



Sept. 12th, 2018

Dear Colleagues,

It is our great pleasure to present to you the first newsletter of our recently founded Scientific Commission “Pyroarchaeology” under the auspices of the UISPP. With this newsletter and on various social media platforms (see below) we are planning to disseminate relevant publications, conferences, research activities and news throughout the group. The larger aim of our commission is to promote the field of pyroarchaeology and to provide a platform for exchange between researchers in the field.

In this very first newsletter you will find a summary of the founding of our commission (page 2), a recap of the Paris UISPP session on Fire as an Artifact and other conference news (page 4) as well as publication news (page 6). The newsletter concludes with an honorary note, an obituary for Harold Dibble, written by Dennis Sandgathe (page 8). Harold was a dear friend and colleague to many in the commission as well as a great archaeologist and an influential voice in pyroarchaeology. He will be greatly missed.

On a final note, we would like to take this opportunity to thank the UISPP executive board for lending their support to our commission. We are also grateful to Carolina’s brother, Max Mallol, who designed our excellent commission logo!

With our best wishes

Carolina, Chris and Mareike*

Contact us via Email pyroarchaeology@gmail.com

Follow us on Twitter [@pyroarchaeology](https://twitter.com/pyroarchaeology)

Visit us on Facebook (coming soon)

or on our UISPP commission website <http://www.uispp.org/pyroarchaeology-0>

* responsible for this newsletter

Scientific Commission “Pyroarchaeology”

The idea to formulate a commission for pyroarchaeology was born while planning a fire session for the UISPP meeting in Paris and after successful sessions at the XVII Meeting in Burgos. Archaeological research on fire has grown a lot over the past decades and we believe it will only continue to grow. Fire plays a central role in many technological, behavioural, and social aspects of the human past, but despite its significance, the remains of fire themselves are often overlooked or are subsumed under other areas of research. Our commission recognizes that recent methodological advances have greatly improved our ability to study fire remains as artefacts in their own right and in our minds this supports the notion of a discrete research field of pyroarchaeology. The aims of our commission are to 1) promote research pertaining to human interaction with fire; 2) provide a platform for the exchange of ideas between various specialists working on the topic from a range of methodological and theoretical perspectives and different time periods; 3) to establish links between methodological techniques and broader theoretical debates about the origins and nature of fire-related behaviour; and 4) to promote the interaction between researchers studying fire remains in the Palaeolithic and those focusing on later time periods.

After many, many emails and recruiting of members, the Commission Pyroarchaeology was accepted during the UISPP Executive Committee meeting at the XVIII^o UISPP World Congress in Paris with the President Christopher Miller (University of Tübingen), Vice President Carolina Mallol (University La Laguna) and Secretary Mareike Stahlschmidt (Max Planck Institute for Evolutionary Anthropology). By formalizing this network with the UISPP, we plan on holding regular sessions at UISPP meetings and workshops outside of the meetings held every four years. Additionally, we will plan annual meetings to be held in conjunction with other larger scientific conferences (SAA, DIG, EAA, ESHE etc.). We will keep members of the commission and the public informed about news, scientific advances, and planned meetings via a regular newsletter and on social media.

Current Commission Members: **Vera Aldeias** (University of Algarve, Portugal), **Dan Cabanes** (Rutgers University, U.S.A.), Angel Carrancho (University of Burgos, Spain), Ellery Frahm (Yale University, U.S.A.), **Paul Goldberg** (Boston University, U.S.A.), **John Gowlett** (University of Liverpool, United Kingdom), **Shira Gur-Arieh** (Leiden University, Netherlands), Miriam Haidle (University of Tübingen, Germany), **Auréade Henry** (CNRS, Université Côte d’Azur, France), Bertrand Ligouis (University of Tübingen, Germany), **Wendy Matthews** (University of Reading, United Kingdom), Susan Mentzer (University of Tübingen, Germany), Cristiano Nicosia

(Université libre de Bruxelles, Belgium), **Dennis Sandgathe** (Simon Fraser University, Canada), **Patrick Schmidt** (University of Tübingen, Germany), Ruth Shahack-Gross (Haifa University, Israel), **Andrew Sorensen** (Leiden University, Netherlands), **Britt Starkovich** (University of Tübingen, Germany), **Paul Thacker** (Wake Forest University, U.S.A), **Isabelle Théry-Parisot** (CNRS, Nice Sophia Antipolis University, France), **Michael Toffolo** (Bordeaux Montaigne University, France).

Marked in bold are official UISPP members, who appear on the member list on the UISPP commission website. If you wish to become an official member, contact us.

Conference News

On June 5th, Carolina, Chris and Mareike had the pleasure to chair the session IV-4 “Fire as an artifact: Advances in the study of Paleolithic combustion features” at the **XVIII UISPP congress in Paris, France**. With 12 presentations and 10 short contributions we had almost a full day of pyroarchaeology. Unsurprisingly, hearths were the most presented and discussed anthropogenic feature of the session. Other talks delved into specific combustion residues or heat alteration of lithics, sediments and more unusual materials such as char residues, soot in speleothems and burnt wooden tools. We were especially happy with the wealth of disciplines represented in our session, from anthracology, geoarchaeology, and archaeometry over to digital archaeology, zooarchaeology and archaeological chemistry. Thank you again to all the presenters and our eager audience for making this session so enjoyable.

Just recently at the **EAA 2018, (September 5th-8th in Barcelona, Spain)** Paloma Vidal-Matutano, Auréade Henry, Yolanda Carrión and Ethel Allué organized a session titled “Disentangling human from natural factors: taphonomical value of microanatomical features on archaeological wood and charcoal assemblages” (**Session #110**). The session had 14 exciting talks and one poster on the topic.

The **8th Annual ESHE Meeting – 13-15th September 2018 in Faro, Portugal** is happening right now! Noteworthy pyroarchaeology talks include Andrew Sorensen and Fulco Scherjon on “Simulating fire-affected archaeological lithic assemblages using the computer-based model ‘fiReproxies’” and João Zilhão and Diego Angelucci on “Neandertal fire” as well as a poster by Vera Aldeias and colleagues on “A Micro-Contextual Approach to Neandertal use of fire at Pech de l’Azé IV (Dordogne, France)”.

The next **SAA meeting** will take place in **Albuquerque, New Mexico, USA, April 10 - 14, 2019**. Carolina is organizing a session on “Charred Organic Matter in the Archaeological Sedimentary Record”. We hope to see many of you there.

The **20th INQUA Congress** will be held between **July 25th and 31st, 2019, in Dublin, Ireland**. Although there is no designated pyroarchaeology session, wildfire and human-fire relationships are featured in many. Abstract submission is open now and closes January 9th, 2019.

The next **UISPP congress, XIX**, will take place already in two years’ time, **August 30th – September 5th, 2020, in Geneva, Switzerland**. We are looking forward to a continued presence of pyroarchaeology sessions and talks there and would be very happy to hear suggestions.

Upcoming Commission Meetings

At the next SAA meeting, which will take place in Albuquerque, New Mexico, USA, from April 10-14, 2019, we are planning on having **the next annual Commission meeting. Please let us know if you will plan on attending!** We would like to hold the meeting together with a social dinner (tacos and margaritas!). Once we know who and how many are interested in attending, we will send around details on the exact location and time.

Lastly, Vera Aldeias and Mareike are planning a Workshop on Experimental Microarchaeology in 2019 at the Interdisciplinary Center for Archaeology and the Evolution of Human Behaviour, Universidade do Algarve, Faro, Portugal. We will send more information on this with the next newsletter.

Publication News

New Papers 2018

Aranguren, B., Revedin, A., Amico, N., Cavulli, F., Giachi, G., Grimaldi, S., Macchioni, N., Santaniello, F. (2018). Wooden tools and fire technology in the early Neanderthal site of Poggetti Vecchi (Italy). PNAS <https://doi.org/10.1073/pnas.1716068115>

Carroll, E.L., Smith, M. (2018). Burning questions: Investigations using field experimentation of different patterns of change to bone in accidental vs deliberate burning scenarios. Journal of Archaeological Science: Reports <https://doi.org/10.1016/j.jasrep.2018.02.001>

Dibble, H., Sandgathe, D, Goldberg, P., McPherron, S., Aldeias, V. (2018). Were Western European Neandertals Able to Make Fire? J Paleo Arch 1, 1, 54-79.

Friesem, D. (in press). Geo-ethnoarchaeology of Fire: Geoarchaeological Investigation of Fire Residues in Contemporary Context and its Archaeological Implications. Ethnoarchaeology. Special Issue Ethnoarchaeology of fire and combustion residues: Current approaches. Vol. 10, Issue 2, p. 159-173.

García-Piquer, A. Lozano, J.-M., March, R.J., Estévez-Escalera, J. (in press). An experimental ethnoarchaeology and analytical approach to fire-related management strategies in a hunter–fisher–gatherer society from the southern tip of Tierra del Fuego (Argentina). Ethnoarchaeology. Special Issue Ethnoarchaeology of fire and combustion residues: Current approaches. Vol. 10, Issue 2, p. 121-140.

Goldfield, A., Booton, R., Marston, J.M. (in press). Modeling the role of fire and cooking in the competitive exclusion of Neanderthals. Journal of Human Evolution <https://doi.org/10.1016/j.jhevol.2018.07.006>

Henry, A., Büdel, T., Bazin, P.-L (2018). Towards and understanding of the costs of fire. Quaternary International <https://doi.org/10.1016/j.quaint.2018.06.037>

Henry, A., Zavadskaya, E., Alix, C., Kurovskaya, E., Beyries, S. (in press). Ethnoarchaeology of Fuel Use in Northern Forests: Towards a Better Characterization of Prehistoric Fire-Related Activities. Ethnoarchaeology. Special Issue Ethnoarchaeology of fire and combustion residues: Current approaches. Vol. 10, Issue 2, p. 99-102.

MacDonald, K. (2018). Fire-Free Hominin Strategies for Coping with Cool Winter Temperatures in North-Western Europe from Before 800,000 to Circa 400,000 Years Ago. PaleoAnthropology 2018: 7–26.

Mallol, C., Henry, A. (2018). Introduction. *Ethnoarchaeology*. Special Issue Ethnoarchaeology of fire and combustion residues: Current approaches. Vol. 10, Issue 2, p. 73-75.

Milano, S., Lindauer, S., Prendergast, A.L., Hill, E.A., Hunt, C.O., Barker, G., Schöne, B.R. (2018). Mollusk carbonate thermal behaviour and its implications in understanding prehistoric fire events in shell middens. *Journal of Archaeological Science: Reports* Volume 20: 443–457.

Pausas, J.G., and Parr, C.L. (2018). Towards an understanding of the evolutionary role of fire in animals. *Evol Ecol* <https://doi.org/10.1007/s10682-018-9927-6>

Schmidt, P. and Morala, A. (2018). First Insights into the Technique used for Heat treatment of Chert at the Solutrean Site of Laugerie-Haute. *Archaeometry* <https://doi.org/10.1111/arcm.12358>

Sorensen, A., Claud, E., Soressi, M (2018). Neandertal fire-making technology inferred from microwear analysis. *Scientific Reports* 8,10065.

Sorensen, A.C. and Scherjon, F. (2018). fiReproxies: A computational model providing insight into heat-affected archaeological lithic assemblages. *PLoS ONE* 13(5): e0196777. <https://doi.org/10.1371/journal.pone.0196777>

Thoms, A.V., Short, L.M., Kamiya, M., Laurence, A.R. (in press). Ethnographies and Actualistic Cooking Experiments: Ethnoarchaeological Pathways toward Understanding Earth-Oven Variability in Archaeological Records. *Ethnoarchaeology*. Special Issue Ethnoarchaeology of fire and combustion residues: Current approaches. Vol. 10, Issue 2, p. 76-98.

Vandavelde, S. (2018). Sooted concretions: A new micro-chronological tool for high temporal resolution archaeology. *Quaternary International* 474: 103-118.

Upcoming Publications

Chris, Carolina and Mareike are planning to publish a special volume on the XVIII UISPP session IV-4 “Fire as an artifact” with many of our presenters showing interest in participating in this. However, if commission members are interested, let us know asap.

Dr. Harold L. Dibble

1951-2018

The field of archaeology suffered a great loss this summer with the unexpected passing of Harold Dibble: Palaeolithic archaeologist, palaeoanthropologist and professor in the Department of Anthropology at the University of Pennsylvania.

Early in his career Harold became well known for his unique approach to understanding Paleolithic stone tools, especially in the context of the famous 'Bordes-Binford-Mellars debate' over the meaning of Bordes' Mousterian facies. Harold demonstrated that many of the criteria used to characterize Mousterian stone tool variability were poorly understood and that the facies represented continuous variability in stone tool production. This called into serious question much of the evidence on which the

debate itself was based. This challenge to conventional views of the Paleolithic was the first of several over his career. More recently Harold also questioned long-held assumptions about the evidence for Neandertal intentional burial and whether Neandertals were able to produce fire.

Harold saw it as his duty to ruffle feathers if the alternative was to check his critical thinking at the door. He took great exception to science by convention or perceived wisdom, and many of his academic battles reflected his impatience with what he felt was often a very casual approach to what constitutes genuine data in support of an argument. He was particularly critical when complex interpretations were favored out of hand over simpler explanations. However, Harold was very supportive of all scientific research and was a collaborator in the best sense of the word. Whether it was doing fieldwork, writing papers, or brainstorming new ideas, he very much preferred working as part of a team than on his own.

His work was, in fact, motivated by a great fondness for Neandertals. This might come as a surprise to some, given that much of his career was about questioning claims of Neandertal



complex behaviors, but he was fascinated by a species so closely related to us and yet seemingly so different in many ways, and he got intense satisfaction from studying them.

A major theme throughout Harold's career was simply improving the quality of data available to archaeologists. In fact, a mantra to his students was '*no data is better than bad data*', by which he meant that you are better off having no data than having bad data (though it was pointed out to him by cheeky colleagues that this could also be read as '*there is no data as good as bad data*'). Harold was also working to improve the quality of data available for understanding prehistoric stone tool variability. In his *Laboratory for the Study of Ancient Technology* at the University of Pennsylvania he built an experimental flintknapping machine (named '*Super Igor*') to identify first principles governing flake formation.

Harold excavated some of the most famous Palaeolithic sites in France (La Quina, Combe-Capelle Bas, Cagny l'Épinette, Fontéchevade, Pech de l'Azé IV, Roc de Marsal, La Gane, and La Ferrassie), and over four decades of fieldwork and 57 field seasons he made significant developments in field methods. He was one of the pioneers in employing total stations and computers in archaeological research. He wrote software that facilitated the use of total stations in collecting and processing artifact provenience data, and he wrote software specifically for the analysis of archaeological data. Harold freely shared this software and currently a significant number of researchers around the world employ technology and methods developed by Harold and his research team over the last 30 years.

Besides his family, there were a number of things Harold loved (in no particular order): *prehistory, silly jokes, science, food, France, friends, the Beatles, playing drums* (something, by the way, he was very good at), and *scotch*.

There were few things he seemed to truly dislike, but these might include (again, in no particular order): *haircuts, wearing a suit and tie* (he equally hated the idea of shorts and a t-shirt – in terms of style, his wardrobe was the studied attempt of a trained mathematician to achieve the exact mean between formal and casual), *public displays of affection, physical activity* (unless you count playing drums), *blood sausage, bullies, poorly constructed arguments, and people brushing their teeth in front of him* (he never did explain the genesis of this random phobia).

Harold loved to cook (he was especially proud of his cartoon illustrated publication '*The Human Evolution Cooked Book*') and was a master at throwing together delicious meals from the same three ingredients: butter, garlic and chunks of meat (with perhaps a side vegetable thrown in as

a grudging nod to tradition). His favorite thing in the world was to prepare and eat a big meal with close friends and family and to tell jokes ... the same five jokes ... over and over.

Harold strongly concurred with this sentiment about the qualities of a good colleague: “*they need to dream big, get stuff done, and know how to have fun*”. This describes in a nutshell how Harold approached life. He worked hard at contributing to our understanding of the human journey (no small thing), but while he was at it, he laughed a lot and he preferred to be surrounded by people who felt the same.

Harold might have had a few battles along the way, but he had a knack for making friends and he has left many sad friends behind.

Harold was born in California in 1951. He received both his BA (1971) and PhD (1981) from the University of Arizona where Art Jelinek was his supervisor. He died in Philadelphia on June 10th. He leaves behind his wife, Lee, and two sons, Flint and Chip.

Donations to the Harold L. Dibble Mini-Me Fund at the Paleoanthropology Society can be made at <http://www.paleoanthro.org/home/donate/>

Donations for University of Pennsylvania archaeology students can be made in honor of Harold at <https://giving.apps.upenn.edu/fund?program=SAS&fund=630074> or checks may be made out to the Trustees of the University Of Pennsylvania, and sent to Laura Weber, Penn Arts and Sciences Advancement, 3600 Market St., Suite 300, Philadelphia, PA 19104, with Harold's name in the memo line.