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‘The finest set of cup and ring marks in existence’: the story of the Cochno Stone, West Dunbartonshire

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Abstract

The Cochno Stone is one of the most extensive and highly decorated prehistoric rock-art outcrops in Britain. It is located on the northern urban fringe of West Dunbartonshire beside Faifley, Clydebank, in a park in the foothills of the Kilpatrick Hills. First re-discovered by antiquarians toward the end of the nineteenth century, this outcrop subsequently became the focus of the attentions of Ludovic McLellan Mann in the 1930s, who decorated the stone with an elaborate painted colour-scheme. Expanding urbanisation, visitor numbers and graffiti prompted the authorities to bury the stone beneath soil for its own protection in 1965. During two seasons of fieldwork in 2015 and 2016, the Cochno Stone was exposed for short periods of time to allow for an assessment to be made of the condition of the stone surface, and digital and photogrammetric recording to take place. Provisional results of the fieldwork are reported on here, but the main focus of this paper is to present as fully as possible for the first time the biography of the Cochno Stone from antiquarian discovery to the present day. The paper concludes with thoughts about the future of this monument.

KEYWORDS: Cochno Stone, Neolithic, rock-art, Ludovic Mann, biography, historic graffiti

‘Evidently the district in which these sculpturings have been found, lying as it does on the pleasant slopes of the Kilpatrick hills, and commanding an extensive view of Clydesdale, had been a favourite resort of these ancient rock-engravers; and it is my hope that, in the course of time, with a little labour, more of these mysterious hieroglyphics may be brought again to the light of day, and perhaps the veil that shrouds from us their meaning may be withdrawn’ (Harvey 1889, 137).

Preamble

On the 7th September 2015, the Cochno Stone rock-art-covered outcrop was exposed for the first time since being buried under tonnes of soil at the behest of the landowners and authorities half a century previously. Despite this lengthy period of enforced incarceration, ostensibly for the site’s own protection, the Cochno Stone had not been forgotten. In fact, it had in that time taken on an almost mythical quality, both amongst rock-art enthusiasts but also in the local community in Faifley, Clydebank, West Dunbartonshire. This is all the more remarkable because of the general lack of engagement with the Cochno Stone and surrounds by archaeologists, an ambivalence that simply added insult to the injury of the

Stone being buried in the first place. In the 1990s, a noticeboard was erected in the urban park that contains the Cochno Stone (and several smaller examples of prehistoric rock-art) which briefly mentioned this prehistoric archaeology. The noticeboard displayed the unfortunate phrase, to 'provide protection from modern people the location of the cup and rings marks is not publicised whilst some have had to be buried.' The burial of the Cochno Stone therefore was not merely an objective management decision, but also could be read as a slight on local people, and that is still felt to this day.

In the absence of engagement by the archaeological community, the Cochno Stone took on a series of alternative meanings. Harry Bell saw the Stone as a key node in his Glasgow Network of Aligned Sites (1993), while the Stone later became a focal point of the Bell-inspired psychogeographical project *The Devil's Plantation* (Miles Thomas 2007-2009) which raised awareness of the Stone through a subsequent film of the same name (released in 2013). Around this time, members of the local community began to campaign via Facebook for what they called the Druid Stone to be uncovered so that it might be enjoyed by locals and visitors once again. Near the fiftieth anniversary of the Stone's burial, journalists picked up on the story and bemoaned the bizarre nature of the decision to bury the Stone in the first place, however well-meaning. Robert McNeil wrote in *The Herald* (2014),

'Can it really be true that there are nearly 90 Bronze Age (5,000-years-old) [sic] fantastic, mysterious rock carvings on a stone measuring 42ft by 26ft ... in a field on the edge of Clydebanks and that these have been deliberately hidden under the soil by "the authorities", so to speak, since 1964 [sic]? You. Are. Having. A. Laugh'.

This foregrounding of the Cochno Stone in public consciousness was a vital stage in it being 'found' once more by archaeologists.

This paper serves two purposes. Firstly, it presents the first comprehensive history, or modern biography, of the Cochno Stone. This biography is concerned not so much with the prehistoric aspects of this monument, but rather how archaeologists, communities and other stakeholders have engaged with this archaeological site from the late nineteenth century onwards. Such biographical approaches to prehistoric monuments are rarely attempted, despite our interpretations of their prehistoric origins being contingent on modern interventions, alterations and changing social roles (Holtorf 1998; Brophy 2004, forthcoming). In other words, we cannot hope to understand prehistoric Cochno without making sense of modern Cochno. Secondly, in this paper I will present details of excavations undertaken at the Cochno Stone in 2015 and 2016, accompanied by provisional results of that analysis. Further detail will be reported on elsewhere (Brophy in prep).

The Cochno Stone: 1886 - 1981

The Cochno Stone is in West Dunbartonshire, on the edge of Faifley, a housing estate on the north side of Clydebank, essentially a suburb of Greater Glasgow. The monument is recorded in the National Monuments Record of Scotland (NMRS) as Whitehill 1, and has NGR NS 5045 7388 and NMRS number NS57SW 32. The location (Figure 1) is now in Auchnacraig Urban Park, formerly Auchnacraig Estate, at the foothills of the Kilpatrick Hills, straddled by power lines and pylons, with extensive outcropping of sedimentary rock evident in the form of cliffs, rock shelters and bedrock outcrops, some of which (but not all) were used to inscribe cup-and-ring marks on in prehistory; the Cochno Stone is merely the most extensive of at least 17 examples recorded in the vicinity (Morris 1981, 123-4). Before going any further, it is worth mentioning the etymology of the name Cochno, which is given not just to the rock-art site but also a nearby road and farm. The name derives from the Gaelic for 'little cups' (Watson 1926, 512) and versions of this place name have been traced back to Cochnach in the 12th century AD (Simon Taylor pers comm). Fascinatingly, this may be the earliest indication we have anywhere of such rock-art motifs being called 'cups', and this may also be the only medieval place name in Scotland to refer to such features.

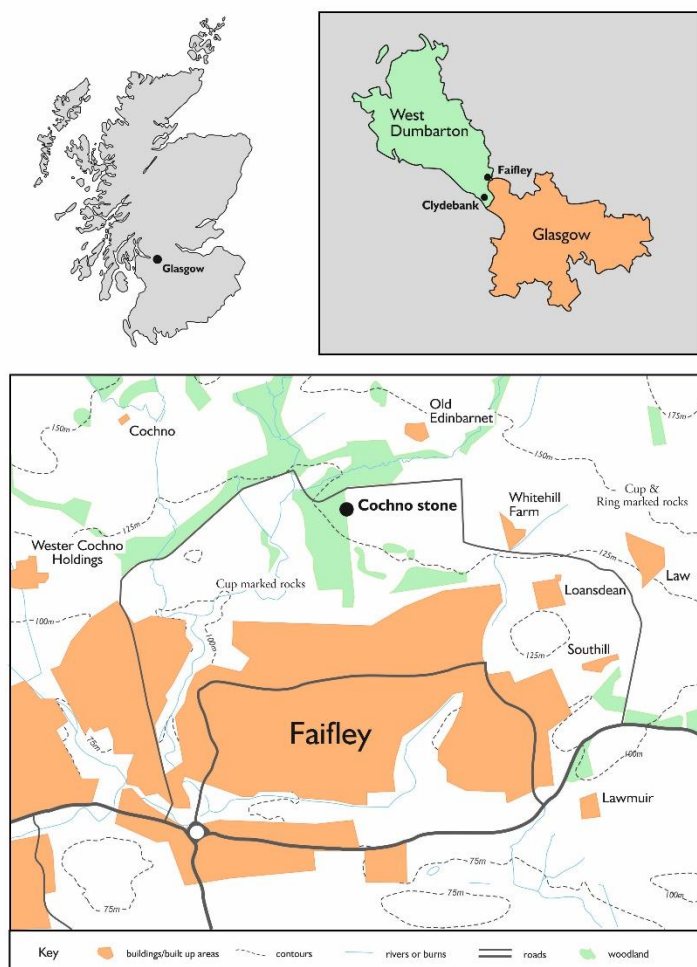


Figure 1: Map showing the location of the Cochno Stone (prepared by Lorraine MacEwan)

The Cochno Stone was first recorded in print (although not under this name) by Rev. James Harvey of Duntocher who visited the Stone in 1885, although at this stage it was well known to local farmers and those who lived in the vicinity. As well as producing a partial sketch plan, Harvey also removed some vegetation from the Stone, revealing further motifs (he called this site Stone A). By the end of this process, he had revealed an area '30 feet square' which was richly decorated with motifs (Figure 2). We can now identify this as essentially the western half of the Cochno Stone, and at the time, as Harvey suspected (*ibid*, 137) much more remained to be revealed.

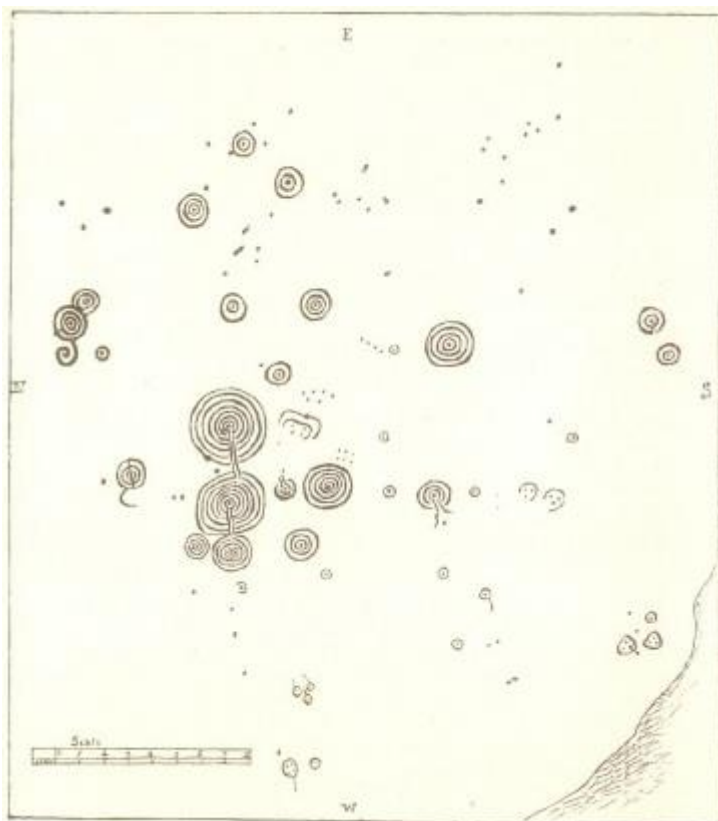


Figure 2: Harvey's sketch plan of the area of the Cochno Stone that he exposed in the 1880s (Harvey 1886, 132).

Within a few years, a second account of this Cochno Stone was published by John Bruce (1896), who had collaborated with well-known illustrator W.A. Donnelly on various projects in the region. Bruce added little to Harvey's initial observations other than the scale of the carvings, but did present the only first-hand detailed sketch plan that we have of the complete Cochno Stone, undertaken by Donnelly (Figure 3), suggesting that by this time, Bruce, Donnelly, or someone else had completely cleared the Stone of turf. Intriguingly, Bruce noted that Donnelly noticed, while drawing the stone, 'two new features which had not hitherto been observed, viz, a cross within an oval border, and a sculpturing resembling two pairs of footprints, which show only four toes each' (*ibid*, 208). Given the

involvement of both Bruce and Donnelly in the 1898 excavations of Dumbuck Crannog, also West Dunbartonshire, a site where a range of faked and unusual carved shale objects were found, some of which bore cupmarks and cup-and-rings (Hale & Sands 2005; Ritchie 2002, 48-9), we need to treat these unusual motifs as suspect and their prehistoric credentials remain, at best, unproven. At around this time, a cast was taken of some or all of the Stone (ibid, 208), but regrettably the location of this is currently unknown.

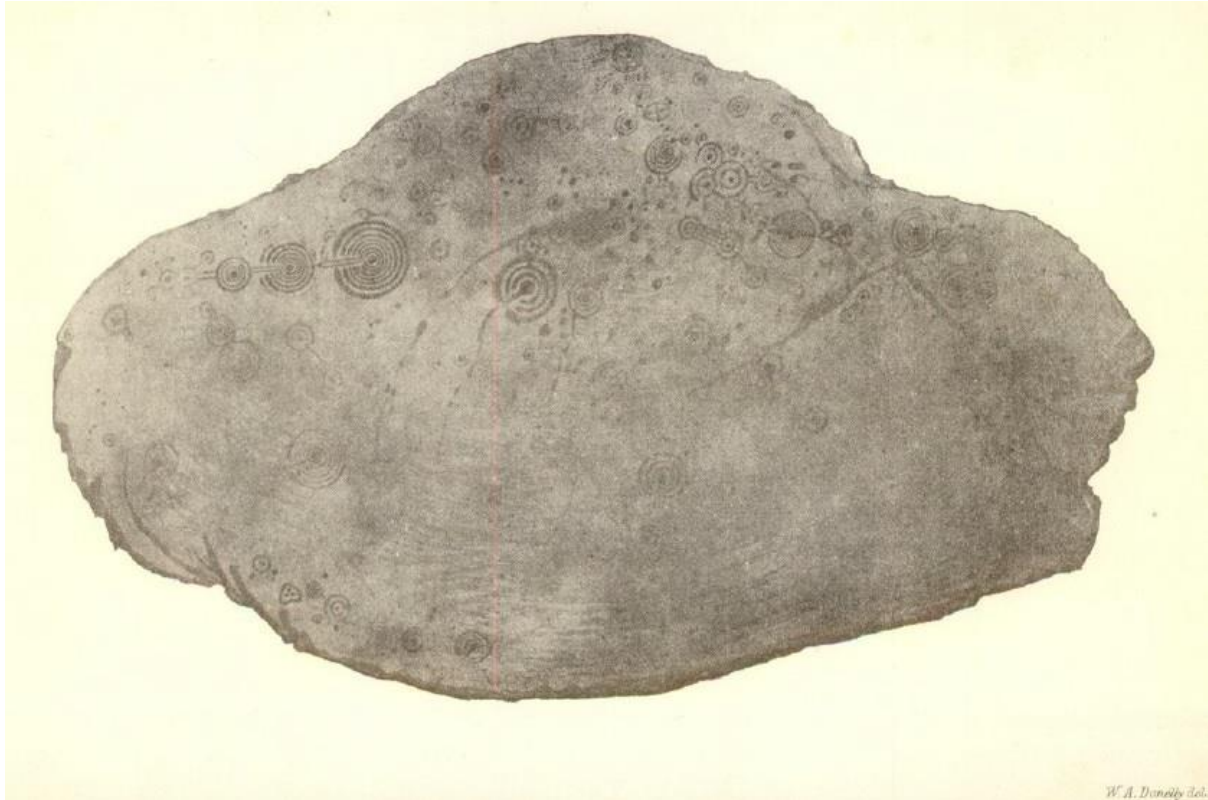


Figure 3: Donnelly's drawing of the Cochno Stone (published in Bruce 1896).

As far as it is possible to tell, little archaeological engagement with the Cochno Stone occurred in the subsequent decades, although at some point after its discovery and cleaning a drystone wall was erected around it with a style for visitor access. This may have happened at the same time as the removal of a drystone land division that ran across the location of the Stone. The site was mentioned from time to time in the literature, although often tangentially, such as a note about the cross and footprints in a paper about ancient crosses in Dunbartonshire (Lacaille 1924-5, 143).

The next chapter in the modern biography of the Cochno Stone is a remarkable one, instigated by the great showmen of Scottish archaeology at the time, Ludovic McLellan Mann. An insurance broker by trade, Mann was an enthusiast for Scotland's archaeology and believed public interest in prehistory should be encouraged; his excavations at the nearby prehistoric site of Knappers, Clydebank, in 1937, attracted thousands of visitors

(Mann 1937, 1939; Ritchie 2002). In the same year, Mann took a close interest in the Cochno Stone where he would play out his obsession with prehistoric measurements and the cosmological meaning of rock-art (Ritchie 2002, 51-2). Mann had long been familiar with the detail of the stone at Cochno, having 15 years previously compared 'sculpturings' he observed on Tiree with unusual symbols on Cochno, such as the 'pagan cruciform figure' (Mann 1922, 124). Moreover, with his friend and collaborator George Appleby, Mann may have carried out previous fieldwork at Cochno. In Appleby's obituary, it was noted that Mann and Appleby 'spent the summer of 1930 camped out beside the Cochno Stone ... making a rubbing of the complete surface' (McIntyre 1991, 2-3) although no other record of this adventure, or the rubbing, exists as far as I can tell. In time, the work of Mann would more directly impact on the monument, and lead directly to the Stone becoming a scheduled ancient monument.



Figure 4: Ludovic Mann and George Appleby on the Cochno Stone, once the paint-job had been completed © HES / George Appleby

In the late summer of 1937, Mann covered the surface of the Cochno Stone with an elaborate painted grid, and also filled with paint every motif he could identify, an act that

was, ostensibly, undertaken in preparation for a visit of the Glasgow Archaeological Society. (This visit took place on 18th September (Jim Mearns pers. comm.), not October as a photograph reproduced in Ritchie (2002, 51) had suggested.) Morris noted that this act was carried out using either chalk (1981, 124) or paint (ibid, caption for Plate 111), and our excavations have confirmed the latter. Photographs from the time (Figure 4) and accounts of the Stone from locals who have contacted me suggested more than one colour was used for this paintjob, and our excavations showed that yellow, blue, green, white and red paint were all used. This remarkable creative act (which would today no doubt lead to arrest and prosecution) allowed Mann to express his theories on a grand scale. Unfortunately, he left few notes or hints as the full extent of his thinking, referring to his work rather obtusely in a booklet about Knappers (Mann 1939, 14). He believed that the symbols on the Cochno Stone, such as a set of three large cup-and-ring marks in a linear arrangement (Figure 5), portrayed a legend associated with the prediction and 'defeat' of eclipses, and other cosmological events (ibid); this eccentric sketch was included in a booklet about Knappers with no context or connection to this site made (Mann 1939).

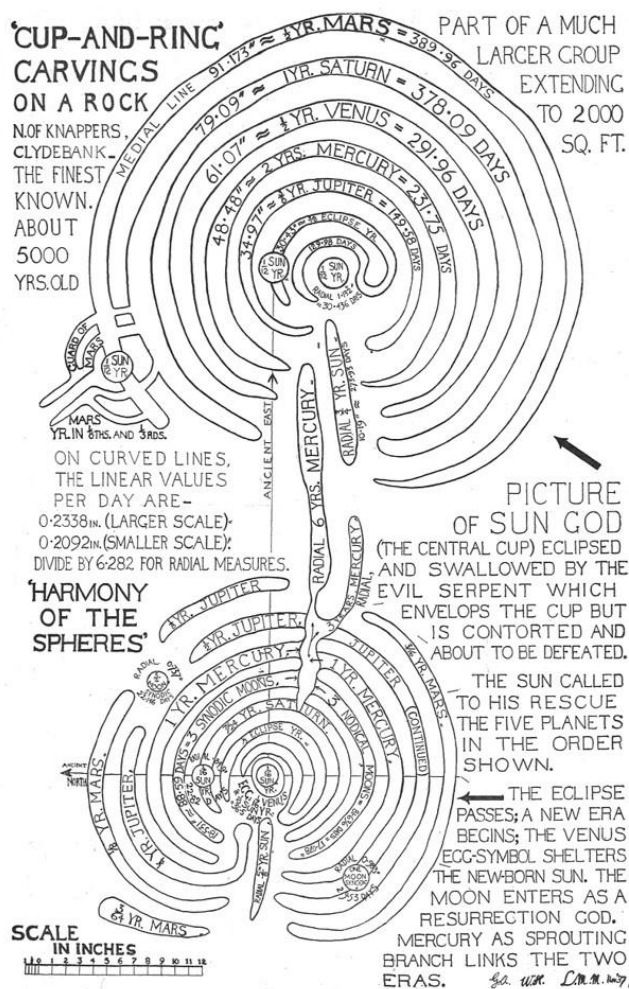


Figure 5: Mann's drawing of cup-and-ring marks from Cochno, with his detailed interpretation of what the symbols might have meant (from Mann 1939)

This eccentric act by the popular Mann, with the assistance of Appleby, raised the profile of the Stone considerably. This very soon became a source of concern for the landowner of one half of the Cochno Stone at the time, a Mr Walter Kinloch (the Stone has different owners, and straddles two different landholdings, one of which is now the local authority). Kinloch's solicitor wrote a letter to the H.M. Office of Works (the predecessor of HES) on 13th September 1937 stating:

"As a result of the activities of *certain antiquarians* who have expended much care on the decoration of the monument, a considerable amount of public interest has recently been directed to the stone, with the result that large numbers of people from the surrounding industrial district and elsewhere are in the habit of visiting the site, particularly at week-ends, where it is the destination of an almost constant stream of sightseers. As a result considerable damage is being done by the behaviour of persons who are attracted more by curiosity than antiquarian interest" (my emphasis).

The painting of the Stone surface at some point before 13th September 1937, and perhaps a few weeks before if several weekends had elapsed, and resultant increased visitor numbers, led to the rapid scheduling of the Cochno Stone by December of that year. Office of Works files from that period show that the government agency was far from impressed with Mann's actions. A few days after the Kinloch letter, an official, naming himself only as J. S. R., wrote in an internal memo that, 'Unfortunately a commotion has arisen owing to the fact that Mr Ludovic Mann has done considerable harm to the appearance of the sculpturing ... through the application of oil paint and a confusion of psuedo-astronomical articulation of lines....'.

Plans at the time to clean the stone of paint seem to have been abandoned and for a period taking the monument into guardianship was also discussed according to Office of Works files; however, the issue of damage and protection rumbled on for three decades until eventually a decision was made by the Ancient Monuments Board to take the extreme step of burying the Cochno Stone, work which was undertaken in early March 1965. The involvement in this process by Scottish History Professor Mackie at the University of Glasgow has led to responsibility for this act to be laid at the doors of archaeologists at the University (e.g. McNeil 2014) although there is no record that this was the case (Euan Mackie pers. comm.). The decision to bury the Stone was probably more likely prompted by an increase in graffiti being carved on the stone, with a preponderance of names and initials with 1960s dates on the surface being found during our excavations (see below, and Douglas 2017). Morris noted that the 'vandals' were from 'near-by towns' (1981, Plate 111 caption), echoing the Kinloch letter's dismissive characterization of those damaging the Stone as being from 'the surrounding industrial district'.

Thereafter the Cochno Stone faded into the archaeological backwaters despite at the time of its scheduling being described by J. S. R. as of 'considerable archaeological importance', the act of scheduling itself enshrining the site as nationally important in legal terms. This lack of visibility is typified by the very brief mention of the monument in a recent research framework for the Neolithic of West Central Scotland: here the wrong site is used to illustrate Cochno (it is in fact Greenland, also West Dunbartonshire) and the monument name is spelled incorrectly in the text (Noble 2014, 11). Only the tireless documentation of rock-art in Scotland by Morris offered serious modern accounts of Cochno. In a review of rock-art in Southern Scotland, Whitehill 1 (as Morris called the Cochno Stone) appeared in the accompanying catalogue (Morris & Bailey 1966, 160). Here, it was noted that the stone was 'now turfed in', the cross symbol had 'worn off' (I am not sure how this was established and indeed this assertion was wrong), and that a rubbing of the Stone existed in the National Museum of Antiquities of Scotland (the location of this is now unknown and it is not clear if this is the Appleby / Mann rubbing from 1930 or another one). A more comprehensive and illustrated account of Whitehill 1 and the at least 16 other rock-art sites in the vicinity was presented by Morris in his 1981 book *The prehistoric rock-art of southern Scotland (except Argyll and Galloway)*. Morris visited and of course was unable to see the site, but he did identify a few previously unrecorded cupmarks that lay beyond the boundary wall of the buried portion of the Stone; these were added to a line drawing he prepared which was an update of the Donnelly sketch utilizing photographs of the Cochno Stone and details recorded by Harvey but not Donnelly (see Figure 6, and compare Figures 2 and 3). Despite lacking first-hand access, Morris offered a valuable modern updating of the antiquarian accounts that had until that time served as the only description of the site (Morris 1981, 124).

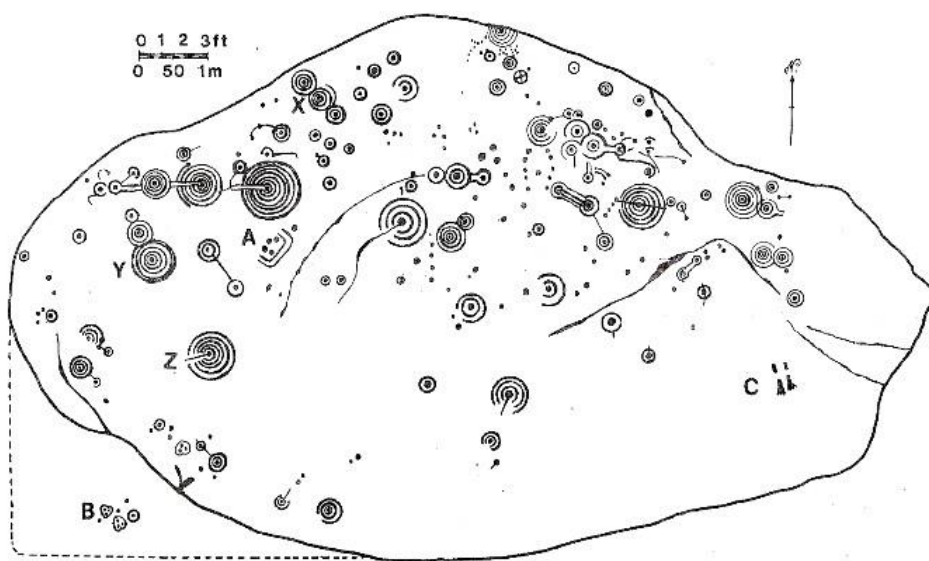


Figure 6: Ronald Morris's drawing of the Cochno Stone, based on drawing by Harvey and Donnelly, and photographs (Morris 1981, 126)

The various accounts of the Cochno Stone taken together suggested that this was a huge gritstone outcrop, with a domed profile, sloping away to the south. The dimensions of the Stone according to Morris were 13m east-west by 8m, and he recorded that the surface of the stone had at least 90 cup-and-ring motifs carved into it, some almost 1m across. He also counted over 110 cupmarks from the various images he was working with. A few other motifs were also recorded, including some gutters or tails, spirals, the cross and footprints. As with Harvey before him, Morris noted the clustering of motifs into groups, such as the line of three large cup-and-rings that had so fascinated Mann (Figure 5 and see also Figure 10). The interpretation of the symbols was a major concern of Morris's, who suggested elsewhere that there were over 100 different theories that had been proposed to explain such markings, of differing levels of plausibility (Morris 1979).

The Cochno Stone: 2015-2016

The approach that Morris took was to try to translate or 'read' the symbols as though the act of describing the shapes and their arrangement was akin to cracking a code. However, more recently archaeologists have become more nuanced in their understanding of rock-art, favouring approaches that emphasise the practice of carving the symbols, the chronology of rock-art, identifying associated features and material culture, analysing landscape setting, and increasingly adopting digital methods of recording these sites (cf. Barnett & Sharpe 2010; Cochrane & Jones 2012; Stebergløkken et al 2015; Foster et al. 2016). For instance, an extensive rock-art site local to Cochno – Greenland – investigated in 1984 underwent a more sophisticated analysis than merely drawing the stone and describing the symbols, Mackie being able to identify phasing amongst the motifs by close visual analysis (Mackie & David 1991). More recently, excavation has become a favoured technique to shed light on the immediate physical and environmental context, and chronology, of rock-art outcrops, with innovative projects in Scotland such as Ben Lawers, Perth and Kinross (Bradley et al. 2012) and Torbhlaren, Argyll and Bute (Jones et al. 2011) identifying structures immediately beside the outcrops, and deposition in cracks of the rock itself. The outcome of this renewed engagement with rock-art is that we can argue that outcrop rock-art sites such as the Cochno Stone were created during the (Late) Neolithic period and that they were a focus for ceremonial activity and deposition.

It is within this context – a prominent anniversary, renewed public interest, emergent approaches to British prehistoric abstract rock-art and new digital technologies – that the next chapter in the life of the Cochno Stone would be written.

When plans were put in place to uncover the Cochno Stone for the first time in half a century in 2015, undertaking any fieldwork at the monument looked daunting. The site itself was recognisable in plan at least as a raised dome covered by trees, weeds and grass, with

the remnants of the drystone wall emerging from the sides (Figure 7), and the site is still depicted on maps despite being buried. Clearly the wall had been used to help retain soil dumped onto the Stone in 1965, although the outcrop itself runs beyond the wall on the south-west side, where Morris (1981, 124) identified a few further cupmarks. An old land boundary drystone wall, which presumably once ran right across the monument before its identification, runs up to the Stone's northern and southern side, with a metal and barbed wire fence defining the eastern half of the stone where it protrudes into a private garden. The summary account of this work that follow is supplemented by more detailed summary accounts elsewhere (Brophy 2015, 2016, in prep.).



Figure 7: The Cochno Stone before excavation (photo: K Brophy)

Trial excavation, September 2015

A small trench, measuring 4m by 1m, was opened by hand on the northern side of the Cochno Stone (Figure 8). This tentative and modest investigation was required to answer a few key questions. Firstly, it was important to confirm that the Cochno Stone was indeed in the location marked on current mapping, located about 75m to the south of Cochno Road. Secondly, we had to assess the nature of the material the Stone had been buried beneath, and relationship with the wall surrounding it, to develop a strategy for removing all or some

of this material completely in the future. Thirdly, it was crucial we could establish the current condition of the Cochno Stone, and to this end a stone conservator, Richard Salmon, was present on site at all times (as was also the case during the 2016 season). Finally, the trial excavation provided an opportunity to engage with the local community, the site being close, but not connected, to frequently used paths in the surrounding park and being within ten minutes' walk from Faifley.

One of the first observations made was that the depth of soil above the stone was variable and for the most part not as substantial as previous (albeit sketchy) accounts of the burial had led us to believe. Morris (1981, 124) for instance noted that the stone was 'covered with about a metre of soil' while elsewhere this had been expressed as 3 feet. In fact, the soil depth varied from just 0.5m at the southern end of the trench (where the stone was highest) to 0.7m where the Stone ran beneath the wall. The material the Stone had been buried with was a claggy mid-brown clay silt, containing frequent inclusions of rounded pebbles, brick fragments, rusted metal nails, broken ceramic and glass sherds. This material had for the most part the character of redeposited plough soil. The boundary wall around the stone appeared to have been partially dismantled, with stones from the upper courses of the wall lying on the surface of the Stone; the wall itself survived to its lower courses and appeared to sit directly on the outcrop. A style, built into the wall and which had facilitated visitor access, partially survived in this location.



Figure 8: Planning the trial trench (photo: K Brophy)

The surface of the Cochno Stone was carefully cleaned with brushes and plastic tools in order not to damage the stone. Water was poured on the Stone to assist cleaning and a water pump used to remove the excess. We recorded the surface of the stone in plan (Figure 8), and through photogrammetry. At least six large cup-marks were evident, some with rings around them. The marks were all deeply incised and quite coarse in quality (cups up to 25mm in depth and 50mm in diameter), and in remarkably good condition given the burial of the stone and previous exposure for several thousand years. It also quickly became clear that the stone had also suffered extensively from various forms of modern damage. This included an instance of graffiti, with a series of words, letters (including the name B DOCHERTY) and numbers incised into the surface of the rock, contained within an irregular box measuring some 0.25 by 0.3m. We also noted within the trench white paint flecks in a cupmark (probably Mann's handiwork), and recorded an amorphous blob of black material on the surface of the stone, possibly related to a melted plastic bucket or bag.

This modest excavation was a success, and allowed us to plan the logistics for a future, more ambitious, excavation with a greater degree of certainty than we had before. We were able to confirm the location of the Cochno Stone, and shed light on the character of the material used to bury the Stone, as well as some other aspects of its burial. Most significantly, despite revealing less than 5% of the surface of the Stone, we were able to confirm damage had taken place, perhaps extensively so, but also that the prehistoric rock-art had survived well despite the Stone's surface being relatively soft. At the end of this three-day investigation, geotextile was laid on the surface of the Stone and the trench was backfilled by hand.

Revealing the Cochno Stone, September 2016

The main excavation of the Cochno Stone ran from 5th to 22nd September 2016. This consisted of three phases of work, beginning with the careful removal of topsoil from the Cochno Stone, and the cleaning of the surface of the Stone with hand tools, and water provided by the local fire brigade. There followed a period of recording the Stone, using a combination of laser scanning, photogrammetry, photography and notes / sketches. The process was completed with the reburial of the Cochno Stone with a geotextile protective layer in place. Here, summary results are presented, as well as indications of future research directions and post-excavation analysis yet to be undertaken; a more comprehensive report will follow (Brophy in prep.).

This programme of work was underpinned by a series of clear aims agreed with Historic Environment Scotland (HES) as part of the scheduled monument consent process. These aims could be summarised as establishing the condition of the Stone across its extent, the production of a comprehensive digital and photographic record of the symbols on the Stone (thus allowing assessment of the accuracy of previous drawings and accounts, and detailed



analysis of the symbols), and the documentation of historic graffiti, Ludovic Mann's paint and other modern damage and additions to the monument. As our work did not go beyond the full extent of the Stone, investigations did not have as an objective the collection of archaeological material from the Stone's environs although we did keep and record material culture gathered during the process.

A great deal of care was taken in removing the overburden of soil, with the methodology developed based on the results of the 2015 trial excavation, and in consultation with HES and stone conservators. It was decided that the extent of the excavations would be the area of the Cochno Stone bounded by the drystone wall: this was an area measuring 15.2m east-west by 8.6m. The overburden was removed by a closely monitored mini-digger with a mini-dumper ensuring spoil was taken well clear of the site, with large stones removed by hand and placed on a separate spoil heap. Once the digger had cleaned to within 0.15m of the surface of the stone, the remainder of the spoil was removed by hand using plastic snow shovels and rubber scoops to avoid damage to the surface. Soft-bristle brushes were also used to help with cleaning at this stage. Once completed, the outcrop was then carefully washed down by a firefighter using a hose, to ensure slow but safe cleaning, a process that took several hours (Figure 9). The site was, where needed, brushed with soft hand brushes and sponges, and after this it was only permissible to walk on site with bare feet, socks or clean plastic shoes.

Recording the Cochno Stone

One of the primary motivations for exposing the whole of the Cochno Stone, and ensuring the surface was as clean as possible, was to allow detailed digital and photographic recording of the stone. This has created a powerful dataset allowing us to interrogate the nature of all carvings on the stone, as well as use in planned future visualisations and replicas. The 3D scanning project was undertaken by Factum Arte and led by Ferdinand Saumarez Smith, and represented one of the largest high-resolution digital recording projects of a cultural heritage artefact anywhere in the world undertaken at the time. Several methods were adopted. Firstly, aerial photogrammetry using a DGI Phantom 4 drone was used to capture the whole of the stone, offering a baseline upon which high resolution data could be mapped. This higher resolution data was gathered using a 50 megapixel Canon 5 DSR on a horizontal linear guide with a ring flash attached. This was moved across the surface sequentially, with the supporting tripods equipped with rubber feet to protect the Stone. This 2D data was collected and processed using software, Capturing Reality, which recognises features from across the different images and triangulates the distance between them, placing points and building up a 'point cloud' of the surface, thus enabling the creation of 3D images.

This work was complemented, and augmented, by a laser scan survey undertaken by HES's Digital Documentation Team who digitally surveyed the site using a Leica P40 terrestrial laser scanner. Several scans were captured at a resolution of 3.1mm for a range of up to 10m around the perimeter of the exposed and cleaned bedrock and at key locations on the bedrock itself. Individual scans were registered using high definition targets. High resolution data capture resulted in a very dense point cloud. Data was registered using Leica Cyclone software to create one database. The data was exported to ASCII format (.ptx) and then passed to Factum Arte who combined this with the photogrammetric data in Capturing Reality. This resulted in the creation of a series of 3D models of the surface of the Cochno Stone.

As well as digital recording, the surface of the Cochno Stone was also documented archaeologically although a scale plan drawing was not required due to the intensity of other forms of recording in use. Scale photography was undertaken across the Stone to record specific motifs, features and groups of motifs, including a comprehensive survey of historic graffiti (Figures 10 and 11). A number of small finds were collected from the soil as it was being removed, although few are archaeologically significant, and none relate to prehistoric use of this location. These included broken ceramics, tiles and field drain pipes, glass, brick fragments and metal objects such as barbed wire and nails. Notable finds included two glass marbles, two coins and a Red Cross medal. The marbles were both found at the southern edge of the excavation area, hard up against the wall base, suggesting that marble games were played on the Stone before its burial. Samples were taken of the various paints found on the surface of the stone, as well as the melted black plastic spread (initially found in 2015); analysis of these has so far proved troublesome due to the small size of the samples.



Figure 10: The three large cup-and-ring marks to the right of this image are those that Mann drew (see Figure 5). These show the scale of the rock-art at this site. Also evident here is a cup-and-ring mark with remnants of white paint, and yellow grid lines, both the handiwork of Mann (photo: K Brophy)



Figure 11: Graffiti with scale: in this case, J CAIRNS (photo: K Brophy)

Preliminary results

At the time of writing, data gathered is still being processed but a preliminary plan of the Cochno Stone, based on digital and photographic imagery, has been prepared, and it shows the stone was covered in a profusion of prehistoric symbols (Figure 12). At least 45 cup-and-ring marks are evident, and over 100 individual cupmarks present. Other symbols that are probably prehistoric include two circles containing three cupmarks each (E on Figure 12), a symbol more commonly found in north-east England (Beckensall 2001), and one convincing 'barbell' arrangement. These symbols are grouped in several large clusters, mostly located on the domed ridge of the stone running in an east-west band, while others appear to be located near or in relation to natural veins running across the rock surface. The nature and meaning of these symbols remains unknown but the scale here is remarkable, the largest cup-and-ring mark being almost 1m across (Figure 10, and A in Figure 12), one of the largest such symbols recorded in Britain, and several large incised cupmarks between 100mm and 150mm across, and 50mm deep, recorded.

This plan, when compared with the only other drawings of the stone produced from direct observation, those of Harvey and Donnelly, and the version of this plan created by Morris (1981, 126, see Figures 2, 3 and 6), suggests that all three previous drawings all depicted the basic components of the suite of motifs. However, all have inaccuracies in terms of the

spacing and orientation of symbols, with for instance some symbols in the Morris drawing simply in the wrong place. Of the unusual symbols picked up by Donnelly, we were able to identify the pair of four-toed footprints (B on Figure 12) and the cross (albeit the latter was very faint) although so far comparison with the pecking evident for the prehistoric symbols has not allowed us to establish whether these are ancient or modern.

Analysis of the data has allowed us to explore the means of production of the symbols, with pecking evident for some more than others, suggesting the use of a hard stone tool. Also, it is possible to identify phasing of symbols, with differential erosion and clarity of some suggesting they are earlier in the sequence. In other cases, cup-and-rings marks overlap, with the crisper usually the later of the two. In some instances, symbols overlap to the extent that their original form is confusing (overlaps are especially common in the location marked C on Figure 12). Such sequence of production was also identified visually at nearby Greenlands (Mackie and Davis 1991) although our dataset has identified symbols barely evident to the naked eye (with overlaps and faint symbols clearly visible in laser scan data for instance (Figure 13)). Furthermore, it seems clear that at Cochno not all the cup-and-ring marks are prehistoric, with poorly realised circles, crude pecking and asymmetry suggesting that a handful of symbols might be interpreted as modern copies of the originals, carried out with little experience in this medium (see D on Figure 12, and Figure 13). Tellingly, the most obvious examples of this 'graffiti' are not recorded on the Donnelly drawing and so, presumably, were not on the surface of the Stone at that time.

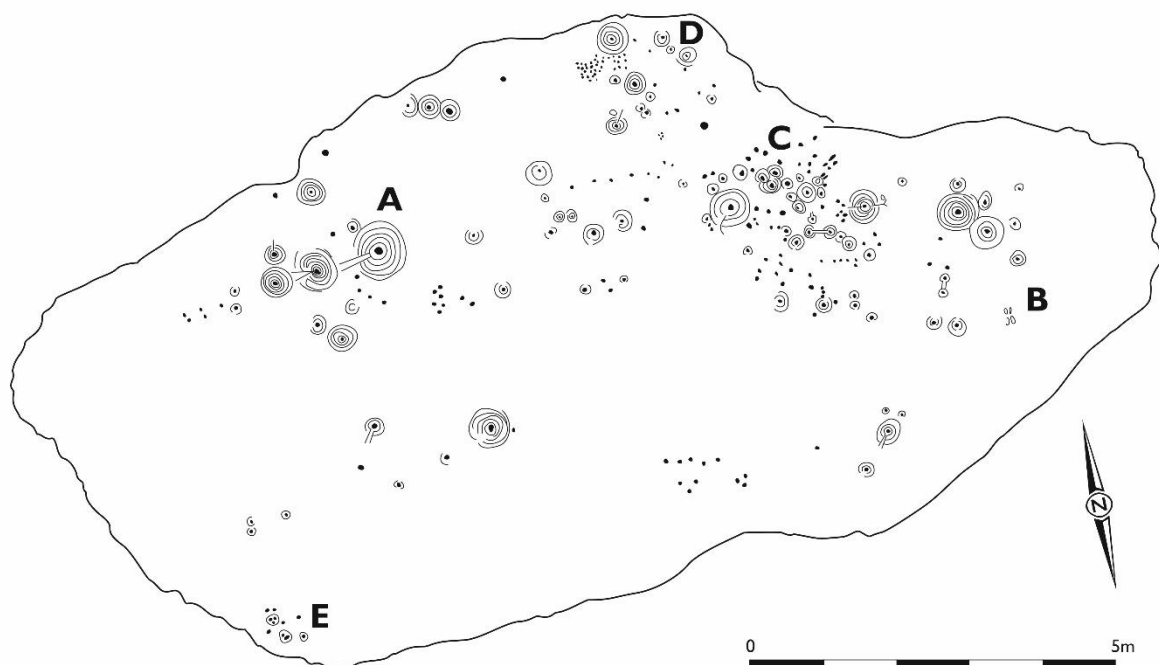


Figure 12: Preliminary drawing of the Cochno Stone based on photogrammetry and laser scan data. The letters refer to symbols mentioned in the text. This drawing does not include Mann's painted lines or historic graffiti. (Prepared by Lorraine MacEwan from data provided by Factum Arte and Ferdinand Saumarez Smith)

Modern additions to the stone were also recorded during exposure, a profusion of words, shapes and lines having been scraped into the surface of the Stone, sometimes pecked but usually incised. Analysis of the digital and photographic data of the surface of the stone has shown that there are over 100 individual examples of historic graffiti on the Cochno Stone (Douglas 2017). The majority of this graffiti is located on the southern and western slopes of the rock and consists of names and initials (Figure 11), with accompanying dates indicating an upsurge in damage to the stone in the 1960s, which may well have finally prompted the action – burial – first suggested by the landowner in 1937. Additional flourishes have been added to some graffiti, such as boxes around text, spirals and arrows; two instances of graffiti, including the name W KERR, appear in bookplate text, perhaps added to the Stone in the nineteenth century.



Figure 13: Preliminary results of the laser scan data from a small zone of the Stone. This clearly shows some motifs are fainter and / or more eroded than others and there is some overlapping of motifs. Note the crude cup-and-ring mark towards the centre of the image, this may be a modern version © HES

Mann's contribution to the biography of the Cochno Stone was also evident when the surface was being cleaned. His grid was still visible on large areas of the stone, painted in various colours, the main grid lines being yellow, with connecting lines of red and blue (Figure 10). Traces of white and green paint were also apparent within some of the

cupmarks and cup-and-rings markings. As well as revealing that Mann's colour scheme was more varied than contemporary black and white photographs suggest (naturally), we were also able to show that some spirals and swirls that he painted were in fact either natural markings, or twentieth century graffiti, suggesting an inability on Mann's part to identify genuine prehistoric markings. A small red and white circle (140mm across) painted onto the surface of the Cochno Stone towards its north-west corner appears not to denote any ancient markings and we cannot demonstrate it was the work of Mann, but the colours were the same as he used and a yellow line from the grid runs across the middle of it. Mann's addition to the Cochno Stone should be viewed as a creative act that we are still unable to fully understand, but having revealed the colour-scheme he used, we are now in a better position to make sense of his theories and how they applied to Cochno, other rock-art sites in Scotland as well as various other megaliths that Mann painted.

Conclusion

The Cochno Stone, even when buried, is still one of the most intriguing prehistoric monuments in Scotland. It holds a fascination for many local people for instance, and the great interest shown in the excavations by community members and local schools, even before the excavations began, shows that this is a monument that resonates with those who either live nearby, or grew up in Clydebank. This will enable us to study in more detail how people interacted with the Cochno Stone before it was buried, but also presents an opportunity to re-invigorate interest in the monument locally and beyond. Already a sense of this is emerging with visitors to the excavation reminiscing with us about playing on the Stone as children (perhaps with marbles) and further stories being shared online and in various public events held since the excavations. We are actively gathering these twentieth century engagements as oral histories and nostalgic accounts, thus adding further depth and detail to the modern biography of this monument as set out here.

This is because monuments do not cease to be important when their first episode of use ends (Holtorf 1998). Rather, they can have complex and meaningful biographies that stretch on for millennia. The Cochno Stone is a powerful example of this phenomenon, having gone through various incarnations: a totemic and special place in the third millennium BC, a focus of antiquarian interest in the 1890s, a location that appeared to back-up the theories of Mann in the 1930s, a place of play and curiosity up until the 1960s, finally becoming a heritage management problem and then the subject of excavation and digital recording. Now another phase may be about to begin. Such biographies are powerful, to the extent that even officialdom burying the site has not caused it to be forgotten or cease to matter. Rather, this is a prehistoric monument that has been kept alive in the memories and imagination of people from the local community, so that when finally the 'establishment' took an interest again, locals were waiting, ready to share stories about the Druid Stone.

The work undertaken to date is helping to shed light on the Cochno Stone in prehistory and today, suggesting that the successful study of prehistoric sites and monuments should combine archaeological methods with historiographical analysis. This allows a holistic view of ancient sites in the past and present that looks to the future. It seems clear to me that prehistoric sites in urban places can often instil positivity and pride for local communities, or at least, as in the case of Cochno, have the potential to do so. The Cochno Stone could once again become a tangible and visible presence in Faifley, a place of play, leisure and learning with the added knowledge that we now have about prehistoric rock-art - and the social benefits of heritage. The challenge for heritage professionals going forward is to maximise the potential of this wonderful resource and use the Cochno Stone's 5000-year story as a starting point for changing lives and environs for the better today and tomorrow.

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Captions for illustrations

Figure 1: Map showing the location of the Cochno Stone (prepared by Lorraine MacEwan)

Figure 2: Harvey's sketch plan of the area of the Cochno Stone that he exposed in the 1880s (Harvey 1886, 132).

Figure 3: Donnelly's drawing of the Cochno Stone (published in Bruce 1896).

Figure 4: Ludovic Mann and George Appleby on the Cochno Stone, once the paint-job had been completed © HES / George Appleby

Figure 5: Mann's drawing of cup-and-ring marks from Cochno, with his detailed interpretation of what the symbols might have meant (from Mann 1937)

Figure 6: Ronald Morris's drawing of the Cochno Stone, based on drawing by Harvey and Donnelly, and photographs (Morris 1981, 126)

Figure 7: The Cochno Stone before excavation (photo: K Brophy)

Figure 8: Planning the trial trench (photo: K Brophy)

Figure 9: Cleaning the surface of the Cochno Stone was undertaken by the local fire brigade (photo: K Brophy)

Figure 10: The three large cup-and-ring marks to the right of this image are those that Mann drew (see Figure 5). These show the scale of the rock-art at this site. Also evident here is a cup-and-ring mark with remnants of white paint, and yellow grid lines, both the handiwork of Mann (photo: K Brophy)

Figure 11: Graffiti with scale: in this case, J CAIRNS (photo: K Brophy)

Figure 12: Preliminary drawing of the Cochno Stone based on photogrammetry and laser scan data. The letters refer to symbols mentioned in the text. This drawing does not include Mann's painted lines or historic graffiti. (Prepared by Lorraine MacEwan from data provided by Factum Arte and Ferdinand Saumarez Smith)

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