INTRODUCTION
This short note is derived from the discussion session at the recent Experimental Approaches to the Palaeolithic and Mesolithic meeting, co-organised by the University of Reading (Department of Archaeology) and the Lithic Studies Society, and hosted by the University of Reading on 28 March 2015. Attendees included academic staff and postgraduate students (research and taught), museum staff, bushcraft professionals and other members of the Society.

The discussions raised a range of issues for consideration with regards to the future practice and development of experimental archaeology, with specific reference to the Palaeolithic and Mesolithic periods, and divided broadly into the following categories.

Participation: collaborations and inclusivity
The discussions highlighted the important point that experimental archaeology is sometimes perceived as, and may well be, an overly male-dominated sphere of the wider discipline. It was noteworthy that at our own conference only one of the nine papers was presented by a female researcher (although the balance was reversed in the poster segment, with five out of six contributions from female postgraduate students). Suggested solutions to this issue were less clear-cut although it was agreed that emphasis should be given to the sheer diversity of experimental activities which can be undertaken and the importance of techniques and knowledge over brute force. To use our meeting as an example, the fifteen papers and posters spanned lithic replication, plant fibre industries, burning, lithic and organic tool use, artefact taphonomy, footprint taphonomy and house construction, while the relationships between experimental and archaeological use-wear traces were also explored during the discussion session. Consideration should also be given to the illustration of experimental archaeology, in terms of both the activities and the participants represented.

There was also agreement on the clear research benefits of collaborations between academic and non-academic groups. The latter could range, for example, from open-air museums (including both permanent staff and volunteer groups) to bushcraft professionals to wood and textile workers. These benefits were felt to be a by-product of both the combining of different skill- and knowledge-sets, and the potential for non-academics, unconstrained by modern university demands, to think ‘outside the box’ and ‘say the unsayable’. The former point was clearly demonstrated at the conference in Annemieke Milks and colleagues’ paper (Human Performance Trials: Spear Thrusting and Throwing), which combined Palaeolithic expertise (Annemieke and Dr Matt Pope from UCL) with experience in ballistics and weapons testing (Debra Carr, Stephen Champion, Libby Cowper and David Parker from Cranfield).
Defence and Security and Loughborough University). In a similar vein, Alice La Porta (Exeter and Reading Universities) has developed contacts with university sport societies and the Professional Hunters’ Association, as part of her ongoing research into Middle Palaeolithic projectile technologies. Discussion also focused on the practicalities of developing such collaborations, including the benefits of perseverance and regular discussions with potential collaborators when trying to build capacity, contacts, interest and involvement, and the importance of being able to offer clear benefits, such as research impacts, diversification and publication.

On a more academically focused point, the value of experimental archaeology in teaching was widely agreed upon, in particular its potential for engaging students with different skills, abilities and learning profiles (e.g. dyslexia) with the subject. It is also a valuable means of introducing students from a mainly humanities background to scientific approaches, and developing their confidence in doing science. It was also emphasised that these benefits could be extended to pre-university students, through collaborations with schools and other organisations (e.g. the Young Archaeologists’ Club). Finally, there was a clear consensus of the potential of experimental archaeology to enhance public and school interest in both archaeology and the natural environment. The multi-sensory nature of archaeological experiments was highlighted by a number of participants. Graeme Warren and John Murphy’s paper (“Building mesolithic”: recent experimental reconstructions of Mesolithic houses in Ireland) included a video produced in collaboration with students from the Dún Laoghaire Institute of Art Design & Technology which was an excellent example of how the sights and sounds of experimental activities can be dynamically conveyed to the general public (the film can be found at: https://www.youtube.com/watch?v=2O22LMgS4V4). Perhaps as 3D printing technologies become more widely available and affordable there will be ever greater scope for digital models of experimental artefacts to be made available for reproduction and for use as teaching aids in school classrooms. On a more cautionary note, the need to consider the suitability of an experiment for a public audience was also highlighted, as activities such as animal butchery may be upsetting to some individuals or groups.

With perhaps more immediate potential, it was also noted that experiments could be designed to enable a public contribution to their progression and/or recording, developing the recent themes of citizen science and perhaps also crowd-sourcing. To offer one example discussed at the meeting, could visitor numbers at an open-air museum or university experimental venue be used as an approximate measure of foot traffic over an experimental surface or floor? This, perhaps inevitably, leads into:

**Experimental design: variables, venues and durations**

Participants raised the point that experiments can be both tightly controlled with strictly defined variables, as is typically the case in academically led studies, but can also be more loosely structured, with the latter model giving more emphasis to experiences gained and lessons learned. As was observed on the day (with apologies to the individual contributor for paraphrasing): “there were probably not rigid rules of practice in the past”. Such ‘looser’ experiments might also facilitate the type of active public roles outlined above. This is of course a potentially controversial area, since controlled variables and the replicability of experiments are central planks of good science, but as a whole there was agreement on the day that both models could have a complementary place in experimental approaches.

More specifically it was noted that many experiments are built on a comparison of the methods, gestures and products of participants with different levels of skill and experience. However, how the experimental archaeology community learns the skills and expertise to recreate past technologies was highlighted as a potential problem. One key aspect is the time commitment required; experts in the past would have acquired vastly more experience than most, but not all, modern experts. Many modern experts also benefit from an academic as well as practical understanding of a technology, and therefore operate outside of the cultural and social norms that may have influenced the way technology was learnt and produced in the past. A final consideration was whether
archaeologists can ever really be considered to be novices. For example, while an undergraduate student may have never tried flintknapping, they are likely to have read descriptions of the mechanics of stone fracture and seen formal demonstrations, thus gaining a different form (if not a level) of understanding that will not have been shared by the novices represented in the archaeological record, the latter of whom are likely to have experienced flintknapping through casual observation in infancy.

The question of experimental venues was also re-visited, not least in light of clear ‘venue envy’ (by Hosfield) for University College Dublin’s dedicated experimental space on campus. It was noted that the running of any experiments with a taphonomic element can become problematic at venues with other, potentially competing tasks and responsibilities, such as open-air museums. The availability of dedicated spaces, whether within university campuses or elsewhere, was therefore clearly recognised, and it was noted that progressive undergraduate and/or postgraduate cohorts (with staff support!) offered one means of running sustained, long-term experiments, with benefits ranging from student teaching and learning to taphonomic insights. This was clearly a common theme, as several participants highlighted the difficulties they had faced in finding suitable venues; however, others shared more positive experiences with local land owners and even their local town hall. Clearly the availability of suitable venues will vary across the country, however the general message was that goodwill and support is abundant and can be found in a variety of places.

However, the question of long-term experiments also highlighted the most frustrating aspect of the discussions: the issue of funding. It was noted that the current academic REF cycle, the typical duration of awards from Research Councils UK and other funding bodies, and the time constraints on modern PhDs all work against the running of long-term experiments, and at times even against the conducting of initial pilot experiments followed by second stage experiments with revised methods informed by the pilot study’s data and experiences. Perhaps unsurprisingly answers were not immediately forthcoming, although the current funding landscape would seem to favour multi-staged experiments, where each funded stage produces outputs but also produces ongoing materials and process which lead into the next stage, supporting further funding applications. The role of a Masters dissertation as an opportunity for pilot study experiments which could lead into ‘second stage’ experiments within a PhD should perhaps also be emphasised.

**Dissemination: publication and the sharing of best practice**

It was agreed that too much experimentation remains unreported, either orally or in writing, and that this is a problem both for the development of experimental methods and approaches and for the wider acceptance of experimental methods as a valid analytical tool. While Britain continues to lack a dedicated journal focused on experimental archaeology there are, of course, a range of other, relevant, UK-based options (e.g. Lithics, Mesolithic Miscellany, Human Origins [https://humanorigins.soton.ac.uk/]) alongside international publications such as EXARC. There are also higher impact publications such as *Journal of Archaeological Science* and the *Journal of Archaeological Method and Theory*. The importance of presenting experimental research at appropriate conferences (e.g. the annual UK Experimental Archaeology meetings and the annual EXAR [European Association for the Advancement of Archaeology by Experiment] conference, but also subject-specific meetings such as the ‘Unravelling the Palaeolithic’ series and the Palaeolithic-Mesolithic meetings at the British Museum) was also highlighted.

It was also suggested that there was too much re-inventing the wheel with regard to methods and practices. This of course is partly a by-product of the limited reporting of experiments described above and is particularly frustrating in light of the range of information which could be shared: e.g. methods, sources of expertise and material resources. To offer a specific example from the meeting, it was noted that a wider range of animal carcasses than the seemingly ubiquitous deer could potentially be sourced via contacts with farmer groups, wildlife organisations, national parks, and/or zoos and safari parks. The potential value of on-
line discussion boards, perhaps hosted through an organisation such as the Lithic Studies Society, in facilitating the sharing of contacts, knowledge and practice was briefly explored, although a younger participant quickly highlighted a ‘social media gap’, emphasising the current existence of an Experimental Archaeology group on Facebook (www.facebook.com/groups/experimentalarchaeology; and there is also the list on jiscmail: arch-experiment@jiscmail.ac.uk). The benefits of the increasingly strong social media presence of experimental archaeology were emphasised, with members from across the world posting their current experiments, ideas and details of upcoming experimental events. It was noted that such groups can act as platforms for approaching other experimental archaeologists to ask for advice, thus addressing some of the issues outlined above. It was felt that such groups bridge the gap between publishing researchers (whether in academic posts or not) and those interested in experimental archaeology but who do not publish their work, and provides an important insight into the experimental work being performed elsewhere in the world. One potential issue raised by such forums is the question of quality control and so, whatever the platform, a simple distinction between posts reporting peer-reviewed published experiments and non-published experiments would seem to be appropriate.

Summary

Overall the meeting discussions, and the meeting as a whole, highlighted the potential of, and enthusiasm for, diverse experimental approaches to Palaeolithic and Mesolithic archaeology. The scope and benefits of collaboration were self-evident, as were the importance of reporting and sharing our best practices and experiences. Thanks to all the participants for their many thought-provoking contributions on the day. See you at the 10th UK Experimental Archaeology conference!

Conference Participants

Pete Alfano, Adrian Arroyo, Eleanor Barnes, Kirsten Barr, Laura Basell, Martin Bell, Lucie Bolton, Keith Bradbury, Chris Brown, Rachel Bynoe, Briony Clifton, Julie Cormack, Cory Cuthbertson, Patrick Cuthbertson, Alice Day, Rebecca Devaney, James Dilley, Philip Dolman, Janet Eastment, Frederick Foulds, Bernard Gilhooly, Peter Groom, Geoffrey Guy, John Handley, Terry Hardaker, Claire Harris, Ian Herbertson, Christian Hoggard, Diane Holmes, Rob Hosfield, Richard Hughes, Rhodri Kemp, Alastair Key, Alice La Porta, Karine Le Hegarat, Graham Lodge, Robert Maurer, Annemieke Milks, Linda Mills, Valerie Moore, Clifford Moth, Molly Pearce, Stephen Poole, Tomos Proffitt, Alex Pryor, Samantha Rogerson, Hannah Simons, Jacky Sommerville, Graeme Warren, Peter Webb and Andrew Woodcock.