

Skyscapes, Cosmology and Archaeology

Introduction to the Module

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MA CAA Module AHAN7043 :: February 2017

Cultural Astronomy and Astrology



Archaeo**astronomy** is a field concerned with:

‘every conceivable form of data that might provide insights into thoughts and practices relating to **astronomy** in the past.’

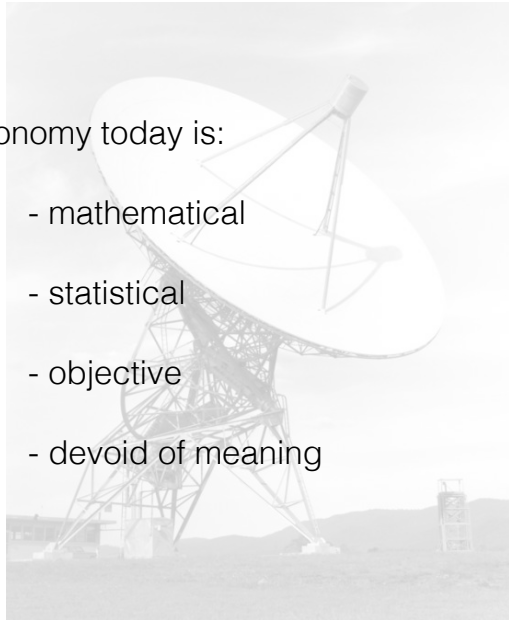
— Clive Ruggles (2011) ‘Pushing back the frontiers or still running around the same circles? ‘Interpretative archaeoastronomy’ thirty years on.’ *Proceedings IAU Symposium* 278, p.1

Can we talk of astronomy in the past? Of ‘prehistoric astronomy’, ‘megolithic astronomy’ or even ‘archaeoastronomy’?

Is this influencing how archaeoastronomy (the discipline) is done? Is it influencing our theories and interpretations?

Astronomy today is:

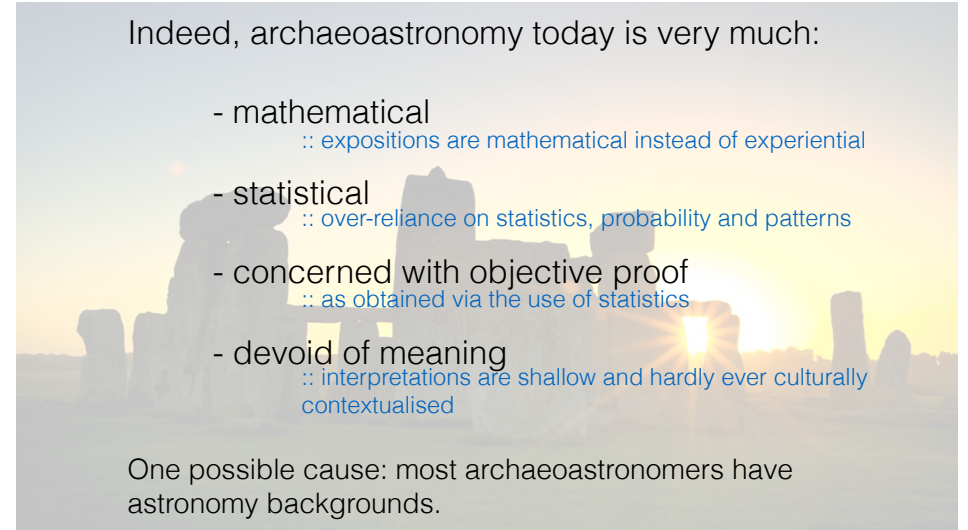
- mathematical
- statistical
- objective
- devoid of meaning



Indeed, archaeoastronomy today is very much:

- mathematical
:: expositions are mathematical instead of experiential
- statistical
:: over-reliance on statistics, probability and patterns
- concerned with objective proof
:: as obtained via the use of statistics
- devoid of meaning
:: interpretations are shallow and hardly ever culturally contextualised

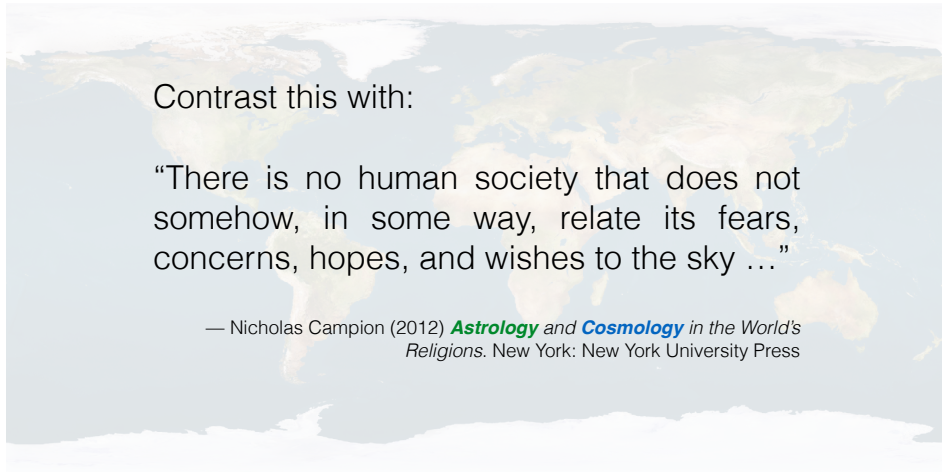
One possible cause: most archaeoastronomers have astronomy backgrounds.



Contrast this with:

“There is no human society that does not somehow, in some way, relate its fears, concerns, hopes, and wishes to the sky ...”

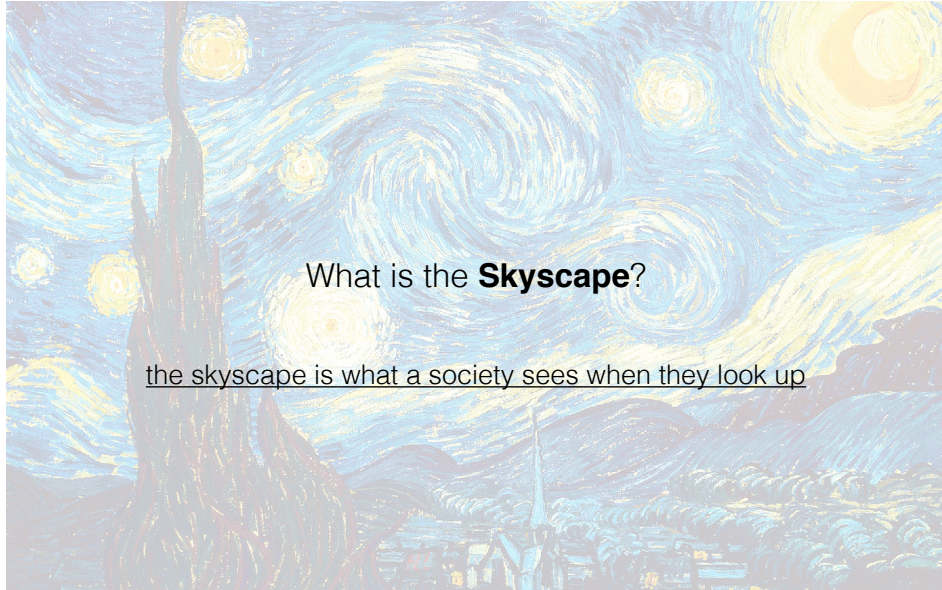
— Nicholas Campion (2012) *Astrology and Cosmology in the World's Religions*. New York: New York University Press



Sophia Centre suggestion:

introducing **Skyscapes**





What is the **Skyscape**?

the skyscape is what a society sees when they look up

What is the **Skyscape**?

the skyscape is what a society sees when they look up

It is a term meant to replace the value-laden term *astronomy* (and even *astrology*).

E.g. instead of talking of *Neolithic astronomy* or the *astronomy of the Hopi tribes*, we talk of *Neolithic skyscape* or the *skyscapes of the Hopi*.

Skyscapes are not merely *ancient astronomies*, they crosscut and correlate with other aspects of a given society (e.g. monumentality, art, myth, language, time-reckoning, etc).

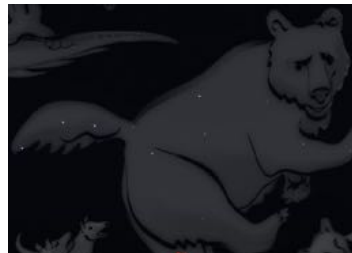
They don't imply a purely functional attitude: *skyscapes* can be used for functional, symbolic or religious purposes; they can encode mythologies and cosmologies; they can do all these things, or any combination of them.

In a word: skyscapes are rich.

What is the **Skyscape**?



sky



skyscape

sources of light
atmospheric phenomena

human agency

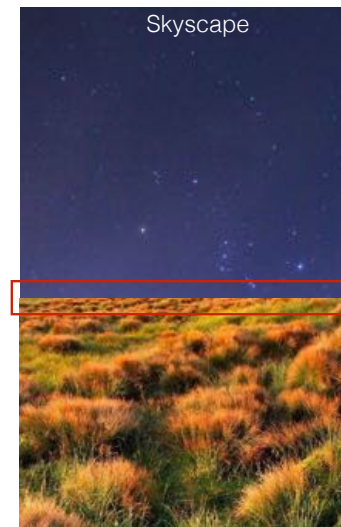


meaning
meaning

its study is the purview of the Natural Sciences (astronomy, astrophysics)

its study is the purview of the Humanities (cultural astronomy and its sub-fields)

What is the **Skyscape**?



Landscape

The concept of *skyscape* is meant to mirror that of *landscape*, but not include it.

The horizon as mediator between Earth and Heaven, between landscape and skyscape.

The land is "a natural phenomenon that is turned into a cultural landscape through human agency."

— Vicky Cummings (2001) *Landscapes in Transition? Exploring the origins of monumentality in south-west Wales and south-west Scotland*. PhD Dissertation. Cardiff: University of Wales, p.82

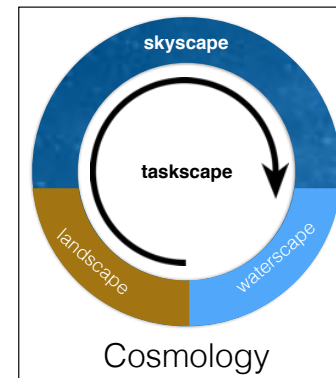
What is the **Skyscape**?

Landscape, seascape, waterscape, taskscape, cityscape... *and now skyscape*

Each of these terms refers to an **ensemble of interlocked components**, each taking its meaning from its position within the ensemble, which can be comprehended in a single view.

— Tim Ingold (1993) 'The Temporality of the Landscape'
World Archaeology 25(2), p.158

What is the **Skyscape**?



Cosmology is "the world view and belief system of a community based upon their understanding of order in the universe."

— Timothy Darvill (2009) *Oxford Concise Dictionary of Archaeology*.
Oxford: Oxford University Press

Cosmology can be conceived as the sum total of the "scapes" of a society

Skyscapes, Cosmology and Archaeology

What is the module about?

Skyscapes, Cosmology and Archaeology What is the module about?

- learning about the archaeological process and interpretation;

Archaeology

- learning about how societies embed their beliefs into everything they do, including their material culture (eg pottery, art, buildings);

Cosmology

- learning how to study material culture in order to identify potential celestial alignments, argue for their intentionality and interpret them.

Skyscapes

Skyscapes, Cosmology and Archaeology Academic Context

1 **Theoretical Archaeology Group (TAG)** meetings of 2012, 2013, 2014 and 2016



A collection of essays on the concept of skiescapes:

Skyscapes: The Role and Importance of the Sky in Archaeology (Oxbow Books), edited by Fabio Silva and Nick Campion.

Required reading for the module



A new academic journal dedicated to the skyscape approach:

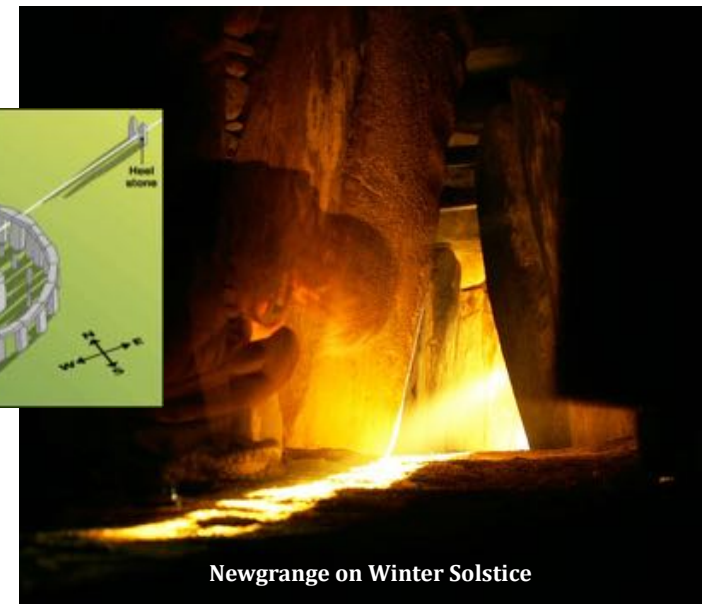
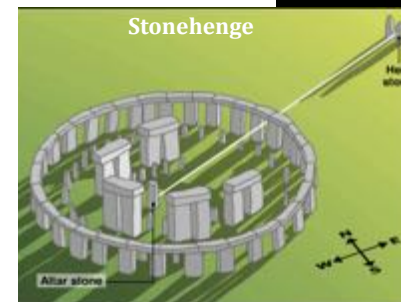
Journal of Skyscape Archaeology (website: equinoxpub.com/JSA), co-edited by Fabio Silva and Liz Henty.

Issue 2.2 just came out

Skyscapes, Cosmology and Archaeology

What to expect?

Skyscapes, Cosmology and Archaeology What to expect?



Skyscapes, Cosmology and Archaeology
What to expect?

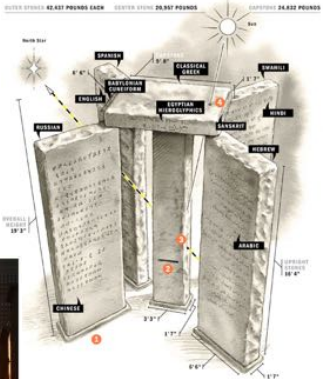


Skyscapes, Cosmology and Archaeology
What to expect?

Calendar Buildings

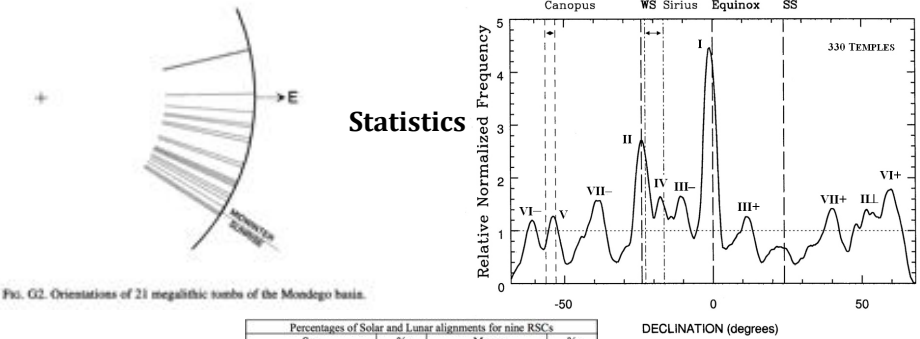


Manhattanhenge



Georgia Guidestones

Skyscapes, Cosmology and Archaeology
What to expect?



Skyscapes, Cosmology and Archaeology
What to expect?



Skyscapes, Cosmology and Archaeology
What to expect?



Stonehenge, winter solstice sunset

Mnajdra South Temple,
winter solstice sunrise



Photography



Chaco Canyon, major
standstill moon rise

Skyscapes, Cosmology and Archaeology
What to expect?

Phenomenological / Experiential



Skyscapes, Cosmology and Archaeology
What to expect?

Experimental

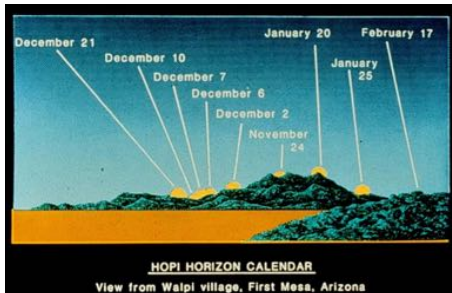


Skyscapes, Cosmology and Archaeology

What will you learn?

Skyscapes, Cosmology and Archaeology

What will you learn?



**Learn the movements of
the Sun, Moon and Stars**

**How to use a compass to
tell where a celestial object
will rise or set on a given
date**



Skyscapes, Cosmology and Archaeology

What will you learn?

**Learn how to plan and
conduct fieldwork**



**How to draw on
archaeological evidence to
support/reject an argument**

Skyscapes, Cosmology and Archaeology



**Worldwide Case
Studies
spanning all time
periods**



Skyscapes, Cosmology and Archaeology

Required Reading

Skyscapes, Cosmology and Archaeology Required Reading



Skyscapes, Cosmology and Archaeology

Assessment

Skyscapes, Cosmology and Archaeology Assessment

1. One 1500 word assignment (20% of total marks)

Write a critical review of the recent debate over the interpretation of Chankillo, Peru, between Iván Ghezzi, Clive Ruggles and Kim Malville. The two works to read are:

- Ghezzi, I and C Ruggles (2011) "The Social and Ritual Context of Horizon Astronomical Observations at Chankillo." In C Ruggles (ed) "*Oxford IX*" *International Symposium on Archaeoastronomy. Proceedings IAU Symposium No. 278*, pp. 144-53.
- Malville, K (2011) "Astronomy and Ceremony at Chankillo: an Andean Perspective." In C Ruggles (ed) "*Oxford IX*" *International Symposium on Archaeoastronomy. Proceedings IAU Symposium No. 278*, pp. 154-61.

You should critically evaluate the different methodologies and theories behind each writer's arguments and views and should refer to other literature in the field (five or more works, as a guide). You should read the guidelines on writing critical reviews on the MA CAA General Information page

DUE DATE: MARCH 13th

Skyscapes, Cosmology and Archaeology Assessment

2. One 3500 word assignment (80% of total marks)

A research project within the subject area. You may choose one of the following approaches:

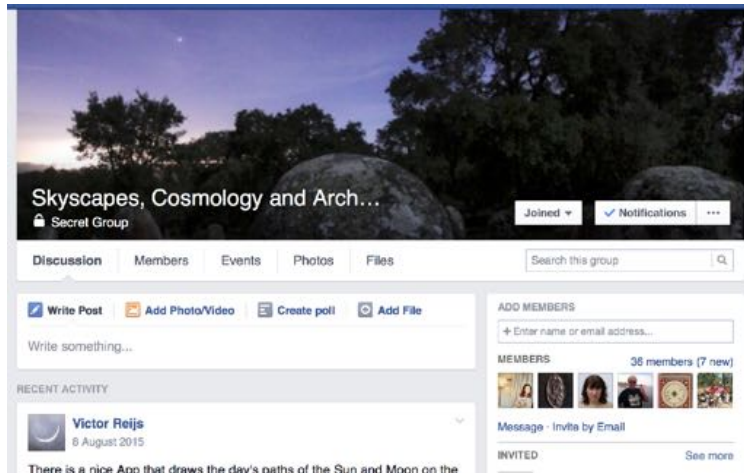
- Conduct a simple fieldwork exercise, investigating the likelihood of celestial alignments at prehistoric or sacred site(s). We can suggest places and projects, depending upon where in the world you live or would like to travel. Separate guidance will be posted. If you choose this approach, you will have to provide a literary justification and context.
- Take an experimental approach and, using simple tools and materials, put to test one archaeoastronomical theory regarding how a given culture measured, observed, marked and/or experienced a particular astronomical event. We can suggest projects, depending on the resources available to you. Separate guidance will be posted. If you choose this approach, you will have to provide a literary justification and contextualize your methodology within the field of experimental archaeology.

Your research project and title **MUST** be approved by your course tutor, and we will provide suggestions for additional reading in your chosen area. Your initial step will be to complete the Research Proposal Form.

DUE DATE: JULY 31st

Skyscapes, Cosmology and Archaeology Facebook Page

<http://www.facebook.com/groups/ArchModuleTSD/>



Skyscapes, Cosmology and Archaeology Weekly Hands-On Exercises

- Simple exercises of astronomical observation or measurement that everyone can do from their homes
- Record and/or photograph your results and share them on the facebook page of the module.

Exercises will progress:

- simple observation;
 - rudimentary measurements using hands and fingers;
 - learning how to use a compass, clinometer and GPS;
 - finding out when does the sun rise in alignment to a given street in your neighbourhood;
-
- By doing these exercises you will build up hands-on knowledge of how to measure the quantities archaeoastronomers routinely measure and allow you to feel comfortable in any future fieldwork.

Skyscapes, Cosmology and Archaeology Weekly Hands-On Exercises

Week 1

What phase is the moon on?

Use a smartphone or camera to take a picture of the moon and post it on the module's facebook page.
Don't forget to tell us where you are and what time it was when you took the picture.

Skyscapes, Cosmology and Archaeology Thoughts of the Week

- This section includes a question for you to think about during your readings of the week.
- Share your thoughts on the facebook page.
- You might even find yourself taking notes that you can use for your essays.

Week 1

What distinguishes Archaeoastronomy from 'Cultural Astronomy'?
Is there a difference?

Let the journey begin!

