Drombeg Stone Circle, Ireland, analyzed with respect to sunrises and lithic shadow-casting for the eight traditional agricultural festival dates and further validated by photography

G. Terence Meaden
Oxford University

ABSTRACT

A new survey of Drombeg Stone Circle and accurate analysis of shadow effects beginning at particular sunrises of the calendar year has led to a breakthrough in the understanding of lithic symbolism and the intentions behind the construction of this and other Irish monuments including Knowth and Newgrange that also have astronomical alignments.

At Drombeg specific standing stones play critical roles at sunrise for all eight of the festival dates as known traditionally and historically for agricultural communities and as now inferred for prehistoric times following the present observation-based analysis.

Crucial for Drombeg in the summer half of the year is the positioning of a tall straight-sided portal stone such that its shadow at midsummer sunrise encounters an engraving on the recumbent stone diametrically opposite. During subsequent minutes the shadow moves away allowing the light of the sun to fall on the carved symbol. It is the same for sunrises at Beltane (May Day), Lughnasadh (Lammas), and the equinoxes when shadows from other perimeter stones achieve the same coupling with the same image, each time soon replaced by sunlight. For the winter half of the year which includes dates for Samhain, the winter solstice and Imbolc, the target stone for shadow reception at sunrise is a huge lozenge-shaped megalith, artificially trimmed. Moreover, for 22 March and 21 September there is notable dramatic action by shadow and light between a precisely positioned narrow pillar stone and the lozenge stone.

As a result, at sunrise at Drombeg eight calendrical shadow events have been witnessed and photographed. This attests to the precision of Neolithic planning that determined the stone positions, and demonstrates the antiquity of the calendar dates for these traditional agricultural festivals. Discussion is held as to what the concept of shadow casting between shaped or engraved stones at the time of sunrise may have meant in terms of lithic symbolism for the planners and builders. This leads to a possible explanation in terms of the ancient worldview known as the hieros gamos or the Marriage of the Gods between Sky and Earth.

AUTHOR BIOGRAPHY

G. Terence Meaden, Oxford University
Kellogg College
Oxford University
62 Banbury Road
Oxford
UK

DOI: https://doi.org/10.2218/jls.v4i4.1919
Volume 4 Number 4 2017

Advances in Understanding Megaliths and Related Prehistoric Lithic Monuments

edited by: Terence Meaden

Issue dedicated to the session
"Standing Stones and Megalithic Monuments in Context"
XVII UISPP World Congress, Burgos, 1-7 September 2014

Published by the University of Edinburgh,
School of History, Classics & Archaeology
Ireland is full of standing stones, ancient stone architecture, and stone circles. One of the most impressive ones to put on your 'must... One of the most impressive ones to put on your 'must see' itinerary is the Drombeg Stone Circle. Even though it's one of the most visited megalithic sites in Ireland, most likely you'll be the only one there enjoying the incredible views and the ancient stones. It has been dated to between 153 BC and 127AD. A little path leads from the small parking lot to the stone circle in the middle of a large, open field. There's a small monument there explaining the history, but I recommend you check out the stones and then sit and enjoy the view for a while. > 1 year ago. 49.