

The cupmark conundrum: A Welsh Neolithic perspective

Context and opportunity

One of the most enigmatic symbols of the later prehistoric world is the humble cupmark (or cupule). Arguably simple to construct, cupmarks are the most common engraved motifs found in Neolithic and Bronze Age Europe. Within the western British Isles, they usually occur on rock outcropping or on top of the capstones of burial-ritual monuments. Occasionally, they are also found on upright stones that form the inner architecture of monuments. However, cupmarks are only found on or near a relatively small number of burial-ritual monuments suggesting several possible scenarios. In this paper I will describe and discuss the evidence that surrounds these simple motifs and suggest reasons why prehistoric communities in this part of western Britain and along the Atlantic Seaboard of Europe found them to be such a potent symbol.

Rock art research in Wales is a relatively new branch of prehistoric research with only several books and a handful of academic papers being published. Much of the most recent research has been produced by the Welsh Rock Art Organisation (WRAO) and the late John Sharkey. Since an inaugural meeting in Bangor, North Wales in 2004, when the Welsh Rock Art Organisation was initially conceived, one of the aims was to data-gather information of known rock art sites in Wales and the Borderlands. At this time, the Sites and Monuments Record (SMR) from each of the four Welsh Archaeological Trusts collectively held around 30 sites of varying size and quality; twenty-two more than

quoted by Stan Beckensall in his useful volume *British Prehistoric Rock Art* (1999, 87). Similarly, R.W.B. Morris listed just five Welsh sites in his survey of prehistoric rock art of the British mainland that focused on motifs more complex than simple cupmarks (1989). These rather under-represented numbers were significantly increased by John Sharkey's book *Meeting of the Tracks: The Rock art in Ancient Wales* (2004). This book provided the reader with an excellent account of the various sites that were distributed across the country, using data from the Welsh Trust HERs and fieldwork notes made by the author. The list of sites in John's book, along with sites discovered and recognised by the WRAO brought the site count to around 60. The size of this assemblage was later expanded considerably thanks to social media. During the early years of the WRAO, myself and fellow convenor Carol Brook set-up a dedicated website and (dare I say it) *Facebook* page for Welsh rock art. It was from this form of mass-communication that we were informed by professionals and enthusiasts alike of potential new sites; many of which were discovered by accident or from dedicated geoprospection, such as the sterling fieldwork of Edith Evans (Glamorgan-Gwent Archaeological Trust) on Gelligaer Common. By the end of 2018, the Welsh Rock Art Organisation held data on at least 115 sites (with two additional sites reported in October 2018 and two from the northern Borderlands in 2019). The majority of these sites date from the Bronze Age with a small assemblage attributed to the Neolithic. Based on the various Welsh Trust

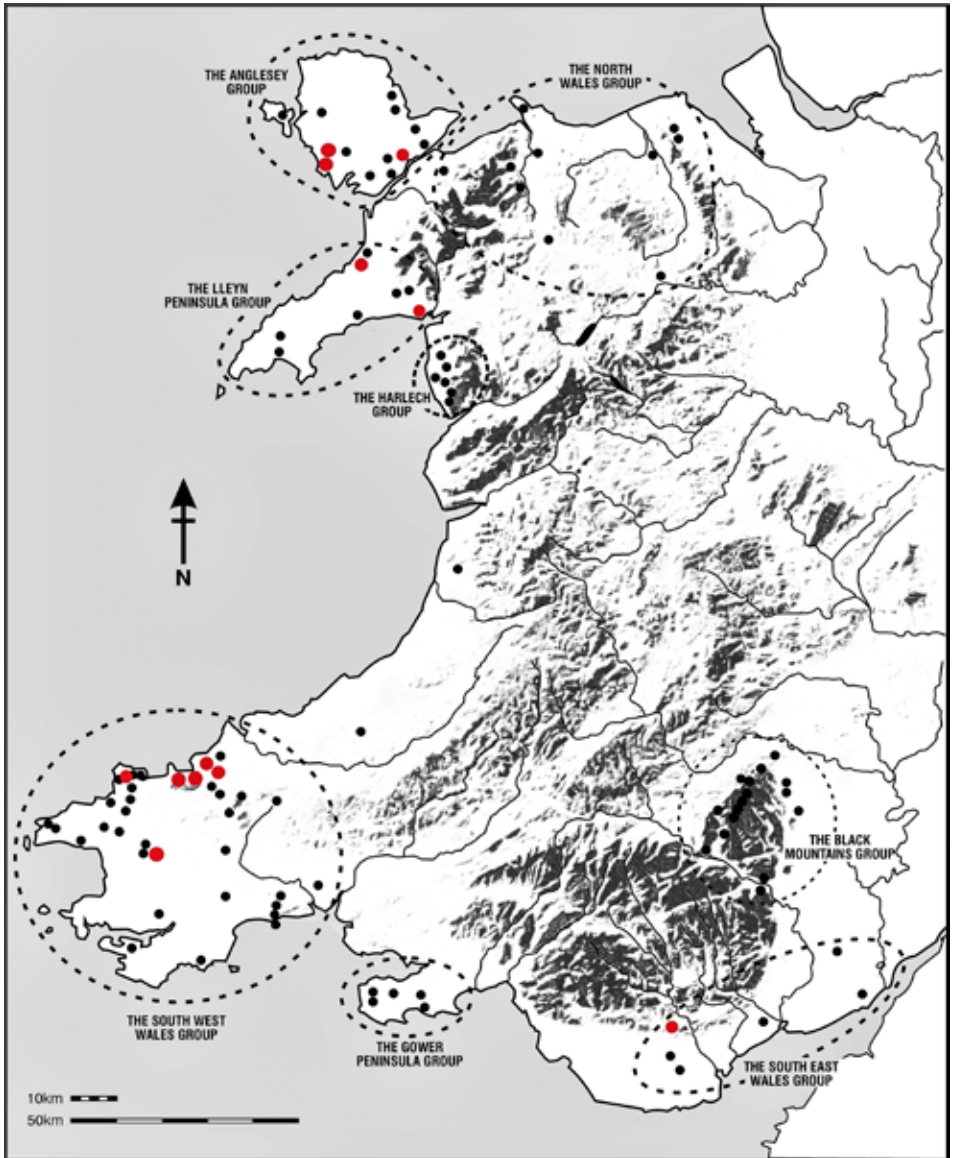


Figure 1. Distribution of Neolithic chambered burial-ritual monuments in Wales (black dots) and those monuments with rock art (red dots)

databases, sites from the Neolithic are usually associated with stone-chambered burial-ritual monuments (Figure 1). These sites were constructed and in use between 4000 and 2000 BCE. Of the eighteen sites in

Wales with associated rock art, all but one contained single and multiple cupmarks.

Contextual geographies

The landmass that is Wales is largely undulating and mountainous, with fer-

tile growing areas located around the coastal fringes in the south, south west and northern parts of the country. Much of the southern, central and northern landscapes of Wales are dominated by the Black Mountains, the Brecon Beacons, the Cadair Idris Range, the Cambrian Range, Mynydd Preseli and the Snowdonia Mountains. It is within these rugged areas, in particular, the hinterlands that encircle the peaks and slopes of these visually imposing ancient landforms that much of the later prehistoric rock art, dating from the Late Neolithic and Bronze Age is found. The same areas also contain pockets of fertile land, usually along the valley floors where glacial and periglacial activity had taken place some 12-14,000 years ago previously and subsequent fluvial deposition during the early Holocene. The enriched soils would have been an important factor in determining early settlement and landscape utilisation. Much of the Neolithic burial-ritual activity though is located around the coastal fringes of northern and southern Wales. According to Fowler (1983) the potential maximum number of growing days during later prehistory would have been within these coastal fringes (and some distance inland) around south-west Wales (Pembrokeshire) and North Wales (Ynys Môn [Anglesey] and Gwynedd). It is within these areas that Fowler suggested the potential maximum growing period equated to 365 days (i.e. all-the-year-round farming). This figure is vastly superior to the 240 growing days in and around, say, the Brecon Beacons of central eastern Wales or Snowdonia.

The highest density of later prehistoric ritual activity is centred (not surprisingly) around those areas where Fowler's maximum annual growing period is identified: the coastal fringes and the hinterlands, the wide estuarine valleys and the [prehistoric] heaths and moors of north-east and South Wales (Nash 2006a; Nash et al. 2005; Sharkey 2004). The later prehistoric rock art distribution appears to mirror those landscapes where Neolithic and Bronze Age settlement and ritual activity occurs.

Neolithic burial monument distribution was based on nine distinct geographic clusters, eight of which were scattered around the coastal fringes whilst one group – the Black Mountains Group of Breconshire is the only inland group (Nash 2006a). The geology used for monument construction is predominantly sandstone and sandstone variants; however, within the North Wales Group the geology is limestone and in Ynys Môn (Anglesey) the geology varies considerably (see Nash & Weston *forthcoming*). Arguably, both geologies are considered to be soft rocks and therefore ideal for engraving and pecking; however, despite monument construction, no rock art occurs on monuments or exposed rock outcropping within the limestone areas of Wales. Within the other eight core areas where sandstone geology is predominant there are a limited number of the megalithic sites that contain engraved rock art including cupmarks.¹ Although near-impossible to prove due to four to five millennia of inclement weather conditions, it is conceivable that these engraved sites would have also been painted, similar to a small assemblage of megalithic sites found in the Iberian Peninsula (Nash & Garcês 2017). Painting over the engravings would have provided essential visual enhancement, especially if natural oblique lighting was not forthcoming!

From antiquarian to professional: attitudes towards research

Available antiquarian and historic literature on the megalithic monuments in Western Britain and Ireland is extensive; however, this is not the place to review it in any detail, although there are a number of useful observations concerning the presence of engraved motifs and symbols either on or near monuments. Whilst limited references to rock art are made, it is not until the publication of J.Y. Simpson's *On Archaic Sculpturings of Cups, Circles, Etc. Upon Stones and Rocks in Scotland, England and, other countries* in 1867 that specific detail on rock art sites was made

(with accompanying illustrations). In this volume and for Wales, the only megalithic sites discussed were Bachwen (also referred to as *Clynnog-Fawr*) and the Calderstones (Liverpool).² During the latter part of the 19th century and the early part of the 20th century when photography had become the preferred publishable medium, a series of surveys around Wales were undertaken (e.g. Baynes 1910-11; Grimes 1936; RCAM 1925, 1937, 1956). These surveys provided later scholars with invaluable information concerning location and the state of preservation of selected monuments. In later years though, sites such as Barclodiad y Gawres and Bryn Celli Ddu would reveal their secrets through systematic excavation and specialist research (Forde-Johnson 1956; Hemp 1930; Lynch 1967; Powell & Daniel 1956).

Following Simpson's accounts, very little in terms of detailed research into prehistoric rock art and its association with Neolithic burial monuments occurred until the late 1920s when there was an intensive programme of archaeological fieldwork undertaken by W.J. Hemp (Hemp 1926, 1930 and 1938). Hemp, concentrating his research in North Wales, excavated the Neolithic passage grave of Bryn Celli Ddu on Ynys Môn between 1925 and 1929 (Hemp 1930). Excavated within the central part of the monument was a pit which was covered by a recumbent stone. This stone, locally known as the 'Pattern Stone' was engraved on three faces with a serpent-type motif.

Following Hemp's intense fieldwork programme, the next and most impressive rock art discovery was made by Glyn Daniel and Terrence Powell at another Neolithic passage grave known as Barclodiad y Gawres, again on Ynys Môn (Powell and Daniel 1956). Excavations between 1952-3 exposed the full extent of a passage and chamber including five uprights that contained complex megalithic rock art (Powell & Daniels 1956).

Between the excavation of Barclodiad y Gawres in the early 1950s and until the publication of several volumes focusing on Welsh megaliths during the late-1960s, little research appears to have been undertaken. The publication of *Megalithic Enquiries* (Powell et al. 1969) revealed the significance of the rock art from the two Ynys Môn passage graves (mentioned above), as well as reporting on nine shallow cupmarks on the capstone of Ty Newydd (Ynys Môn) and the 115+ cupmarks on the capstone at Bachwen (on the Llyn Peninsula).

Further research concerning rock art occurring on being associated with megalithic sites was also published by Frances Lynch (1972) who focused attention on the megalithic monuments of the Nevern Valley in north Pembrokeshire (south-west Wales). Sites such as Trelyffaint and Trefael (as a footnote) are commented upon. Focusing on the same area in Wales, Christopher Barker in 1992 provided a detailed gazetteer of sites on megalithic sites, several of which contained rock art. Further discussions were later postulated by anthropologist Christopher Tilley, who made reference to certain Neolithic burial-ritual monuments using landscape philosophy (phenomenology) to make an attempt to interpret their setting and distribution (1994). Using some of the ideas expressed by Tilley, Children and Nash (1997) and later Nash (2006a) produced detailed descriptions and discussions on rock art for megalithic monuments in south-west Wales and Wales respectively; the focus was on monument architecture and landscape. It was in the latter volume that the nine clear megalithic core areas of Wales were identified.

In 2007 members of Clifton Antiquarian Club (Bristol) published papers on several Neolithic chambered burial-ritual sites including Cist Cerrig and Caer-Dyni (both on the Llyn Peninsula). Research was also undertaken on the megalithic site of Garn Turne in Pembrokeshire where a single cup-and-ring was discovered on

the enormous capstone (Nash 2006b). At the nearby Garn Wen cemetery on Strumble Head, cupmarks were also found on nearby exposed rock-outcropping (Nash 2006a). In terms of published archaeological field investigations, the Welsh Rock-Art Organisation excavated the cupmarked Trefael Stone in north Pembrokeshire between 2009 and 2012 (Nash et al. 2011, Nash *et al. forthcoming*), The same organisation has recently surveyed in detail the landscape around the Trelyf-faint chambered dolmen which contained 70+ cupmarks on its capstone (Nash *et al. forthcoming*).

Much of this ongoing research including the most recent investigations by the author and the WRAO team were reported in a comprehensive review by Timothy Darvill and the late Geoffrey Wainwright who focused upon the Neolithic and Bronze Age of Pembrokeshire (2016).

Making and later marking megaliths?

I now wish to turn my attentions to intentionality. As stated earlier, only eighteen monuments (so far) have cupmarks engraved either onto its architecture or present on nearby rock outcropping. The decision to engrave one site but not another is a difficult question to answer in that western coastal areas of Wales where much of the engraved rock art is located form part of a complex communication network with Ireland and other areas of north-western Europe. Therefore, it is near-impossible to establish the whereabouts of an initial starting point where certain communities gain the knowledge and concept to statement certain monuments with rock art. Using field observations on what is sometimes a fragmentary evidence-base in Wales, I ask:

- Was the rock art commissioned before or whilst the monument was being constructed or during use?

- Does the rock art of Wales form a regional tradition within the Atlantic Façade?
- Can inferences be made in terms of monuments that contain rock art and those that do not?
- Of the 250 or so extant burial-ritual monuments, why are there only 18 sites with rock art?

My initial research into megalithic burial-ritual monuments was based on the chronological changes in architecture rather than rock art. However, one could not ignore the fact that engraved rock art occurs on many different types of monument architecture. Rock art would have formed an integral part of the ritual behaviour of communities who at some point during the Neolithic adopted the concept of engraving meaningful symbols into and around their monuments such as single and multiple cupmarks. The 18 burial-ritual monuments possessing rock art account for just a small percentage of the potential total number that were in use over a 2000-year period in Wales. Roughly half the assemblage is concentrated in north-west Wales, whilst the other half is sited in south-west Wales; both areas, according to Fowler (1983) had potential all-the-year-round agriculture.

Monuments possessing cupmarks usually stand near to monuments without rock art, forming loosely defined clusters. One can postulate that some form of idiosyncratic change in the religious mindset of some Neolithic communities may have accounted for the adoption, execution and use of rock art in a selected few, but not all monuments; similar to the changes to religious ideology during the 18th century when non-conformism becomes a dominant force in England and Wales thus challenging the state religion.

The evidence for this change in religious practice is the presence of rock art including cupmarks, which I believe was added to monuments that were already in use. The rock art style present on or around

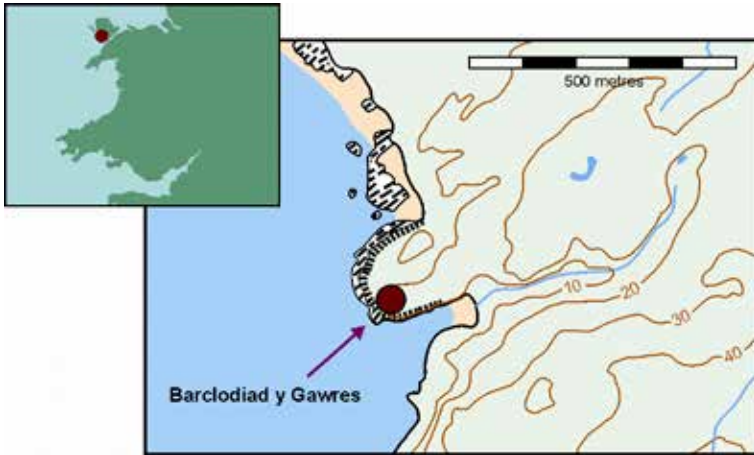


Figure 2. The landscape position of Barclodiad y Gawres

each of the 18 monuments falls within the 11 categories of complexity recognised by Shee-Twohig (1981). Apart from the Calderstones site in Liverpool, it is probable that Barclodiad y Gawres is the most ornately engraved monument in western Britain. This passage grave monument is similar in its architectural style to those found in Ireland and along the Atlantic Façade; it is probable that the blueprint for its construction and artistic endeavour originated from Neolithic core area in central eastern Ireland.

Similar to their counterparts in Ireland, Barclodiad y Gawres, Bryn Celli Ddu and the Calderstones comprise five distinct architectural components: a circular mound, wide façade/entrance, long passage, cruciform chamber and the landscape in which it stands (Figure 2). Following excavation, between 1952-53 at Barclodiad y Gawres, Powell and Daniel's team uncovered five engraved stones within the chamber area, each containing elaborate panel designs.

The artistic style on the five upright stones within the inner passage and main gallery of Barclodiad y Gawres monument is essentially geometric in form with the predominant designs being chevrons, lozenges and zigzag lines. These motifs occupy four of the five stones that are

located within the chamber and are essentially hidden from view and cannot be seen with natural light (from the passage). In addition, on Stones C3, C13 and C16 large spirals and zigzag lines are present while on Stone C3 spirals dominate. At some point during the use of the monument a single cupmark is engraved onto

Plate 1. Stone C15, located on the NE side of the western chamber



an upright (labelled C15) that occupies the north-east section of the western chamber. This cupmark is clearly visible using an oblique light source (Nash & Weston *forthcoming*) (Plate 1).

Approximately 25 km east of Barclodiad y Gawres is the passage grave Bryn Celli Ddu which was more than likely constructed and in use at the same time. At Bryn Celli Ddu the art is spatially organised into three areas in and around the monument. Within the southern section of the chamber is a crudely engraved spiral which appears to be tooled by a metal implement and is therefore not contemporary with the original use of the monument. More impressive though is a serpentine-style carving which is engraved onto three faces of a large monolith. The serpentine engraving was discovered lying prostrate next to a pit, centrally located and west of the chamber (Hemp 1930). Excavations by Hemp between 1925 and 1929 revealed an earlier monument phase that he interpreted as being a henge, and it is believed that this stone – also known as the *Pattern Stone* belonged to this earlier monument phase; however, the design can be still considered one of the motifs belonging to the megalithic art tradition.³



Plate 2. View of Bryn Celli Ddu from a prominent rock outcrop which contains cupmarks

As well as rock art being found in the monument, engraved cupmarks were also discovered on nearby rock outcropping to the west of monument (Nash *et al.* 2005)

Plate 3. A group of four cupmarks forming a crescent, located on nearby blue schist rock-outcropping, west of Bryn Celli Ddu





Plate 4. The southern section of the Bachwen capstone

(Plate 2). The cupmarks were engraved into blue schist and were arranged in clear patterns, several groups forming crescents (Plate 3). It is more than probable that the cupmarks (numbering around 32) and two nearby monoliths – The Bryn Celli Standing Stone and the Tyddyn-Bach Standing Stone, along with a now-destroyed Bronze Age cairn and various natural topographic features, formed part a large ritualised landscape (e.g. RCAM 1937). The cup-

marks on this and other rock outcropping nearby was discovered by members of the WRAO in 2004 (Nash *et al.* 2005). Located south of Ynys Môn and occupying the coastal fringes of the Llyn Peninsula are a small number of Portal Dolmen-type monuments with accompanying single and multiple cupmarks. The Bachwen monument is a 'classic' Portal Dolmen which has expansive views of the sea (Cardigan Bay) to the west and the dramatic series of jagged mountain peaks to the south and east. The monument has the largest number of cupmarks of any burial-ritual monument in western Britain. The capstone is supported by four uprights and dips westwards towards the sea. The southern section of the upper face of the capstone is covered with around 115 cupmarks of varying size and depth (Plate 4). Accompanying the cupmarks is a small number of linear interconnecting grooves and lines. It is probable that the cupmarks were engraved after the monument was constructed.

Plate 5. The Caer-Dyni monument with fallen capstone and cupmarks on the western upright





Plate 6. Uprights forming a chamber belonging to Cist Cerrig

To the south of Bachwen, east of the medieval town of Crickieth and overlooking the sea (Cardigan Bay) is a small dolmen monument with the remains of an accompanying mound known as *Caer-Dyni*. The surviving architecture – the uprights, chamber and capstone – suggests it is an Early Neolithic Portal Dolmen; however, it is probable that due to its size, it is Late Neolithic or Early Bronze Age in date. Located on the outer face of the SW upright (rather than on the upper face of the capstone) are up to 14 shallow cupmarks, five of which occupy the southern face (Plate 5). This discovery was made by members of the WRAO in 2006 (Nash *et al.* 2007).

South-east of *Caer-Dyni*, the *Cist Cerrig* monument stands within an undulating landscape with the mountain *Moel y Gest* to the north-east and the sea to the south-west (Plate 6). Although this damaged monument (with missing capstone) does not contain rock art, a vertical row of 12 cupmarks are present on a north-west facing rock outcrop (Figure 3) (Hemp 1938). The rock outcropping stands 25m to the west with further cupmarks recorded along field boundaries to the north, suggesting that a large ritualised landscape existed around the monument.



Figure 3. Cupmarks are found on rock outcropping to the SW of *Cist Cerrig* (after Hemp 1938)

Moving southwards

From 2009 the Welsh Rock art Organisation undertook a project to archaeologically investigate Welsh Neolithic burial-ritual sites that contained rock art; the first of these was *Trefael* in northern Pem-

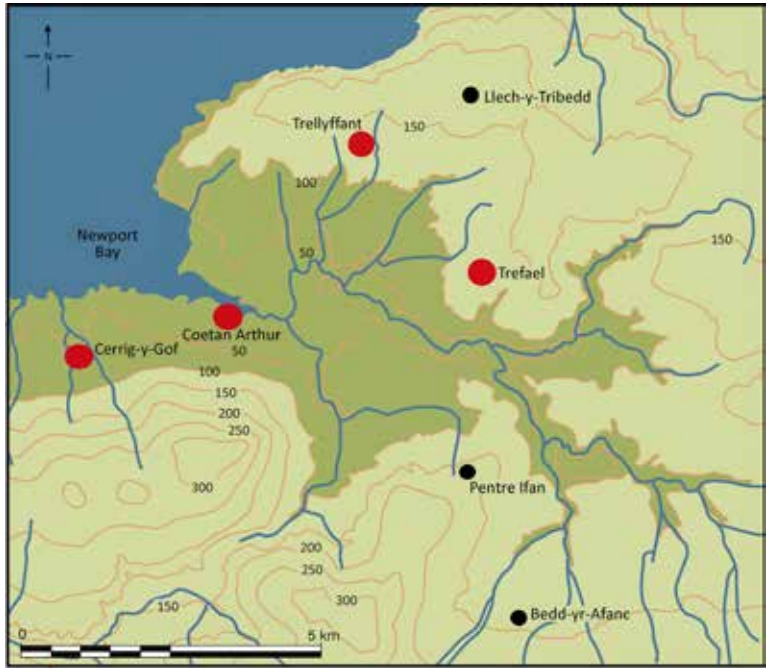
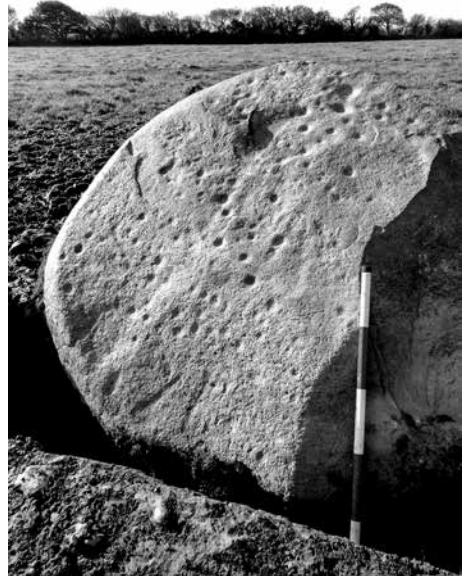


Figure 4. Map of the Never Valley showing the location of Neolithic burial-ritual monuments including those that possess cupmarks (marked as red dots).

brokeshire. The Trefael site is one of seven Neolithic burial-ritual sites that surround the Never Valley and overlook the north-western section of Mynydd Preseli (Figure 4). The seven sites vary in architectural-style and arguably were each in use at different times over the 2000-year span of the Neolithic.

The Trefael site was originally considered to be a standing stone of maybe Bronze Age date, although following excavation by the WRAO, it became clear that the monolith formed part of a more complex monument, more than likely a Neolithic Portal Dolmen (Nash *et al.* 2011). The standing stone, tilting westwards, contained 75+ cupmarks (Plate 7 and Figure 5). Uncovered immediately west of the stone were the remains of a juvenile cremation that was radiocarbon dated to around 3653 ± 45 BP [calibrated date range: 2200- 1900 cal. BCE] (Nash *et al. forthcoming*), along with the [sub-surface] architecture and artefact deposition of

Plate 7. The cupmarked capstone of Trefael during excavation in 2009



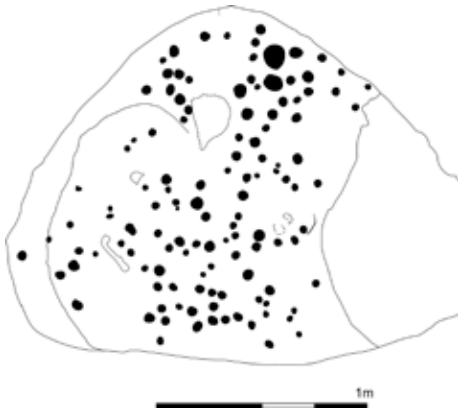


Figure 5. A recent tracing made by the WRAO of the Trefael Stone

a burial chamber. It is probable that the cupmarked stone formed a similar role to those Welsh monuments that have cupmarks present on their capstones, such as Bachwen and nearby Trelyffaint.

Approximately 2 km north-east of Trefael, the Welsh Rock-art Organisation turned their attentions in 2015 to the Neolithic dolmen of Trelyffaint (Plate 8). This stone chambered monument with 75+ cupmarks

gouged upon the upper face of its capstone was the focus of a measured survey, along with a geophysical survey that extended some 40m around its denuded mound. The cupmarks were recorded both as a tracing and photographic survey using oblique lighting (Plate 9). Cupmarks present on this monument were noted in a number of antiquarian and archaeological references including the Royal Commission inventory (RCAM 1925) and Daniel (1950).

South-west of Trelyffaint and Trefael, on the St David's Peninsula and away from open water is one of Wales' largest Neolithic stone chambered monuments, known as Garn Turne. This large monument, with its partly destroyed or confused entrance and V-shaped façade area, has a massive capstone weighing an estimated 60 tonnes (measuring 5 x 4.1m). The capstone is of intrusive igneous hydroclastite pillow lavas that were created by underwater volcanic activity, some 430 million years ago (Neville George 1970, 28). The upper surface of the capstone can be described as undulating and weathered with very little surface lamination. Located within the north-eastern corner of

Plate 8. The Trelyffaint monument overlooking the Nevern Valley and Mynydd Preseli





Plate 9. Oblique-lighted image of the upper face of the capstone at Trellyffaint

the capstone is a clear engraved cup-and-ring (Nash 2006b). The partly gouged ring measures approximately 14 cm in diameter whilst the cupmark is 5 cm in diameter. The ring has been partly gouged by human agency, leaving several sections of the ring broken due to it extending over a hard-intrusive quartz vein. Inspection by the author revealed that the cupmark may have been initially formed from a natural spherical depression, the result of a loosened stone clast. Despite the natural elements of the art and being covered with lichen, the cup-and-ring is clearly visible (Plate 10). A further cupmark is located on the northern side of the capstone, which is slightly smaller and less defined.

The final Neolithic site for discussion is Maen Catwg which lies north of Roman forts within the village of Galligaer (RCAHM 1976) (Plate 11). Based on the regional Historic Environment Record no Neolithic activity is recorded within the immediate area, thus questioning the date of the stone. However, the 50+ cupmarks present on the upper face of this stone have similarities with cupmarked capstones elsewhere in Wales (e.g. Bachwen, Ty Newydd and Trellyffaint). On nearby Gelligaer Common and Aberdare Com-

mon a number of exposed rock outcrop sites have been identified that contain

Plate 10. Cup-and-ring mark on the capstone of Garn Turne





Plate 11. The cupmarked boulder of Maen Catwg located on the edge of Gelligaer Common, Glamorgan

cupmarks, including one on a fallen standing stone, probably Late Neolithic or Early Bronze Age in date.⁴

Discussion: cupmarks looking up

Based on information supplied by the four Welsh Archaeological Trust's Historic Environment Records (HERs) there are remains of around 250 monuments, many of which retain clear outlines of the chamber, passage and the remains of a mound.⁵ In addition to these sites are around 50-80 sites that are destroyed or lost, sometimes surviving merely as place-name evidence (Daniel 1950; Powell *et al.* 1969; Barker 1992). The majority of extant sites and those within a poor state of preservation are concentrated into nine well-defined clusters, eight of which are around the coastal fringes of Wales; in those areas where Neolithic communities would have had access to both terrestrial and marine resources. It is probable that the siting of burial-ritual monuments within these core areas was based more on ancestral permanency (e.g. Bradley 1993, 1998).

Arguably, the engraved prehistoric rock art of Wales forms part of a universal sign system that extends along 3200 km coastline, referred to as the Atlantic Façade, extending from the Iberian Peninsula to southern Scandinavia (Cunliffe 2001; Nash *forthcoming*). Shee-Twohig (1981) has identified a clear repertoire of motifs that

include 11 generic geometric and curvilinear forms, ranging from chevrons, lozenges, and cup-and-rings to zigzags and simple cupmarks. In addition to this abstract repertoire and depending on regionality, representational engravings are also present and include footprints, which occur on three of the uprights

belonging to the former Calderstones passage grave and the Pool Farm cist in Somerset.⁶ For both monuments, cupmarks feature alongside representational motifs suggesting a number of scenarios: a relationship between motifs, a chronological development of the panel or different ideologies, as expressed through artistic endeavours that are competing for the same panel space.

Of the 250 or so known monuments only 18 sites so far are identified as possessing engraved rock art, either as simple single and multiple cupmarks or elaborate engravings using a complex set of motifs such as cup-and-rings, chevrons, serpentine lines and spirals. The most impressive repertoire of motifs occurs on the two passage graves that are sited in Ynys Môn – Barclodiad y Gawres and Bryn Celli Ddu. Conversely, single and multiple cupmarks are found predominantly on Portal Dolmens and later Neolithic monuments, especially those found along the coastal fringes of the Llyn Peninsula and the south-west Wales peninsula (e.g. Bachwen, Caer-Dyni, Carreg Coetan Arthur, Garn Turne, Trellyffaint and Ty Newydd). Multiple cupmarks are also found on single stones which may have once been capstones to former dolmens, such as Maen Catwg and Trefael. Rock art also occurs on rock outcropping that stands close to burial-ritual monuments. This form of landscape statementing occurs at the sites

of Bryn Celli Ddu, Cerrig y Gof, Cist Cerrig and Garn Wen.

Cupmarks appear on most of the architectural forms present in Wales suggesting the longevity of the cupmark motif. It is conceivable that cupmarks are engraved when the earliest monuments – Portal Dolmens are constructed and in use. However, it is also plausible that cupmarks occur sometime when all monument types are in use, say, around 3000 BCE when there is potential evidence of rock art from the passage graves of southern Ireland being replicated within the two monuments in Ynys Môn and on the Calderstones in Liverpool. The idea for replicating the artistic repertoire of, say, monuments within the Boyne Valley, Ireland would have involved the tomb builders of Wales having a similar mindset in terms of art and its meaning. In suggesting this however, the complex rock art used in the chamber of Barclodiad y Gawres and on the stone that covered a centrally placed pit within the early henge phase at Bryn Celli Ddu is different to the rock art found elsewhere along the Atlantic Façade. Although the mindset of Neolithic tomb builders across north western Europe was probably similar, linguistics, local and regional identity and changing attitudes towards landscape may have had a profound influence on what type of motif was engraved and where it should be placed. For example, the megalithic art on the two Ynys Môn monuments is significantly different to the rock art on the Calderstones and the nearby Robin Hood Stone in Liverpool (Nash 2010). Indeed, there are clear differences in artistic style with monuments in the Boyne Valley group in County Meath. Despite these changes however, the binding motif that is found in all burial-ritual sites is the cupmark.

In terms of landscape, there are two principle regions of Wales where burial-ritual sites containing rock art occur: North Pembrokeshire [SW Wales] (around the coastal settlement of Newport) and North Wales (on the Llyn Peninsula and the island of

Ynys Môn). In these areas, burial-ritual monuments stand closeby to open water – each sited between 0.1km and c. 15km of the coast. The majority of monuments with and without rock art are intervisible with the sea; several standing very close to the shoreline (e.g. Bachwen, Barclodiad y Gawres, Carreg Coetan Arthur and Garn Wen) (Nash 2006a). Others are either sited close to sea but are not intervisible with it (e.g. Cist Cerrig, Trefael and Trellyffaint) or are some way inland, on the intermediate slopes of hills and rocky outcropping (Garn Gilfach, Garn Turne and Morfa Bychan). With this particular group the original idea (prior to the execution of rock art) may have been ritualised concealment (Tilley 1994; Nash 2006a).

Although the 18 sites account for only 7.5% of the total extant assemblage of Neolithic burial-ritual monuments in Wales, one can begin to establish several patterns that involve landscape position and distribution, and in those areas of the monument where rock art occurs (albeit tentatively). A slightly higher ratio occurs in Ireland with only 15% of the 225 passage graves possessing megalithic art (Waddell 2005, 57); similar ratios exist elsewhere in Atlantic Europe; with much of its repertoire possessing cupmarks.

I have previously postulated the concept that ideas associated with the production and meaning of engraved art was a fluid process that extended over vast distances that included sea journeys between the British mainland and Ireland via the Irish Sea (and further afield) (Nash 2017). It is likely that the four architectural monument types – Portal Dolmens, Long Cairns, Passage Graves and earth-fast monuments were constructed without the concept of engraving motifs on or around the monument structure. At some point in time, probably around 3500 BCE when the passage grave tradition was gaining momentum across the core areas of north-western Atlantic Europe, Neolithic communities began to engrave meaningful motifs on their burial-ritual monuments; the original con-

cept being established within the southern core areas of the Iberian Peninsula (Capilla Nicolás *et al.* 2017). These motifs, which are found in no other burial-site type except for occasional stone-lined Bronze Age Barrows (e.g. Crick Barrow and the Pool Farm cist) appear to be associated with the performance associated with death, burial and ritual, providing the necessary garnish within a funerary context.

The potential meanings associated with the [humble] cupmark and its location are numerous and cannot be fully discussed here. I tend to think with a 21st century mindset that there is a possible link between cupmarks, their orientation, their panel distribution and the whereabouts on the monument they are carved. Their appearance on capstones for example suggests a relationship with the sky or more poignantly, the celestial heavens.⁷ Many of the eighteen monuments in Wales have their cupmarks engraved onto the upper face of the capstone (e.g. Bachwen, Garn Turne, Trefael and Trelyffaint). Although the distribution of cupmarks on any of the capstones do not represent clear star constellations, the very essence that such motifs face towards the sky is a plausible hypothesis. Obviously, the details for such a hypothesis require an in-depth analysis of each site and may be a comparative analysis with other megalithic core areas in Atlantic Europe; alas, another paper one postulates!

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Endnotes

1. Megalithic sites in Wales are also referred to as 'cromlechs'.
2. Based on good documentary evidence including two early lithographs of the site, it is considered that the Calderstones is formally a Neolithic passage grave. For this paper and for geography, I do not include

details of this monument, but see Nash & Stanford (2010).

3. Sometimes referred to as 'passage grave art'
4. Dr Edith Evans and Martyn Howells (*pers. comm.*)
5. This number was probably much higher when one consults the antiquarian references such as Rowlands (1723) and Skinner (1802); both refer to many sites that were destroyed within their lifetime.
6. The covering slab on which the engraved footprints are found is housed in Bristol City Museum.
7. Clusters of Bronze Age cupmarks found on horizontal rock outcropping also behave in the same way, always facing the sky.

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