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HYBRID: TRANSDISCIPLINARY: TRANSFORMATIVE: An instance of travelling in practice-led research: Talk in 5 minutes

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**PHD BY DESIGN SATELLITE SESSION  
AT LEEDS COLLEGE OF ART  
14 MAY 2015**




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## **HYBRID: TRANSDISCIPLINARY: TRANSFORMATIVE**

An instance of travelling in practice-led research: Talk in 5 minutes

**ANDREW TAYLOR**

SCHOOL OF ART, DESIGN & ARCHITECTURE  
UNIVERSITY OF HUDDERSFIELD

# **HYBRID: TRANSDISCIPLINARY: TRANSFORMATIVE**

An instance of travelling in practice-led research: Talk in 5 minutes

**ANDREW TAYLOR**

SCHOOL OF ART, DESIGN & ARCHITECTURE UNIVERSITY OF HUDDERSFIELD

Hybrid practices with (or without) digital or interactive technologies can transport us to unexpected new spaces and places; On our nomadic practitioner journeys we transform: move, change and co-evolve through thinking and experimenting with tools, creating objects, artefacts, experiences, new ways or methods, languages, and production paradigms.

I collaborated on various phases of practice led trans disciplinary experimental immersive archaeological research concerned with understanding ritual praxis of Neolithic makers of Stonehenge. The sites, data and research we experienced, sourced, surfaced, cleaned, modelled, sculpted and the artefacts and music we created, performed, exhibited, navigates, maps and reflectively records a truly unique journey through space and time.

During the progressive phases of practice led transdisciplinary research, we gained a deeper understanding into how people and technologies make a human contribution to dissolving of physical and disciplinary boundaries. And how through cultural exchange we learn more about being more open to encouraging creative approaches of this nature to positively transform and transcend us as practitioners and the disciplines themselves now and into the future.



Taylor, A (August,2009). Image recorded at Sunrise : Inner Stone Circle Access granted by English Heritage





Image recorded at Sunrise : Inner Stone Circle Access granted by English Heritage



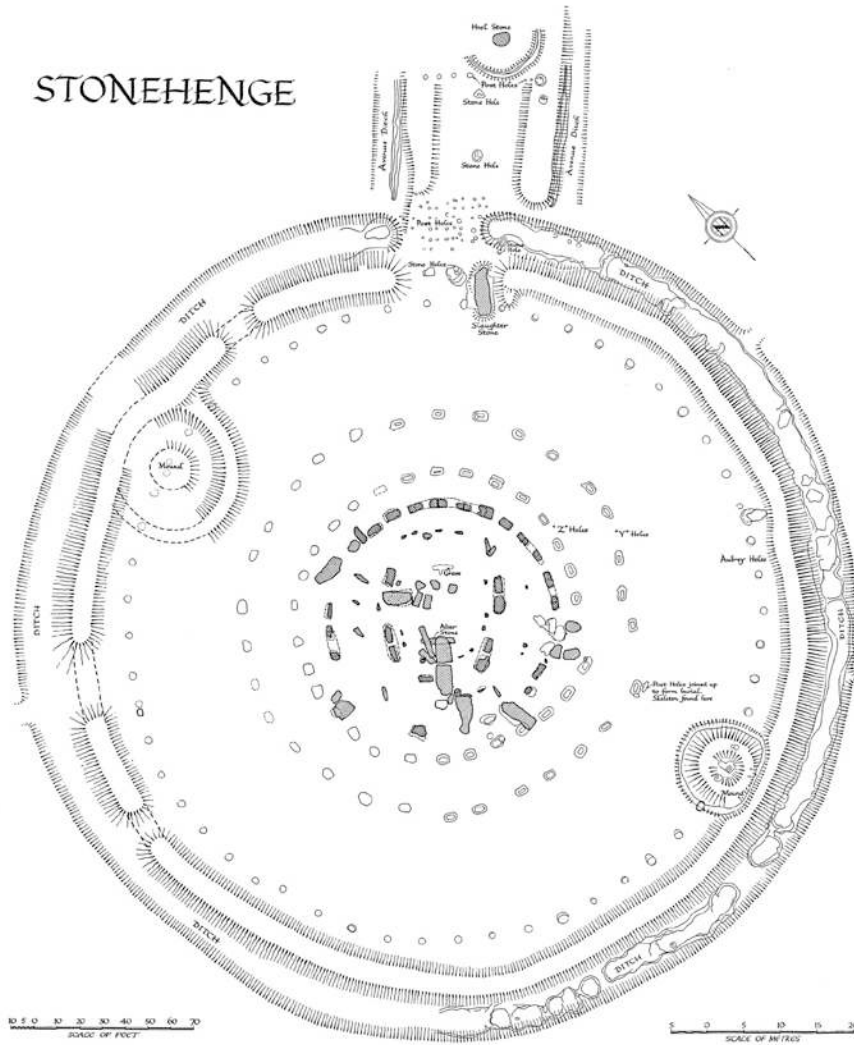
Taylor, A (2009) Sourced at Stonehenge site visit as tourist. August.



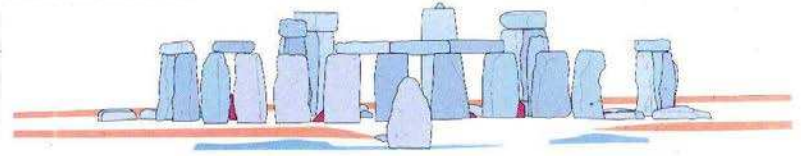
Digital photographic images of stones recorded during Stone circle access for 3D texturizing



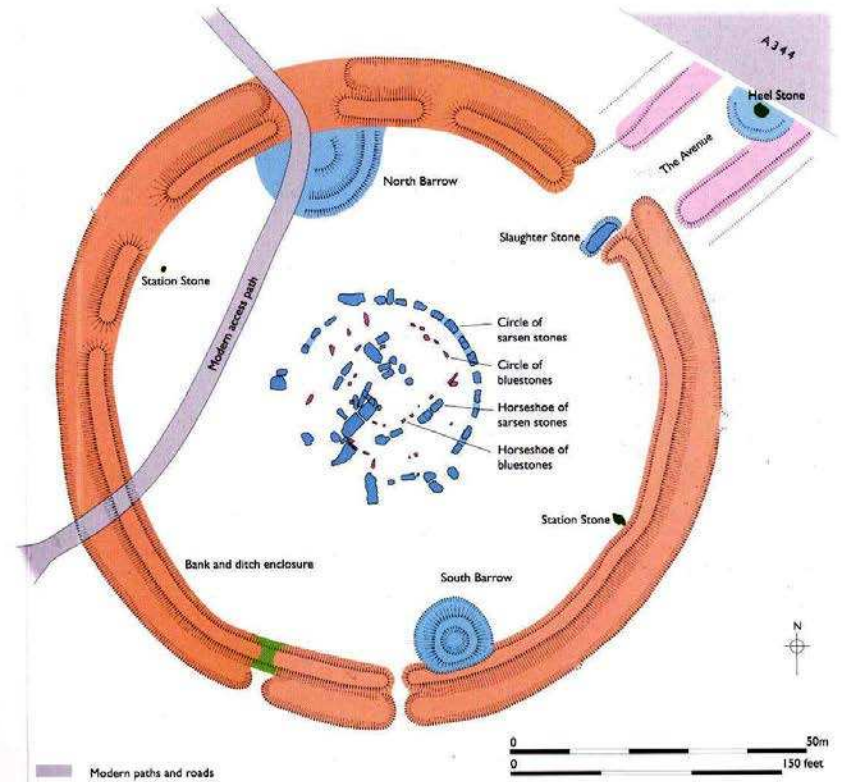
# STONEHENGE



## THE STONES VIEWED FROM THE AVENUE



## PRESENT DAY STONEHENGE



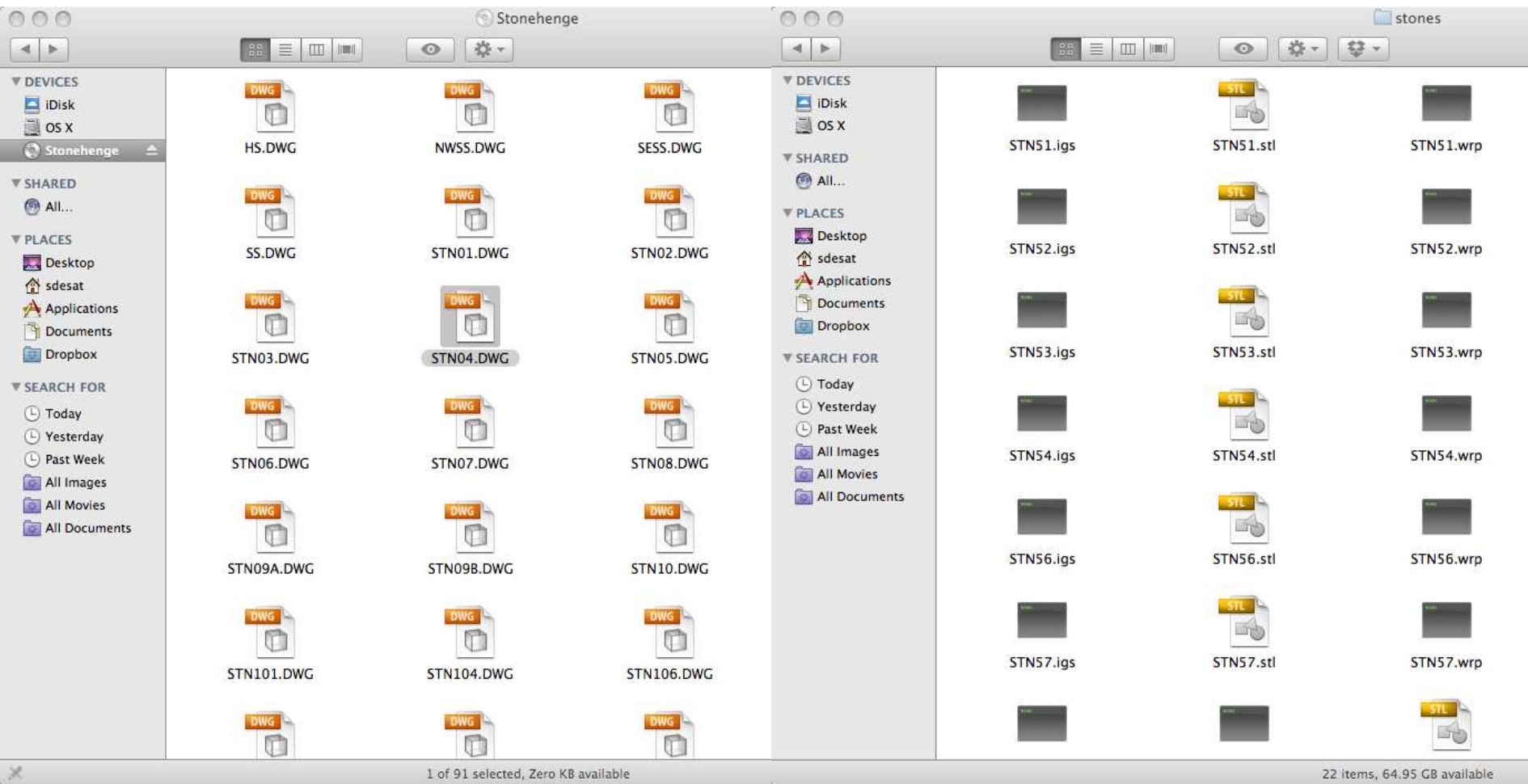
Stonehenge Survey engraving c.1740

Source: English Heritage National Monument Record Archive, 2009.

Contemporary Stonehenge publication Illustrations

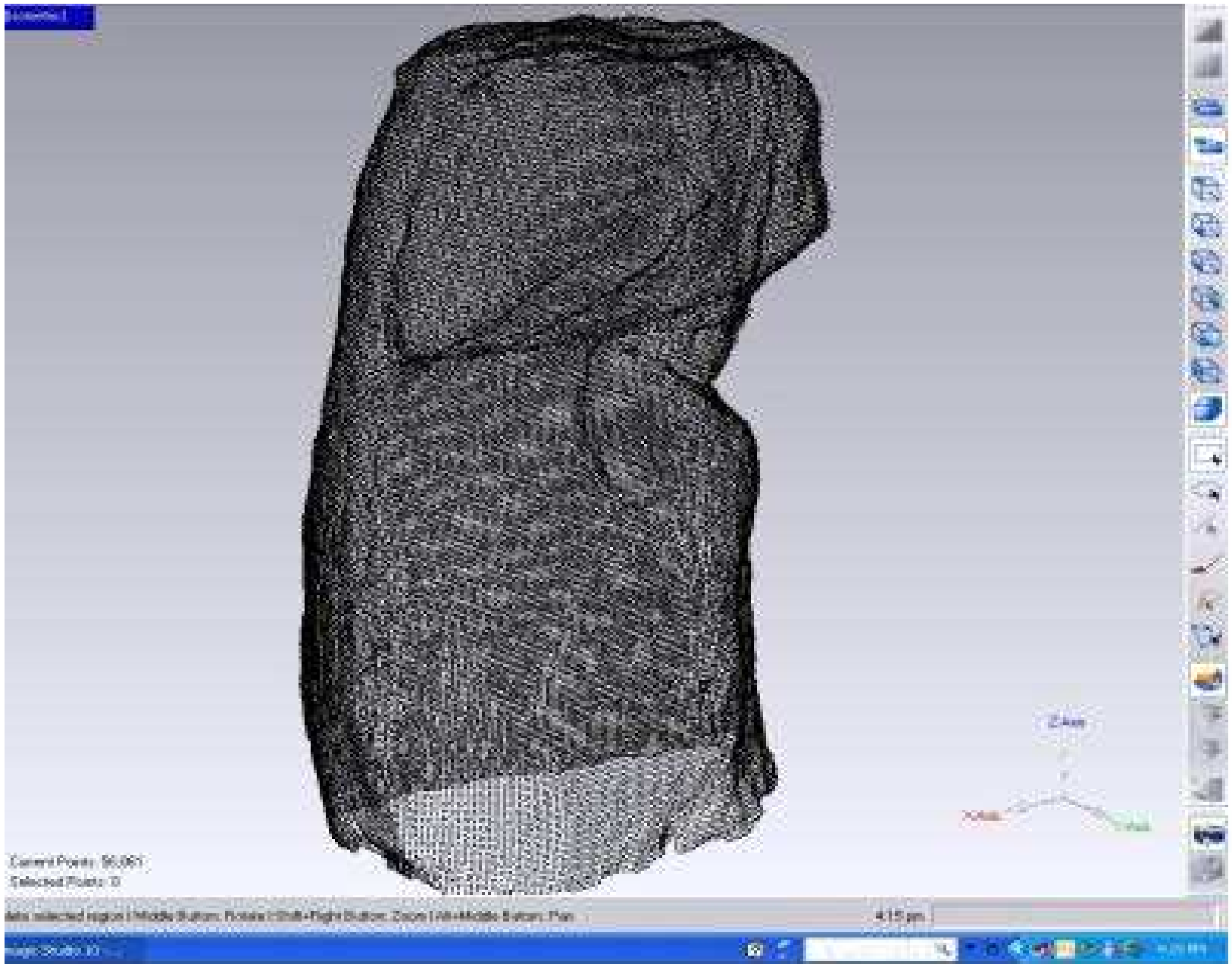
English Heritage Guidebook (2005) Sourced Stonehenge Visitor Centre



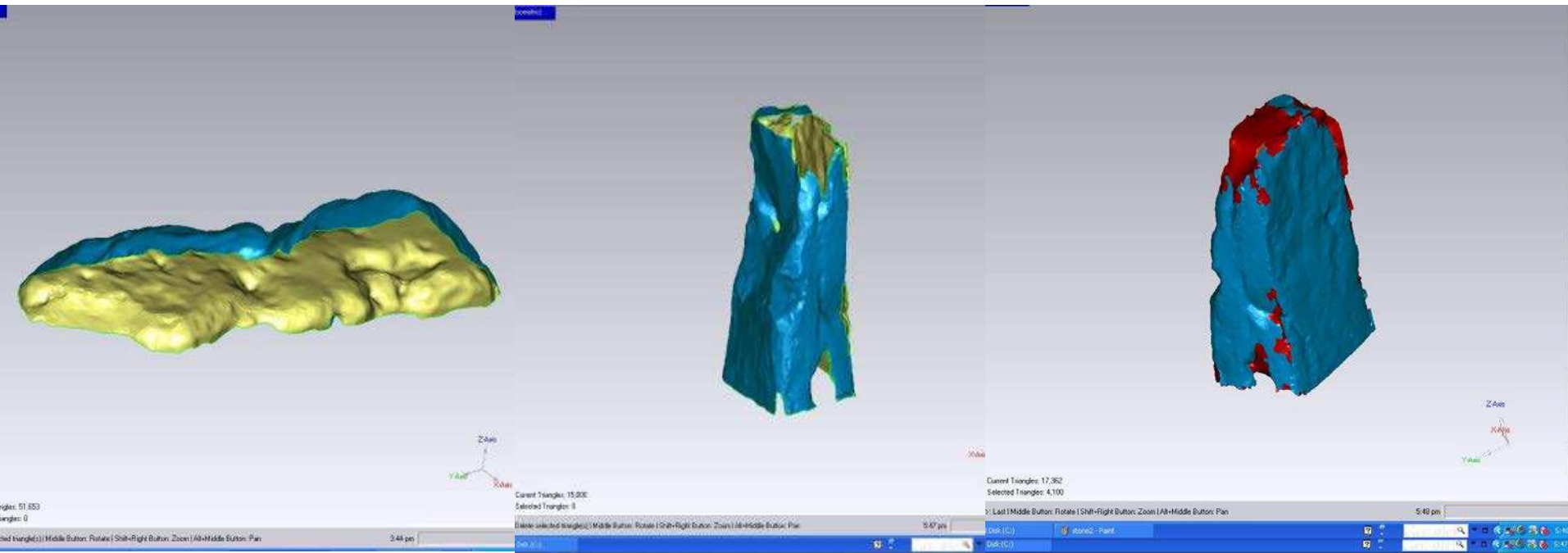


Categorizing the Stone scan cloud data files.

Conversion of stone scan files into 3D files in 3D software

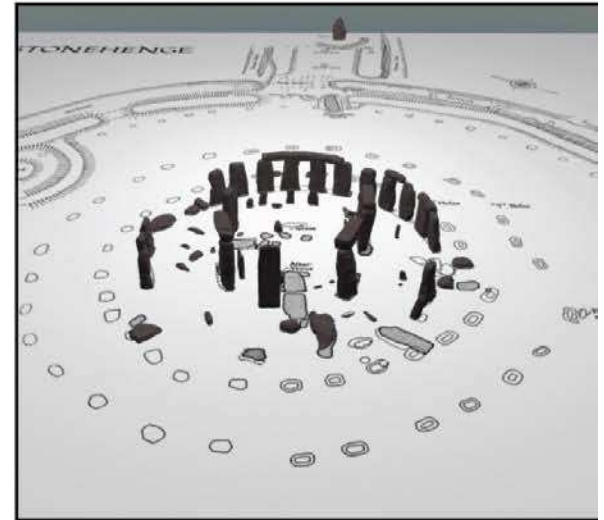
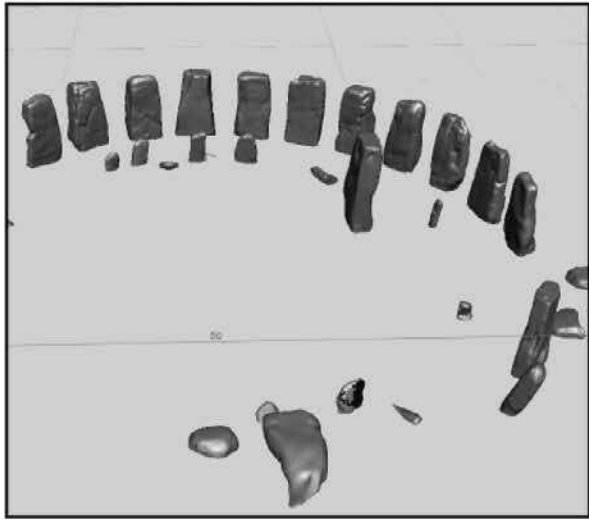


Point cloud data. Sourced from English Heritage - National Monuments Record, 2009



3D Scanning software processing and converting cloud data into 3D surfaces.

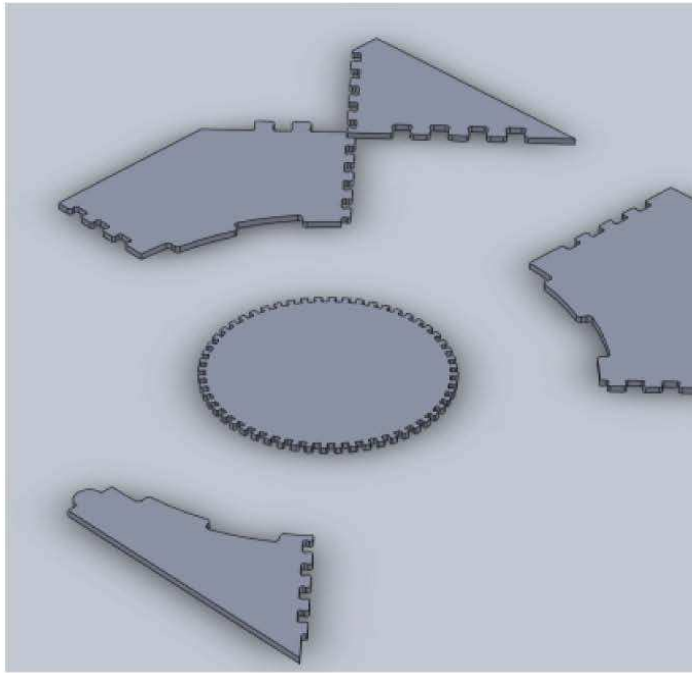
Rebuilding, filling and merging to generate a 3D surface to be imported into 3D modeling & animation software



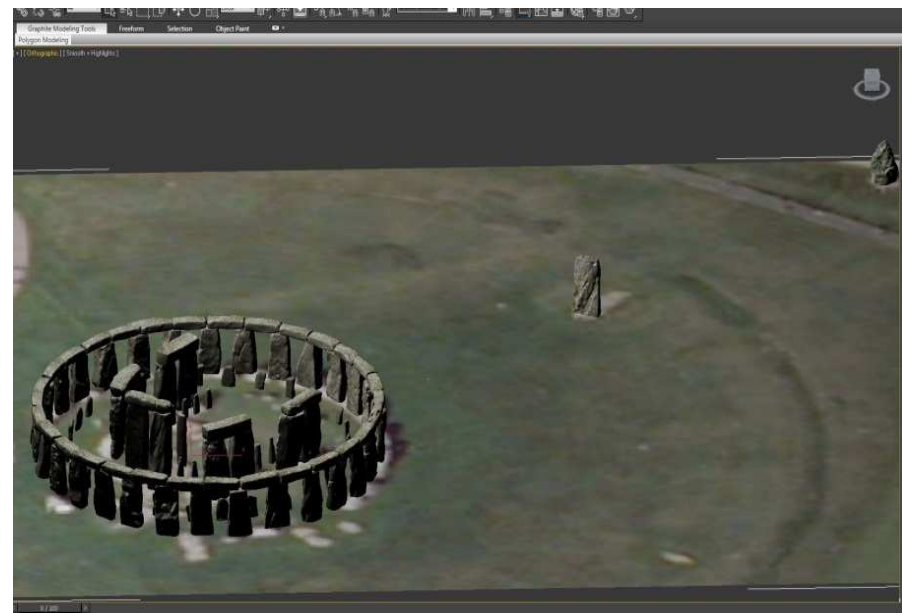
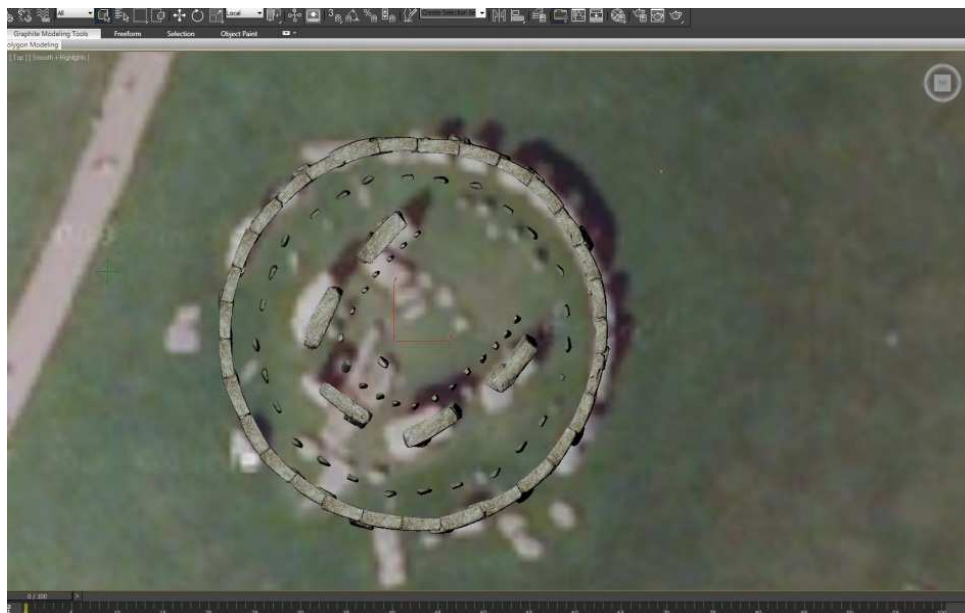
## MA 3D Digital Design, Design Puzzle Project.

- Unver, Ertu, Taylor, Andrew and Hughes, Daniel (2010) [Poster Paper: Editable Artefact: Stonehenge Megalithic Puzzle Project.](#)
- In: University of Huddersfield Research Festival 2010 , 8-18 March 2010, University of Huddersfield





3D Modeling in Autodesk Maya. Laser cutter to hatch the map on base and cut the fittings for stones.



Google Map Satellite data:

Texture map applied in 3D software to evaluate and estimate the scale of the model and the approximate visual location of each stones

Quick Find :  Found



Google Map measuring tools used to select area for sourcing the LIDAR Data

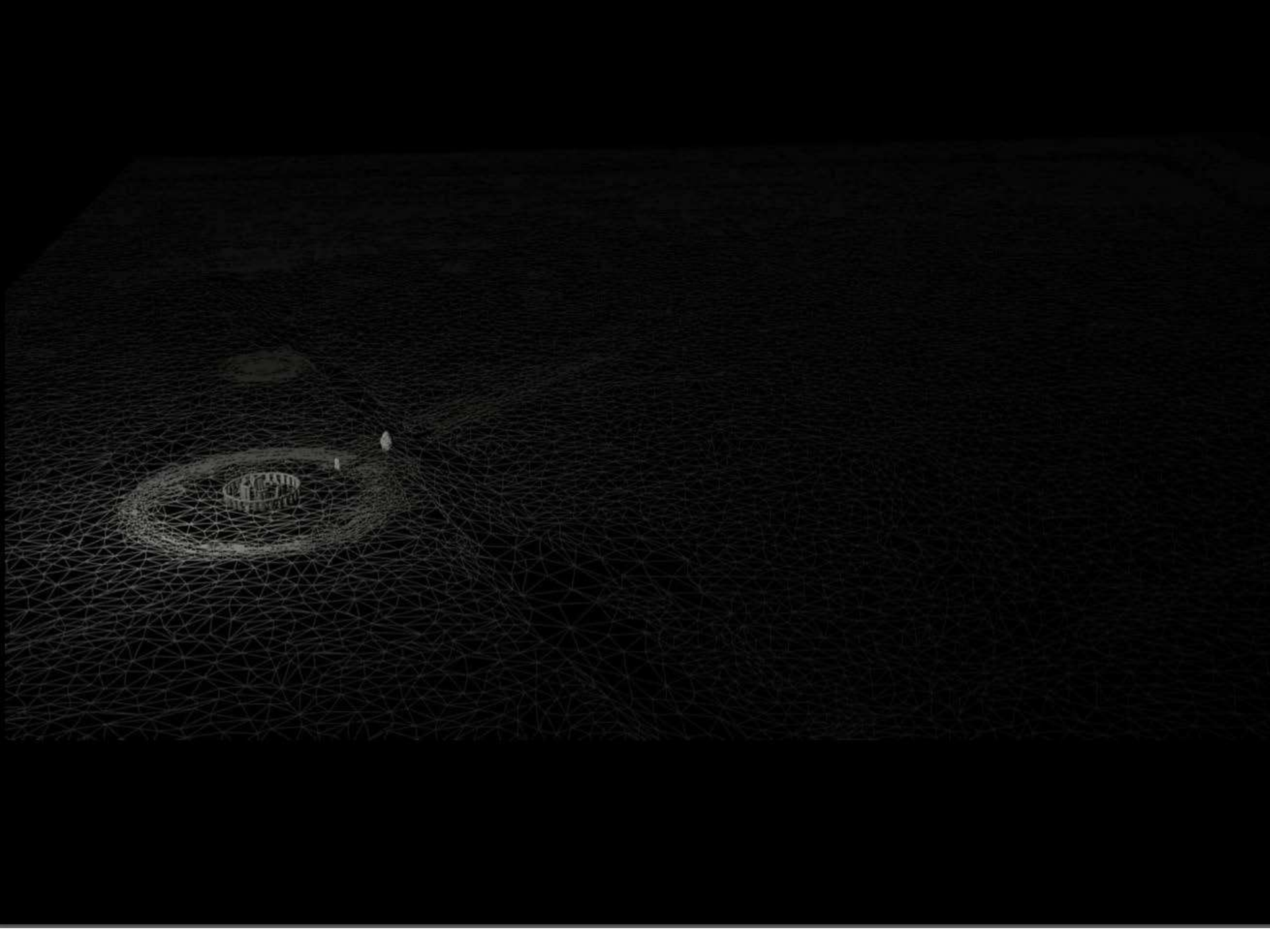




Stonehenge LIDAR data:

Source: Archaeoptics and Geomatics







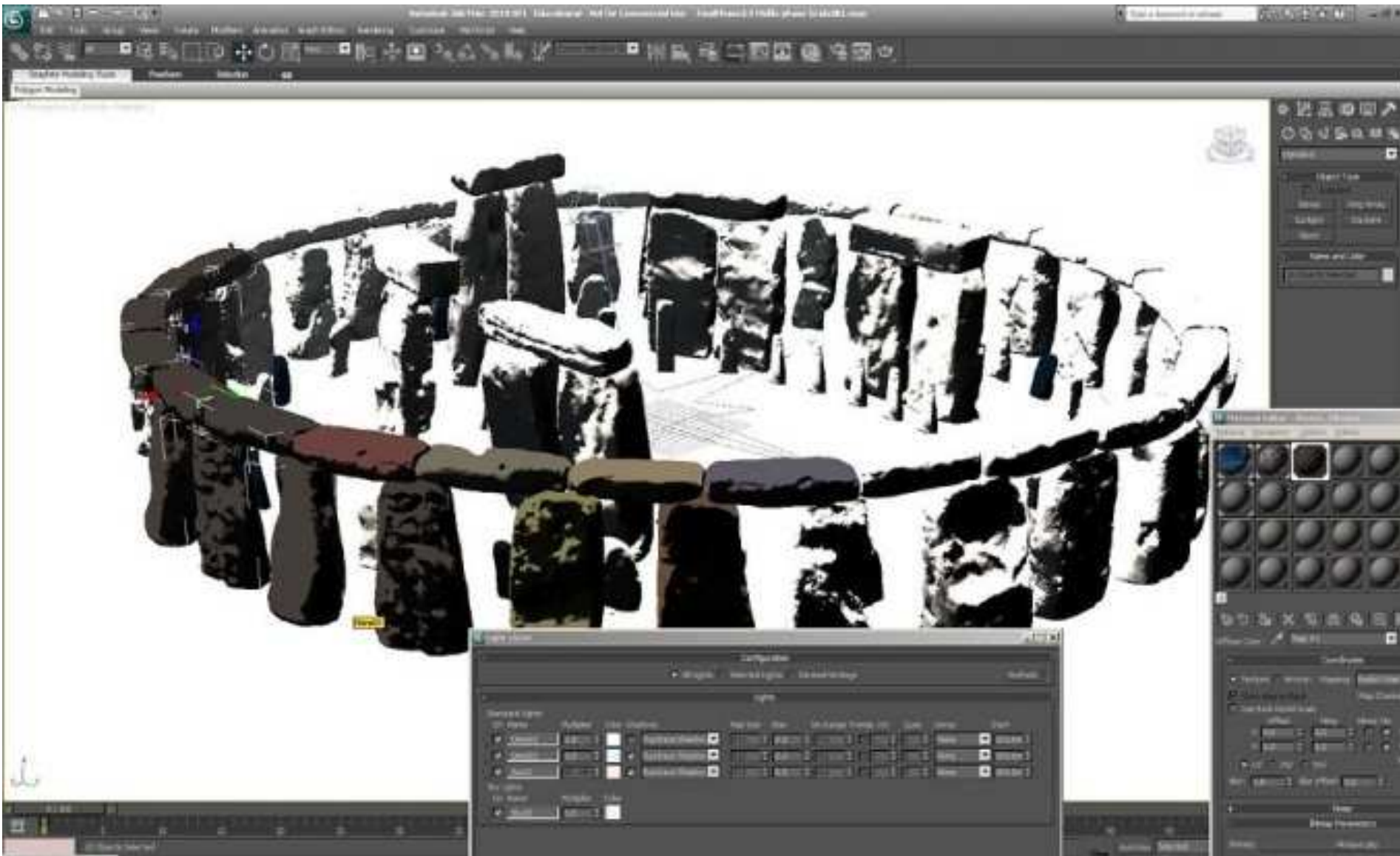
Non -textured 3D CG model of Stonehenge phase 3c, rendered test.

3D CG model of Stonehenge with human character added for scale and population



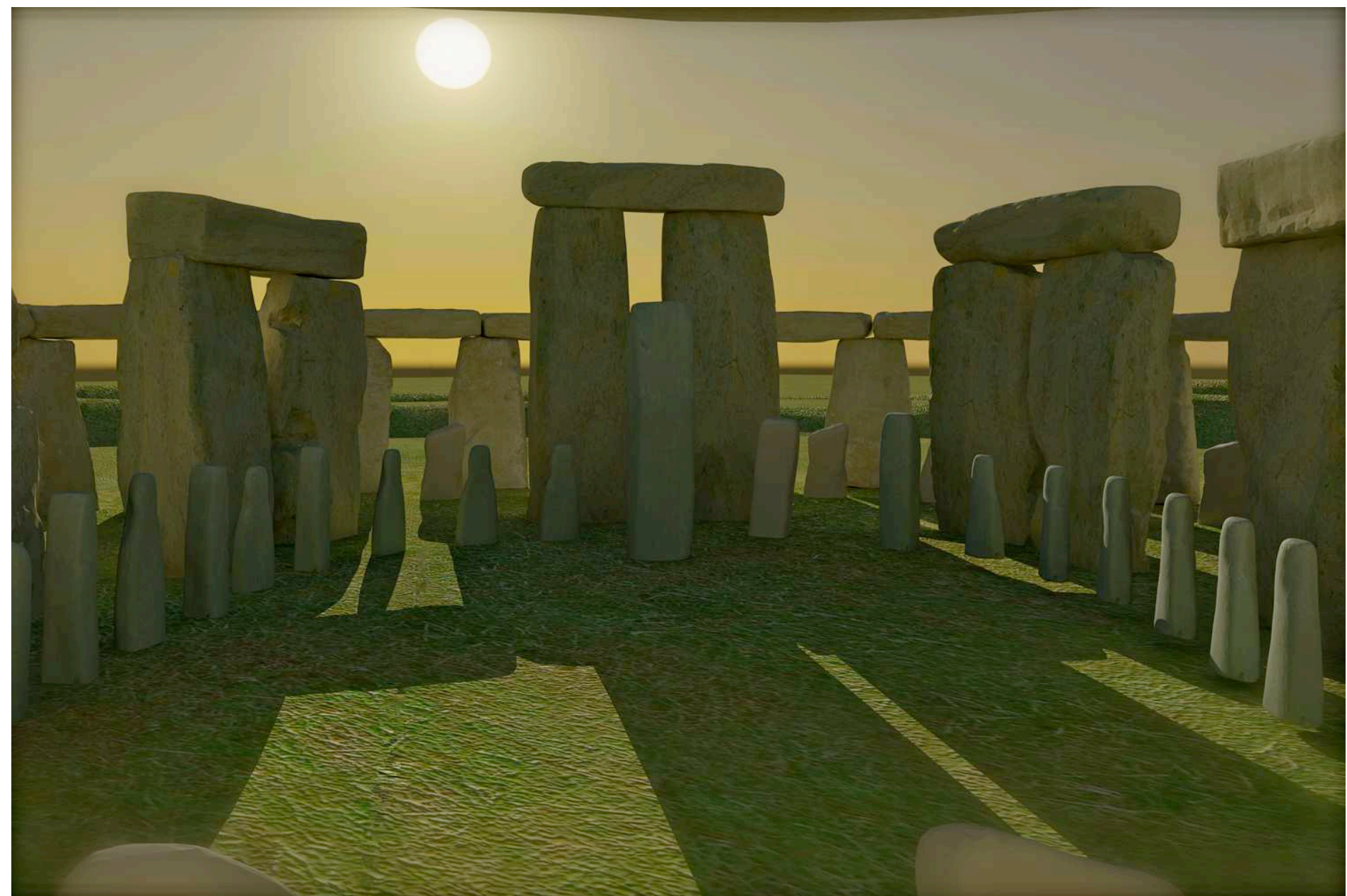
Digital photographic images of stones recorded during Stone circle access for 3D texturing





Colour and texturing experiments for collating data of the 3D CG model of Stonehenge





Taylor, A., Unver, E. and Till, R. (2010) '[Modelling Stonehenge: An interdisciplinary digital approach to 3D interactive storytelling](#)'. In: *TAG 2010: The 32nd Annual Conference of the Theoretical Archaeology Group, 17-19 December 2010*, University of Bristol, UK



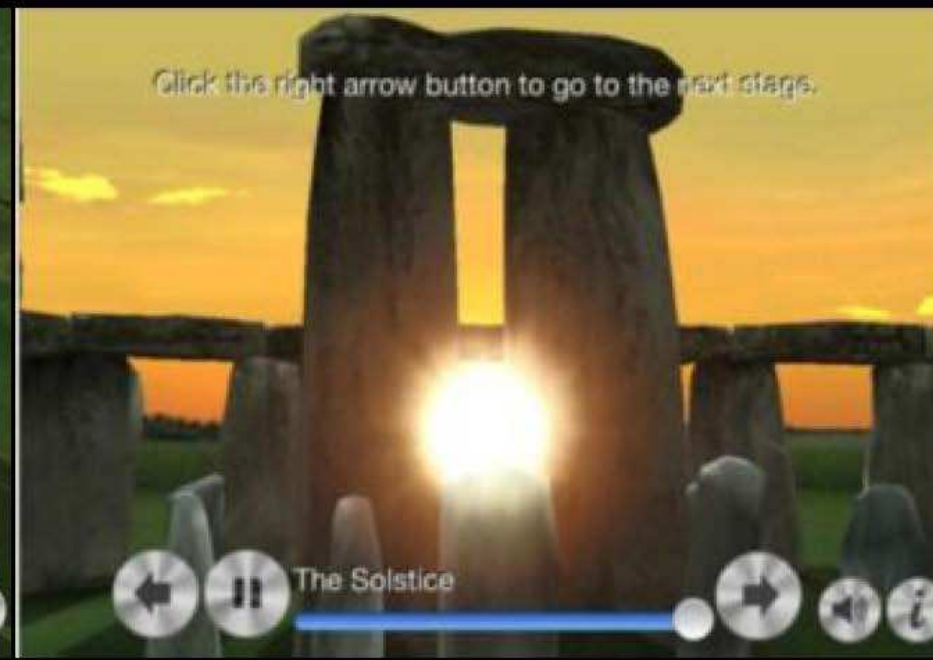
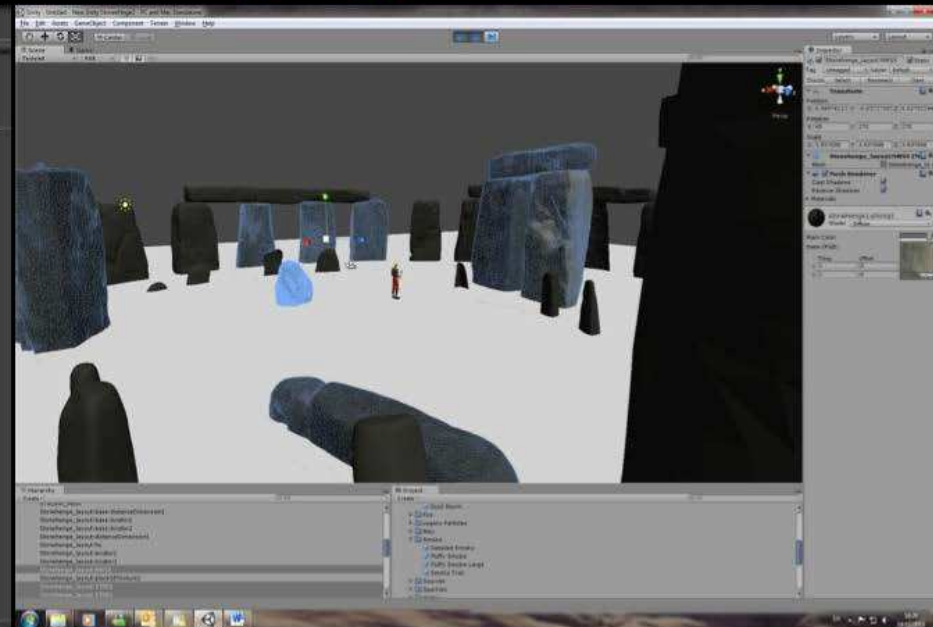
Till, R., Taylor, A. and Unver, E. (2011) '[Stonehenge Ritual Sound](#)'.

*In: Palaeophonics: a live multimedia performance event , 27 May 2011, George Square Theatre, Edinburgh.UK*





# 3D game environments & Interactive heritage applications





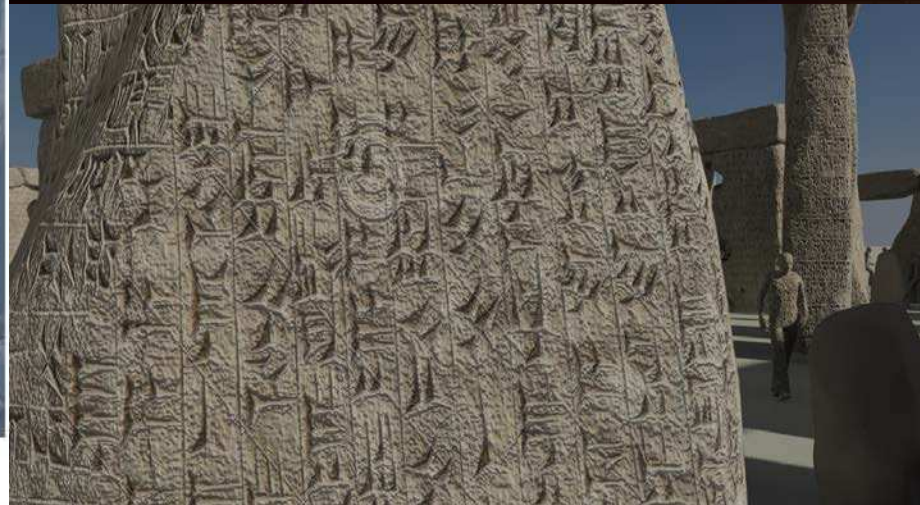
## HYPER NATURALISM & SIMULACRA IN STONEHENGE ART

Unver and Taylor have explored digitally a methodology that has interested makers and observers for decades. In the 1930's Walter Benjamin. In his seminal discussion of Art In the Age of Mechanical Reproduction worried about the destruction of authenticity and aura that reproduction of the real created for the viewer, while acknowledging that this reproduction allowed artefacts to be dislocated from their original ritual purposes and therefore making the once sacred more accessible.

In 1977 Roland Barthes liberated the emphasis of construction and understanding of knowledge from the makers to the spectator by proposing that the author (in the case of Stonehenge this is a sort of discourse) was no longer the 'god' that should be sought out to explain the works on offer. In fact, once the understanding of a text is placed with the viewer he suggested that 'to try to impose a final reading of an object is ineffective. Ecoiffard believed that when a reader sits out on images of the real (of the Stonehenge monument) there is a physical barrier in place between the tourist and the object) the more was the schism between a lived experience.

Unver and Taylor, have helped to reiterate an immersive experience through the Stonehenge Virtual Reconstruction research. Up for debate is whether their output really is another example of 'technological inertia' or whether, because digital life and real life are now so closely intertwined they have enabled new spectators to be perceptually closer to the stones and the surrounding site.

(© Roland Barthes, Image Music Text (1978) (©) Jean Baudrillard, The Consumer Society (1970)



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International Conference on Cultural Heritage, EUROMED 2012, CYPRUS.





