Wood Glossary Revision Round 2

by Ruth Blasco, 25 Apr 2022 08:44
Manuscript: **https://osf.io/x8m4j** version v3

Minor revision

We have carried out a new review round so that the referees could assess the changes made to the manuscript. All three reviewers have positively assessed the modifications and think that the manuscript is practically ready to be accepted pending a few small changes.

Many thanks to the reviewers and recommender for the further details regarding the glossary. We have aimed to make those further changes that we are able to make at this point and with further communication to continue to revisit some of the disagreements and confusions around particular terms such as 'shaping facets' and 'sawing'. We have re-written some sections of the introduction to improve the clarity and accuracy. We have also fixed the figure numbering errors, and made some fixes to the German translations of terms, ensuring they are fully consistent with changes to the English. We have also added the two suggested references. As stated in the introduction, the intention is for this to continue to be a recursive, collaborative process during the development of some key ongoing projects analysing prehistoric wood technologies, and we continue to welcome feedback, new evidence and contributions from other researchers. On behalf of my co-authors I would like to thank all for a constructive and positive experience,

Annemieke Milks

Reviews
Reviewed by Oriol López-Bultó, 23 Apr 2022 22:00
The authors have applied considerable and appreciated changes to the original manuscript after the first revision. Also, the addition of images to illustrate the glossary is great input. The paper has undoubtedly increased its quality and it is going to be a reference text for future scientific works on wood Technology in prehistory.

Even though there are still some minor changes that could be applied in order to improve the quality:
-      2nd paragraph – at the first sentence of the paragraph the word "subaquatic" could be changed to waterlogged.
We have made this change.
-      5th paragraph "Organisation" – the organisation of the seven blocks of the glossary is not properly explained; from the way this paragraph is written it is understood that there are only five blocks on the glossary. It is not understood that "general terms" and "natural terms" are going to be two blocks of the glossary, even less the two first ones. Consider rewriting this paragraph.
We have revised the paragraph :

We have organised the glossary into categories including general terms and natural traces, followed by blocks according to a *chaîne opératoire* framework (**Error! Reference source not found.**). General terms are those that may fall into either no

phases (e.g. separating natural wood from anthropogenic wood in an assemblage) or multiple phases (e.g. debarking that could occur anthropogenically or naturally) of a *chaîne opératoire* framework. Natural traces are alterations to wood caused by natural agents (e.g. insects, beaver, fungi) that can affect both unmodified and modified wood prior to, during or after anthropogenic engagement. Phases are as follows: Phase 0 (raw material), Phase 1 (manufacture), Phase 2 (use, maintenance, discard) with the additional sections of Phase 3 (taphonomy) and Phase 4 (excavation and post-excavation) (following e.g. Geneste 2010; Soressi & Geneste 2011; Sørensen 2006; Tafelmeir et al. 2020, p.40). An asterisk (*) within a definition or in a figure caption highlights words that are defined elsewhere in the glossary.

- Figure 1 – same as the previous observation. Provably, adding "general terms" and "natural terms" blocks in the figure will help in a better understanding.
We have revised Figure 1 to include general terms and natural traces.

- Paragraph "Future versions" – is a very interesting point, unluckily the way this "open" database will work in the future lacks further explanation.
For the time being we intend for the glossary to remain as it is, as an unpublished preprint. Just as with these current revisions, we will continue to make alterations and upload a new version to the preprint server whenever we need to, and intend to do so as and when changes are suggested and agreed from colleagues and our own experience. It is intended as an open and collaborative exercise. In the meantime, it can be cited in its current form. We think this is clear and doesn't need further explanation in the text. We aim to eventually make the glossary available online and/or as a printed booklet, but as this is a recursive process we are not in a position to yet commit to exactly how it will be published or when.
- Glossary – on the glossary the figures do not follow numeric order. This should be reviewed to avoid confusion.
We have corrected this now. In a few instances, where multiple terms are referenced to a single figure (e.g. Figure 2) that figure number may appear again, but should not now be a higher number before the lower one appears! Many thanks.

Reviewed by Eva Francesca Martellotta, 22 Mar 2022 04:15
The work undertaken by Milks et al. has to be recognised as a valuable contribution to the study of ancient wooden technologies. The creation of a shared glossary is the first step of a path towards more experimental, traceological and technological understandings of wooden tools.

The authors integrated most of my suggestions regarding technological and usewear terms. They conducted the reviewing process with respect and showed the willingness to present the best version possible of their manuscript.

After reading this second version, I will definitely recommend this work for publication.

Many thanks for the positive and fruitful further engagement!

Reviewed by Paloma Vidal-Matutano, 18 Mar 2022 14:56
As I said in the previous version of the manuscript, this is an excellent and comprehensive work, very necessary for the technological approach to wooden artefacts from

archaeological contexts as there is still a general gap in established nomenclature. In addition, the last version of this work has been significantly improved by adding some of the issues suggested by the evaluators (initial discussion of ways of wood preservation, etc.). In addition to this, and after reading the other reviewers' comments, I must thank the authors for having valued the work carried out in the Canary Islands with the dried wooden artefacts, not always cited when referring to dried wooden artefacts elsewhere. The preservation of archaeological wood by drying occurs, as the authors of the work point out, in places other than South America, and there are also studies carried out in Africa (Egypt, the Canary Islands, etc.) where this type of preservation also takes place. On the other hand, as mentioned by the authors in the "Terms and Code" section, I understand that what is important in a work of these characteristics (a glossary that will serve for the consultation of all those specialists working on the technological analysis of wooden artefacts) is not so much the number of articles referenced but the mention of those on which the authors have based themselves to define or redefine the concepts. I completely agree with the author's reply about the nature of this work: a referenced glossary and not a review paper. And this is where this work is extremely relevant, as it brings together those (few) works that do define and describe concepts of the chaîne operatoire applied to the technological analysis of wooden artefacts. Unfortunately, the still lack of established nomenclature hinders intra-site comparisons.

I agree with some reviewers that the terms should follow a certain order within each "phase". The latest version of the manuscript actually incorporates an alphabetical order within each phase and it's now much easier to consult. Some of the concepts have been reorganised in other folders, making more sense. However, I do not support the idea of creating more folders or sub-folders as suggested in some reviews. I believe that subdivisions in a glossary run the risk of making the information less accessible and more difficult to consult. I appreciate that there are terms referring to taphonomy as, although it is not directly related to technological analyses, it does influence them. In this sense, archaeoentomological analyses are sometimes combined with xylological and technological analyses providing interesting results about wood use, choices, wood degradation patterns and the chaîne opératoire itself (Martín-Seijo, 2020; Vidal-Matutano et al., 2021a).

In Phase 1 (Manufacturing), I would suggest to nuance the definition of "shaping facet" as these facets, produced with volcanic lithic tools in the Canary Islands, are very often < 1 cm. In addition, these marks are not necessary produced using an adze (this tool did not exist during the Prehispanic period of the Canary Islands, for example).

Thank you for this observation. Following further discussion via email we have agreed that the reviewer may be thinking of the wider term 'Tool facet'. However, we have also agreed together that the differentiation between 'tool facet' and 'shaping facet' will need careful consideration as we all move forward with our work, and we hope to address this in an upcoming small workshop in autumn 2022.

Regarding the term "sawing mark", described in Vidal-Matutano et al., 2021b, I agree with some reviewers that can lead to confusion. We defined this tool mark as the result of cutting a piece of wood (in fact, it was mentioned in the paper as a synonym of "cutting mark"). These marks reflect a parallel direction carried out with a uni or bidirectional

movement in continuous contact with the wood at different angles close to 90º. This action yields straight linear negatives of different lengths with V-shaped or irregular sections. Obviously, we didn't refer to a mark made by a saw but I agree that it could be confusing. Thus, I could understand if the authors decided to omit this term.

Yes, this was a point of questioning amongst several reviewers. We do think 'sawing' as a repetitive gesture remains relevant, and will pay careful attention to this issue, particularly in experimental woodworking with different tool types. Personally I (AM) have created very wide-shaped sawing marks prior to complete severing of a branch/trunk using a retouched lithic tool. After severing, one fragment has an angled cut, and the other fragment a straighter cut. However as this term is a known woodworking gesture, and is used in publications, and not necessarily the same as cutting, we will keep this term under review, as per the note in the glossary. Perhaps the terms sawing and cutting will need further experimental work to understand how the resultant marks differentiate on wood artefacts, if at all.

I also agree with the fact that adding more photographs (macro and micro) would help a better understanding of the terms, as often the definition is not enough (we may be referring to different things with the same term). In this sense, I think that adding some photographs from different geochronological contexts would improve the future version of this work as it would show the great diversity of tool marks that can be observed using different lithic tools.
Agreed, this is work for future versions, and further contributions are most welcome. We are also collecting further images from manufacturing and use experiments, and intend to add these as well as they become available.

References mentioned in the review (not necessarily to be added):

Martin-Seijo, M. (2020). The presence of decayed wood in Iron Age contexts of northwest Iberia: wood-borer galleries and fungal hyphae. Environmental Archaeology. DOI: 10.1080/14614103.2020.1829294.

Vidal-Matutano, P.; Delgado-Darias, T.; López-Dos Santos, N.; Henríquez-Valido, P.; Velasco-Vázquez, J.; Alberto-Barroso, V. (2021). Use of decayed wood for funerary practices: archaeobotanical analysis of funerary wooden artefacts from Prehispanic (ca. 400 – 1500 CE) Gran Canaria (Canary Islands, Spain). Quaternary International, 593-594: 384-398.

We thank you for your further observations and comments. We have added the above two references to the new version.