

TITLE/ABSTRACT/INTRODUCTION

Does the title clearly reflect the content of the article?

Yes, it is appropriate.

Does the abstract present the supported findings of the study concerned and no other?

Yes, it focuses solely on the study in question.

Does the introduction clearly explain the motivation for the study?

Yes, the motivation for the study is clearly stated.

Is the research question/hypothesis/prediction clearly presented?

The research question is stated, but it could use some refinement to reduce repetition. The research statement is somewhat indirectly stated throughout the abstract. Some editing that focuses on a more direct statement would be helpful, in my opinion.

Does the introduction build on relevant recent and past research performed in the field?

The abstract uses some general terms (e.g., 3D model(s), digital methods, three-dimensional models), but it does not mention the more technical methods used to derive these datasets, such as structure-from-motion (SfM) or photogrammetry. I was expecting mention of these terms given their relevance to this subject. I would recommend focusing on these methods and literature that are heavily documented in previous archaeological research. NOTE: The SfM method is briefly mentioned on the website under the "Reconstruction History" section, but it is only briefly mentioned.

MATERIALS AND METHODS

Are the methods and analysis described in sufficient detail to allow replication by other researchers?

I would personally want to know more about the actual SfM methods used to reconstruct the megalithic tomb. I would also like to know more about how the data was captured. What scanners were used? What cameras were used? What software was used "stitch" the point clouds together? The author mentions some basics, but I would prefer more information. This information would help others replicate the methods used.

Is the experimental plan consistent with the questions?

The goal was to attempt to reconstruct this specific megalithic tomb as it was originally built using old photographs and current scans/photographs. I was confused about how this could be achieved and tested without additional information to produce the interpretation of the tomb as it was originally erected in 3000 B.C. Some additional data seems important here. Perhaps it is available in the archaeological datasets and could be shared on the website?

Are the statistical analyses appropriate?

N/A

Have you evaluated the statistical scripts and program codes?

N/A

RESULTS

Have you checked the raw data and their associated description?

N/A

Have you run the data transformations and statistical analyses and checked that you get the same results?

N/A

To the best of your ability, can you detect any obvious manipulation of data (e.g. removal)?

No, the data does not appear to be manipulated.

Do the statistical results strongly support the conclusion ($p < 10^{-3}$ or $BF > 20$)?

N/A

In the case of negative results, was a statistical power analysis (or an appropriate Bayesian analysis) performed?

N/A

Did the authors conduct many experiments but retain only some of the results?

N/A

DISCUSSION

Do the interpretations of the analysis go too far?

Yes, a little bit. It is unclear to me, at least with the information presented on the website, how the author decided what the tomb looked like in 3000 B.C. in the final rendering. I understand that this is highly interpretive, but I think it important to be explicit about the interpretation.

Are the conclusions adequately supported by the results?

The final interpretation of what the tomb looked like originally does not appear to match the results from the photogrammetry of recent and old photographs. I assume much of the data comes from other sources that are not fully explained. It would be helpful to know how the author decided to arrange the stones noted in the excavations into the position seen in the final models.

Does the discussion take into account relevant recent and past research performed in the field?

Yes, in part. The author discusses the archaeological work specific to the site itself but does not include a discussion of the methods/technology. I was hoping to see some mention of how SfM and photogrammetry have been used in past archaeological research and why these methods were chosen for this project instead of using other methods (artist reconstruction, etc.).

Did the authors test many hypotheses but consider only a few in the discussion?

I was not able to discern any hypothesis testing for this project.

REFERENCES

Are all the references appropriate?

Yes, they seem appropriate. I would suggest more references to support the study. They were also difficult to find on the website.

Are the necessary references present?

No. I would recommend a review of the literature on archaeological digital reconstruction (specifically SfM and photogrammetry) to include in this research. I think this is important given the focus of the research on these methods to derive the results.

Do the references seem accurate?

Yes, they appear to be accurate.

TABLES AND FIGURES

Are the tables and figures clear and comprehensive?

Yes, they are clear.

Are all the tables/figures useful?

Yes

Are there too many/too few tables and figures?

I think the number of figures is appropriate.

Do the tables and figures have suitable captions such that they can be understood without having to read the main text?

The image under the “tales” main section does not have a caption. The source for the image is listed when the user clicks on the section, but it is difficult to find at the bottom of the webpage. I would recommend using the format under the “history of the excavation” section which includes the caption and source under the image.

CONCLUDING COMMENTS

I think this is a very interesting research project that integrates historic photographs with modern datasets from multiple sources. I believe the research has scientific merit and value to the regional archaeology. My concerns are noted above, but in general, I would recommend adding some specific details instead of using generalities. This is especially evident in the methods and results. I would also recommend some editing for clarity, grammar, wording, and general writing structure. I do not see any glaring problems, but some editing would refine the writing. I appreciate the novel approach of using a website to share research. I feel like the website was a little difficult to navigate at times. I had a hard time finding some of the elements (references, sources, captions, etc.). Perhaps the main menu could provide a link to some of the major elements for others to easily access. With a little refining and polishing, I think this study will be a nice addition to the body of work associated with archaeological digital reconstruction.