GEOGRAPHY POSTGRADUATE SYMPOSIUM

Wednesday 25th September 2019, Queens Building 170



Schedule

11.00	Welcome by Professor Phil Crang (Head of Department)
11.10	Emily Wiesendanger – 'The Late Pleistocene Reindeer (Rangifer tarandus, Linnaeus, 1758) of Britain: Past Migrations and Seasonality'
11.30	Ed Armston-Sheret – 'Failing bodies: exploration, non-heroic suffering, and imperial heroism, 1856—1913'
11.50	Joanna Tindall – 'Reconstructing abrupt Holocene climatic events from ostracod-derived stable isotopes'
12.10	Saskia Papadakis – `England as a diaspora space: Troubling the North-South divide'
12.30	Lunch (QB171)
13.30	Shuang Zhang – 'Resolving the tephrostratigraphic and geochemical correlation framework for the Eastern Mediterranean region over the Late Quaternary'
13.50	Jack Lowe – 'Environmental Storytelling and Digital Games: Geographies of Interactive Narrative World-Building'
14:10	Emma Cooper – 'Reconstructing the Patagonian Ice Sheet: glaciers, climate and palaeo- lakes since the local Last Glacial Maximum'
14.30	Tess Pinto – 'Heritage and Conservation in the work of the Greater London Council: Reimagining London 1965-1986'
14.50	Break (Teα and coffee provided)
15.10	Yunting (Tina) Qi – 'Everyday Food Consumption and Emotions of Overseas Returned Students in Shanghai'
15.30	Kim Walker – `The quest for quinine: Kew's cinchona collections and 19th century networks of knowledge'
15.50	Rachel Devine – 'Insights from a UKRI science-policy internship: Understanding the poor recycling performance of London flats'
16.10	Joy Slappnig – 'Between the Indigenous map and colonial cartography: a Tibetan map of Sikkim at the Royal Geographical Society'
16.30	Concluding remarks and thank you from Alice Reynolds and Amy Walsh

The day will be concluded by a social at a local pub – *The Happy Man* All invited!

Abstracts

Emily Wiesendanger: 'The Late Pleistocene Reindeer (Rangifer tarandus, Linnaeus, 1758) of Britain: Past Migrations and Seasonality'.

Reindeer (*Rangifer tarandus*, Linnaeus, 1758), a typically glacial fauna, were a common component of the steppe tundra environments present across Britain and western Europe during the Late Pleistocene (125,000-11,700 years BP). This is in marked contrast to the Arctic and Subarctic distribution of this species today, which are experiencing declines in both body mass and population sizes across their global range. By reconstructing the migrations and seasonality (palaeobiogeography) of reindeer over the Late Pleistocene, the impacts of climatic, environmental and anthropogenic changes on reindeer ecology can be more tightly constrained.

As bi-annual migrators, reconstructions of reindeer palaeobiogeography are achieved through the recognition of seasonal aggregations, using the ageing and sexing of individual reindeer specimens. From the British Late Pleistocene, reconstructions of seasonality primarily imply that migratory reindeer followed a north-south trajectory between summer and winter grazing grounds. However, while these movements appear constrained to within Britain during MIS 5a and MIS 2, multiple signals of seasonality have been recognised from MIS 3 reindeer, particularly in southern Britain. This has significant implications for reindeer palaeobiogeography under varying climatic and environmental conditions. The influence of herd-specific factors such as density dependence on this species are similarly important. This is evident from reconstructions of body mass from both fossil and historical reindeer specimens, demonstrating the past and ongoing variability in this ecologically vulnerable species.

<u>Ed Armston-Sheret: 'Failing bodies: exploration, non-heroic suffering, and imperial heroism, 1856—1913'.</u>

This paper analyses forms of bodily breakdown that proved difficult (or impossible) for explorers to incorporate into narratives of heroic failure, suffering for science, or masculine adventure. In examining these issues, I offer insights on questions of scientific credibility, identity, and heroism. I argue that bodily suffering played a central role within explorers' public and scientific reputations: privations (and even death) were important in demonstrating that a journey was a scientifically significant and heroic undertaking. However, many forms of suffering that explorers' experienced—such as venereal diseases, alcoholism, incontinence, hallucinations, and insanity—proved much harder to incorporate into their public narratives. These forms of suffering could cast doubt on the accuracy of an explorer's observations, the robustness of their body, and their quality of their moral conduct. Such suffering could also bring to the fore anxieties about the malleability and fragility of the white-male body—anxieties shaped by ideas about racial and gender difference and concerns about illness, disability, and degeneration. I examine these issues in relation to the several British expeditions: Richard Burton and John Hanning Speke's Nile

expeditions (1856–63); Isabella Bird's journeys to the Rocky Mountains and Japan; and Captain Scott's two Antarctic expeditions (1901–1904 and 1911–13). In exploring how these non-heroic forms of suffering were edited or removed from explorers' accounts, I argue that dominant visions of masculine heroism often rest on the abjection of certain bodily functions, and that recovering these aspects of explorers' bodies provides a way to contest problematic narratives surrounding explorers in contemporary British culture.

<u>Joanna Tindall: 'Reconstructing abrupt Holocene climatic events from ostracod-derived stable isotopes'.</u>

The Holocene spans the last ~11,700 years of Earth's history and whilst typically thought of as climatically stable, is punctuated by short-lived, abrupt climatic cool events. This research focuses on different time-slices within the Holocene, taking sites known to have high carbonate level lake sequences and aims to reconstruct palaeoclimatic change primarily through ostracod derived oxygen-isotope data. In time, this proxy data will be compared to isotope-enabled climate model outputs to begin investigating questions surrounding driving mechanisms and atmospheric circulation change during the various time intervals.

Ostracods are micro-crustaceans with carbonate shells that are made in-situ of the water body they are living in. This means that the isotopic composition of their shells are reflective of the water body (considering a usually well-known vital offset) at the time the ostracod was alive. With this knowledge, and the assumption that the lake water's isotope composition is controlled by that of the input water, it becomes possible to reconstruct climatic conditions by running stable isotopes on the ostracods.

In this talk, current progress from Crudale Meadow, Orkney Mainland will be discussed. This palaeolake site has a long lateglacial to Holocene sediment record, chronologically constrained principally by multiple tephra layers. A high-resolution (sub-centennial, if not multi-decadal scale) δ^{18} O and δ^{13} C record is presented with multiple negative excursions proposed to be recording early Holocene abrupt climatic events. Candidates include the 9.3ka and 8.2ka events, depending on the strength of the chronology.

Saskia Papadakis: 'England as a diaspora space: Troubling the North-South divide'.

In this paper, I use Avtar Brah's conceptualisation of England as a 'diaspora space' to trouble understandings of the English North-South divide. The North/South dualism in England has long been imagined as shaping and shaped by political, socio-economic and cultural differences between English regions. London and the South-East has been figured as the seat of power; of wealth, aristocracy, finance and government. In contrast, the North is portrayed as 'the Land of the Working Class', associated with industry, manufacturing, unionisation and, particularly in the last forty years, with deindustrialisation and decline. Despite the role that colonisation played in the Industrial Revolution and in London's status as a 'global city', empire has been largely absent from attempts to theorise the North-South divide. As Brah argues, Englishness is continually contested and reconstituted in the context of centuries of rivalries and encounters with other European nations, imperial conquests, and migrations both by those imagined as English and those racialised as migrants. Spatial inequalities and social hierarchies within England produce and are produced by this complex

and ever-shifting network of power relations: the changing political, social and economic fortunes of English places are entangled with England's imperial past, present and imagined futures. Drawing on my research on the life histories of people from the North of England who live in London, in which I integrate post/decolonial scholarship on Englishness and conventional accounts of English regional disparities, I aim to challenge spatial dualisms and explore the potential for reimaginations of the North-South divide.

<u>Tess Pinto: 'Heritage and Conservation in the work of the Greater London Council:</u> <u>Reimagining London 1965-1986'.</u>

This thesis seeks to provide a new interpretation of approaches to heritage and conservation during a transformative period in post-war London. It focuses on the planning culture of the Greater London Council (GLC) — in particular the way that historical buildings and areas were or were not conserved. Due to its responsibility for London's strategic redevelopment from 1965-86, the GLC was a crucial agent in the development of conservation cultures, profoundly influencing the identity of London, everyday lived experiences and the way we understand heritage today.

In the 70s and 80s the GLC swung between municipal Labourism, a Conservative leadership increasingly coloured by neoliberalism, and finally a radical urban left committed to building alliances with local communities. How these political shifts informed the GLC's engagement with the historic environment, and the ways in which the council simultaneously accommodated and shaped various strands of the conservation movement will be the subject of extended analysis. Focusing on several different case studies, this research draws upon oral history, contemporary plans, visual sources such as documentary film, and extensive archival materials, to investigate this changing planning culture and wider understandings of the cultural and economic value of the urban past. More broadly, this thesis considers how heritage was understood in the period, and how changing judgements about different aesthetic styles and urban textures meshed with changing ideological positions and economic pressures. These debates and issues have contemporary relevance, prefiguring current discussions about gentrification, commercial development and the preservation of established urban communities.

Emma Cooper: 'Reconstructing the Patagonian Ice Sheet: glaciers, climate and palaeo-lakes since the local Last Glacial Maximum'.

During the global Last Glacial Maximum (~21,000 years ago), when temperatures were significantly cooler, ice accumulated over southern South America, forming the Patagonian Ice Sheet (PIS). As the PIS retreated, large proglacial lakes formed along its eastern flanks. Retreating glaciers left behind a rich suite of glacial landforms (e.g. moraine ridges, shorelines) and associated deposits (e.g. till, lake sediments). Such features are useful in ice sheet/lake reconstructions as they can be directly dated to determine the timing of their formation and/or deposition. Similarly, geomorphological data can be integrated with these dates to assess changes in glacier dynamics through time. For example, the retreat style of a glacier, or the transition from lake-calving (iceberg rafting) to land-terminating. In addition, proglacial lake sediments can be utilised in these reconstructions, particularly those that possess an annual signal, such as annually laminated (varved) sediments. A 'varve' typically

composes of a coarse layer that is deposited in the summer melt season, and a finer layer which is deposited in the winter season. As a result, varves provide a useful tool for understanding past climate, glacier and lake regimes at a very high temporal resolution. By combining dated landforms with these sediments, we can begin to construct a more detailed picture of geomorphic and palaeo-ice sheet evolution and their response to glacial-interglacial cycles (cold/warm climates), as well as shorter climatic events.

This talk will provide an overview of ongoing geomorphological mapping centred on former glaciers at 44-450S, as well as the future plans for this project.

<u>Jack Lowe: `Environmental Storytelling and Digital Games: Geographies of Interactive Narrative World-Building'</u>

In digital game production, spurred in part by significant improvements in graphics and computer processing power, the design of intricate environments has increasingly become a central method for communicating stories to players. Known in the videogames industry as 'environmental storytelling', the past decade of game development has seen heightened engagement with techniques through which "organization of the plot becomes a matter of designing the geography of imaginary worlds, so that obstacles thwart and affordances facilitate the protagonist's movement towards resolution" (Jenkins, 2004: 6). While research across the (digital) humanities is beginning to investigate how these techniques operate in video games, pervasive and location-based games – those in which the gameplay mostly takes place "in the real world" rather than through software displayed on screens – have rarely formed part of this inquiry. Thinking about storytelling in this context raises the question of how effectively such game design techniques might operate in material environments – to enable people to engage with the stories that make the places we inhabit meaningful. In this presentation, I'll outline how my interdisciplinary research is grappling with this question by adopting a creative, practice-based methodology, for which I am developing a locationbased treasure hunting game in my home district of Canterbury. Situating my research within a broader turn in cultural geography towards creative practice, as well as the digital, I will discuss the implications of this form of academic inquiry for geography as a discipline and game development as a craft.

Shuang Zhang: 'Resolving the tephrostratigraphic and geochemical correlation framework for the Eastern Mediterranean region over the Late Quaternary'.

Tephrochronology is a vital tool for correlating palaeoceanographic, palaeoclimatic and archaeological records around the Mediterranean. This is especially important in the last ~120,000 years where there is significant climate variability and major changes in the record of human dispersal and adaptation. The Eastern Mediterranean is a research area of interest as it is subject to a range of climate forcing factors and is also the first region to show evidence of the dispersal of Modern Humans out of Africa. Despite the importance of the Eastern Mediterranean, the potential for tephrochronology to provide a useful chronological tool in the region is poorly understood. Part of the problem relates to a lack of cryptotephra studies (tephra that are not visible to the naked eye) on long stratigraphic records and a very limited geochemical database of tephra from different volcanic centres, especially in terms of trace elements and isotopic compositions. This project aims to build a tephrostratigraphy along with luminescence dating, paleomagnetism and oxygen isotope stratigraphy for

marine cores to resolve some existed tephra problems and link palaeoenvironmental and archaeological evidence in Eastern Mediterranean region.

Rachel Devine – 'Insights from a UKRI science-policy internship: Understanding the poor recycling performance of London flats'.

In January-April this year I took a break from my PhD research in glacial sediments and Quaternary climate change to work at the Waste and Resources Action Programme (WRAP). This talk provides an insight into some of the work I was involved in including my experience working outside academia in the charity/waste management sector.

Urban environments are one of the most challenging in terms of increasing participation in recycling services and capture rates of the target materials. Even well-established schemes can yield around 50% less recycling than average low-rise properties. The potential factors that affect recycling performance in flats are complex and many factors may contribute to outcomes. In order to understand the barriers and behaviours, and to identify solutions that will increase recycling rates in flats, Resource London invested in a three-year flats initiative working with one of London's largest housing associations, Peabody. The project included detailed flats inventories, comprehensive ethnographic research as well as waste monitoring and waste compositional analysis. The project aims to understand the waste and recycling behaviour of residents living in estates and address barriers by improving the quality of recycling provision and testing a series of interventions. Recycling intervention schemes were trialled across 12 estates in six inner London boroughs across more than 1,500 households.

Yunting (Tina) Qi – 'Everyday Food Consumption and Emotions of Overseas Returned Students in Shanghai'

Given that food takes a central role in everyday life, migration researchers have a long-standing interest on food related to human mobility and have contributed a body of inspired discussion about food as a cultural practice, politics of identity, sense of belonging and other related issues. This paper pays attention to a widely noted but less examined perspective, emotions embedded in migrants' everyday food consumption. Focusing on overseas returned Chinese students in Shanghai, China, this paper questions that how returned student expressed their emotions towards various places where they lived or are living in through food consumption in current everyday life and what kinds of emotions were expressed. Overseas returned students connected their past memories in other places to their present life in Shanghai and attempted to re-make their previous life and recall some familiar feelings. Drawing on one-year ethnographic research in Shanghai, this paper illustrates that for returnees, who live in homeland and whose everyday encounters are mostly with their ethnic fellows, the emotions embedded in everyday food consumptions may not be the issues of politics of identity or ethnic consumption, but more about longing and attachment to everyday lived experience in specific places and in particular period.

<u>Kim Walker – 'The quest for quinine: Kew's cinchona collections and 19th century</u> networks of knowledge'

The Andean 'fever-tree', (*Cinchona* sp.) and its constituent alkaloid quinine were the only treatments for malaria in the West for over 300 years and played a central role in stories of biopiracy and colonisation. During the 19th century, scientists known as 'quinologists' worked on unpicking the complex botany and chemistry of the tree, aiming to transfer the plant from its South American range to government run plantations in India and South East

Asia. The collections of Cinchona at the Royal Botanic Gardens, Kew, the largest on the world, represent the networks of scientists producing and exchanging knowledge about the tree and how they informed the development of the drug that became a 'tool of empire'.

<u>Joy Slappnig: Between the Indigenous map and colonial cartography: a Tibetan map of Sikkim at the Royal Geographical Society</u>

During the long nineteenth century, so-called 'native maps' were typically acquired, commissioned or co-produced in the process of European geographical exploration and reconnaissance preceding or accompanying the imposition of colonial rule. Far from being simply embodiments of Indigenous knowledge, the form and content of such maps often reflected aspects of the process of colonial encounter and exchange. When these maps were accessioned into Western collections, their use and meaning changed as they became sources of 'native information', ethnographic artefacts or exotic curiosities. Forming part of a wider research project on Indigenous maps in the Collections of the Royal Geographical Society (RGS) in London, also including a notable set of maps of Burma and a Gujarati chart, this paper will focus on a Tibetan map of Sikkim.

In December 1888, a Tibetan map of Sikkim, painted on cloth, was exhibited at the monthly meeting of the Asiatic Society of Bengal. Originally acquired on the field of battle between British and Tibetan forces, the map was subsequently lithographed at the Survey of India premises in Calcutta. The 'native map of Sikkim' was later included as a 'specimen of lithography' in a map exhibition at the Imperial Institute in London, after which it was accessioned by the RGS. In the context of the RGS collections, this singular artefact opens up questions about the hybrid form and epistemological status of Indigenous maps in Western collections. The 1895 exhibition catalogue presented the map simultaneously as a 'native map of Sikkim' and a 'specimen of lithography'; in its transformation from a unique painting on cloth to a photolithographed copy on paper, overprinted with both British and Tibetan script, the artefact had become more readily amenable to incorporation within a Western map collection. By examining such map objects and situating their production in the context of the work of contemporary institutions including the Survey of India, the Asiatic Society of Bengal and the Royal Geographical Society, the paper will explore the role of Indigenous maps in the production of colonial knowledge.