

I would like to express my sincerest gratitude to the authors for broaching the subject. The problem of data collection and the exploration of datasets in bioarchaeological research is of paramount importance for many osteo-archaeological projects. The huge amount of data that we collect in the field and in the laboratory are difficult to interpret in their entirety and an R tool which facilitates the process of exploring the patterns of both osteological and isotopic data in one go would be a welcome addition to the bioarchaeological toolbox. However, the promise made in the abstract and in the introduction has not been delivered convincingly within the text itself.

A considerably shortened abstract, that is more to the point, would be better. The key sentence being 'we propose a tool that enables the researcher to automatically find any correlations between dental pathologies and isotope values'. The keywords are misleading as no paleodemography, paleopathology, isotope, and database architecture are discussed within the text. I would recommend using bioarchaeological keywords instead.

[line 48] The introduction would clearly benefit from more references concerning the previous studies using both 'stable isotopic and dental health data'.

[lines 51-52] It would be great to see the tool and the outcome it generates and the rationale behind the analysis mentioned in the passage 'we generated a tool that enables the researcher to automatically find if there are any correlations between dental pathologies and isotope values'.

[line 60] It would be great to see a North pointing arrow on the picture.

[lines 66-68] These sentences are quite confusing. First you mention 'integrating different types of recorded data into one common database' and then you write about coping with this using: web storage 'Google Drive, Dropbox', a group collaboration suite 'Box', and a code versioning solution 'GitHub'. Please, clarify.

[line 77] What do you mean by 'most undivided'. Please, elaborate.

[line 79] What do you mean by: tomb, burial, and assemblage? It would help if you could explain the differences. Can assemblages and burials be found within the tomb? Do you identify all commingled burials as assemblages?

[line 80] Could you clarify what you mean when writing about an individual? Do the lines 79 and 80 together mean that you have been able to identify the MNI of 100 when investigating 200 tombs? Did you in addition to these 200 tombs investigate a number of burials and assemblages? Please clarify.

[lines 81-83] The citation in line 83 should be moved to line 81 and come immediately after 'individual burial'.

[line 84] The picture would benefit from the area 1 label being more visible. It also would be helpful to see the North pointing arrow on the picture.

[lines 87-93] I would suggest this paragraph be reworked into a longer description of how you comply with all the FAIR principles. While doing this, when possible, please, keep the division between data and data analysis clear for the reader.

[lines 97-98] Needs rephrasing. I think I know what you mean but your point is not stated clearly. The second sentence is especially confusing. Could you please elaborate a little more about the data you collect and the way you do it?

[lines 99-103] The whole paragraph is very confusing. It could be rewritten in a few paragraphs explaining your 'pipeline'. You should also describe exactly how, and why, you use the software listed in the paragraph.

[line 106] How do you integrate your data if you allow researchers to use any means available out there when they want to collect data?

[lines 121-123] For this paragraph. Could you please provide the rationale behind your proposition to use cloud server environments; 'cloud server' means nothing specific in terms of technology or the services it provides. Do you recommend it for providing spreadsheet functionality to allow online data collection by all collaborators?

[line 126, 127] By 'parametrization' do you mean standardization and data cleaning?

[lines 129-138] The bibliography given there, although great from a bioarchaeological point of view, is not needed for the subject presented. These bibliographical references would be invaluable if you were to rewrite this article to be about your solution from the point of view of the bioarchaeological analysis it performs.

[line 146] In this line you write about the tool created. Is this available for download anywhere on the internet? If so, please, provide a reference to it.

There are many important problems mentioned in the text: data collection, cleaning, analysis, and publication but none of them is described in depth. Moreover, the 'pipeline' stated in the subject is not satisfactorily elaborated upon in the text. I would recommend that the authors select a subject and concentrate on it. They could follow up on what they promise in the introduction and describe the tool they devise as a focal point in the 'pipeline'. I can see at least two potential approaches to this. They could describe the tool and the 'pipeline' from the point of view of their technical development and use. They could also elaborate on the rationale behind the 'pipeline' they propose and the bioarchaeological solution behind the R code they have created – or behind the R code they intend to create.

I strongly recommend that the text be corrected by an English native speaker with good writing skills. There are many sentences in the text that needs clarification.

The article has great potential but I strongly recommend that the authors refrain from publishing it in its current form. The whole text gives the impression of being a draft document and that the actual subject matter has not yet been fully clarified.