Academic Event Report

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Conference: 40th Association for Environmental Archaeology Conference

Venue: University of Sheffield

Date: 29th November to 1st December 2019

The Association for Environmental Archaeology (AEA) Conference is hosted annually in the Autumn with smaller, themed meetings hosted in the Spring. The 2019 conference marked the 40th anniversary since the establishment of the AEA in Sheffield and it was the largest conference held thus far. The theme for the conference was "Living through change: the archaeology of humanenvironment interactions". "Living through change" was an inadvertently timely theme considering that, even as concern about Climate Change and world conflicts are ever present in the minds of the public, social change was stirring in the UK academic world with a nation-wide university strike. The latter meant adaptability for each individual and for the group as a whole, with one speaker opting to support her colleagues by striking through the conference and others choosing to give voice to the struggle during their sessions.

The conference involved eight individual sessions in which papers were presented along with a poster session. It began on 29th November with an enthusiastic keynote address from Gill Campbell of Historic England. Campbell raised the argument that we must understand how we arrived at where we are in order to understand where we are going. Understanding how past peoples acted as agents of environmental change can aid in understanding how we arrived at this point in human-environment interactions. This argument was also applied to the field of environmental archaeology, which has changed in the last forty years to become the multidisciplinary, multi-proxy, and multi-national field of study that it is today. Closing remarks on the final day of the conference (1st December) were given by Prof. Umberto Albarella of the University of Sheffield who, again, reflected upon the changes undergone within the field.

Sessions—Day One: Humans are Adaptable

"Session A: Impacts on and of early subsistence" included four papers, two from Spanish researchers, one from an English researcher, and one from a Japanese researcher, reflecting the international growth of the AEA in the last forty years. The research projects covered study regions such as Northern Spain, the Levant region of Asia, the Atacama Desert of Chili and the Japanese archipelago. These studies ranged in date from 20,000 BP to 1000 BP. This session was a cross-border, chronologically diverse discussion of how humans have changed the ways in which they utilise different food resources, including animals, plants and fish from hunting and gathering, and through animal husbandry and agriculture. Humans, as a species, have adapted to climate changes, new lands and differing cultural pressures to continue utilising the natural world.

Session B focused on the idea that humans have adapted to climate changes before and that we have an ongoing relationship with the natural world in which we are a part, rather than a separate dichotomised entity. One paper in particular resonated with these ideas: "Wild wetlands and domestic drylands?" by Floor Huisman of the Cambridge Archaeological Unit. Huisman discussed how humans have moved in and out of the Fens from 4000 BC to 100 AD to utilise its resources and live among its waters, even as the area continuously flooded further inland. The people moved, changed tactics, and adapted, an ever increasingly applicable lesson as the world's climate continues to rapidly change.

Session C returned to the idea that humans are not separate from the natural world but have a long standing, ongoing interaction with it. Present day human-environment interactions can teach us about similar past interactions and learning about past interactions can better prepare us for the future. This idea was explored in the paper "Human-induced changes in upland landscapes" by Helen Shaw of Maynooth University. Shaw discussed issues within modern perceptions of 'naturalness' while looking at relatively biodiverse, human-managed upland landscapes, with specific reference to relatively modern uses of such areas. She reflected upon the applicability of this and similar studies to help build "policy and practice in future land management" (Shaw, 2019).

Reflecting a consistent theme throughout the day and, indeed, the conference as a whole, Session D concluded the first day of sessions with the idea 'humans are adaptable.' Humans experiment with the use of familiar environments and are able to adjust when new problems arise or move to new environments and start anew. While this is more easily seen in smaller, less 'permanent' societies, one paper made it clear that even the largest of civilisations can adapt, if they are prepared to. In their paper, "Assessing environmental change at Indus Civilisation Valley sites in northwest India through geoarchaeology", Joanna Walker, Cameron Petrie, and Charly French of the University of Cambridge, Julie Durcan of the University of Oxford, and Hector Orengo of the Catalan Institute of Classical Archaeology addressed the long-held hypothesis that climate change caused the decline of the Indus Civilisation. Their research suggested that the Indus people were resilient to such change and had strategies in place to adjust as the rains increased and decreased across their hydrologically complex landscape. The assumption that climate change caused their collapse is perhaps based upon our own fears that we are not adapting fast enough, but the past teaches us that there is hope.

Sessions—Day Two: Interplay between Culture and Environment

Session E underscored the constant and ever-present human factor within our environments. We have always changed aspects of our environment: from hunter gatherers selectively, though perhaps inadvertently, spreading favoured plant seeds; to early farmers using fire to clear land; to modern man's ever-growing industrialisation. This constant adaptation of our environment has always had consequences—good (fire may revitalize a forest), bad (pollutants can destroy habitats), or otherwise. The paper "What's mined is yours" by Hannah O'Regan and Christopher Loveluck of University of Nottingham was a timely reminder that humans are polluters and have been for millennia, but that once humans mitigate their own affects, the land can regenerate over time. The paper analysed the Historic Ice Core Project at Colle Gnifetti, Italy which shows spikes in lead pollution due to the mining of Hope Valley in the Peak District, UK almost 1000km away. When the mining was known to pause or cease, the pollutants decreased, and the air became nontoxic once again, allowing for slow habitat restoration.

Session F centred around large scale societies and their expansion of resource exploitation beyond their local environment. As societies grow, so too does their effects on the environment. The papers from this session spanned from the Neolithic (the final part of the Stone Age), with the introduction of farming and its catalytic effect on social expansion, through to the Roman

conquests and their extended trade networks, to the Early Medieval Period, when evidence suggests that social change further influenced environmental use.

Session G focused on the interplay between environment and culture: how conditions in one can hinder or create change in the strategies applied to the other. The paper "Make yourself at home" by independent researcher, Ulana Gocman, emphasised this interplay during a time when humans were moving from Silesia into Lesser Poland, to the southeast. Environmental pressures, along with cultural considerations, influenced the implementation of the same economic model used in Silesia in Lesser Poland. A new landscape did not equate to new methods, but instead the old methods dictated how the land was used.

"Session I: People and commensal carnivores" explored the close relationship between humans and canines such as dogs and foxes, who may benefit from such a relationship. Humans affect wild and domestic animals with what we eat, how and where we settle, and what resources we exploit. These animals can also affect how humans react to their environment, with some animals receiving special treatment while others are subject to social norms, such as taboos.

Reflections and Conclusions

Prof. Albarella summarised the conference well with a reflection on its timeliness and its relevance. Though he does not believe that environmental archaeology should be considered its own discipline—all archaeologists look at the environment in one form or another—he was impressed with the multi-disciplinary approach evident in the papers, combining techniques from geology, geography, palynology, biology, botany, osteology, zoology and many other fields to bring about a holistic view of how humans have interacted with their environments through times of change. He also noted the increased internationality of the conference compared to 40 years ago. The field itself has changed to be more dynamic and inclusive, appealing to those in disciplines outside of archaeology and outside of the UK. The field has adapted to and aided in the scientific push for multi-proxy evidence and has grown because of it.

Change happens on many scales, and this conference was a refreshing look at how humans have adapted to and caused such change. The natural environment and human cultures are not separate from each other but cyclically affect one another to varying degrees at various times throughout the world. We still have power to act as agents of change within our environments, whether that be the natural, social or, in the case of the contemporary University Strike, economic environment. We also still have the power to adapt to changes forced upon us through invention, interaction, and the choices we make together. The stated goal of the conference was "to [both] reflect upon the discipline's past, and debate its future" applicability in our ever changing world (Wallace *et al.* 2019). Environmental archaeologists have an unique perspective of these changes and, as has been evident in the papers presented at this conference, have an important part to play in helping the world understand how we arrived where we are by understanding how past peoples acted as agents of change.

Works Cited

- Shaw, H. 2019. Human-induced changes in upland landscapes: a palaeoecological case study in Ribblesdale considering the sustainability of traditional land management. Paper presented at: 40th Association for Environmental Archaeology Conference, 29 November to 1 December 2019, Sheffield, p. 32.
- Wallace, M., Salvagno, L., Longford, C., Iles, L., Bamforth, M., Forster, E., Nagle, C., and Ayala, G. 2019. Living through change: the archaeology of human-environment interactions. Conference abstract for: 40th Association for Environmental Archaeology Conference, 29 November to 1 December 2019, Sheffield.