

REVIEWS

EUROPEAN SOCIETY FOR THE STUDY OF HUMAN EVOLUTION – 3RD ANNUAL MEETING, VIENNA, 19-21 SEPTEMBER 2013

The European Society for the study of Human Evolution (ESHE) held its 3rd annual meeting in Vienna from the 19 – 21 September 2013 hosted by the local organizer Professor Gerhard Weber from the Department of Anthropology at the University of Vienna. The meeting was extremely popular with over 300 attendees, and a busy podium (57), and poster (154) schedule reflecting a healthy competition for presentation space amongst researchers of human evolution.

On the evening of September 19th, the meeting was opened by a Keynote presentation by Professor Tecumseh Fitch from the University of Vienna talking about the evolution of speech, language and music. This was followed by an early 0800 start on Friday morning with the opening speech by the president of ESHE Professor Jean-Jacques Hublin who gave an impressive break down of conference attendees and the forthcoming schedule of the next few days. The format consisted of plenary podium morning sessions focusing on the areas of perceived especial interest in Human Origins research around the world, arranged in a broadly chronological order. The afternoon sessions then consisted of parallel podium talks arranged thematically, with time for poster sessions in the evenings of both days.

Session 1 started with a range of talks dealing with early tool use and hominins exploring a range of topics from: stone tool use in primates, how to recognise tools that are older than 2.6 million years, the use of aquatic resources in East Africa at 2 million years, the possible link between *Australopithecus sediba* and the evolution of our own genus (*Homo*), and the hunting/scavenging practices of *Homo erectus* in relation to large mega fauna in Bed II, Olduvai Gorge.

Session 2 began after a coffee break with two papers focusing on early evidence for the stone tool use, Oldowan 2.3–2.0 mya and Acheulean c. 1.6 mya from North Africa to early Acheulean assemblages from Gona, Afar, Ethiopia at c. 1.7–1.6 mya. The next four talks were slightly disconnected in theme topic, but

broadly coherent in terms of chronological frameworks and they focused on insights into the effects of X-ray imaging on recent fossils, reconstructing DNA methylation maps of archaic hominins, the morphological integration of the bony labyrinth and the cranial base in modern humans and Neanderthals, and ending with a very interesting talk on new discoveries of Middle Pleistocene hominin fossils from a cave site in the Luanchuan County in central China.

After lunch was the first of the parallel session blocks. Session 3 was focused on the broad Palaeoanthropological theme of hominin locomotion with several interesting podium presentations on the adaptation to bipedalism from *Ardipithecus* to *Homo*, changes to the pelvis shape in human evolution, the functions of long bones and locomotion. Other papers in this session focused on the behavioural characteristics of *Paranthropus boisei* and the degree of dimorphism and potential implications for species attributions for the Australopiths of Sterkfontein Member 4. Session 4 which ran in parallel to Session 3 had the primary focus of modern human behaviour starting with the dispersals out of Africa and the modern human presence in the Thar Desert in the Upper Pleistocene followed by two papers discussing the importance of Kostenki in regards to modern human behaviours and dispersal timings into Europe which linked nicely into a discussion on the Uluzzian technology at Fumane Cave (Italy) and a dating programme on the earliest Upper Palaeolithic ornaments in Europe and the Levant.

Parallel Sessions 5 and 6 ran after the coffee break where Session 5 was very much focused on Palaeo-diet and subsistence behaviours of Neanderthals and modern humans. The first talk was a re-evaluation of La Cotte de St Brelade (Jersey) followed by new perspectives on Neanderthal diet suggesting that they were more omnivorous than previously thought. The following four papers discussed the subsistence of modern humans in Europe with evidence from Kostenki, Dolní Věstonice II,

the earliest fish hooks in Europe from Wustermark 22 (NE Germany dated to 19 kya, and the exploitation of small game and birds by Magdalenian hunters in Germany. Session 6 was the first specialised theme session on *Formal cognitive models in Palaeolithic Archaeology*. The first paper described a model of expert cognition in human evolutionary studies followed by a paper on interacting cognitive subsystems and how to interpret the archaeological record in light of cognitive evolution. The third paper in the session was a discussion on how material culture engagement may have influenced the development of self-consciousness, followed by a discussion on the neuropsychology of numbers within the Palaeolithic record. The final two papers focused on the interpretation of art within the Palaeolithic from an embodied cognitive position and a dominant neurovisual input into preferential pattern creation.

The end of the first day was heralded by a drinks reception in the evening where the first poster session was run at the same time, providing a good opportunity to circulate amongst the 76 high quality research posters and talk to the authors about their work.

Day two of the conference was another early start at 0800 with the beginning of Session 7 whose primary focus was Neanderthals. The first paper discussed the results of new excavations at La Ferrassie, followed by new data on the context of Middle Palaeolithic bone tools from Abri Peyrony and Pech-de-l'Azé I. The next paper discussed a recent radiocarbon dating programme looking at the extinction of European Neanderthals, followed by a discussion on the Châtelperronian bone tools from Arcy-sur-Cure. The final paper of this session examined the so-called “transitional industries” between modern humans and Neanderthals with a view to deciphering the makers.

Session 8 moved firmly into the realm of the modern human dispersal into Europe after a comparison of cold adaptations between modern humans and Neanderthals. The context of the KC4 modern human maxilla from Kent's Cavern (UK) was then discussed in light of the dating early c.40 kya dating for modern humans in Europe. This was followed by a paper on the impact of the Campanian

Ignimbrite eruption and the impact on human evolution. The next paper examined the mollusc exploitation in the Levantine Upper Palaeolithic and the plenary sessions was ended with an ethnoarchaeological look at the present day Nenets found at Yangana Pe, the Polar Ural Mountains, Russia.

After lunch, there were two parallel sessions with Session 9 focussing in the early Acheulean occupation of Europe starting with a discussion on new ESR dates from the Atapuerca complex in Spain. This was followed by further evidence from Atapuerca about the (dis)continuity of hominin settlement in Europe during the Early Pleistocene and a paper on the presence of *Homo erectus* in Turkey. This session also contained a paper on the reassessment of *Homo erectus* in Asia and a discussion on the similarity between humans and archaic hominids across the globe with implications for the idea of admixture contributing to the evolutionary development of our species. Session 10 ran in parallel and focused on the Middle Stone Age in Africa and the Near East and the Middle Palaeolithic in Europe. Unfortunately the first paper in this session on the later Quaternary of the Turkana Basin was cancelled, so the session began with a discussion on the bifacial technology of the MSA site of Sibudu cave and the implications for understanding the Still Bay technocomplex of South Africa. This was followed by a useful summary on recent fieldwork in the study of the Middle Palaeolithic of Arabia, and a discussion on the pigment use in the Châtelperronian of Europe. The session was finished with a review of further work conducted on the Neanderthal occupation of La Cotte de St Brelade.

After the final coffee break of the conference the last podium sessions were run in parallel. Session 11 focused on the classification of hominin species from around the globe. The session started with a discussion on the Sima de los Huesos fossil teeth possibly indicating a ‘modern’ looking Neanderthal. This was followed by a paper on the Qesem Cave (Israel) dental material on a morphometric basis and the implications for species assignment for these samples. The next paper was a discussion on the hominid palaeodiversity of Java during the Early-Middle Pleistocene followed by a paper on the Middle Pleistocene hominin teeth from China

and the subsequent implications for human evolution in Eurasia. The final podium talk for this session examined how modern were the earliest *Homo sapiens*. Session 12 was a less coherent session with a diverse mix of papers. The first paper looked at a case study in the British Lower to Middle Palaeolithic for assessing hominin cognition, followed by a talk on the biomechanics of Neanderthals and Modern Humans in regards to humeral rigidity. The next paper looked at the land-sea correlation of the last interglacial via the Blake palaeomagnetic event with associated implications for the Neanderthal occupation history for NW Europe, followed by an examination of the chronometric and relative dating of the Middle Pleistocene sequence at Schöningen (Germany). The final paper in this session discussed one of the oldest Acheulean sites in Europe, la Noira, Brinay, France dated to 650 kya.

After the podium talks of the second day was the second poster session of the conference displaying 77 different posters to the previous day. The poster session was followed by the ESHE General Assembly where new board members were elected by members of the

society. This was followed by the official closing diner / party of the conference.

The third day of the conference was designated as a site visit day where delegates were offered the opportunity to visit the sites of Willendorf (a famous Venus figurine site), followed by a lunchtime cruise along the Wachau section of the Danube and an afternoon visit to the Gravettian site of Krems-Wachberg.

All in all the 3rd ESHE conference was a resounding success with a huge number of established academics, new post-docs, PhD and Masters students in attendance. Full details of the meeting can be found at: http://www.eshe.eu/meeting_2013.html including a copy of the impressive 248 page abstract booklet and a conference timetable which counts as a formal peer-reviewed publication in its own right. The next meeting is scheduled for Florence on the 18 – 24 September 2014 and in London the following year 10 – 12 September 2015.

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