraser River delta, was home to the Ewen Salmon Cannery (1885-1930). Its workforce—Chinese, First Nations and Euro-Canadian—lived there during the summer salmon-run months. On neighbouring Don Island (and the east tip of Lion), a Japanese village formed—fishermen and their families, living mostly year-round, supplying the cannery with salmon in the summer and working at agricultural and other ventures the remainder of the year. The cannery shut down after four decades of operation, amid province-wide consolidation of the industry. The seasonal workers presumably left immediately, and the Japanese village dissipated soon after.

Between 2005 and 2006, then-SFU doctoral candidate, Douglas Ross conducted the first significant excavation of the islands, focusing his interest on that Asian immigrant experience. He put his project to bed, wrote a book on the subject, and thought he’d never return to the island. But unknowingly he’d set the stage for SFU’s 2013 field school.

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Over our six weeks of excavations I experienced the sensation of on the one hand being on the island but at the same time not being on that island, the Lion Island of the turn of the twentieth century. The feeling of an unbridgeable separation between past and present must be common to all archaeological digs, but I wonder if the sensation is more uncanny in historical archaeology. For one, the objects we were finding were intimately familiar. We may not, for example, have been able to identify one particular crooked-necked white ceramic bottle if a student’s grandparents didn’t have the same product (German mouthwash) at home. A century later, the bottle is now plastic, but still formed in the same unique shape and doing the same job. A familiar object, provided you have the right relatives.

The point is that there was almost nothing that we found that couldn’t be purchased today, if not at the mall then at least in an antique store: lantern glass and old whiskey bottles, a china teacup with a garden motif, a marble and a doorknob. But despite this familiarity I felt negligibly closer to the occupation era of Lion Island than I suspect I might have at a prehistoric site.

We worked from fire insurance plan maps, which plot and label the structures that once scattered the island. We studied aerial photos, saw those same buildings and also tilled fields, dykes and hedgerows. Other historical photos showed the cannery from the inside. Oral and written accounts lent specificity to the entire complex, down, at times, to the level of the individual. There is little mystery as to what was on the island, what was going on there, at a macroscopic level.

So our interest was focused on the interpersonal—the mixing (or not) of nationalities, the lifestyles of the transient versus the permanent residents, and who really lived at the unmarked bunkhouse anyhow? Despite having excavated only a small fraction of the areas of interest, we left with a dozen boxes of artifacts, incipient answers.

What does the array of artifacts tell us? In his thesis, Ross brought together the finds from his first excavation with ethnographic accounts, documentation of industry, plant and bone remains and plenty of historical research. Ultimately, he wrote of two Asian immigrant experiences, different from each other in many details but, between Don and Lion Islands, sharing the same small space.

Our field school itself did not offer much time for on-the-fly site interpretation. We were taught the mechanics of excavation very well, and the products of that excavation are in good hands. But there was little opportunity to discuss the significance of our finds in any systematic or comprehensive fashion. That sort of conversation happened mostly.
in the still moments at the end of the day, groups of us waiting on the beach for the next boat to bring us back to the mainland, comparing mental notes.

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So in that absence, let me pose an intentionally naïve question: If our goal was to better understand the people who populated this low-lying little island a century ago, what means did we, the excavation crew, have for understanding the site, even in a momentary, provisional way?

For all of our complaints about weeks spent in rain pants and the soggy Skytrain rides home, a part of me came to believe that it was our time spent wallowing in the mud—more than anything we pulled from it—that brought us closer to the people we were studying. The mud became the substrate, both literally and figuratively, for how I came to imagine the lives we were attempting to reconstruct.

Their shifts over, workers balance awkwardly outside their bunkhouse, relieving their tired feet of boots made doubly heavy by caked-on mud. Someone hurls out an armful of empty cider bottles later that evening, to the heap just outside of camp, picking his way over a deteriorating boardwalk. Or perhaps there’s no boardwalk at all, and instead he sticks carefully to the edges of the thoroughfare where it hasn’t yet been trampled into ankle-deep muck (that’s how we walked to the dig site each day, picking our way along the perimeter of the path, continually widening it in the process). Harmonicas are played around campfires, men seated, their feet tapping (slapping) in the mud. And before turning in for a night, someone walks to the edge of camp to relieve himself; a button pops off his trousers and is immediately lost in a puddle; a nineteenth century button disappears until the twenty-first.

Figure 3. The crew works as a team to bail excavation units flooded by water of the Fraser River.
Photo courtesy of Douglas Ross, used by permission.
I suppose we don’t know if any of these things actually happened, as modestly imagined as they are. But as the island itself hasn’t moved much since 1890; and as high tides bring the Fraser River water fully into the island, filling our excavation units to the brim each morning; and as it appears that all the old buildings, removed from the site long ago, were built on pilings, mud feels like the constant. Ubiquitous and persistent. Ask one of the other students: which will you remember from the island—the mud or your first trowel? The mud or the colour of the intact medicine vial you found on that second week?

And what did the former residents of Lion Island remember of the place when they returned to Chinatown at the end of the salmon season, or when they walked the dusty grounds of internment camps in BC’s interior a decade later? One night’s cider bottle? A discarded inkwell? A lost hairpin? Maybe. More than their possessions, likely, they remembered those incidents that tend to leave no trace on the archaeological record: a romance, a fistfight, a drink-fuelled revelation that couldn’t be shaken the next morning, maybe the decision to leave the island for good.

But present both in the moments of pathos and the discarding of the daily detritus of material life ... the mud! I’m forcing the point now, but I wonder if, despite the familiarity of the artifacts we collected, it’s the ground underfoot that we shared most closely with the cannery workers. The ligature that binds us now. It’s the very small thing we know best about the island, and we know it with them.

Figure 4. Traversing the muddy shore.
Photo courtesy of John Vandergugten, used by permission.

Editor’s Note:
Also take a look at the field school blog, to which field school participants contributed over the field season: [http://sfuarchaeology.wordpress.com/](http://sfuarchaeology.wordpress.com/).
Announcements

VOLUNTEERS WANTED

If you are looking for experience in a museum and/or want volunteer hours consider the Museum of Archaeology & Ethnology at the Burnaby campus. The MAE needs help with the management of collections: tasks include image digitization, database entry, records creation, and photographing artifacts.

No experience needed. Projects are based on the needs of the Museum but can generally be tailored to individual interests and goals. Museum hours of operation run 9-4, scheduling for volunteers is flexible with an expectation of 4 hours a week.

Interested? Questions? Contact Barbara Winter, Museum Curator, at bwinter@sfu.ca.

Upcoming Conferences

The 46th Annual Chacmool Archaeological Conference
When: November 7 to 9, 2013
Where: Rosza Centre, University of Calgary
Focus: “The understanding of cultures worldwide and across time through interpretation and context of the movement of people, materials and ideas”
Contact: chacmool2013@gmail.com
For more information: http://arky.ucalgary.ca/chacmool2013/

The 47th Annual Canadian Archaeological Association Conference
When: May 14 to 18, 2014
Where: Hilton London Ontario - sessions, professional meetings and the banquet
Focus: TBD
Contact: caa2014aca@gmail.com
For more information: http://canadianarchaeology.com/caa/

The 47th Conference on Historical and Underwater Archaeology
When: January 8 to 12, 2014
Where: Quebec City, Canada
Focus: TBD
Contact: registration.sha2014@conferium.com
For more information: www.sha2014.com

Societies to Join

British Columbia Association of Professional Archaeologists (BCAPA)
Canadian Archaeological Association (CAA)
Archaeological Society of British Columbia (ASBC)
Underwater Archaeological Society of British Columbia (UASBC)
Society for Historical Archaeology (SHA)
Society for American Archaeology (SAA)
Archaeology Headlines!

**SFU in the news:**

Matt Go (San Jose de Moro Archaeology Program, Pontificia Universidad Católica del Perú)


**Archaeology and the Public:**

Canadian Man Gets Nine Years for Artifact Theft in Halifax, Nova Scotia


Vote for Pennsylvania’s Most Endangered Artifact


Oregon Trail Repaired With the Help of Boy Scouts


**Recent Discoveries:**

Mummified Egyptian Dog Suffered From Tick Bites


Who Was Eating Salmon 45,000 Years Ago in the Caucasus? Neandertals.

http://www.sciencedaily.com/releases/2013/09/130917090125.htm

Dating of Beads Sets New Timeline for Early Humans

http://www.sciencedaily.com/releases/2013/09/130913093314.htm

Entelognathus: Paleontologists Find 419-Million-Year-Old Jawed Fish


**Archaeological Debates:**

Where Should Richard III be Reburied?

For Your Amusement...

it's not you... i just think we need to date other peoples

Motivation Behind Archaeology Students Career Choices

- To discovering the truth about our shared heritage
- To improve instrumental analysis of sensitive artefacts, and move science forward
- To spend one's career in the outdoors, getting fit, healthy and well paid
- Being Indiana Jones
- "It belongs in a Museum!"

I always want my provenience to be next to you.
Archaeology Crossword by Chelsea Muirhead

Across
1. _____ Point.
3. Fossilized excrement or feces.
6. _____ Matrix.
7. A mound of stones used as monument or marker.
10. Hand tool consisting of a metal blade attached to wooden handle.
12. Period between Paleolithic and Neolithic.
13. Rough outer surface of a stone.
15. Extinct form of humans.
16. Stone debris from manufacture of stone tools.
17. A reed; used for writing sheets in Egypt.
18. Fragment of pottery or glass.

Down
1. First system of writing.
2. _____ knapping.
4. Bulb of _____.
5. Collection of objects purposefully buried.
8. Pre-20th Century collectors of artifacts (Pre-Archeologists).
11. Earliest Egyptian script.
12. Deposit of ancient debris or rubbish.
14. Survey instrument that measures horizontal and vertical angles and distances.
Thanks to everyone who contributed to this issue of The Debitage! We would love to hear from you if you have suggestions for upcoming issues or if you have anything to contribute! You can contact us at sfudebitage@gmail.com.

Be sure to look out for our next issue!

Creators:

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