

MA in Cultural Astronomy and Astrology
Archaeoastronomy Module – AHAN7010
Week Description

Week 4: Case Studies – Prehistoric Europe

Purpose of the week

The next four weeks focus on worldwide case studies, beginning with Prehistoric Europe. Each week your readings will focus on different regions and time-periods, giving you examples from a breadth of cultures. Moreover, each week will also exemplify a different “flavour” of archaeoastronomical research, as the different case studies draw on a variety of data (archaeological, historical, ethnographical) to support the archaeoastronomical interpretations.

Tasks this week

- Write your critical review for the first assignment.

Class Description

Stonehenge and the megalithic monuments of Europe have been at the center of debates in the field since its inception (see e.g. Lockyer 1906, Hawkins 1965, Thom 1971, Ruggles 1999). But claims of astronomical awareness and symbolism go considerably back in time, into the Upper Palaeolithic c. 50,000 to 10,000 BCE (Marshack 1991, D’Errico 1989, Rappenglück, 2002, Hayden and Villeneuve 2011).

The evidence from prehistory is confined to the material culture uncovered and studied by archaeologists, but recourse to ethnographic analogy (e.g. Hayden and Villeneuve 2011) and the use of statistics (e.g. Ruggles 1999, Silva in press) is common. This raises interpretative issues (already mentioned in week 2), with which you should engage in this week’s readings.

Required Reading

This week’s reading is extensive as we’re covering one of most studied areas and periods. Campion provides a good overview of prehistoric archaeoastronomy and you should start there. Hayden and Villeneuve review the evidence for astronomy in the Upper Palaeolithic, with recourse to ethnographic analogy. Malville et al’s study of Nabta Playa, although technically outside Europe, falls within the same “flavour” as the rest of the readings, and is still the oldest known site with celestial alignments. Ruggles’ book then delves into the archaeoastronomy of the British Isles. His approach is updated and extended in the study of megalithic dolmens by Silva. Finally, Prendergast’s study moves forward in time into the Iron Age. The optional reading is also substantial, which emphasizes the breadth of work done on this particular time period.

Campion, Nicholas, *The Dawn of Astrology: A Cultural History of Western Astrology*, Vol. 1, The Ancient and Classical Worlds, London: Continuum, 2008, Republished as *A History of Western Astrology*, Vol. 1, The Ancient World, London: Continuum, 2009, chap 2.

Hayden, Brian and Suzanne Villeneuve, "Astronomy in the Upper Palaeolithic?," *Cambridge Archaeological Journal* 21(3), 2011, pp.331-55. [PDF ON MOODLE]

Malville, J McKim, Romauld Schild, Fred Wendorf and Robert Brenmer, "Astronomy of Nabta Playa." In J. Holbrook et al. (eds.), *African Cultural Astronomy – Current Archaeoastronomy and Ethnoastronomy Research in Africa*, New York: Springer, 2008, pp. 131-43. [PDF ON MOODLE]

Ruggles, Clive, *Astronomy in Prehistoric Britain and Ireland*, New Haven and London: Yale University Press, 1999.

Silva, Fabio, "Landscape and Astronomy in Megalithic Portugal: the *Carregal do Sal* nucleus and Star mountain range," *Papers from the Institute of Archaeology* 22, in press. [PDF ON MOODLE]

Prendergast, Frank, "The Lismullin Enclosure: Design Beyond the Obvious in the Iron Age." In Kelly, B. et al. (eds.) *Encounters Between Peoples. Archaeology and the National Roads Authority Monograph Series No. 9*. Dublin: National Roads Authority, 2012. Available online: <http://arrow.dit.ie/cgi/viewcontent.cgi?article=1000&context=arastbk>

Optional Reading

Marshack, Alexander, *The Roots of Civilization* (revised edition), New York: Moyer Bell, 1991.

D'Errico, Francesco, "Paleolithic Lunar Calendars: a case of wishful thinking?," *Current Anthropology* 30(1), 1989, pp.117-8.

Hoskin, Michael, *Tombs, Temples and their Orientations*, Bognor Regis: Ocarina Books, 2001.

Sims, Lionel, "The 'Solarization' of the Moon: Manipulated Knowledge at Stonehenge," *Cambridge Archaeological Journal* 16(2), 2006, pp.191-207.

Sims, Lionel, "Entering, and returning from, the underworld: reconstituting Sillbury Hill by combining a quantified landscape phenomenology with archaeoastronomy," *Journal of the Royal Anthropological Institute* 15(2), 2009, pp. 386-408.

Thom, Alexander, *Megalithic Lunar Observatories*, Oxford: Oxford University Press, 1971.

Lockyer, Norman, *Stonehenge and other British stone monuments astronomically considered*, London: Macmillan, 1906. Available online:
<http://archive.org/details/stonehengeotherb00lockuoft>

Hawkins, Gerald, *Stonehenge Decoded*, New York: Doubleday, 1965

Rappenglück, Michael, "The Milky Way: Its concept, function and meaning in ancient cultures." In Potyomkina, T.M and V.N. Obridko (eds.), *Astronomy of Ancient Societies*, Moscow: Nauka, 2002. Available online:
<http://www.infis.org/downloads/mr2000bruspdf.pdf>

Rappenglück, Michael, "The Pleiades in the 'Salle des Taureaux', Grotte de Lascaux (France)" In Jaschek, C. and F. Atrio Barandela (eds.), *Astronomy and Culture*, Salamanca: Universidad de Salamanca, 1996, pp. 217-25. Available online:
<http://www.infis.org/downloads/mr1997cenglpdf.pdf>

Cox, John and Tore Lomsdalen, "Prehistoric Cosmology: Observations of Moonrise and Sunrise from Ancient temples in Malta and Gozo," *Journal of Cosmology*, 2010, 9, pp. 2217-31. Available online:
<http://journalofcosmology.com/AncientAstronomy114.html>

Prendergast, Frank, "Visual signatures in the Irish Neolithic landscape. A wider perspective of the Irish passage tombs." In Zedda, M.P. and J.A. Belmonte (eds.), *Lights and shadows in cultural astronomy*. Isili: Associazione Archeofila Sarda, 2007, pp. 100+

Parker Pearson, Mike, *Stonehenge: Exploring the Greatest Stone Age Mystery*, London: Simon & Schuster, 2012.

Thought for the Week

What constitutes 'evidence' in Archaeoastronomy?