Trowel

Volume XII 2010

Edited by

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Cover Illustration: Irene Carroll.

Based on an Archaeological Consultancy Services Ltd computer-generated reconstruction of an Iron Age post enclosure excavated by Aidan O'Connell at Lismullin, Co. Meath.

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Published in 2010 by

Andrea Watters and Niamh Ní Riain.

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ISSN Number: 0791-1017.

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Editors Foreword

Welcome to Volume XII of Trowel, Student Journal of the School of Archaeology, University College Dublin. Volume XII features 14 articles by post graduate students, dealing with a variety of diverse topics. We are delighted to include five authors from a classics background. This volume also features reflections by Dr. Elizabeth Shee Twohig, Professor Seamas Caulfield and Seamus Heaney. We would like to take this opportunity to thank all of the authors who have contributed to the journal. Your cooperation and hard work is greatly appreciated, and the final product is a credit to your work.

We also wish to thank all the staff of the School of Archaeology, UCD. A special thank you goes to Conor McDermott, Dr Rob Sands and Angela McAteer for their help, enthusiasm and patience. Thank you also to Professor Gabriel Cooney for his support. Our deepest gratitude is given to Emmett O'Keeffe and Margaret Williams, who were consistently on hand to rectify all the little disasters that came our way. We are extremely grateful to Irene Carroll for her design of the Trowel XII logo.

We wish to extend further thanks to Valerie Norton, administrator of the HII. This journal would not have gone to print were it not for the support of the many institutions who donated towards printing costs, and we would like to express our deepest gratitude to them. A special thank you to Fionnuala Parnell of the OPW and Paddy O'Flynn of the Newman Fund Organisation.

Many thanks to the rest of you out there, who offered support and wished us well in our endeavours to produce this volume.

So here it is, Trowel Volume XII- we hope you enjoy it.

Andrea & Niamh

November 2010.

Sponsorship Acknowledgements

Many thanks to all our sponsors for their generous contributions, without which Volume XII would not have been possible:

Four Courts Press
National Roads Authority
Oxbow Books
UCD School of Archaeology
UCD Archaeological Society

UCD Newman Fund

Very special thanks to our main sponsors:

The National Monuments Section, Department of the Environment, Heritage and Local government

The Office of Public Works





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The Archaeology of Ambiguity

Andrew May

Abstract

This article examines the relevance of the concept of syncretism to archaeological interpretations in order to provide a more fluid view of the transmission and transformation of ideologies and beliefs. Syncretism has been discussed both in theological and anthropological discourse, but has recieved little discussion within modern archaeology. By examining the sites of Téviec and Hoëdic in the Breton Peninsula within the context of the Mesolithic-Neolithic transition, it is demonstrated that seeing syncretism as a process cannot help us understand the historical trajectories of specific objects or practices, but does enable us to consider the flow of ideology through porous cultural or ideological boundaries.

Introduction

This article draws upon lines of questioning that arose from my M.A. dissertation which was an evaluation of the concept of syncretism and its applications in the study of prehistory, specifically on the Mesolithic-Neolithic transition and the islands of Téviec and Hoëdic located in the bay of Quiberon, Brittany. Entitled 'The Archaeology of Ambiguity', it considered the flow of world-views through porous cultural boundaries in order to recognize the ambiguity in which both agriculturalist and huntergatherer populations found themselves. Not only was the so-called transition an economic or social one, but it was equally based in material culture, technology, worldviews/ideology, and our own chronologies and classifications(e.g. Mesolithic/Neolithic or hunter-gatherer/agriculturalist). The reason Téviec and Hoëdic are so often studied with recourse to this is that they have been seen as fossilized points of transition, and syncretism was proposed as a new, more complex way of thinking about this problem of ambiguity.

Essentially, syncretism is considered as 'the temporary ambiguous coexistence of elements from diverse religious and other contexts within a coherent religious picture' (Pye 2004, 67) and the implications presented by usage of the term are relevant to modern interpretations of past societies as it sees them as being composed of more than just stable cultures, cosmologies and individuated beings unfolding in a 'coherent linear narrative' (Olsen 2001, 44). Because of the teleological nature of the transition to agriculture (Whittle & Cummings 2007, 2), or perhaps because of a conceptual inability of most archaeologists to relate in any way to a hunter-gatherer existence, we see the Neolithic as being applied to the Mesolithic, agriculture to hunter-gatherer, rather than the other way round.

However, simply identifying an element of material culture or belief as syncretic means nothing, and tells us relatively little as syncretism is seen as being part of the 'dynamics of religion' (Rudolph 2004, 71), and that all religions, beliefs and world-views are, at their core syncretic traditions. Thus, it has been suggested that instead of focusing on syncretism as a category or 'an "ism" (Shaw & Stewart 1994, 7), we should instead give our attention to the 'processes of synthesis and the discourses of syncretism' (ibid). This involves the 'politics of religious synthesis' (ibid), and questions of power and agency are considered within a process that sees people as more than 'passive receptors and objects of doctrinal teaching: they also form independent forms of religious tradition. 'Religious popular belief is the basis of all religions' (Rudolph 2004, 81; see Bell 1997, 212-223, for 'lay'-reinterpretations of Christian traditions).

We must also recognize that the discourse in which discussions of the Mesolithic-Neolithic transition are situated is firmly embedded within Orientalist modes of thought (Boric 2005, 16). Migration or acculturation are not in themselves adequate explanations, and more recent 'mosaic' approaches, although acknowledging more regional cultural diversity, create, in the words of Homi Bhabha, a 'containment of cultural difference' (Rutherford 1990, 217) which sees a reification of culture. Seeing that the adoption of any new technology or ideology must have necessarily been localized and 'preconditioned by the already existing

variations in social relations and historical trajectories' (Thomas 1996, 313; Rowley-Conwy 2004, 105) is essential as it opens up the Mesolithic-Neolithic transition to be discussed without some of the aforementioned restrictive conceptualizations.

Téviec and Hoëdic

The practice of burial and questions of population movement on the islands will now be explored and discussed in relation to syncretism. Coupled with this, it must be remembered that there is not, and should not be, a check list with which to approach the study of this subject for many reasons (Insoll 2004, 138; Clack, In press), but fundamentally due to the nature, and ambiguity of syncretic discourses.

How people were buried in Téviec and Hoëdic stand out from what would be traditionally seen as a Mesolithic burial. They show evidence not only of collective burial, but of some sort of formal burial structure and grave inclusions. The evidence from the burials has often been cited as the first 'expressions of megalithism' (Boujot & Cassen 1993, 479) in Brittany, and in this way it is worth exploring here.

The graves at Téviec were located in the sterile beach deposits with partly overlaying midden material and many contained similar types of stone structures which both lined the grave and rose above it to a height of 0.6-0.8 meters (Schulting 1996, 337). The ten graves excavated at Téviec contained the remains of 23 persons, and what Péquart identified as a cenotaph was also present. At Téviec, Péquart also noted the presence of several types of hearth, which he defined as domestic, ritual and feasting. Both feasting and ritual hearths seem to be used in relation to funerary practice, feasting hearths being larger, containing bone fragments and charcoal, ritual hearths giving less evidence of burning and were smaller in size. The ritual hearths were located directly above the majority of graves, suggesting that they were used for the burning of funerary offerings.

At Hoëdic the graves were found in the bedrock beneath midden material. Nine were discovered containing the remains of fourteen

persons, and a tenth empty grave. The features outlined previously for Téviec are less well defined and recorded for Hoëdic, however there is evidence of burning on several of the graves so it is suggested that the same system of hearths as at Téviec was also in operation. Also, worthy of note is the presence of two antler structures associated with two adult burials at Téviec, one male and one female, and two females and two males at Hoëdic. These constructions appear 'to have formed small tent-like arrangements over the heads of these individuals' (Schulting 1996, 344), and the remains contained therein had over twice the average artifact richness compared to other burials.

In both sites there is evidence for the manipulation of the dead after initial interment, in the multiple graves at least. A prime example of this being grave K from Téviec which contained the remains of six people. The 'ritual' hearth above this was evidently used several times as is suggested by a greater amount of burning relative to the others. Skeleton six in this grave was not moved aside with the other previous interments in order to make room for a new body, instead it was kept separate from the others in a stone lined depression, 'its' skull within a "box" constructed of stone slabs' (ibid). Also a child's rib was found at Téviec which carried intentional cut marks. The evidence cited gives reason to believe that human remains were in some cases actively accessed and manipulated after their initial interment.

There were a variety of grave goods found, present were marine shells which were the most abundant of the grave goods from the two sites, truncated flint blades and bone pins being the next most common artefacts in a funerary context. At Hoëdic, the flint blades recovered are reported to be smaller, and more similar to those found amongst the midden material than those found at Téviec. Schulting suggests that this could be seen as evidence of a more elaborate burial process at Téviec in which long flint blades are manufactured specifically for mortuary practice (ibid: 345). This could been seen in light of the general statement that the stone and antler structures on Hoëdic are not as significant as those on Téviec.

The bone pins, suggestive of clothes fasteners, which are present in

many graves are also interesting, as according to Schulting, they have a tendency to be associated with greater artifact richness. Only one of the six individuals buried within the antler structures does not have a bone pin, which could suggest some indication of social status, however, the bone pins are found across both sex and age groups which complicates this. Most interestingly the bone pins from either site are exclusively formed from different material. Those found in Téviec are made of wild boar fibulae, while those from Hoëdic are made of deer bone. Because the two materials are visually distinguishable from each other this could be interpreted as a symbol of identification, suggesting further distinction between the groups.

In these sites the mortuary practices present some similarities to those of the early Neolithic as both Schulting (1996) and Thomas and Tilley (1993) have suggested. As Thomas and Tilley state, 'in some respects early Neolithic ritual activities can be regarded as directly continuing or symbolically referring back to Mesolithic ritual practices' (Thomas & Tilley 1993, 228). We can hypothesize a dialogue whereby the older traditions of burial, and the world-views into which they undoubtedly once fit, were reinterpreted in light of new ways of living and their associated beliefs in a multi-directional relationship. Paul Connerton states;

'We experience our present world in a context which is causally connected with past events and objects, and hence with reference to events and objects which we are not experiencing when we experience the present. And we will experience our present differently in accordance with the different pasts to which we are able to connect that past. Hence the difficulty of extracting our past from our present: not simply because present factors tend to influence – some might want to say distort – our recollections of the past, but also because past factors tend to influence, or distort, our experience of the present'.

(Connerton 1989, 2).

This illustrates a vision of social memory that can be seen as a dialogue in which beliefs are reinterpreted in light of the ambiguity created through

the discourse between past and present. This dialogue can be seen as syncretic, as it is full of the ambiguities which syncretism can be seen to represent.

However, seeing the burials of Téviec and Hoëdic as direct forerunners of a megalithic tradition is going too far. To say that the phenomenon of megalithic architecture was conceptually united, and stemmed from one single source would be to ignore the concept of syncretism altogether. We must recognize that there certainly were 'different understandings of the world in simultaneous operation' (Whittle 2002, 193) during the period of megalithic construction, as there is in all places at all times.

'Any new placing of stone or other material, any new building, may have involved both continuity and change: continuity because of the way practice was perhaps normally grounded in existing belief, and change because construction involved attention to and drawing attention to matters that had previously been implicitly understood, taken for granted or unquestioned'. (Whittle 2002, 195).

The emergence of these traditions within the context of the 6th millennium BC is difficult to discuss with any certainty, as dating methods are not accurate enough to reveal evidence of contemporaneity in the short term (Marchand 2007, 236). Thus we cannot have information such as, on which island these traditions first began, or whether the practices emerged at the same time. One question that is quite important to this discussion is whether the two islands were in use by people who considered themselves the same. While this is a question that is impossible to answer, we can make some reasonable judgments. That burial practices can be seen as more elaborate in Téviec can point to the fact that differences between the two sites do exist (Schulting 1996, 347), coupled with which, the presence of the visually distinct bone pins is also intriguing. Also, stable isotope analysis has revealed that diet at the two sites was different. In Hoëdic, diet was made up of 70-80% of seafood protein, whereas on Téviec, diet was more balanced (Schulting & Richards 2001, 326). Schulting and Richards propose that if the populations who utilized the two islands were part of 'a single, highly mobile "population" (ibid), the diets would reflect this by being the same. Thus, one way this could be interpreted is to see the archaeological data as evidence for two groups with similar funerary practices, but different dietary systems. If this is the case we can envisage a dialogue between the two groups in which they constantly reinterpreted their technology, beliefs, differences, and place in the world within their own historical framework

At both Téviec and Hoëdic, although their overall subsistence strategies seem to be different, the isotopic data for the adult females from both sites shows a drop in carbon and nitrogen levels, indicating a diet that consisted of much less marine protein than the male inhabitants, and indeed the older and younger females (Schulting 2003, 433). Thus, we can hypothesize that some women came into Téviec and Hoëdic from communities with a different subsistence base. Schulting (ibid) uses this as the basis for an argument in which we see the intermarriage of women from local groups standing in opposition to the Neolithic regional groupings. As there are relatively few stylistic crossovers, he argues for interaction on the local level, but a 'strongly maintained cultural boundary' on a larger scale (ibid).

The web of social relationships presented here, between local groups and larger regional groups is precisely that which would engender processes of discursive syncretism. While the existence of these social formations in the Mesolithic does not explicitly provide evidence of them being perceived as different in the Mesolithic itself, it does allow us to consider the possibility that this was the case. If we believe that women entered the island communities from groups with other subsistence bases, we can ask whether these other groups saw the world differently?

When we consider population movement, or two hunter-gatherer populations with different subsistence strategies may have existed in a relatively small space and had dealings with each other on some level, we can see the ideological relationships that must have been engendered. With the introduction of sedentary agriculture, new ideologies and novel ways of seeing oneself were formed. These 'contacts and exchange between pastoralists/hunter-gatherers and

farmers would certainly not only have entailed economic aspects but also world-views and sacral concepts' (Arias 2007, 80), and the concept of syncretism enables us to realize the existence and fluidity of these concepts without necessarily implying an actual specific belief, such as ancestor worship, etc. It is in this that we are recognizing human diversity, and indeed the diversity of human experience that allows the conscious and unconscious flows of beliefs and world-views that stem from the ambiguity of human existence.

Conclusion

Archaeologists tend to look for moments of transition, evidence of change at a particular time, and prioritize certain elements like 'social complexity' or subsistence, but we should consider these 'novel ways of thinking about the world, about time, about identity and about sociality' (Whittle & Cummings 2007, 2). The fact is that these things did not simply change with the introduction of agriculture, or a 'Neolithic package', but that the frameworks within which these ideas are bound are eternally changing. The conscious and unconscious flow of ideas and discourse through porous ideological boundaries should not be ignored, or treated as a black and white passive exchange of ideas from one to another just because we, as archaeologists, cannot make concrete interpretive statements about them.

As has been demonstrated, new ways of doing or acting can be adopted, while older ways of thinking and the belief systems into which they fit remain, as has been demonstrated with ethnographic examples (Barnard 2007). However, they do not necessarily remain totally unchanged as they are constantly altering with the new elements of life that confront them. Like this, the islands of Téviec and Hoëdic are most often discussed with recourse to the Mesolithic-Neolithic transition, and the influence they had on the Neolithic of the region. However, the status quo, whether in an ideological or material sense, within the island (and all) communities must not be considered as static or unchanging, but should be recognized to have had constant discursive negotiations of ideological and cosmological significance both among themselves and with others. Although the Mesolithic is generally discussed from the point

of view of an economic phenomenon as if void of ritual and belief (Barnard 2007, 13), and the Neolithic as a period of increasing 'ritual' complexity, we should be able to say that hunter gatherer populations did have beliefs, ideas of who they were, and where they came from, which were equally complex (if we are to use this terminology). Although these beliefs and cosmologies are not entirely visible in the archaeological record, we must acknowledge that they themselves as people were entwined within constantly renegotiated cosmologies, and beliefs. We must see that for farmers culture is not necessarily just a conscious choice on their behalf, likewise for hunter-gatherers, culture and beliefs are not just passively assumed (Robb & Miracle 2007, 107).

While it is asserted that no elements of belief or perhaps even specific practice can be concretely identified, to totally ignore this aspect of prehistory is to the detriment of archaeological thought. It has been well documented that archaeologists of prehistory are reluctant to speak of religion or belief, other than the catch all term ritual. Syncretism as a concept could enrich archaeological discourse. It allows us to discuss ideological interactions, and relationships in prehistory without making over arching statements about elements of belief. Recognizing the concept of syncretism as a process allows unknown systems of belief from the past to mean different things to different people both at the same time, and throughout time. In this sense, although syncretism does not provide us with any concrete answers, nor provide us with a more detailed vision of the islands of Téviec and Hoëdic, it does allow us to view Mesolithic, or more rightly, hunter-gatherer societies, as more than just passive receivers of new ideas.

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Dying for their King: A critical analysis of the relationship between Iron Age bog bodies and boundaries

Sarah Forde

Abstract

The purpose of this paper is to assess the relationship between the placement of Iron Age bog bodies near boundaries including townland, parish and especially barony boundaries which have been dated to the medieval period and later periods. This theory was originally proposed by Eamonn Kelly, Keeper of Antiquities at the National Museum of Ireland, in 2006. The research for this thesis has shown that there are many gaps in the archaeological record regarding bog bodies in Ireland especially those which date to the Iron Age. In addition to this, it is difficult to prove that political and territorial boundaries originated in prehistory and that they formed the template for boundaries. formally established in the medieval and also those from more recent times. This thesis also questions Kelly's definition of a boundary, what constitutes a boundary and how they were marked on the landscape. Statistical analysis carried out as part of this thesis, does not support Kelly's findings due to the insufficient records available for analysis.1

Introduction

Stuck between a boundary and a boggy place; does every Iron Age sacrifice tell the same story? Prompted by the discovery of two Iron Age bog bodies, Clonycavan Man, Co. Meath and Oldcroghan Man, Co. Offaly in 2003, Mr. Eamonn Kelly, Keeper of Antiquities at the National Museum of Ireland, has suggested that Iron Age bog bodies were sacrificed and placed along important boundaries as an offering to the earth goddess (Kelly 2006, 26-30). This would guarantee a successful

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¹ Editors note. In 2006, Keeper of Antiquaries in the National Museum of Ireland, Eamonn P. Kelly, published an article discussing bog bodies and their relationship to boundaries in Ireland. Although the author of this article does not fully support his theory, Kelly's hypothesis remains at the forefront of Irish studies relating to bog bodies.

reign for the king and it would ensure the fertility of the local people and their land (ibid.).

Kelly discusses eight bog bodies in his analysis of sacrificial burial near liminal boundaries, predominantly barony boundaries. For this critical analysis a further 12 examples from across Ireland were examined. These were specifically chosen because of their known provenance and because they were not exclusively dated to the Iron Age. This provided the opportunity to see if the hypothesis could be applied to all bog bodies regardless of their date. It was also necessary to recognize the level at which bogs themselves had become natural liminal boundaries in the past.

This hypothesis will be deconstructed using the following four points:

- · Lack of evidence
- Boundary problems
- Distance to the boundaries.
- Representation of boundaries

Lack of Evidence

One of the biggest problems facing Kelly's work is the limited amount of information that has been collected for the 130 Irish bog bodies (Bermingham 2006, 185). Kelly (2006, 26) believes there are over 40 instances where bog bodies were buried near boundaries, particularly baronies. This does not seem plausible since the topographical files at the National Museum of Ireland do not imply that there are 40 recorded locations of discovery. This is immediately apparent by the large gaps in the archaeological record for discovery, location and date; method of retrieval; depth and evidence of violence etc. Without sufficient records to support this hypothesis, principally a recorded location, it is not possible to ascertain a connection between human sacrifices and boundaries.

Furthermore, Kelly (2006, 26) insinuates that bog bodies accompanied with wooden stakes and animal bones or indications of a violent death can be classified as Iron Age. The evidence for this once again is

unsatisfactory when we look at the collective records. There are a number of post medieval and modern bog burials with similar characteristics to those which have been successfully dated to the Iron Age (Forde 2008, 184 - 225).

The majority of bog bodies in Ireland have been found while hand cutting turf. The first peak in discovery began with the work of the Ordnance Survey recorders in the late 1800s. After the 1950s, new fuel demands resulted in a further increase in the number of findings (Ó'Floinn 2006. 138). With the establishment of Bord na Móna in 1946 and the introduction of heavy machinery for extracting and processing peat, there have been a number of problems in recovering remains and studying their context. Important details such as the orientation of the body, burial rite and accompanying artefacts were subsequently lost. Therefore, it would be highly inaccurate to assume a relationship between sacrificial burial practices and boundaries unless a definitive Iron Age date and location of discovery has been obtained. This problem was highlighted by the discovery of Clonycavan Man on a Bord na Móna sorting screen in 2003 (Ó'Floinn 2006, 138) and also in the 1960's when a number of body parts were found at the sorting depot at Lindow Moss in England (Turner 1999, 228).

Only 12 bog bodies in Ireland have been radiocarbon dated. Seven of these are Iron Age, one is Neolithic and four are medieval. A further 38 bog bodies have been dated to the medieval period or later, using local sources and clothing. Almost 80 examples have no estimated date. The high frequency of Iron Age radiocarbon dates would suggest that the deposition of bog bodies had reached a peak at this time. Nonetheless, in comparison to the total number of bog bodies, these Iron Age remains do not appear statistically significant. To get a clearer picture of the distribution of bog bodies, we need more radiocarbon dates. Unfortunately, as of 1996, one third of the known bog bodies in Ireland had only survived as 'paper bog bodies' i.e. through written records (Delaney & Ó'Floinn 1995, 123-132). As a result, it is not surprising that most of the remains are not available for analysis. Only finds from recent years have been scientifically studied. While such studies can shed new

light on possible sacrificial practices, the problem still remains with the unrecorded remains and those that merely exist as paper.

It is unreasonable to expect that seven Iron Age bog bodies could represent a definite sacrificial rite associated with the success of a king. There is not enough evidence to suggest that sacrifice was a regular occurrence or even that it was carried out on an annual basis. This does not necessarily mean that it did not happen; we just need more evidence to prove that it did. Therefore we must ask the questions; how many human sacrifices were placed in bogs during the Iron Age in Ireland? And, how many have gone unnoticed in the peat or in the machinery?

If we look at the dates for bog bodies in the rest of Europe, the evidence shows that there was a definite rise in the number of Iron Age human sacrifices especially in Denmark and Germany (Chamberlain and Pearson 2001, 53). It would be beneficial to see if this theory can be applied to the rest of Europe where a greater number of Iron Age bog bodies have been found.

Radiocarbon dating is not without its problems or inaccuracies. Contamination from humic acid is likely to occur and hard to control. Certain preservatives used in conservation can cause a number of problems for dating (Brindley and Lanting 1995, 133). The dates from Gallagh Man and Stonyisland Co. Galway have shown the effects of contamination. Therefore the dates for the seven Iron Age bog bodies must be accepted with caution. If more bog bodies in Ireland were dated, then the characteristics of the deposition could be studied more thoroughly and hopefully similarities or other evidence would appear to strengthen these dates.

Boundary problems

A boundary does not necessarily have to be political in its definition. Kelly (2006, 26-30) focuses on boundaries such as the townland, parish and barony boundaries which were generally established long after the Iron Age (Public Record Office of Northern Ireland 2007). While the provincial borders were firmly set in stone by the 17th century, their origins may have begun in prehistory with the formation of the five

provinces. Many parish boundaries were formed after the 12th century, while the establishment of counties began as early as the 13th century, and baronies became an important aspect of Ireland in the 16th century (Public Record Office of Northern Ireland 2007). The medieval period was greatly unstable and its boundaries were highly flexible. It is hard to conceive, that all medieval boundaries would have been founded to some degree in the Iron Age. It is possible that this may have occurred in some areas, but it is difficult to prove considering the Irish landscape remained highly divided into a variety of constantly shifting political and territorial units

It is accepted that the king of the *tuath* symbolically mated with the local goddess through a sacrificial offering royal sites such as Tara, Emain Macha and Rathcroghan (MacNiocaill 1972, 44). If sacrifices were made in honour of this tradition, should we not expect the remains to be distributed throughout the surrounding wetlands or on the boundaries of the royal sites? Surely these locations would have been perceived as liminal or important.

Kelly does not refer to a particular grade of king when he discusses the sacrifice of humans to ensure a successful and prosperous reign (Kelly 2006, 30). He also considers Gallagh Man and Oldcroghan Man possibly being buried on the boundary of a royal estate given that medieval castles were located within these townlands (ibid. 26). With over 150 kings in reign at any one time between the fifth and twelfth centuries (Byrne 2001, 7), it is clear that Ireland during the Iron Age and early medieval period was a highly unpredictable society. One would expect more sacrifices to mark the new kings entering power. Changes in power would have seriously affected the general population causing fear and feelings of insecurity. Theoretically, sacrifices secured the communities confidence in the king and his forthcoming reign. The number of Iron Age bog bodies and the constant rotation of kings do not seem to correlate. Once again, the gaps in our records have stunted our understanding of this practice, even though there may have been hundreds of sacrificial offerings.

The fluctuation in territorial ownership and land divisions in Ireland would suggest that boundaries possibly had a temporary basis. Therefore

placing a bog body near a political boundary would have lost its meaning soon after deposition, whilst placement near a natural boundary was a longer lasting statement.

Consequently, the enforcement of boundaries must be questioned. Three bog bodies are within boundaries that are distinguished by natural or recently constructed mounds in the bog. A further 12 townlands use rivers or lakes to form a variety of boundaries including the limits of the county, townland, parish and barony. By using natural features as the foundation of political borders there is greater consistency in their survival in the landscape. As political ideas spread there was a need for easily recognisable land divisions hence the logical use of natural features as boundary markers.

If a bog body is deliberately deposited in a bog it is associated with a boundary; a natural boundary filled with ideas of liminality and the supernatural. Deposition at the edge of the bog may have been easier rather than navigating through the treacherous peat for miles. Distance into the bog may not have been a huge factor since the act of placing a body within the natural bog boundary was a greater statement as it was not a common burial rite. This can explain why the nineteenth and early twentieth century peat cutters found many bog bodies on the margins of the bogs (O'Sullivan 2007, 188).

Distances to the Boundaries

If we study the boundaries in relation to the location of the bog bodies then we are faced with many problems. Firstly, we only know the general locations for 10 bog bodies, five of which were used by Kelly (2006, 26-30). A further dilemma is the difficulty in measuring the distances between the boundaries and the discovery locations since many bog boundaries do not have adequate physical indicators and the discovery locations are without sufficient co-ordinates.

Kelly (2006, 26) associates the Coolronan body, Co Meath, with the townland boundary. There are large stretches of bog to the west and north of the townland but there is no reference for a bog body situated there, only a reference to a burial (ME035-001----) located on dry land.

For arguments sake, this site is still over one kilometre from the townland, parish and barony boundaries.

The location of Gallagh Man has also caused confusion. According to Kelly the body was found near the townland and parish boundaries. This would indicate that it was situated in the bog to the south of Gallagh. Although, a map of the townland from the NMI files suggest that the deposition took place in an area now covered in dry land, to the north of 'Cruice Lawn', the castle and the enclosure (GA060-08101/02----). Once again there are discrepancies with location and therefore distances.

The remains from Kinnakinelly, Co. Galway, also have no recorded location. It is in this townland that the Dalgan River borders almost two-thirds of the townland. We only know that the remains were found along the Galway-Mayo border to the north. It can be estimated that the body was no more than 400m from the boundary, unless the find spot has been subsequently overtaken by peat. At Derrymaquirk, Co. Roscommon the remains are reportedly near a barony boundary (Kelly 2006, 26). It is understood that a burial was uncovered near a crannóg (RO005-027----). If this is the location of the body, then it is almost on the townland, barony, parish and county boundaries which are very linear and highlight the eroding shore.

Kelly (2006, 26) proposes that the body from Baronstown West, Co. Kildare is linked to the barony boundary. The Ordnance Survey maps clearly show that the bog body is almost 2km NE of this boundary. Kelly gives no justification for this suggestion and does not acknowledge a possible relationship with the townland and parish boundaries which are within 100m north of the finds spot.

The additional bog bodies which have been studied have led to a surprising revelation. Of those with a known location, it appears that they are near boundaries. The medieval bog body from Kilwarden, Co. Meath, is over 200m to the east of the townland and barony boundaries which follow the Kinnegad River (Ó'Floinn 1995, 229). The undated Drinagh bog body in Co. Offaly is at least 200m north of a natural mound which guides the townland, parish and barony boundaries. The Neolithic,

Stonyisland bog body was found a few meters to the north of the townland boundary and at least 300m ENE from the parish, barony and river. Finally the medieval remains of Meenybraddan Woman, Co. Donegal, was approximately 100m SE of the townland and parish boundaries which run along the course of a river.

It was expected that the additional bog bodies would not be found near boundaries since they were not Iron Age in date but this was not the case. Some of these were 'near' boundaries suggesting that the theory could be stretched to fit. The fact that this theory could be applied without difficulty, if we exclude issues concerning dates and lack of Iron Age characteristics, proves that the theory has no solid basis to sustain itself. Kelly (2006, 26-30) does not reveal a maximum distance that bog bodies would have been placed from a boundary. There must have been a maximum distance from the bog where all aspects of liminality began to fade and an optimal distance where liminality was strongest thereby encouraging the success of the sacrifice.

Representation of the Boundaries

All boundaries included in Kelly's study (2006, 26-30) cut through the bog in a very linear and precise manner. Many of these boundaries do not rely on physical features to mark their layout. While it seems unusual to divide a bog in prehistory considering its liminality and wild nature, it can be considered as a display of power and ownership. Boundaries must be continuous and areas of land do not remain neutral on maps; they must be owned by someone and this is the motive for boundaries through bogs. The construction of toghers, from prehistory onwards, possibly formed a physical boundary in these wastelands. Boundaries represented on maps are more likely meaningless and modern given that their linear nature suggests that they coincided with the commencement of the Ordnance Survey mapping from the 19th century onwards.

Some maps also show variation in the boundary line reflecting the lack of continuity throughout time. For example the parish and townland boundaries to the south of Gallagh clearly outline the bog on the 1st edition O.S. map. These boundaries have become straighter within 30

years. At Derrymaquirk the boundaries following the shores of Lough Gara have also changed due to erosion. To the east of Coolronan the boundaries run along the course of the river. Over time this river has become straighter thereby changing the characteristics of the borders. Derrydooan Middle, Co. Westmeath once incorporated a part of Glen Lough within its boundaries; however, the shores of the lake have since been reclaimed adding more dry land to the townland.

Confusion over ownership in the bog is clearly seen when a stretch of bog has the name of one townland even though it runs through a number of adjacent townlands. For example, Clonearl Bog is the location for Oldcroghan Man. This bog runs through Clonearl Demesne and the townland of Oldcroghan. Baronstown West bog body is sometimes referred to as the Cloongownagh bog body because it was found in Cloongownagh Bog. Stonyisland bog body was named after the bog it was found in, even though it was discovered near the townland boundary of Sawnagh. This is why these particular bog bodies were called after the bog itself rather than the townland in which they came from. Out in the field it is not easy to recognise these boundaries. Yet again, this highlights the difficulty of recognizing the exact line of the boundary in the past.

Conclusion

This paper presents the key points which can be used to deconstruct Kelly's hypothesis. While this study is very interesting, in reality the evidence for Iron Age bog bodies does not correlate with the idea of human sacrificial offerings near important political boundaries. As previously mentioned, many bog bodies have been removed from their original context which creates a loss in crucial information. There are not enough Iron Age bog bodies in Ireland to represent a regular sacrificial practice. Therefore, while this hypothesis may not be applicable to Ireland, the European examples may be more fruitful. The boundaries in question tend to be medieval or later in date. They have been remodelled and straightened over time. There is no guideline for the distance from a boundary which leaves this hypothesis too open and easy to apply to any bog body, whether Iron Age or not.

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Other Sources:

NMI Files - Topographical Files (1935 - 2005) courtesy of the National Museum of Ireland.

1st – 3rd edition Ordnance Survey Maps courtesy of Trinity Map Library.

Transformations: assessing the relationship between ironworking and burial in early medieval Ireland

Margaret Williams

Abstract

This article suggests that the smith had a pivotal role in the funerary rite in early medieval Ireland. A study in north Leinster. Ireland, has produced very interesting correlations between burials and ironworking. This association is evident at enclosed 'cemetery settlements'. There is also clear evidence of a link between burial and food production in the format of residual animal bone and grain drying kilns. These processes can be conceptually related to the social and symbolic power of 'transformations'. In contrast, other secular cemeteries that are not enclosed do not have evidence of these activities. The association of burials with ironworking has its origins in the Iron Age and continued into the early medieval period. Ethnographic studies demonstrate how ironworking can act as a powerful metaphor for life, fertility, death and transformations. These metaphors are universal and can be gleaned in Irish mythology and early medieval literature.

Introduction

In recent years, new types of burial grounds both in enclosed and unenclosed 'secular' cemeteries contemporary with the historical introduction of Christianity have been discovered. The enclosed 'secular cemeteries' (Stout & Stout 2008, 75) are more commonly termed 'cemetery settlements' based on the evidence of artefacts, presence of animal bone in the enclosure ditches, pits and 'activities' such as metalworking and grain-drying in kilns; yet 'nowhere has a building recognisable as a church or house been discovered' (ibid). These new sites are 'poorly understood' (Seaver 2010) and in Ireland the current

mind frame of archaeologists is to assume settlement rather than perceiving 'activities' particularly ironworking in a broader cultural sense.

Narratives in Ireland to date in relation to these newly discovered sites dwell on the religious aspect; once the burials are discovered to be aligned east-west (head to the west), with few grave-goods, the term 'Christian' is inevitably used (O'Connell & Clark 2009, 22; Coughlan 2008, 1; O'Connell 2006, 21; Delaney & Roycroft 2003, 18). Religious buildings such as a 'church' or 'shrine' are suggested as possible structures that left either no evidence or just ambiguous slot trenches (Clarke & Carlin 2008, 69; O'Hara 2009, 94). The current focus is on orientation of the body and identification of 'Christian' burials. Archaeologists have not questioned why ironworking took place in such close proximity to burials. Why is the smith(s) present at these sites?

The introduction of ironworking and associated products must have had social implications and offered a way for society to interpret the world in a different way than before (Giles 2007, 399). In Iron Age Britain ironworking and its products were associated with 'violent and potentially destructive transformation' and 'appear to have been used to negotiate moments of social crises or to comment on themes of fertility and death' (Giles 2007, 396). Also ironworking and grain production have a relationship based on evidence that related items were deliberately placed together (ibid). Ethnographic evidence suggests that ironworking can be a 'highly symbolic act, a magical or alchemical process, surrounded with ritual' (Giles 2007, 397). The rituals surrounding ironworking also transcend to the funerary rite and 'smiths may have played a special role as funerary specialists' during the Iron Age (ibid, 405); this view is supported by ethnographic studies in Africa (Herbert 1993, 31).

The limited evidence of burial in Ireland during the Iron Age gives a tantalising insight into the possible role of the smith and the significance of this metal. Scott (1990) notes the presence of ironworking during the late Iron Age at the portal tomb at Aghnaskeagh Co. Louth, the wedge tomb at Largantea Co. Derry and the passage tomb at Knowth, Co. Meath (Scott 1990, 222, 223); smiths working beside ancient burial

monuments. There is also evidence of the presence of the smith at Iron Age burial grounds. At Harlockstown, Co. Meath 'Iron Age activity on the site was manifested by a rectangular enclosure, wherein metalworking activity took place by a small, poorly preserved burial ring-ditch' (Fitzgerald 2006, 41). The 'cluster of bowl furnaces and ring-ditch' at this site date 'from the second century AD' (Seaver 2010b, 302). At Rath, Co. Meath, there is evidence of industrial activity (ironworking and cereal processing) in the vicinity of four ring ditches, one of which dates to 550-350BC (Fitzgerald 2006, 41, 42). At Ballydavis 1, Co. Laois dated to 359-46BC, a number of furnaces were discovered beside ring-ditches which also contained iron slag in discrete layers (Excavations Bulletin 03E0151).

There is also evidence from the Iron Age of slag and iron objects associated with burial. The ring barrow at Cooldrinagh Co. Dublin contained cremations and iron slag under a burial mound (Excavations Bulletin, 95E039). At Rathdooney Beg, Co. Sligo a barrow cemetery is dated to 114BC-71AD; the interior base of a mound contained fragments of smelting slag above which were human bone fragments (Mount 1999. 345). At Ballywilliam, Co. Tipperary a pit was discovered in a D shaped enclosure dated to 170BC-30AD which contained cremated bone and a number of corroded iron objects (Taylor 2008, 55). Rath of the Synods at Tara dated to 400BC-400AD (Grogan & O'Sullivan 2008, 142) is a circular trivallate enclosure that contained a number of cremations and inhumations: within the central southern area a 'charcoal and slag-rich' area was discovered (Grogan 2008, 3, 65); discrete from the burials. There is therefore an established association between burials and ironworking during the Iron Age: the research below demonstrates that this association continued into the early medieval period.

Research Methodology

Twenty enclosed cemeteries and sixteen unenclosed cemeteries were selected in north Leinster as a study area (See Fig. 1). Data was obtained mainly from excavation reports (short summaries in Excavation Bulletins, published final reports from the National Roads Authority and EMAP archive). Each cemetery was analysed under key thematic headings: presence of enclosure (ditch, bank or both), grave

morphology, orientation of body, presence of structures, ironworking (furnaces, slag, hearths), grain-drying kilns, animal bone and artefact finds. In total 4,306 inhumations were excavated in enclosed cemeteries and 785 in unenclosed cemeteries. Published radiocarbon dates indicate that these cemeteries appear from the forth/fifth century AD onwards; many go out of use in the eight-ninth centuries; a few continue in use until the post-medieval period.



Figure 1 North Leinster study area (Courtesy of Conor McDermott, UCD)

Key Findings

Enclosed cemeteries are defined by substantial ditches ranging from 30m-200m in diameter. Unenclosed cemeteries are defined by the absence of ditches. Both cemetery type had similar morphology of grave; either stone-lined, simple dug grave, slab lined with ear muffs or lintels. Both had similar orientation of the body, mainly west-east (head to the west). Enclosed cemeteries have evidence of ironworking either in the form of furnaces, smithing hearths or iron slag. Slag was either in the grave itself (in the fill or with the body), in a pit, in a furnace or in an

enclosure ditch. Large quantities of animal bone were located in the ditches. Grain-drying kilns are associated with many of the cemeteries. Unusual burials are present including burials in ditches, prone burials, headless burials and skull fragments in ditches.



Figure 2 Excavation of three stone lined graves at Faughart Lower, Co. Louth (Courtesy of ADS Ltd).

In contrast to the above, unenclosed cemeteries did not produce evidence of a similar nature. The research has identified that there are distinct differences between 'enclosed cemeteries' and 'unenclosed cemeteries' other than enclosing ditches which might give insight to the nature of funerary rites. There is extraordinary polarisation in the data for metalworking, food production and consumption activities on the sites as demonstrated in Table 1.

Enclosed Cemeteries		Iron- working	Animal bone in ditch	Kiln	Unenclosed Cemeteries		Iron- working	Animal bone in ditch	Kiln
1	Butterfield	Yes	Yes		1	Murphystown	No	No	No
2	Gracedieu	Yes	Yes	Yes	2	Mount Gamble	No	No	No
3	Mount Offaly	Yes	Yes		3	Kilshane	No	No	No
4	Coldwinter	Yes	Yes		4	Westereave	No	No	No
5	Corkagh	Yes	Yes	Yes	5	Mell 2	Yes	Yes	No
6	Balriggan	Yes	n/a	Yes	6	Ardsallagh 1	No	No	No
8	Faughart Lower	Yes	n/a	Yes	7	Betaghstown	No	No	No
						The			
9	Kiltale	Yes	Yes		8	Anchorage	No	No	No
10	Ninch, Laytown	Yes	Yes	Yes	9	Boolies Little	No	No	No
11	Johnstown 1	Yes	Yes	Yes	10	Knowth Site 1	No	No	No
12	Ratoath	Yes	Yes	Yes	11	Mooretown	No	No	No
13	Raystown	Yes	Yes	Yes	12	Peterstown	No	No	No
14	Knowth M	Yes	Yes		13	Sarsfieldstown	No	No	No
15	Castlefarm	Yes	Yes		14	Claristown	No	No	No
16	Parknahown 5	Yes	Yes		15	Ardnagross	No	No	No
17	Ballydavis 2	Yes	Yes		16	Greenhills	No	No	No
18	Lismore	Yes	n/a						
19	Marlinstown	Yes	Yes						

Table 1: Source: Excavation Bulletins (www.excavations.ie); EMAP archive; National Roads Authority archaeological reports, monographs and *Seanda* magazines.

People who were buried in the enclosed cemeteries were surrounded by activities whereas those in unenclosed cemeteries were not. One site Mell 2, Co. Louth, classified as an unenclosed cemetery, appears to have evidence of metalworking and animal bone (Excavations Bulletin 00E0430). The metalworking, in the form of slag, is actually in a ring-ditch; together with quantities of burnt bone and unburnt animal bone. The inhumations are located beside the ring-ditch. The ring-ditch is probably Iron Age; dating was not confirmed in the report. The presence of slag and ring-ditch burial monument suggests earlier association between metalworking and burial rites.

Interpretation

20 Colp West

Yes

Yes

The excavators of the enclosed cemeteries have interpreted some as having ecclesiastical connections based on the burial evidence (body orientation) despite the absence of any structure that might be related to a church; for example Butterfield, Gracedieu and Mount Offaly in Co. Dublin (Excavations Bulletin). The excavator of Mount Offaly states 'it is

reasonable to assume that within the boundary of the site lies evidence of perhaps a church' (Excavations Bulletin 98E0035). Castlefarm 1, Co. Meath is described as the residence of 'lords' based on the prestige artefacts found and the assumption that dwellings may have existed (Kinsella 2008, 101). Other sites are assumed to have houses as illustrated at Johnstown 1 Co. Meath (See Fig. 3); although the excavators conclude that this site 'is indeed a secular cemetery' (Clarke & Carlin 2008, 69).

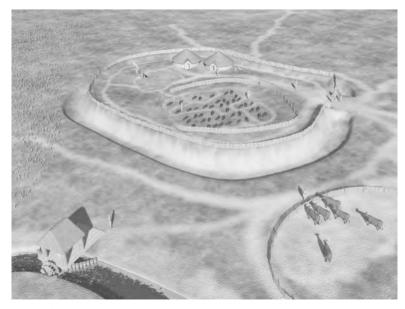


Figure 3c Computer-generated image of the enclosed cemetery at Johnstown 1, Co. Meath (Niall Gillespie, Courtesy of ACS Ltd).

Another interesting interpretation is from the excavator of Ratoath, Co. Meath who suggests the site represents 'perhaps a seventh century pre-Christian Irish community with extensive trading contacts or a group of foreign metal craftworkers' based on the presence of large quantities of smithing slag, unusual burial positions and the presence of grave goods. (Excavations Bulletin 03E1781). The site is perceived as not conforming to what the modern notion is of past Christian customs and is therefore considered non-Christian.

The enclosed cemeteries are a recent discovery and the above discussion shows that archaeologists to date are focused on religious connections and that 'activities' imply 'settlement' in terms of dwelling on site. A new narrative is required that looks at the evidence as presented: with no preconceived assumptions of religious beliefs. A framework for interpretation can be suggested by drawing on the above data analysis from the sites in north Leinster combined with ethnographic evidence. O'Sullivan & Harney (2008, 80), in reviewing the evidence for these enclosed cemeteries state that 'their origins lie in the late Iron Age'. This also seems likely to be the time when ironworking became an important technology in society. In the study area a large industrial archaeological site was recently discovered at Derrinsallagh County Laois: within a 7,000m square area forty two furnaces were discovered, dating to the 1st to 3rd century AD (National Roads Authority); this is significant in terms of intensity of use of this technology. Earlier furnace sites in the Iron Age appear to be in smaller clusters.

Therefore, if ironworking was widespread and its technology embraced by society, what might be the 'metaphors' for understanding this new form of metal? Based on ethnographic studies in Africa it was noted that 'a great many societies subdivided iron working into a variety of specialist tasks' (de Barros 2000, 151). Amongst the tasks is the production of the furnace and smelting of the ore to produce a good 'bloom' (ibid). The forging of the tools or other items may be done by the smelter himself or by a smith who were 'specialists' who required years of training (ibid). As Melanie Giles points out (2007, 398) 'both the processing of ore and making of finished objects was a skilled activity. requiring knowledge of how metal behaves and of high temperature processes'. She further states that 'smelting entails carefully judged timing; smithing skilled improvisation' and ethnographic evidence demonstrates that this knowledge is carefully controlled by certain people (ibid). Smelting and associated furnaces can be interpreted as a regeneration process, a process of transformation that is highly symbolic (Hingley 1997, 10, 11).

This ethnographic evidence is in total contrast to the view expressed by some archaeologists in Ireland. They consider the ironworking process as 'so non dynamic, the technology so simplistic and the evidence so prolific that there is no reason to suggest that only specialist ironworkers existed' (Carlin *et al.* 2008, 112). It is further stated that the 'skills of the farmer-smith would have satisfied his requirements' (*ibid*). One has to ask in this scenario, who had smelted the ore for the farmer-smith to hammer out? This could be where the real 'magic' lies, with the smelter and the furnace

Smelting is potentially dangerous and archaeological evidence in Britain suggests that it was conducted away from settlements (Hingley 1997, 10; Giles 2007, 397). One enclosed cemetery, Johnstown 1, is definitely connected with the smelting process (Clarke & Carlin 2008, 73). The archaeologists were able to make this statement due to the fact that they brought metallurgical specialists on site during the excavation (ibid, 87). It is important to differentiate between smelting and smithing (Cleere 1972, 11). The 'magical' dangerous time in ironworking is in the smelting (Giles 2007, 399). It would be interesting to see if a thorough analysis of the furnaces from enclosed cemeteries and of other sites, particularly ecclesiastical and ringforts (settlement sites), demonstrates differences in terms of smelting and smithing activities.

Taking the above view that metalworking in Ireland is more than just a mundane, simple operation, are archaeologists asking the right research questions? Slag, where mentioned in the reports, is simply a listed item; the significance of its presence in the graves is not questioned. On the other hand 'slag may have been a significant material in its own right, redolent with fertility' (Hingley 1997, 15). Dioscorides' *Herbal* Classical text notes that 'slag and metallic stones also had medicinal uses' (Hingley 2006, 216). Giles in her studies (2007) on Iron Age Britain is of the opinion that 'iron and its by-products were manifestations of the power to transform material substance (both metals and human flesh) and, thereby, provided a metaphor for power over life and death'. She further states that 'they evoked the authority of the deceased in a world which pivoted around the control of fertility' (Giles 2007, 404).

Giles (2007) and Hingley (1994 & 2006) concepts of transformations can be used to support an interpretation of the enclosed cemeteries in Ireland associated with ironworking, kilns, animal bone, milling and their residues. Could this ideology have started in the Iron Age as expressed at the Iron Age ring-ditches and barrows where the archaeological evidence is identical in many ways to the later enclosed cemeteries, but on a much smaller more intimate scale? If the whole process of iron working 'evoked the authority of the deceased in a world which pivoted around the control of fertility' (Giles 2007, 404) then the presence of the smith at burial grounds would appear to demonstrate this link with death, ancestors and *rites de passage*. The 'control of fertility' may relate to the other activities on site as evidenced by the kilns, the mills and the slaughtering and processing of animals.

Clearly the enclosed cemeteries are where a lot of activity happened as evidenced by the 'tons of slag' at particular sites (Roycroft 2005, 77), the presence of cereal-drying kilns and by the considerable quantities of animal bone on many sites. The control of fire is important for ironworking and grain-drying and this can be linked to the skills of the smith. We seem to see quite a different ideology at play at these sites compared to unenclosed cemeteries where just burial is the focus. Both types of cemeteries are contemporary with early Christianity in Ireland but it is only 'from the eight century onwards the church started to legislate regarding acceptable burial practices for Christians' (O'Brien 2009, 149).

Hingley argues that 'iron in Iron Age Britain was powerfully associated with the idea of regeneration' citing ethnographic evidence in Africa and 'early Irish historical sources' (Hingley 1997, 9). The sources referred to relate the story of the mythological Niall and his four stepbrothers who are sent to Sithchenn the smith, 'who is also a magician and seer' as part of an initiation rite' (Rees & Rees 1961, 252). The boys are sent into the forge which is set on fire; they are unharmed, the initiation is successful and they go forward to 'prove their prowess', thus symbolically reborn (ibid). This story indicates that the smith had a role as an initiator and was involved with a *rite de passage*. This concept of 'reborn', transformed, giving new life is expressed in the *Triads of Ireland*:

the three renovators of the world: the womb of a woman, the udder of a cow, the moulding block of a blacksmith' (Kelly 1988, 62).

The triads are dated to the ninth century AD (Meyer, 1906, x). Kelly (1988) translates 'ness' to mean a 'moulding block' of a blacksmith. however this term can also apply to the 'shaped furnace or to the bag of moulding clay for making it' (Joyce 1905, 408). Scott (1990) states that from the archaeological evidence, we can suggest that the forge hearth and smelting furnace were often the same structure; which he perceives 'reinforces the imagery' of the concept of renovator in the Triad (Scott. 1990, 179). Therefore the smith and the blacksmith can be seen as the renovators - the giving of a new life - transforming - equated with a mother's womb, giving birth to iron and iron objects. Haaland (2004, 1) states that in cross-cultural ethnographic studies that 'iron smelting is to giving birth: the blacksmith's role in transformations (ore to iron) is claimed to be a metaphoric model for social transformations rites de passage'. This demonstrates how universal and ancient the concept is and gives tantalizing insight that the smith as initiator, involved in rites de passage which includes death, had a role in conveying the dead on a journey to the otherworld to be possibly reborn.

Conclusion and Outlook

This research has demonstrated that there is a clear link between ironworking and burial in enclosed cemeteries. The consistency of the non presence of 'dwelling' structures on twenty sites in the study area strongly supports the view that they are not settlement sites. Therefore, if these sites are not enclosed 'cemetery settlements', what type of site are they and how can one interpret such a site? The analysis shows that ironworking evidence is consistently present. The location of the ironworking evidence varies: furnaces occur both within enclosures and outside, slag deposits are found in ditches and also in the graves of the deceased. These spatial patterns suggest that there is an ideological

connection. Using the ethnographic evidence as outlined above it seems likely that this relationship was connected to a belief system based on or linked to the transformative process of ironworking. Indeed, all the activities that can be identified by the evidence can be considered transformative; drying and harvesting grain, butchering and cooking animals, bodies in the ground decaying - transformed into ancestors.

The research also shows how polarised two apparently contemporary cemetery types (enclosed and unenclosed) are in terms of the activities surrounding the burials. What they have in common are the east-west orientation of body and similar grave morphologies. The differentiating factors are ironworking, animal food preparation and grain harvesting. Does this imply contrasting cultural traditions with different ideologies and beliefs? The key question then for future research is how and when the symbolic power of ironworking was reconciled with Christianity in Ireland? Certainly it was well after the introduction of the latter, demonstrating that we need to recognise the long-lived power of the former from its roots in the Iron Age.

Acknowledgements

I am very grateful for the advice and kind support from the following people: Professor Gabriel Cooney, Dr. Aidan O'Sullivan, Dr. Katharina Becker, Dr. Alan Petefield, Conor McDermott, Dr. Rob Sands and Lorcan Harney UCD School of Archaeology. Michael Stanley, Senior Archaeologist, National Roads Authority and Edmund Bourke National Monuments Archive. Mr. Donald Murphy ACS Ltd and Mr. Eoin Halpin ADS Ltd for granting permission to use photograph and illustration. Finally, Library Staff at UCD.

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Never trust a text Rediscovering "De oratorio" in Hisperica Famina

Oliver Reuss

Abstract

The long description of an early Irish timber church in the 7th century text 'Hisperica Famina' offers an opportunity to understand the nature of the wooden churches in early medieval Ireland. Historians and archaeologists have tried to reconstruct this particular church by examining and interpreting the textual description.

The text itself describes an actual church and not an oratory as previously argued. The former interpretation of the word oratorium as being used to describe a building made out of wood prior to 789 AD in the Irish Annals can no longer be maintained. The interior is not described in great detail, but it can be argued that the word porticus is not used in its meaning as an archway or an entrance but as an equivalent for sanctum or chancel.

Unfortunately this text cannot be used as an architectural drawing or description of a 7th century Irish church because of the absence of any archaeological evidence from Ireland and due to the context of the text itself, namely a poem. Furthermore, by comparing the archaeological evidence and the description of the church it becomes obvious that the building involved is `A´ church and consequently not necessarily the church of the monk in Ireland who wrote the text.

De oratorio

Hoc arboreum candelatis plasmatum est oratorium tabulis, gemellis conserta biiug[u]is artat latera; quadrigona edicti stabilitant fundamenta templi, quis densum globoso munimine creuit tabulatum,

 550^{1}

_

¹ Verse number

supernam compaginat cameram,
quadrigona comptis plextra sunt sita tectis.

Ageam copulat in gremio aram,
cui collecti cerimonicant uates missam.

Unicum ab occiduo limite amplecitur ostium,
quod arborea strictis fotis cluditur regia.

Extensum tabulosa stipat porticum collectura,
quaternas summo nectit pinnas.

Inumera congellat plasmamina,
quae non loqueloso explicare famulor turno.

560
(Herren 1974, 108)

One of the earliest descriptions of a church in Ireland is within a poem called Hisperica Famina, roughly translated as Western orations. The text exists in four different recensions. Text A is the most complete one and contains a description of an oratorium. The other manuscripts are preserved as fragments and only one of these includes the lines discussed below (see Herren 1974, 42). The dating of the text is complicated but since 1953 (Damon 1953, 399) most scholars (Browne 1954, 6: Herren 1974, 42: Harbison 1982, 626: Ahrens 2001, 89) accept a date about 650-664 AD and an origin in Ireland. The language of the manuscript was difficult, and it remains difficult to understand. Various linguists and historians have tried to edit and interpret the text, along with archaeologists who had taken special interest in the description of the oratorium (for a detailed description and history/historiography of the text see Herren 1974, 3). The text itself can be separated into two major parts. The first part can be seen as a dialogue between a tutor and his disciples (Herren 1974, 35). The second part is a collection of essays about natural phenomena (e.g. the chapter entitled On the sea), objects (e.g. the chapter entitled On the book container) and buildings (e.g. the chapter entitled About the oratory).

The *Chapter de Oratorio* belongs in a series of short delineations about natural phenomena, objects and buildings. If one were to accept the argument that these text are "manuels scolaris" (Herren 1974, 19), keeping in mind that the whole text has to be seen as a poem, one might reconsider the text. Furthermore, when one sees the text as *manuels*

scolaris it might be more the case that the texts are the examples written by the teacher rather than by the students; if it were vice versa it would have been illogical for text by pupils to have been copied.

What of the description of the church? If we write about a church today we will hardly describe a particular church in detail, but rather in a general way, combining elements from different churches we have seen, read or heard about. This is even more than true if we write a poem, where our words have to fit within the syntax. Moreover, one will look for puns or more complicated metaphors to describe simple data (to make it sound better). To give an example from the Hisperica Famina text, Browne (1954, 5) says that compagiant, copulat, amplecitur, stipat, necit, conglegat are just words the author (the 'Faminator') has used to avoid using the word habet. So, to identify and to reconstruct the church that the author had in mind it is necessary to lay down the blinkers and understand the text for what it is, a poem. One must allow oneself to see the pictures that the 'Faminator' is drawing in his mind's eye.

When reading the description of the oratory in the poem, one notices that it is subdivided into two major parts. The first part stretches from lines 547 to 552. In this passage the author is describing the exterior of the building, its appearance and what it is made of. The second part covers the lines 553 to 560, in which the author speaks about the interior. This paragraph is most interesting because it is subdivided in itself again. The first part (lines 553 to 558) describe the important and extensive parts of the interior, whereas in the second part (lines 558 to 560) the writer refuses to say more about the small-scale items within the church.

The poem starts off with the heading 'about the chapel'. This translation of the Latin word *oratorium* as chapel is more than misleading. The 'Revised Medieval Latin Word-List' (Latham 1965) shows that the word *oratorium* was used before c.900 AD to mean a church, and that the first account of its use for an oratory or a bedehouse is c.1090 AD. McDonald (1981) and more recently Manning (2000) both have demonstrated that in the Irish Annals the word *oratorium* is used to describe a church.

Starting with the description of the external appearance of the building. the Faminator lets us know that what he has in mind is a wooden church (oratorium arboreum). This description is surprising insofar as when the first time the word oratorium is used in the context of the Irish Annals the adjective lapideum is used and so Manning (2000, 38) draws the conclusion that before 789 AD (when the first reference is made to a stone church) the word had to be understood in a context of a wooden building. But, as said above, the 'Hisperica Famina' dates between 650-664 AD and the stone church in the Annals from 789 AD, which leads to a gap of 125 years at least. In this respect it is not presumptuous to wonder if there had been stone churches prior to 789 AD. This is more than true if one takes a closer look at the archaeological remains of wooden churches in Ireland. None of the excavated 'churches' so far can definitely be assigned as a church (see Reuß 2007). Furthermore Ann Hamlin (1984) refers to the place-name Duleek (damliac = stone church). which is mentioned in Tirechách's account of St Patrick and describes a church of stone (Domnach Saigrigi iuxta Domum Liacc Cennani, id est lapidum). She concludes that this source is at least a century earlier than the one for Armagh (of 789 AD) and that the place-name Duleek descended from the fact that there had been a stone church.

This theory can be taken further and it can be asked what did people understand of a wooden church? The Faminator tells us that the church is made of 'candle-shaped beams' (V 547). There may not have been any other way for him to describe wooden logs, but if one is using the term 'beam' it becomes clear that there is wood involved. So why does the author overemphasize the term 'wood' in that way? It may merely be a play on words, but this author believes that there is more behind it. The 'candle-shaped beams' are most likely describing something similar to the walls that still stand in the church of Greensted (see Håkon et al. 1979). The 'four-fold fastenings' is difficult to explain but if one takes a look into the translation by Brown (1954) things start to make sense. There it is translated as 'four (twice two) walls'. This gives us another interesting hint, namely that the church was square/rectangular, and one can conclude that all four sides were made out of wood. This is further supported by the next line, where the author tells us about the 'square foundations'. Because the word 'square' is used, some scholars (e.g.

Herren 1974; Harbison 1982; Hamlin 1984) believed the description to be proof that there were square churches with altars in the middle. The Latin word used here is *quadrigona*, which is one of those words made up by the Faminator. But if we look for the closest relatives of this word, all of them start with the prefix quadri-, meaning four times, e.g. *quadriga*. If we take a closer look at the meaning of the word we will find that it describes a 'chariot drawn by four horses harnessed abreast' (Simpson and Weiner 1989). The word does not imply that all four are the same or equal, it just says that there are four of them. It is most likely that one has to see the 'quadrigona fundamenta' not as 'square' but four-sided.

This argument is supported by the fact that that in Verse 552 the Faminator talks about *quadrigona* plextra which may be understood as the top of the box-frame construction. These beams are four-sided in contrast to the (semi-) circular vertical beams, described as 'candleshaped'. It can be assumed that the writer is referring to the sill-beam of a box-framed building, because the next line states that from there 'springs ... a massive enclosure' (Verse 550). Anglo-Saxon church descriptions in Old English state that there is a clear differentiation between the grund (horizontal base) and the grundweall (vertical base) (Biggam 2002, 51). Furthermore, other entries in the Annals mention wooden churches that had been exposed to very strong winds, have turned upside down without being destroyed and therefore must have been constructed of a self-supporting structure. Unfortunately, the Faminator leaves us in the dark as to whether these 'square foundations' are the actual foundations or if they are resting on another foundation. e.g. a stone-built wall, as had been found in Derry (see Waterman 1967).

The next thing the author talks about is the roof construction. The translation here by Brown (1954) of 'room' is misleading. The 'Medieval Latin word-list' (Latham 1965) refers to it as a 'vault' in 690 AD. If one has to describe a roof it becomes clear that it is hard to do so. If the phrase 'triangle' is used, this is just describing one dimension, and is missing the aspect of space. So to avoid this, the Faminator is using the term *camara* (Verse 551), which can be translated as 'room', but more importantly as 'vault' as well. In fact the Oxford Dictionary only refers to it

as 'an arched or vaulted roof' (Simpson and Weiner 1989). To describe a roof as a vault comes very close to the actual appearance. Because there is no sign within the description following that there is anything like an internal roof support, and because of the box-frame structure of the building one can assume that the roof itself was executed as a common rafter. The ornamented 'square' beams that follow in the description are, as stated above, the wall plates and the tie beams. Stave churches from Scandinavia show similar carvings on the tie beams, for example, Humptrup (Germany), Hemse (Sweden), Södra Råda (Sweden) and Urnes (Norway) (Ahrens 2001, 45, 236, 262, 327).

The Faminator continues onto the description of the placing of the altar. Different to modern church description such as Visser (2001), who starts off from the entrance of the church, the Faminator begins with the most important part of a church, the altar. The author refers to the altar as being in gremio (Verse 553). 'The centre of the church' might be a proper translation in technical terms but it does not really hit the target. Taylor (1974) concludes in his study about Anglo-Saxon churches that "the centre" does not mean the geometric centre but anywhere along the central axis. *Gremio* can mean 'lap' or 'womb'. But even more important. the Medieval Latin word-list (Latham 1965) records that connected to ecclesia the word has the meaning of 'the bosom of the church'. If one takes a closer look at the meaning of gremio one will find it connected to the meaning of 'protection' and 'shelter'. One can even go so far as to call the altar the actual heart of the church. If the altar is the heart of the church then the chancel of the church embraces the altar just as the bosom embraces the heart. It can be argued that the 'centre of the church' is more likely to be the sanctum than the architectural centre. In fact the English word 'sanctuary' refers to a place of shelter from danger but more important to a place. Therefore by using a figure of speech the Faminator tells us that the only altar in the church is in the chancel of the church.

The following line of the verse suggests that Mass is celebrated at the altar. The fact that more than one priest celebrated mass may tell us something about the size and importance of the church, although one must keep in mind that it is very likely that the Faminator describes a part

of his own church here. As this is likely to be a monastic church, one can posit that there was more than one priest.

The following lines of the verse are confusing. This author agrees with Herren regarding an entrance from the west but this entrance may relate to the chancel and not to the church in general. The Faminator speaks of the sanctuary and this was surely separated from the nave. Verse 556 speaks about a 'wooden door that seals the warmth'. One can ask the question why it was so important to keep the warmth within the boundaries of the church. It is possible that the author is using a picture again and describing the sanctum, as a literal translation of strictis fotis could well be a description of the way the door was constructed (personal comment of Professor Picard, UCD). What the Faminator describes is simply a choir screen with a door, a partition that separates the chancel from the nave. In Bede's description of the temple he refers to the porticus as being on the outside. The porticus is of the same size and in front of the actual temple. But nevertheless inside the porticus are the patriarchs and the prophets (6.2). The porticus was designed for those who 'did not receive the promises but beheld and greeted them from a distance' (6.2).

If we imply the meaning of porticus onto the *Hisperica Famina* the Faminator refers to the nave. One has to keep in mind that until now there was no hint if the 'candle-shaped beams' that were covered in the inside of the building. This 'assembly of planks' however, could well be vertical planks that shield the inside. For this reason the chancel is visually separated from the nave. Hence the porticus is 'comprised'. It is likely that these planks are on all four sides, thus on the boarder of the nave and the chancel, in other words choir screens again. This screen has *pinnas* on the top and it is likely that another picture is drawn here and the 'wings' are in fact arches stretching across the choir screens as can be found in San Clemente in Rome or in other Continental churches.

It has to be said that the text has not been discussed as much as one would wish within an archaeological context, although Herren (1974) has tried to encourage archaeologists to examine the text because of its importance. He believes that the *Hisperica Famina* 'provides a solid

literary evidence for the existence of wooden churches with central altars in Ireland' (Herren 1974, 187), a view that had been proved to be incorrect

Harbison (1982) and Brady (1997) both offer a reconstruction of certain parts of the church. While some of Harbison's points are a little obscure. such as the interpretation of the pinnas as steeples 'standing at the top of each corner of the church' (1982, 627), or the idea of the porticus representing massive antae, others are more reliable such as the interpretation of the 'candle-shaped beams' as being similar to the one in Greensted, Brady's (1997) more recent work focuses on the placing of the altar, the porticus and the pinnas. His interpretation of the altar as being located along a central axis and not in the geometrical middle of the church is convincing and his conclusion about the porticus as an internal boundary is guite convincing. Nevertheless his assumption that the Hisperica Famina refers rather to a church than to a small building is correct, but this author cannot follow his argument based on the interpretation of supernam cameram as a room or a small croft. Browne's (1954) translation of a room is less than convincing if one bears in mind that the Faminator describes a church. His other theory that the pinnas refer to the gable roof trusses is persuasive without seeing the context of the text. As shown above the text can be divided into two separate parts. a description of the interior and one of the exterior. The line about the pinnas is at the end of the description of the interior; hence it is unclear why the author should describe the outside of the building, then the altar and the porticus.

One must ask the question was this church an existing church or imaginary church? Clearly this is not a description of a particular church but of a church par excellence. The text demonstrates the authors' knowledge of different churches and the way they had been built. But some interesting hints are in the text, such as the carved ornaments of the tie-beams and the construction of the roof. This text may help archaeologists to reconstruct excavated wooden churches in Ireland, if they can be found. Such a church as described in this text is hard to find because it is resting on the ground, so all that can be found is a shallow gutter or some form of foundation on which the building was resting.

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Late Iron Age/Early Medieval Burial Grounds

Claire Kavanagh

Abstract

The subject of this paper is the placement of late Iron Age/early medieval burial grounds within the landscape. It is argued that the actual locations chosen by contemporary populations for burial have not yet been adequately researched. An examination in a 2008 MA thesis showed the potential for a landscape study of these locations which may provide important additional knowledge regarding early medieval societies.

Introduction

This article is based on a thesis, Late Iron Age/Early Medieval Burial undertaken as part of UCD's 2008 MA programme in archaeology. A perspective explored in the thesis offered a possible key to accessing Early Medieval perceptions of death and burial through the examination of perceptions of the landscape as reflected by location and structure of contemporary burial grounds.

It frequently emerged in the related research that early medieval burial grounds were not only used for burial but also for a variety of other roles within the landscape and that late Iron Age/early medieval societies deliberately chose burial locations through which they could make statements regarding identity, ownership and power to others within the surrounding landscape. The locations and structural layout of burial grounds provided insights into the level of separation between arenas of the living and placement of the dead required by contemporary society. Changes that occurred in burial ground location and structure from pre-Christian to Christian transition show echoes of alterations in beliefs, ritual practices and in the actual experience of human use of the landscape itself.

Research history

Although there have been a number of studies of late Iron Age/early medieval burial sites and burials themselves, at the time of this 2008 MA study no previous research had yet focussed on the significance of the landscape positioning of these sites. The key works in the field of late Iron Age/early medieval burial are those of Elizabeth O'Brien (1990; 1992; 1993; 1999; 2003) and Nancy Edwards (1990), who both have provided important insights into the structure and possible evolution of early medieval burial grounds. However, by 2008, significant volumes of new evidence had been uncovered since those publications which resulted in a necessity for further expansive research and data synthesis.

The 2008 Early Medieval Archaeology

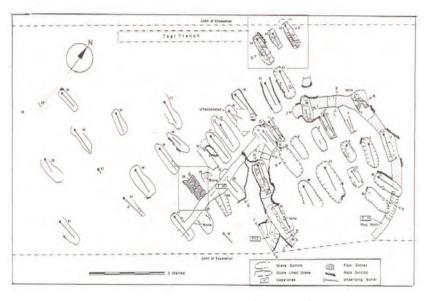


Fig. 1: Westreave penannular burial site enclosure, Co. Dublin (O'Brien 1999, 181)

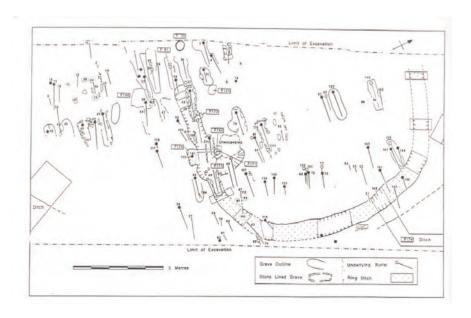


Fig 2: Colp West penannular burial site enclosure, Co. Meath (O'Brien 1999, 181)

Project (EMAP) completed by Dr. Aidan O'Sullivan and Lorcan Harney was in 2008 the most up to date publication to carry out an overall examination of early medieval burial taking newly excavated and researched data into account. The objective of that project was the creation of an early medieval site database as a basis for further research. Its published report discussed early medieval burial sites yet the purpose of the project was intended to allow only for limited interpretation of the evidence. The 2008 MA thesis was the first attempt at a landscape based study of late Iron Age/early medieval burial sites. A multidisciplinary Heritage Council/INSTAR funded project, 'Mapping death: People, Boundaries and Territories in Ireland 1st to 8th centuries AD', has since further examined early medieval burial with a landscape perspective (http://www.mappingdeath.ie/). PhD work, presently underway, is being carried out by Matthew Seaver, which is further examining burial sites found in association with settlement features of no known Christian association in the landscape (UCD School of Archaeology Website, http://www.ucd.ie/archaeology/research/phd/matthew seaver/). This should provide important insights to many aspects of this fascinating subject.

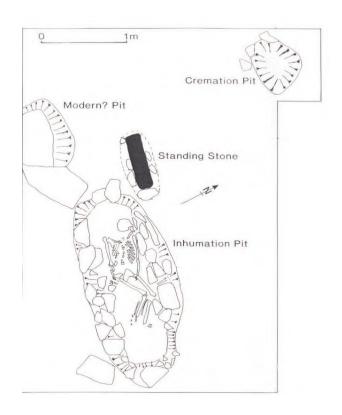
Form of late Iron Age/early medieval burial sites

The 2008 MA thesis looked into the burial period spanning from the fifth to the ninth centuries. It was already evident through previous research that massive variety in burial ground form existed during that transitional period. This thesis referred to burial site structures under the following headings:

- (a) Enclosed burial sites
 - Penannular burial site enclosures (fig. 1&2)
 - Annular burial site enclosures
 - -Enclosed sites with associated settlement evidence
- (b) Unenclosed cemeteries
 - -Isolated burials
- (c) Mound burials
- (d) Reuse of existing monuments for burial and as foci for burial

Research had also previously shown that cremation had continued as a minority practice until the fifth century as was evidenced for example at the site of Furness, Co. Kildare (Grogan 1983-84). The ritual use of inhumation became dominant in the late Iron Age period preceding the transition to Christianity. Inhumation was therefore the standard burial rite in practice in Ireland on the arrival of Christianity, continuing in use for early Christians and eventually becoming synonymous with Christian burial and identity.

Elizabeth O'Brien saw inhumation as initially being crouched and due to British influence. She outlined possible evidence for a transitional period in burial practices in Ireland through the contemporary use of cremation, crouched inhumation and extended inhumation at the Rath of the Synods, Tara, Co. Meath, where the three rites appear to have been used around the first/second centuries AD. Orientation of burial is believed as not being noticeably established in the early stages of the use of inhumation in Ireland and O'Brien believed that an absence of grave goods within the burials dates the majority to the fourth century AD onwards (O'Brien 1990, 37-42).



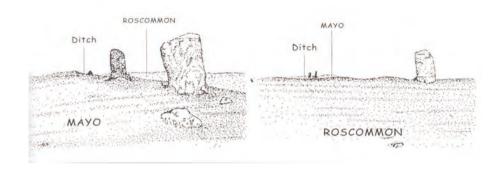


Fig. 3: Kiltullagh Hill, Co. Roscommon (Mayo border); Burial at standing stone (McCormick, Cribbin, Robinson, Shimwell 1995, 92).

Movement within the Early Medieval Landscape

In his 2007 paper, 'Walking with Anglo-Saxons: Landscapes of the Dead in Early Anglo-Saxon Kent, Stuart Brookes expressed his belief that models of "stratified geographical movements...embody crucial aspects of ideology, power and identity" (Brooks 2007, 144-153). It thus makes sense that late Iron Age/early medieval burial grounds would have influenced both movement and experience of movement within contemporary landscapes. Burial grounds likely functioned as territorial or route markers and often site locations may have facilitated observation of movement within the landscape. Evidence of non burial related activities at many cemetery sites show that the living population frequently made use of these locations for activities other than those of burial.

While a large variation in landscape positioning of late Iron Age/early medieval burial grounds was found during the research, some patterns also emerged. On examination of a sample of eighty-two sites with no known ecclesiastical associations it was found that a large number were located on gravel ridges, hilltops and slopes. Use was made of cliff areas and existing natural and artificial mounds while monuments already existing within the landscape were also reused. Two pre-Christian sites at Kilgowan, Co. Kildare and Kiltullagh, Co. Roscommon were placed on hills where a focus on pre-existing standing stones increased their visibility within the landscape. Another early medieval site at Kilnasaggart, Co. Armagh focussed around a standing stone and though classed as an ecclesiastical site in the study, could possibly have developed from an earlier burial/ritual site. It is clear that choice of burial location within the landscape was made with regard to the maximisation of site impact upon its surrounding area.



Fig. 4: Kileencormac (Cell Fine Cormaic, Co. Kildare) an example of site reuse, Christian burial site on top of a prehistoric mound (Smyth 1982, 47)

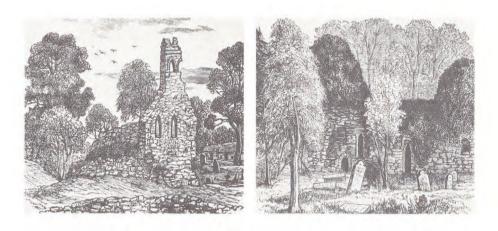


Fig. 5: Cloncurry (Cluain Conaire Tomain) and Laraghbryan (Lathrach Briúin). "Both in north Kildare and both lay just inside the sensitive border with the hostile Uí Néill kingdom of Brega in Meath. Cloncurry lay at one of the few crossing points between the Leinster and Uí Néill kingdoms which accounts for its choice for the 'great royal assembly' of 838AD attended by kings from northern and southern Ireland". An example of the many uses of burial places (Smyth 1982, 45)

The relevance of late Iron Age/early medieval burial to the human experience of movement within the landscape is best encapsulated relationships between routes of movement and burial sites. Both pre-Christian and ecclesiastical burial sites are frequently found to have had associations with some form of route-way, esker, road-way or waterway. In both the lives of St. Patrick by Tírechán and Muirchú, an episode refers to the burial of a pagan and a Christian at a roadside, significantly showing routeway positioning of pre-Christian and Christian burial sites and also a possible evolving of one from the other (De Paor 1996, 170 & 19). A number of ecclesiastical burial sites for example St. Lughadih, Domiskin, Co. Louth, have evidence of ancient roads running through them which may indicate a road that ran adjacent or through an earlier pagan burial site from which the ecclesiastical site may have developed. Such burial sites were clearly placed to maximise the experience of their presence within their contemporary and subsequent landscapes.

Landscapes of mortuary movement

On death an individual moves from a place of the living to one of the dead on both a physical and ideological basis. The landscape contains social memories for those familiar with it and thus provides a link to the past in a general sense and to ancestors in particular (Williams 2006, 179). landscape in which settlement occurred at any distance from the contemporary burial ground necessitated a physical mortuary journey through pathways of mortuary movement within the landscape. Even settlement/cemetery sites with contemporary burial phases required movement to a separate area of the settlement upon death.

The reuse of pre-existing burial monuments and abandoned habitations for late Iron Age/early medieval burial may evidence contemporary perceptions of specific places and alternative ideologies of places of the dead within the landscape.

The religious transitional period appears to have resulted in the movement, evolution or abandonment of burial sites. Although this thesis found that burial outside of Christian contexts continued as a minority practice as far as the ninth and tenth centuries and possibly even later in some circumstances, the fact that the majority of burials were buried in Christian contexts by the eighth century must bring us to question the repercussions of such change to the early medieval experience of the landscape and to perceptions of

mortuary movement within it.

The power of the dead within the landscape

Law tract evidence supports use of burial sites as boundary markers in late pagan Ireland and their use in establishment of land ownership. Charles-Edwards saw such procedures as being dependant upon contemporary beliefs that "the dead do not merely survive but may take an active part in the affairs of the living" (Charles-Edwards 1976, 83-85). That concept was further explored in the thesis with relation to the theory of Heinrich Härke (2001) which referred to the power of cemeteries, power within cemeteries and power over cemeteries (Williams 2006, 197). These concepts were seen as key to understanding motives behind landscape positioning of burial sites even if only in the consideration of the emotional power of burial grounds but also in the accessing of the political, territorial, ideological and mythical powers of cemeteries both within their contemporary and subsequent landscapes.

Conclusion

The 2008 MA thesis highlighted the need for extensive research in the area of early medieval burial which is now being further addressed. An overall synthesis of recent research and excavation data relating to late Iron Age/early medieval burial is overdue. Such work should be viewed as particularly relevant now that burial ritual and religious practices in modern Ireland are becoming again increasingly varied. The study of early medieval burial grounds within their contemporary landscapes is a means for assessing the last major shift in Irish burial rituals. This has been frequently studied in relation to evolution of a standard form of inhumation but can also be assessed through placement of burial ground within the landscape. This can further provide a basis from which to examine the character of the religious transition from pre-Christian to Christian in Ireland. Viewing late Iron Age/early medieval burial grounds as active sites within their contemporary landscapes and assessing the deliberate choice of their landscape placement emphasises their many roles of use within the landscape including those used to convey contemporary identity, power, ownership, memory, control over use of and movement within the landscape.

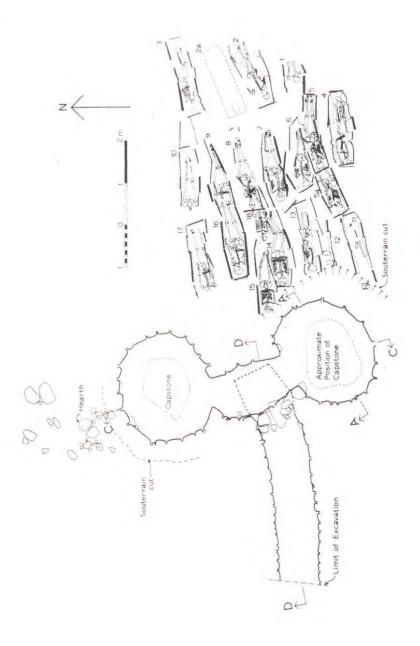


Fig. 6: Boolies Little, Co. Meath; Burials and Souterrain (Sweetman 1982-3, 43-57)

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The Round Towers of Ireland: Date, Origins, Functions and Symbolism.

Russell Ó Ríagáin

Abstract

The debate over the origins, function and date of the round towers of Ireland has been ongoing for a number of centuries. However, the majority of discussion has focused on their dating and possible continental origins, with little discussion of their function, symbolic significance, role in the exercise of medieval social power and the social relations behind their construction. They were not based on some pre-existing continental model. from Ravenna or elsewhere. They were not places of refuge as popular culture would have us believe, and it is argued here, as elsewhere, that these towers served as bell towers, although this does not preclude multi-functionality, the towers may well have served as reliquaries and storage areas. Christianity has always been a highly symbolic religion whose adherents are often highly adept manipulators of symbols. The possible role of sacred numbers in their planning and construction are discussed, in addition to the symbolic and ritual role of circularity itself. Round towers were and remain highly conspicuous monuments in the landscape, with an important role in the materialisation of social power relations, with the role of patronage by those controlling military, economic and political power resources in their construction particularly important.

Perhaps no monument conveys the image of the so-called land of saints and scholars more evocatively than the slender, elegant round towers found throughout the island of Ireland. While the debate over the origins, function and date of the round towers of Ireland has been ongoing for a number of centuries, the majority of discussion has focused on their dating and possible continental origins, with little discussion of their function, symbolic significance, role in the exercise of medieval social

power and the social relations behind their construction, upon which this paper will largely focus.

The Viking burning of the *cloictheach*² at Sláine (Slane) in 948/949/950 from the AFM/AU/CS is the earliest existing historical reference to the form.³ This may indicate that the form was relatively recent in origin at this point. There are only two extant references to their construction, at Clonmacnoise (AFM124, CS1124), and at Annadown (AFM1238).⁴ Any earlier dates assigned to round towers (cf. Barrow 1978, 42-4) must be discounted, on historical, architectural and archaeological grounds. While it has been possible to approximate them with the historical evidence using radiocarbon-dating (cf. Berger 1995), old wood effect has prevented their accurate dating. O'Keeffe (2003, 72) and Manning (1997, 12; 1998, 89) have shown the validity of art-historical dating methods, which enables the dating of a large proportion of them to the tenth and eleventh centuries.

Commentators have long sought the origins of the Irish round tower on the continent, with Rayenna mentioned most often as the probable source.⁵ However, many Italian sources date them to the ninth and tenth centuries (Benati & Salvatore 2002, 8-12),6 and McDonnell to the mid/late-ninth century date (1994, 74).7 If this is the case, then it is difficult to support the theory of an influence on Ireland from Ravenna. There is an alternative to the diffusionist model. Medieval towers, square and round, appearing across Christendom and the Islamic world may be due more to a similar mode of thought rather than the spread of an architectural form across a number of centuries. The link may have been cognitive rather than the direct influence of one region on another. although there may have been some shared collective sacred memory inherent in both religions, which were both outgrowths of a similar belief system and tradition, such as the tower at the Temple of the Mount. The towers may have been raised in tribute to God, and to inspire thoughts of heaven in the minds of those who saw them. Medieval religion was very visual. Diebold views early medieval art as having provided 'books for the illiterate' (2000, 9), with use made of other non-verbal symbolic systems, such as architecture and sculpture. This symbolically loaded conspicuous monumentality⁸ on the part of the builders, be they Muslim or Christian, could have been for the glory of their religious communities, themselves or their patrons.

A number of factors, both inter- and intra-regional could have influenced the decision to construct round-form towers, whether freestanding or not. It is more likely that both minaret and campanile were introduced within their communities for similar purposes, such as the regulation of prayer times and the need for the call to prayer to be heard by all those intended to hear it. In a period characterised by demographic change, where religious and secular settlements began to take on a more urban form in both areas, the call to prayer would have grown increasingly difficult to transmit. A solution to this was to issue this call from a height, thus increasing the distance over which it could be heard.

No serious scholar can dispute that Irish round towers functioned primarily as bell towers. The fact that they are referred to in the annals as cloictech on several occasions provides incontestable evidence for this (Stalley 2001, 30). O'Keeffe points out that 'they were associated with rituals of time marking and assembly, rituals that were unquestionably central to medieval monastic community life' (2003, 74). The demarcation of time is extremely important in any monastic community. Christian or not. It provides the main means for producing disciplined monastic subjects (cf. Foucault 1977, improvement of the audibility of the bell had distinct advantages for monks, as failure not to hear the bell was not accepted as an excuse in Irish monasteries (Rule of St Columbanus, Regula Coenobialis XII; Stallev 2001, 40).9 Reading through these rules, it is possible to see just how important prayer, and the discipline surrounding it, was to those in monastic communities. The form of bell used in these towers remains uncertain, with either a cast-bell and rope system in use, as was the case in later centuries, or a handbell (for a full discussion see Stalley 2001, 40-2).

Stalley points out that round towers were 'one more reflection of the socalled urbanisation of Irish monasteries, which was well under way by the tenth century' (2001, 40). They were necessities in communities where, due to their size and number of inhabitants, the call to prayer was growing increasingly difficult to hear. Issuing that call to prayer from a height greatly increased the chances of it being heard. For this reason multiple windows are to be found on the highest floor of the round towers surviving to that height. Their location, almost invariably in larger societal monasteries of great antiquity, and often in sites which would later become cathedral centres indicates the necessity for such measures.

Round towers most likely did have functions other than their primary function. They could have been used to house relics (O'Keeffe 2003, 74) and could even have had chapels (ibid, 75). The height of the towers might have provided additional powers to the relics, enabling them to protect the community from a height. As can be seen from the annals, they could on occasion be used as refuges. However, the popular interpretation of them primarily being places of retreat should be discounted. As O'Keeffe points out, populations would have fled rather than seek refuge in the confines of 'what were effectively enormous chimneys-in-waiting' (2003, 74). Indeed all authorities are agreed on this matter, and it will no longer receive attention in this essay.

Another possible function could have been storage. The raised door meant that a rather large potential storage space was available underneath. If given a sufficient coating of damp clay or earth along the walls, and if sealed from above, this space would have been ideal for grain storage. This is highly likely in centres of accumulation of agricultural wealth. Excavation making use of modern sampling techniques, or at least obtaining a core sample from the internal fill may well provide evidence for this. Unfortunately, the actions of nineteenth century antiquarians, such as Getty at Antrim and Armoy, have meant that the internal fill at the base of some towers has been removed. The other floors also might have been used for storage of valuables (Stalley 2001, 30), although the rendering would have been necessary to avoid dampness.

If they were used in this fashion, there was probably a more permanent method of entering the building than with a movable ladder. A strong possibility is the use of an elevated platform outside the door (Stalley 2001, 29). Excavations at Iniscealtra have shown up postholes outside the base of the tower (ibid). This might well indicate that the raised doorways were accessed in a similar fashion to raised doorways on various castle forms. They may well have descended around the circumference of the towers, making use of the put-locks from the scaffolding to stabilise their superstructure.

An assessment of the use of sacred numbers in their construction may prove fruitful approach to the symbolic role of round towers. There is no reason not to believe that Irish monks were any different than their Continental brethren when it came to sacred numerology and its application to their daily lives. O'Keeffe's suggestion that the windows surviving in original form point in the direction of the four cardinal directions, suggesting a symbolic direction of the call to all corners of the world (2003, 74) can only be limitedly applied. Barrow points out a number of exceptions to this; out of the 29 with surviving top floors, 11 such as Kells and Kildare with five windows, Kilmacduagh and Kilkenny with six, and that there are too many exceptions to describe four cardinal windows as standard practice (1978, 29). However, his theory might be applicable to the other 21.

Stalley points out that many round towers in Ireland approach 100 Roman feet in height¹² (2001, 39). The number 100 was regarded in Christian numerology as a perfect number (ibid). It was used as a sign of heavenly life and as representing the word of the gospels (ibid). Stalley also points out that the number 100 and its association with the gospels would have had a particular relevance for towers used to demarcate time in this way (ibid). The number 4 was also associated with the gospels in Christian numerology, and the fact that 21 out of 29 towers have four windows on their top floor (Barrow 1978, 29) may well be associated with this also. In Christian numerology, four is also the number of creation, being the fourth thing, after the trinity of father, son and spirit (Bullinger 1967, 123). It is also the number associated with the lunar phases, the great elements, the seasons, and is utilised throughout the Old and New Testaments (ibid, 123 ff). The five windows at Kildare and Kells may represent the five zones of the world in the medieval Christian mind (Eco 1980, 22). 13 and it might be that O'Keeffe's above theory may be applied here also. Five is also the number associated with redemption, the tabernacle and a number of biblical passages (Bullinger 1967, 135ff). The towers at Clonmacnoise and Tullaherin have eight windows on their reconstructed top floors. Symbolism may also be at work here. The number 8 was an extremely mystical number. It was the number of perfection (Eco 1980, 22) and also of the resurrection (Bullinger 1967, 200), among other meanings.

The ratio of height to circumference of each of the round towers approaches 2:1 according to Stalley (2002, 39). Stalley uses the example of the tower at Glendalough, 30.48m high and 15.30m in circumference, to illustrate this (ibid). Are there any other schemes in use in these edifices? O'Keeffe points out that the windows in towers often ascend clockwise, and that this may be in imitation of the pattern of procession (2003, 76). Each tower would have to be examined to prove this, but it may be a worthwhile exercise. The symbolic role of circular movements in conjunction with prayer and ritual is very important, and is visible in a number of cultures. It may help explain circularity inherent in passage tombs, hengiform monuments and other forms of ritual architecture (de Burca, D. 2007, pers comm.).

The valla surrounding ecclesiastical establishment were of circular or elliptical form also, which is very significant on many levels. The enclosed area may represent a symbolic womb, within the protection of which was located the sacred space of the monastery. The vallum also provided a circular pattern for prayer. The vallum also harked back to both the circularity of the City of God, ¹⁴ and to the circularity found everywhere in the Irish archaeological record, as did the round tower. The placement of such a prominent phallic object might have had important connotations for the subconscious minds of the inhabitants. It may have been an expression of the repressed sexual energy of the inhabitants of the monastery. It may also have provided a symbolic match for the vallum. Foremost, however, it was a bell-house.

The visual impact of these towers on contemporaries must have been staggering. They were presented with these 30m high tapering monuments pointing toward the heavens. It would have certainly been

possible to read their message from the landscape for contemporaries. The fact that they were located in long established institutions meant that the strong landscape message of these establishments was now further underlined by the presence of these towers. They displayed in no uncertain terms the power and prestige of the ecclesiastical establishment in which they were located.

In 1124 the cloictheach at Clonmacnoise was finished under the patronage of its coarb Gilla Crist Ua Maoileóin (AFM, CS) and Toirdealbach Ua Concubair (CS).15 The linking of Ua Concubair to the erection of the tower is significant, as it provides evidence for royal patronage for innovative ecclesiastical building, as can be found across the continent at the time. In Ireland, patronage of this form extends back at least to Flann mac Mael Sechnaill's patronage of the Dámliac erected at Clonmacnoise (CS909). In both cases, a connection with buildings as striking and in a location as prominent as Clonmacnoise in the minds of contemporaries would have greatly boosted the status of these already powerful kings. The tower would have been seen by all travellers on the Shannon and on the Slighe Mór passing the site. The materiality of these buildings is extremely important in this respect, as stone buildings are built to last a long time, and perhaps these patrons sought to encode a message conveying the permanence of their rule into the landscape via their association with these buildings. The same may be true from the perspective of the church, with these stone buildings being utilised to convey messages of permanency.

O'Keeffe draws attention to the use by members of the Anglo-Saxon of the tower church at Earls Barton, where, as part of their process of legitimisation, the local thegns appeared at the upper doorway to be viewed by all (2003, 76). He applies this to Ireland, where kings lead processions carrying relics into the towers where they then appear at the doorway with these relics in order to legitimise their authority (ibid). There is always a danger in applying a model from one culture to another in this fashion. The doors of Irish round towers would not allow the king to stand in a suitably dignified position, for one (FitzPatrick, E. 2008, pers comm.). Also, the doors of round towers usually pointed back towards

the main church of the establishment, which would have obscured the view of the king had he partaken in such an act.

The manipulation of resources, economic, spiritual and organisational. necessary for their construction would have been another message not lost on contemporaries. Royal patronage associated a king in the minds of others with the ability to manipulate such resources. The later years of the first millennium saw a period of royal aggrandisement in Ireland. where the network of petty-kingdoms, or tuatha came to be superseded by the rise of dynastic over kingdoms, of which there were roughly twelve by the tenth century (Ó Corráin 1972: Ó Cróinín 1995: Edwards 1990: 8). These kings may well have done this on a diversified economic base. having switched from a system of wealth and status based on cattle to one based on a combination of arable and pastoral agriculture with trade (McCormick 2008). They may also have engaged in a proto-feudal protection racket, taxing economic activity in the region in which they had established a monopoly over the legitimate use of force (cf. Weber 1978) I. 54. Elias 2000). The appearance of Hiberno-Norse derived silver in settlement sites associated with Gaelic elites also would have bolstered the power of those kings who had access to such networks of interaction (cf. Sheehan 1998, 2004).

Patronage of such prominent monuments as round towers and large stone churches may well have given an expression to the edifice complex associated with the concentrated accumulation of wealth and power, easing the status anxiety (cf. de Botton 2004) associated with peer-polity competition (cf. Renfrew 1986). Ireland in this period was characterised by an "elimination contest" between competing kings, ¹⁶ similar to that identifiable in post-Carolinian Francia (cf. Elias 2000, 263; Bloch 1961). Furthermore, through patronage it was possible for the secular elite to legitimise their hegemony via the collusion of the shapers of the contemporary symbolic universe (system of explanation of the world), reifying their socially acquired status and making it seem as natural as the sun's position in the sky.¹⁷

Round towers also may have been built without royal patronage, as many of the ecclesiastical establishments in which they were built were

extremely wealthy by the standards of the time. Ecclesiastical sites have been associated with milling and arable agriculture (Stout 1997), and this would over time have lead to the accumulation of wealth. It is as yet unknown exactly how many sites had taken on proto-urban characteristics, but sites like Armagh and Clonmacnoise saw a good deal of settlement activity in the period of round tower construction, with attendant craft specialisation and related activities such as markets and long distance trade (Doherty 1980, 1982, 1985; Valente 1998; Swift 1998; Bradley 1995, 9; Edwards 1990, 107-112; Barry 1987: 30).

That round towers coincide more with the urban settlement phase of Norse activity in Ireland is significant. The tenth and eleventh centuries were characterised by a Viking inspired growth in long term trade links and rise of a silver economy. This continued into the twelfth century as Dublin consolidated its dual status at the apex of a localised central place hierarchy and as a nodal point in a vast interconnected urban network brought about by the Viking inspired contraction of conceptual time and space. Sheehan (1998, 2004) has shown that the vast majority of ninth and tenth century coin hoards on native Irish sites have been from monastic sites. Therefore, economic links, either direct or indirect must have been in operation between monastic sites and Hiberno-Norse traders in this period, links which most likely continued until the Anglo-Norman arrival. This silver could have been used to pay masons and artisans to build the stone churches and round towers of the period which underlined their status as centres of accumulation and redistribution in addition to their ideologically derived status. Centres such as this have been characterised by large scale monumentality throughout history and prehistory. From this perspective, round towers served as a material embodiment of the status of the sites within which they were located.

Irish round towers of the tenth century onwards were not directly descended from some continental template and were primarily instruments for the demarcation of time for ritual purposes. If they had any other functions, they were all secondary to this. They were highly symbolic; they were impressive structures that conveyed messages of spiritual and temporal power to contemporaries. There may also have

been subconscious thought processes at work in their construction, and indeed in the layout of their entire ecclesiastical establishment. There may also have been other functions for these towers, such as storage. The popular view of their being used primarily as places of refuge is unfounded, and they may have even been built as an indirect consequence of the economic impact of Hiberno-Norse urbanism. They were built at a high point of the power of many of the ecclesiastical sites within which they were located, a power which would come under threat in the period of reform of the Irish Church, the introduction of new Continental monastic orders and new Anglo-Norman secular power holders.

1 (

¹ Cf. Petrie 1845; Keane 1867; De la Motraye 1732, and the discussions in McDonnell 1994; Barrow 1979; Lalor 1999.

² There are various forms of this word, due to the changes in the Irish language over time, such as cloictheach in the AFM, cloictech in the CS and other less common spellings are all to be found

³ The Irish annals mainly refer to disasters striking the various round towers.

⁴ However, the tower at Annadown, of which there are no visible remains, may not have been of the regular cylindrical form associated with the *cloictheach* tradition (Petrie 1845, 395; Barrow 1978, 42-3).

⁵ See McDonnell 1994 for a full discussion of this debate, cf. Stalley 2001 for a later regression into this old orthodoxy.

⁶ This is actually an engineering report on campanili from the University of Pisa, but it has an excellent contextualisation.

McDonnell assigns a mid-ninth century date to S. Apollinare Nuovo, with that at S. Apollinare Classe slightly later. It should be noted that the dates of the adjacent churches themselves, which date to the sixth century should not be confused with the much later campanili, which has been done in a number of Irish texts.

⁸ I am adapting Veblen's term conspicuous consumption for use to describe monumentality.

⁹ 'Et qui non audierit sonitus orationum, XII psalmos' under Diversitas culparum diversitatis paenitentiae medicamento sanari debet. Itaque, fratres karissimi, XII

¹⁰ Stalley got his information from the late Liam de Paor, who excavated the site, and who

Stalley got his information from the late Liam de Paor, who excavated the site, and who also held a similar view of the possibility of there having been a semi permanent entrance structure.

¹¹ Of these, Clonmacnoise and Tullaherin had eight windows, the results of remodelling after their initial construction.

^{12 97} British feet

¹³ While it is highly unorthodox to use information from a work of fiction, Umberto Eco is one of the world's foremost Semioticians, which he uses throughout his work. It is a far safer and more reliable source than the internet.

 ¹⁴ Cf. Augustine's *City of God*. Also, Doherty 1980, 1982, 1985; Swift 1998; Valente 1998
 15 The reference to this tower as *an Cloicthech Mór* might be significant if it wasn't for the fact that the *Cronicon Scottorum* was compiled after Clonmacnoise's other tower, that of Temple Finghin, had been erected. Otherwise it might have been tempting to postulate that there

was some form of nationwide hierarchy in tower form, rather than just a hierarchy within the

confines of Clonmacnoise.

16 A true picture of the extent of this can be gained from reading through any of the Irish annals with entries dealing with this period.

17 The concept of a symbolic universe is taken from Berger & Luckmann 1967, hegemony

from the writings of Gramsci, and reification from Lukaćs 1968.

Acknowledgements

Conleth Manning, National Monuments Service, Dublin for his comments on an earlier draft and discussions on the topic in general, Dr Elizabeth FitzPatrick, Dr Christy Cuniffe, Danny Burke and David Donnellan, all NUI Galway, Ben Ruddy, Trinity College Dublin for their helpful discussions and comments on the topic, and my supervisor at the University of Cambridge, Dr James Barrett for his encouragement and advice

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Turning Stone into Bread: Harrylock Millstone Quarry, The Hook Peninsula. Co. Wexford.

Niall Colfer

Abstract

This paper provides an examination of the post-medieval industrial millstone quarries on the Loftus Estate, located on the Hook Peninsula, Co. Wexford. Detailed analysis will discuss how these quarries are monuments to everyday existence in the landscape. The transformation of the local Old Red Sandstone into millstones played a major role in the local economy of these areas which in turn ran parallel to being assimilated into a nationwide industrialisation of quarrying and agriculture.

The lack of research undertaken on millstone quarries in Ireland has ensured that a fundamental part of the post-medieval industrial and agricultural landscape in this country is neglected and to a large extent undefined. Issues to be addressed include the techniques used to transform a "rough-out" (Rynne, 2006) piece of quarried stone and qualities needed in bedrock to manufacture a functioning millstone. The distribution of both the coastal quarries and the millstones in the wider landscape will also be discussed. What were the origins of the millstone quarries during the medieval period and was their nationwide demise in the late 19th and early 20th century gradual and what were the reasons behind it?

The millstone is a simple circular object that links the development of industry, agriculture and society in a way no other stone object does. Since the prehistoric era, stone has been quarried to provide tools with which to process cereals. This practice of bedrock extraction serves as the origins of the industry under discussion here, which reached its zenith during the

post-medieval period due to advances in technology and demand for millstones. It is largely the quarries, which still survive *in situ*, that provide the story of the formation of this industrial landscape and the people who worked and lived on it. The circular scars of the removed millstones, as well as the broken and unfinished examples, provide a direct link to the stonemasons who practiced a craft in often unseen and isolated places.

The Hook Peninsula serves as an ideal case study from which to gain an understanding of the industry that provided millstones to the 165 working mills recorded in Co. Wexford on the 1st edition Ordnance Survey maps of 1841 (Hogg, 2008). Having an underlying bedrock of limestone extending northwards from the southern tip of the peninsula for about 6.5 kilometres, and to the north a band of Old Red Sandstone 2 kilometres in width (Tietzsch-Tyler & Sleeman, 1994), there were two types of stones that were harvested intensively (Fig.2). As part of the Loftus Estate, the Hook provides a microcosm of the quarrying industry both economically and culturally in 18th and 19th century Ireland.

The quarrying of Old Red Sandstone was the extraction of a local stone for a specific purpose, which was the production of millstones in quarries at Harrylock, in the townland of Templetown on the western side of the peninsula, and in a quarry known as 'Millstone Hole' in the townland of Graigue Great, directly opposite to Harrylock on the eastern side of the Hook (Fig. 1b). Both situated on coastal outcrops, these quarries provided a highly specialised and localised use of stone, from which the instantly recognisable 'Harrylock stone' millstones were transported by sea. This practice played a major role in the local economy of the Hook, which in turn contributed to a wider, national pattern of industrialisation of quarrying and agriculture as "particular sources of rock became widely known for their suitability of their product for millstones, having the necessary qualities of hardness, coarseness and toughness" (Tucker 1982, 191). This article will focus on Harrylock quarry on the western side of the Hook (Fig. 1b).



Fig. 1a : Hook Peninsula Location



Fig. 1b : Millstone Quarry Location

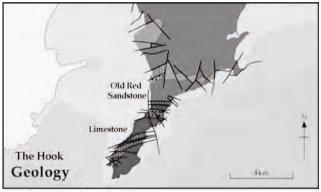


Fig. 2 : Geological Map (after Colfer, 2004)

Harrylock farmhouse cluster and quarry

Historical references suggest the extraction of millstones at Harrylock since the medieval period. The earliest reference to the use of a windmill, and therefore a millstone, comes from an early 14th century inventory of the possessions of the Knight Templars who were based in Templetown which was located 1.5 kilometres north of Harrylock quarry, and where their settlement was listed as being in need of "iron for the repair of the broken sail of the windmill, two shillings and six pence" (Hore 1900-11, 277). A navigational chart of Waterford Harbour prepared by Francis Jobson in the aftermath of the Spanish Armada in 1591 also shows a windmill at Harrylock.

An aerial photo of Harrylock taken in 2000 by the Ordnance Survey of Ireland (www.osiemaps.ie) clearly shows the indentation of the Old Red Sandstone quarry on the coastline (Fig.3). When this photo is compared 1st with the OSL edition map (sheet no. 49) of 1841 (www.irishhistoricmaps.ie), the indentation representing the quarry is smaller, suggesting an intense period of activity in the second half of the 19th century (Fig.3).

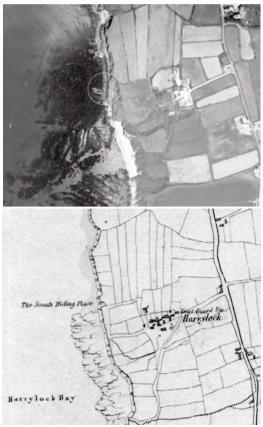


Fig.3. Aerial photo of Harrylock farmhouse cluster and quarry (circled)(OSI, 2005) and Ordnance Survey 1st Edition of Harrylock (OSI, 1841).

The presence of a farmhouse cluster, which have their origins on the manors of the medieval period (Colfer, 2004), overlooking the cliffs at Harrylock, suggests that the stone was worked there since its establishment (Figs.1b & 3). The occupants of the cluster farmed in dispersed plots of land in the surrounding fields (ibid), but furthermore, the knowledge of extracting and cutting Old Red Sandstone on the Hook was a specific aspect of the community who lived and worked at Harrylock, from where stonemasons

also travelled the 1.75 kilometres to the millstone quarry at 'millstone hole' in Graigue Great. The quarrying of Old Red Sandstone, while part of the "taskscape" (Ingold, 1993, 158) of the occupants of the cluster along with agriculture, must also have been central to the economic and traditional life of the local stonemasons.

The laneway that links the farm cluster to the coast is evident on the 1st edition OSI map of 1841 (Fig.3), and although very overgrown it is still extant today. The trackway cutting through the grass and scrub on the cliff-face to the quarry is still very much visible, and remains as a physical representation of the experience of the quarrymen and stonemasons who worked there.

The track way leads to the coastal outcrop of Old Red Sandstone and to the quarry itself, which is an area approximately 50 metres in length and corresponds to the man-made indentation on the coastline visible in the aerial photograph mentioned above. The quarry is bounded on its eastern side by the quarried cliff face, and the sea abutts the quarry at high tide on its western side, leaving an industrial zone 10 to 15 metres wide that has been quarried out of the coastal outcrop.

The Old Red Sandstone consists of alternative layers of fine-grained sandstone and a darker coarse conglomerate, which contains a high density of small rounded quartz pebbles, usually under 2cm in dimension (Tietzsch-Tyler & Sleeman, 1994). Very similar in make-up to the 'millstone grit' of the Peak District in Derbyshire (Tucker, 1985), the coarse conglomerate was exclusively used to manufacture millstones at Harrylock.

Central to the placement and workings of the quarry is the natural jetty, known locally as the 'ould key', from which millstones were transported (Fig.4). This measures 30 metres in length, and lies on an east to west orientation into Waterford harbour. On the northern side of the jetty, which is a mere 1-1.5 metres in height, the boulders and stones have been removed to increase height and safety of access. A foreshore area roughly

20 metres in width, consisting of sand and boulders separates the jetty from the main quarry.



Fig 4. The 'ould key' at Harrylock with Waterford Harbour in background.

Millstone Production

Throughout the surveyed area of the quarry at Harrylock there is evidence of millstone making, in the form of monolithic millstones in various stages of production, broken millstones and also the circular hollow or 'dish' from where the millstones have been extracted from the rock. In all, 12 millstones were located at the quarry, one of which is still attached to the bedrock. Seven partial dishes were also found. Perhaps the most informative features, in terms of production, are four complete dishes set out in a semi circle on a prepared flattened platform, 10 metres from the northern end of the surveyed area. These dishes also contained the residue or the 'scar' of the removed millstone, which in some cases was quite extensive and were initially thought to be unfinished millstones (Fig.5).

Various methods of cutting millstones from bedrock have been recorded in millstone quarries, many of which are dictated by the placement of the quarry and the conditions under which the stone is cut, such as in the mines of the Eifel Region of Germany, where the dish was cut into the ceiling and a pick was worked around the base of the stone until gravity took effect (Major, 1982).



Fig.5. Dish and scar of removed millstone.

At Harrylock, a circular trench was cut around the selected piece of sandstone (which was probably marked out using a piece of chalk and string), which, once the "rough-out" (Rynne, 2006) millstone was removed, created the dish (Fig.5). The number of unfinished and discarded millstones may indicate that the suitability of a piece of stone may have been difficult to ascertain before extraction. At Harrylock, wedge pits (Fig.6) were made in the intended millstone with the aid of a handpick, into which wooden pegs were inserted. The incoming tide, or water poured into the trench caused the pegs to swell and the resulting pressure split the rough-out millstone from the underlying bedrock (Colfer, 2004). A similar method was recorded in west Ulster where sticks were dried before being packed into the holes at the base of the proposed millstone, where they were either submerged or set on fire in an effort to crack the bedrock (Cunningham, 1998). The process of extracting millstones at Harrylock was recorded by Rutty in 1772 who described how the stonemasons "poole or cleave the rocks with wedges and bring them to the form of millstones with picks and pickhammers (for no chizzel will cut them) and they are very sound and grind corn clean and well: and I have known good walls to have been built of this stone: for they dress tolerably well with the hammer and bind hard in their mortar" (Rutty, 1772, 135).



Fig.6. Wedge pit.

The use of wedge pits to extract millstones at Harrylock could be seen over a large area within the surveyed quarry. This area measured approximately 50 metres in length, 10 metres wide and up to 3 metres in height. As no natural platforms of coarse Old Red Sandstone currently exist either side of the survey area, it is logical to deduce that up to five metres of clay, loose stone and fine Old Red Sandstone was dug out over the more valuable coarse stone as the coastal outcrop was gradually quarried under the cliff face. The wedge pits at Harrylock, of which there are two sets of examples where the millstones have not been removed, are set 0.20 metres apart from the centre of one pit to the next. One loose stone with a plan of a finished wedge pit imprinted on it, shows it to be triangular in shape, measuring 0.28 metres in depth and 0.20 metres wide at its opening. This method of cutting stone was laborious and quite often resulted in rough fractures, many of which can be seen in the dishes of Harrylock.

Although the majority of the millstones at Harrylock were produced in the above manner, close inspection reveals two ways in which the natural formation of the Old Red Sandstone was taken advantage to minimize

physical effort. One millstone, which still survives attached *in situ*, is cut into the top edge of a natural fracture arc in the bedrock, leaving no trench required on the open side, which would immediately reduce the work required by at least one third.

In an effort to minimise stone cutting, the trench surrounding a removed millstone was cut through the fault line between the two kinds of Old Red Sandstone, so that the millstone, which is cut from coarse stone, can be separated from the bedrock exactly where the coarse meets the fine stone, making the process easier and also producing a flatter finish on the stone (Fig.7).

As a result of the erosion process, large pieces of unquarried conglomerate are strewn across the foreshore of the quarry area. One unfinished millstone was located in this area. It is possible the stonemasons worked these large pieces of loose stone, much in the same way that single stones, or 'daystones' were used to produce millstones on the open moors of the Peak District in Derbyshire (Stanier, 2000).



Fig.7. Unfinished millstone cut on natural fracture of Old Red Sandstone bedrock.

When analyzing the millstones of the Peak District, G.D. Tucker identified the stages of millstone production once the rough-out has been removed from the dish, which can be applied to the examples at Harrylock:

Stage one: the circular face plane on the top of the stone is cut.

Stage two: the centre hole, or 'eye', is marked out and cut through half the final thickness of the millstone

Stage three: the stone is turned and the convex side is cut. The jagged and uneven scars in the dishes at Harrylock would indicate that the corresponding lower surface on the removed millstone would be similar.

Stage four: the centre hole is completed.

Stage five: the edge of the millstone is cut (Tucker, 1985).

Once the above procedures are carried out the millstone is referred to as a "cut-out" (Stanier, 2000, 52), as there is no more work at the quarry to be performed on the millstone. The final job to be carried out was the 'dressing' of the millstone, which was not carried out at the quarry, but at the mill itself. This job entailed the carving of grooves in the millstone, known as 'lands' and 'furrows'. Once the pair of millstones were moving these created a scissor-like action for cutting open the cereal (Rynne, 2006).

Harrylock Quarry Survey

The variation in the size and diameter of the millstones at Harrylock leads to the conclusion that each stone was made for a specific mill of a certain power and capacity. By examining the stages of production, however, a rough pattern emerges. The four examples of a dish containing a scar all measure 2-2.15 metres in diameter. The width of the trenches surrounding the scar and removed millstone is 0.25-0.30 metres. All scars, and therefore all rough-outs in these examples are 1.5 metres in diameter. The trench depths, which vary between 0.30-0.40 metres, when compared to the depth

of the scar indicate that ample room was dug out below the point from which the stone would be cut, in order to be able to cut the wedge pits into which wooden wedges would be inserted.

The remaining broken and unfinished millstones at Harrylock measure between 1.2-1.4 metres, indicating that either the rough-out was made smaller once extracted, or the millstones produced from the rough-outs measuring 1.5 metres in diameter were transported to the mill they were designed for. The depth of the millstones ranges from 0.2-0.3 metres, with one example finished on both sides having a depth of 0.20 metres. There are five millstones with centre holes, which give an average diameter of 0.20-0.30 metres.

A set of millstones located on the jetty at Harrylock measure 1.40 metres in diameter. Wider than the other examples at the quarry, and lying there as if awaiting collection, one of these stones is broken and so both were abandoned (Fig.8). This set indicates that both the 'bedstone', which formed the base of the pair, and the 'runner stone' into which the grain was fed were produced at Harrylock (Hazen, 2001). The three millstones of Old Red Sandstone at Dungulph watermill on the Hook Peninsula all measure 1.40-1.55 metres in diameter, with the depth of the stones and the diameters of the centre holes all corresponding to the features of the millstones at Harrylock.

All of the millstones at Harrylock correspond to a description of the 19th century "modern type" in the Peak District, which are defined as cylindrical stones. One millstone, the aforementioned example waiting for collection on the jetty (Fig.8), may belong to the "mushroom type" due to one side of the stone being highly convex, and date to the early 19th century (Tucker, 1985).



Fig.8. Mushroom type 'runner' millstone with 'bedstone' (left).

Transport

Hook millstones were not unusual in that they were transported by boat, a common practice in Ireland. For example, the jetty in Newcastle, Co. Down, was built in the early 19th century, and from here millstones made in the nearby Mourne Mountains were sent to their intended mills (Evans, 1978). An important distinction, however, is that Harrylock millstones were transported by sea directly from the quarries where they were made.

As mentioned previously, the 'ould key' at Harrylock was used for boats to get as close as possible to shore to load their cargo. At low tide the millstones were manoeuvred to the side of the jetty and were strapped underneath a small boat. The rising tide lifted the boat and stone which was then taken under the boat to its destination (Colfer, 2004).

Tools

The tools used by the stonemasons at Harrylock survived in an outhouse of the farm until the latter years of the last century, when having being out of use for so long they were discarded (pers comm. Aiden Devereaux, farm owner). The millstone-makers metal tools were simple but effective, as there is no evidence of pneumatic drilling or the blasting of rock being used at Harrylock.

A list of tools used by the millstone makers of the Peak District included the pick, kevel (for rough-hewing or breaking stone), maul (heavy hammer), punch, wedge, pitcher (bar for making holes), hammer, axe, reamer and plug and feathers (Stanier, 2000). Although not all tools listed here were used at Harrylock (such as plug and feathers), it is likely given the similarity of the stone and the job at hand that they include many of the tools used on the Hook.

These iron and steel tool used by the stonemasons would have been made and repaired by a local blacksmith. It is likely in the case of Harrylock, that the forge engaged in this activity was located in the farmhouse cluster.

Conclusion

The stonemasons of Harrylock had an extensive knowledge of the form taken and techniques used to work and shape the band of Old Red Sandstone stretching across the peninsula. Their relationship with the stone was economic and industrial but was also personalised through an intimate knowledge of the stone, which was passed on through generations as a trade and a means of making a living.

Throughout the 19th century 'French Burr' millstones were extensively used throughout Britain and Ireland and provided competition to locally quarried examples. The introduction of cheaper more efficient synthetic millstones at the end of the 19th century signalled the end of the millstone quarries on the Hook and throughout Europe. Due to the importation of flour, two thirds of Irish floor mills had gone out of business by 1885 (Rynne, 2006), signalling the end of a way of life that had lasted for centuries. The importance of these quarries in Ireland to date has been underestimated and "it is very fitting that archaeologists begin to document the quarries that produced these important stones" (Hockensmith, 2009, 5).



Fig.9. A 'cut-out' millstone.

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The Murder of Murchad Ua Máelsechnaill: A Re-examination of the Irish Round Towers

Nienke van Etten

Abstract

This paper will examine the murder of Murchad Ua Máelsechnaill, king of Mide from 1073 until his death in 1076, and high-king of Tara for three days. He was killed by Amlaibh m. Máelán, a son or grandson of the king of the Gailenga. The murder was committed inside the round tower at Kells, Co. Meath. I will explore the previous historiography of the buildings and examine why Murchad Ua Máelsechnaill had been inside the tower at the time of his death. The king's death inside the round tower at Kells clearly calls for a reexamination of the function(s) of the round towers.

While many scholarly studies concerning round towers have been conducted over the past three centuries, the intended purpose of the buildings remains uncertain. Many scholars have accepted Petrie's conclusion that the round towers were primarily intended as bell-towers (Petrie 1845, 2-3). Yet, due to only a few annalistic entries, which refer to deaths within these buildings, it has remained the popular opinion that the towers may have functioned as places of refuge. This theory has often been disputed by the scholarly community. Recently, however, this argument has been revisited by academics. The round towers perhaps functioned as places of sanctuary and could thus have provided at least sanctuaried refuge (Lalor 1999, 70; O'Keeffe 2004, 93-110). While this theory does not seem supported by the archaeological and historical records, it is nonetheless an interesting assumption, and it calls for more research into the matter.

According to George Petrie (1845, 2-3; 363), the *cloigtheachs* were the bell-houses of the medieval monasteries. Bells were of considerable importance to the medieval Christian. Hand-bells often became relics and were subsequently enshrined. From the annalistic record it becomes clear that the round towers also held relics. The veneration that relics received should not be underestimated. The buildings in which these relics were kept would also have been of considerable importance.

The death of Murchad Ua Máelsechnaill, king of Mide (r. 1073-1076), and king of Tara for three days only, inside the tower of Kells is of interest here. The murder of the king inside the monastic building poses some problems which will be addressed. It may be that Murchad had entered the round tower, perhaps to validate his high-kingship in the presence of relics. A wild suggestion perhaps — but in light of the historical record it is a possibility. The historical record certainly does not seem to support that Ua Máelsechnaill fled into the round tower for sanctuaried refuge.

George Petrie's nineteenth-century findings are still considered to be valid. and very little revision of his conclusions has since been performed. The monasteries steadily growing in size since their respective foundation soon became the Irish equivalent of proto-towns and were thus trading places and places of craftsmanship (Doherty 1985, 67-8). Due to the noise within and the size of the monastic sites, it would certainly not be strange to suggest that large towers were built to ring the larger bells that were needed to bring the congregation to mass from the tenth century onwards (Manning 1995, 13, 44; Stalley 2000, 14-6). In support of this theory it can be noted that hand-bells seem to disappear from the archaeological record around AD900. While some hand-bells were still produced as late as the twelfth century, the production certainly declined after AD900 (Bourke 1980, 61). Interestingly, this is the same date that has been suggested for the appearance of the round towers in Ireland. It is also important to note here that by the same date bell towers with large bells were introduced throughout Western Europe. The towers probably made their way from Rome or Ravenna, where they appeared a little earlier (Fisher 1969, 23). It has been argued by those who oppose the idea that the towers were used as bell towers that no large bells were recovered. The annalistic record, however, refers to the presence of bells in the round towers. The metal from which these bells were made was extremely valuable. Therefore it seems likely that the larger bells were melted when their associated monasteries fell out of use, so that the metal could be reused (e.g. AFM 1552; Stalley 2000, 14-16). The disappearance of the large bells from the archaeological record can thus be explained.

Objections have occasionally been raised to Petrie's suggestion that the cloigtheach were the bell towers of Irish monasteries. Sir William Wilde suggested in 1870 that the word cloiatheach had been subjected 'to the erroneous notion that it meant the habitation of a large swinging bell hung in the top of the structure', instead he argued that 'this name is derived from their subsequent use as repositories for the small sacred bells used in the neighbouring churches' (Wilde 1870-1, 47-8). This is an interesting assumption. Bells already existed in the classical world and it was thought that the objects had the power to chase away evil spirits. In Christian times, the bell retained its magical character (Cabrol & Leclerg 1914, cols. 1961, 1963, 1967-9). A saint's bell in the so-called 'Celtic' Church became an extremely valuable relic after the saint's death. It was believed that possession of these bells would bring victory in battle (Cabrol et al. 1914. cols. 1985-9). Furthermore, hand-bells were part of a senior cleric's paraphernalia. The enshrinement of many hand-bells would also indicate their importance to the early Christian Church. This may also explain why, if large bells were indeed hung from the top of the towers, all these larger bells have been lost, while their smaller counterparts have survived. The larger bells were simply not credited with the same amount of veneration that the hand-bells had received. Sir William Wilde, despite many flaws in his article, has made a plausible suggestion. His assumptions about the round towers are, however, not entirely accurate. A gloss on the seventh grades of the Church in the eighth century Irish law tract Uraicecht Becc explains the term aistreoir (i.e. 'janitor'), the second grade of the Church (ALI V.22.6). The honour of the grade of aistreoir is dependent on whether he rings a bell in a 'bellhouse' (cloq cloiatige), or whether the bell he rings is a hand-bell. In light of this gloss, it would be impossible to argue that no bell ringing took place in the round towers. Furthermore, it seems that if the round towers were only intended to function as treasuries, their design would be peculiar. It seems odd that they would have been constructed in such a way if they did not function at all as bell towers.

The recorded violence against the towers in the annalistic record has led many scholars to believe that the round towers were more than simply bell towers. George Petrie (1845, 360-9) also suggested that the small, elevated doorway would have been an inconvenient architectural feature if the towers were solely used as bell towers. He thus argued that the towers would also function as a temporary refuge in times of need. However, it is no longer accepted that the elevated doorway is a defensive feature. The round tower at Scattery Island, for example, has its doorway at ground level, yet the monastery was attacked frequently (Stalley 2000, 40). Moreover, the round towers would be a death-trap to those who sought refuge inside it. Furthermore, Petrie suggested that access was by a ladder that could be pulled into the tower in times of crises. Yet, due to the low height of internal floors, it would be extremely difficult or even impossible to pull in the ladder (Lalor 1999, 68). It has been suggested that ladders could have been made of rope, and due to the nature of the material, absence of these in the archaeological record need not cause surprise (Lennox Barrow 1979. 26). Excavations at the tower of Iniscealtra in Co. Clare have revealed post holes outside the base of the tower, which suggests that perhaps a wooden platform or wooden stairs would at one time have been attached to the doorway. This could indicate that the towers may have been accessed by semi-permanent stairs leading up to the doorway (Stalley 2001, 29). It is certainly plausible that other towers would have been accessed in the same way. If this is indeed so, the elevated doorway would most likely not have functioned as a defensive feature.

Some scholars have argued that the elevated doorway was simply to aid the construction of the building. Doorways at ground-level would weaken the base (Stalley 2001, 30). Others, however, have proposed that the doorways were slightly elevated to represent the heightened sanctity of the building (O'Keeffe 2004, 99-102). The buildings may also have had

elevated doorways to prevent casual theft (Lalor 1999, 69). This is certainly a plausible suggestion. It has already been suggested that the round towers also housed relics. From the tenth century onwards, due to a rise in urbanism and trade, there was an increase in casual theft in Europe (Murray 1978, 65-8; Doherty 1985, 69). The monasteries too were targeted by robbers, who were tempted by the churches' riches (e.g. AU1007.11). It is certainly possible that a rise in casual theft persuaded the clerics to safeguard their treasures elsewhere. The towers may have provided a safer environment than their associated churches.

The assumption that the round towers perhaps functioned as places of refuge seems to be based only on a few annalistic entries. It is noteworthy that out of a total of twenty-eight references to the round towers in various Irish annals, only eight of those refer to the violent destruction or plundering of the towers, and only in six of these eight references has loss of life been recorded. An additional five references are to towers that 'fell' or were destroyed by fire, yet no cause for these events is specified. The remaining fourteen¹ references are to either damage caused to round towers by natural forces or to their construction (Hamlin & Hare 1986, 140-2). Furthermore, the only reference to violence caused to the towers by non-Irish 'combatants' is the entry to the Viking attack upon the tower at Slane (AU 950.7). Even more interesting is that the recorded violence is of a relatively late date. It seems that only from the eleventh century onwards that the towers were subjected to fairly violent attacks. It was not for a century after the burning of the tower at Slane that the next violent destruction of a round tower was recorded (CS 1047 recte 1049: AFM 1050). Only in three out of the six references in which loss of life is recorded, is there reference made to the death of a relatively large number of people within the tower (AU 950.7; MIA 1126.10 & AI 1128.7; ATig 1171 & AFM 1171). One of these three, namely MIA 1126.10 compared to AI 1128.7, is inconsistent. In an attack on Tullyard by Tigernan Hua Ruairc, many people were killed when the round tower was burnt (MIA 1126.10 & Al 1128.7). It is uncertain whether these people had sought refuge within the tower, or whether they were executed. Three other entries mention people killed inside a round tower, but this time reference is made only to named individuals. Two of these entries are of particular interest because they refer to the deaths of kings within the towers (AU 1076.3; MIA 1176.3). One other individual lost his life in the round tower of either Fertagh or Aghamacart when his monastery was attacked (AFM 1156; ATig 1156). The entry in the Miscellaneous Irish Annals in 1176, which is the only known source which mentions this particular event, refers the murder of Domhnall mac Amloaibh O Maoil Ruanaidh, king of the Fir Mhanach, in the round tower of Devenish in 1176 by his own kinsmen. This entry is intriguing and raises some interesting questions, but due to the scarcity of the information relating to this event, it will not be examined here.

Historians are far more fortunate in the case of the murder of Murchad Ua Máelsechnaill of the Clann Cholmain in 1076. His death has been recorded by many annalists and is also recorded in the medieval poem *Mide Maigen Clainne Cuind*. One may wonder why Murchad had been in the tower at Kells. The monastery of Kells lay on the border with the rival Southern Uí Néill branch Síl nÁedo Sláine. It has been argued that the Síl nÁedo Sláine had been weakened in the 11th and 12th centuries by the hostility of the Clann Cholmain, which allowed the Gailenga, subkings to the Southern Uí Néill, to become more powerful and even succeed to the kingship of Brega (Byrne 1973, 88). Was it the annexation of Síl nÁedo Sláine lands that had brought Murchad to the border?



Map showing medieval roads leading to the monastery of Kells. Reprinted with kind permission of Dr. Linda Doran of the RSAI.

Nearly all of the annals report that Murchad was killed by the grandson (or son) of Máelán, son of the king of the Gailenga. Four annals report that the grandson of Máelán was killed immediately thereafter, 'through the miracle of Colm Cille, by Máelsechnaill mac Conchobair' (ATig 1076; AClon 1075; CS 1073: AFM 1076). The grandson of Máelán was thus subsequently killed through the miracle of the patron saint of Kells. After all, the murder had also been a violation of sanctuary. Two other annals note the subsequent death of the grandson of Máelán, not through the miracle of Colm Cille, a year later (AU 1077.2; ALC 1076), It may be suggested that Murchad perhaps fled into the tower. Even though this is certainly possible. this argument is not extremely convincing. It has been suggested that Murchad m. Flainn sought refuge in the tower because he may perhaps have been attacked by his kinsmen. After all, only three years before his own death, Murchad had killed his uncle and predecessor Conchobor Ua MáelSechnaill (AU1073.2). However, from the annalistic record one could conclude that Murchad continued to be supported by his kinsmen. He had indeed killed Conchobor in 1073, but he had succeeded him to the kingship of Mide, and, more importantly, had successfully gained the kingship of Tara shortly before his death in 1076. It would be safe to argue that only those powerful enough would succeed to gain the supremacy over Tara. Furthermore, the number of annalistic entries concerning Murchad's death can be seen as a further testament to his prominence. Unlike Domhnall m. Amlaoibh O Maoil Ruanaidh, who lost his life a century later in the tower at Devenish, there is an extensive record of Murchad's death. This would certainly imply that the annalists throughout Ireland had, at the very least, been concerned enough to record his death. Moreover, the annals record that Murchad was, indeed, not killed by his own kinsmen, but rather by the Gailenga. In fact, the grandson of Máelán was subsequently killed by MáelSechnaill m. Conchoboir in retribution for Murchad's death. Interestingly, even though Murchad had killed Conchobor Ua Máelsechnaill, he had not alienated the latter's son. Thus, the argument that Murchad fell victim to his own kin is not supported by the annalistic record.



The round tower at Kells, Picture: author.

A king would have had a large retinue, and it was expected of him that he would not be found alone (*CG* § 116-18; Kelly 2004, 352-3). Thus, it is unlikely that Murchad was alone in the monastery of Kells, and it seems improbable that he fled into the tower to escape an assault by his relatives. It can thus be assumed that Murchad, king of Tara, was accompanied by his allies. It would be unlikely for Murchad and his retinue to flee from the assault, if indeed confronted by m. m. Máelán. It would be strange if Murchad, who presumably had been powerful enough to attain the kingship of Tara, would flee from the first sight of confrontation. Moreover, some annalistic references quote that m. m. Máelán was subsequently killed 'through the miracle of Colm Cille'. Such a statement would be odd if Murchad had fled from an attack, which was a very unkingly thing to do.

The medieval poem *Mide Maigen Clainne Cuind* suggests that Murchad reigned in Mide for a year and the annals report that Murchad had been king of Tara for three days only (Smith 2001, 21-2). The presence of relics in the round tower is of considerable importance here. Oaths were commonly sworn in the presence of relics (e.g. AFM 1277; O'Keeffe 2004, 99). Murchad could thus have been in the round tower at Kells to perhaps receive pledges from his sub-kings.

Objections can certainly be raised against this suggestion. The round towers had no easy means of access and the internal access was not suitable for daily worshippers. Furthermore, the towers were dark and cramped. Thus, it was perhaps not such a suitable location for kings to give or receive pledges.

However, such objections are often based on the false assumption that the early medieval Irish churches were better lit and thus more suitable places for such events. Yet, the churches of early medieval Ireland were extremely dark before the twelfth century. Not until the twelfth century was a church built with a relatively large window (i.e. Cormac's Chapel) (Lalor 1999, 82-3). As the excavations at Iniscealtra have revealed, the round towers could have been accessed via a semi-permanent wooden stairway relatively easily. Moreover, it is certainly not suggested here that the towers functioned as places for daily worship.

If it is accepted that Murchad did not flee into the tower it is perhaps a reasonable suggestion that he may have been in the tower to receive a promise of allegiance. The annalistic record suggests that pledges were commonly made in the presence of relics and church treasures (e.g. AFM 1277). Such entries are interesting because one may wonder where these pledges were made. Would these treasuries have been taken out of the round tower and brought to the church when kings wished to exchange sureties in their presence? The references to the murder of Murchad Ua MáelSechnaill may suggest that it is a possibility, that at least on this occasion, it was not the relics that came to the lords, but the lords that came to the relics. It may be that Murchad was in the tower to receive

pledges from his subordinate kings. This would also explain how Amlaibh had successfully gained entry to the round tower, and how he had been able to approach his subsequent victim. It may be that, in this case, sureties were not exchanged inside a church, but inside a round tower. And this would suggest that the round towers were indeed much more than belfries.

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¹ One reference has symbolic value and does not actually refer to an existing round tower, namely ATig 1054; AFM 1054 – 'A steeple (cloictheach) of fire was seen at Ross Ela on the Sunday of the feast of S. George.

'With your shield or on it' – An experimental approach to the Greek hoplite shield

Kevin Rowan De Groote

Abstract

The Greek hoplite, although occasionally mythologized, is very much the quintessential soldier of antiquity. With a crested helmet and a long spear he stood side-by-side his fellow countrymen and fought brutal battles at uncomfortably close-quarters. The single most important item in the hoplite's panoply; indeed that which defined him as a hoplite and from which he took his name was his large round shield or hoplon. Three feet in diameter with a double handgrip and gently convex shape it was made of wood and reinforced with a thin bronze outer facing. But how was it made/ constructed?

Somewhat surprisingly, little is known about the actual construction of the hoplon. The methods/approaches of the developing discipline of experiential archaeology can be brought to bear on this topic. This paper aims to explore and shed light on the construction process by detailing how the author went about making a replica hoplite shield and discussing the possible and probable ways in which this might have been done in antiquity. This will be further supplemented by examining the evidence for the materials and construction. A clearer understanding of the structure and manufacturing process of the shield will hopefully provide more insight into how it was used and what made it so effective and enduring.

Introduction

From his somewhat obscure beginnings to his starring role during the Persian Wars of the early 5th century BC the Greek heavy infantryman or 'hoplite' (see Fig. 1) has come to symbolize, certainly as much as Plato or the Acropolis do, the Classical Greek world. With his crested helmet

and large round shield the hoplite embodies the quintessential soldier of antiquity. What set this highly successful force apart from any preceding it were both a shift in mentality and advances in equipment. This paper will focus on the equipment, specifically the hoplite's shield. Though reasonably well covered in a literary and artistic sense, surprisingly little is known about the actual construction and use of the shield. This paper aims to explore and shed light on the construction process by detailing how the author went about making three replica hoplite shields and discussing the possible and probable ways in which this might have been done in antiquity. This will be further supplemented by examining the evidence for the materials and construction. A clearer understanding of the structure and manufacturing process of the shield will hopefully provide more insight into how it was used and what made it so effective and enduring.

The hoplon

The single most important item in the hoplite's panoply, indeed that which defined him as a hoplite was his large round shield or hoplon. This was, according to the Roman writer Plutarch, because the shield was carried for the whole line, not just the individual's protection. It was approximately 90 cm in diameter, although Snodgrass (1967) noted one specimen almost 120 cm in diameter, and gently convex in design. Its precise origins remain unknown although there is strong evidence to suggest an eastern influence. Large round shields are known to have been used at an earlier date by the Assyrians and Urartians although both the hand grips and shape differ from the hoplon (Snodgrass 1965). Large round shields first appear on Greek vases in the late 8th century Late-Geometric period). These may well representations of the hoplon, but due to the fact that they are graphically represented as flat rather than convex this remains conjecture. Artistic representations of hoplite shields appear with more certainty in the seventh century BC (the Archaic) and the earliest surviving specimens date from the late 7th/early 6th century BC.

The hoplon weighed approximately 6 to 7 kilos making it heavier than any preceding round shield. During the Archaic period only the rim of the

shield was reinforced with bronze, but by the Classical period (circa 500 BC) the whole outer surface was reinforced with a thin bronze outer facing approximately 1 mm thick (Sekunda 2000). What set the hoplon apart from all preceding shields was the ingenious introduction of the porpax or central arm-band (see Fig. 2). Cast of bronze it usually ran the full length of the inside of the shield and culminated in a loop at the centre of the shield through which the hoplite would put his left fore-arm (Snodgrass 1967). This allowed the hand-grip, literally a rope handle (antilabe), to be moved to the rim of the shield. Prior to the invention of the porpax all shield handles were set in the centre of the shield. This meant the full weight of the shield and all incoming blows were focussed on the hand, the wrist and the fore-arm. To diffuse some of this excessive weight neck straps or telamons were used. The sheer physical strength needed to wield these shields limited their size and weight. The porpax, coupled with the shape of the hoplite's shield, redistributed the weight from the hand, wrist and fore-arm to the elbow and shoulder which are designed to take greater weights. This in turn allowed for larger shields offering greater protection without unnecessarily tiring or restricting the hoplite's mobility. An additional benefit of the double grip was that it allowed the hoplite to release the antilabe (without losing his shield) and use or carry an additional weapon.

Method of construction

From a surviving Etruscan example housed at the Museo Gregoriano in the Vatican we know the core of the hoplite shield was made of wood. The clear lines of demarcation on the wooden base of the aforementioned shield indicate that the shield was not made of one solid block of wood but of several planks of wood glued together to form a block (Sekunda 2000). What happened next is less clear. A passing reference from the fifth century BC Athenian writer Aristophanes in his play *Birds* (491) informs us that woodturning lathes were used. The block, possibly square in shape, was then turned until the typical bowl-shape of the hoplon was achieved. This appears to suitably describe the method of construction. However, it lacks any detail regarding the lathe or the act of woodturning and disregards the complexity of this method of

construction. It is no more useful than stating that cars are made in factories with large machinery.

Replicas and experimental archaeology

Due to the scant amount of evidence regarding the method of construction of the hoplite shield the author decided to adopt an experimental approach and create three replica shields. Three differing methods of construction were used and will be explored. The first method involved hand carving the shield, the second involved turning the shield on a lathe and third a hybrid method. From the surviving shield in the Vatican we know the wooden planks constituting the core of the shield were made of poplar. Furthermore, in his *Historia Naturalis* (16.209) the Roman writer Pliny the Elder noted that trees that grow in water, such as poplar and willow, are ideally suited for making shields. Due to cost and time constraints two of the replicas were made of beech wood at a scale of 1:9. The final replica was made of poplar and full size.

Replica 1

This replica was made using a square block of beech wood measuring 22.5cm in both length and width and 5cm in depth. It weighed approximately 1.2 kilos. A circle with a diameter of 20.5cm was marked in pen using a compass on the designated 'top side' of the block. This marked the outer edge of the rim of the shield. Following this a smaller circle with a diameter of 18.5cm was added to this to mark the inner edge of the rim; the rim thus being 1cm in width on the inside of the shield. Having outlined the diameter of the shield I proceeded to remove the edges of the square block with a hacksaw and a jigsaw, the latter for the purpose of speed. This left a 5cm thick round piece of wood with a diameter of 20.5cm. This was then securely fixed to a stable work surface. A chisel and hammer were used to remove wood within the 18.5cm diameter circle (see Fig. 3) to a predetermined depth of 2.5cm the inner high point; the highest point on the convex side would be 3cm meaning the shield would be 0.5cm thick. This proved guite slow and labour intensive. Shaping the concave slope was done by eye. The inside was completed after approximately 2 days.

The outside of the shield was approached a different way. The 5cm thick round block of wood, now carved out on the 'top side', was reduced in thickness on the 'bottom side' by means of a junior hacksaw to 3cm. A sureform, which works much like a cheese grater, was then used to shape the bottom side and give the outside of the shield its characteristic convex shape. The outer rim, that is the rim on the convex side, was to be half the width of the inner rim, so approximately 0.5cm and no more than 0.1cm in thickness. This was achieved by means of a junior hacksaw. Finally, the entire shield was sanded down with sand paper. The whole process took approximately 5 days to complete.

The lathe

Replicas 2 and 3 both involved using a woodturning lathe (see Fig. 7). The lathe is a device used to shape wood or metal by rotating the object against a sharpened tool. The object is fixed to the lathe's 'spindle' which rotates the object. This rotating action is called 'turning' and necessarily produces objects of a circular shape. They can be constructed from various materials and come in a variety of forms. The earliest artistic evidence shows two men operating a lathe; one turning the lathe by means of a rope and the other carving the wood. A similar method may well have been used in Greece. Lathes are (and were) typically used to the manufacture small bowls and in order for the ancient Greeks to have turned a piece of wood with a diameter of 90cm or more a very specialized lathe would have had to have been developed.

My own lathe is based on the 'pole' or 'sapling' lathe which can be operated by one person (rather than two people). It is constructed of an ordinary bicycle frame, a modified wheel, a copper pipe, a stable work bench (which is indispensible for the tool support) and a treadle attached to a bungee cord and bicycle chain. It is operated by stepping on and off the treadle which in conjunction with the springing of the bungee cord rotates the wheel onto which the object is attached. The work bench with tool support is moved to the desired distance from the spinning object which then allows the tool to be held against the object and wood to be removed.

Replica 2

Shield replica 2 was made using a block of wood with the exact same properties and dimensions as replica 1. The block was securely fixed to the rotating wheel of the lathe and a straight gouge chisel was used as the primary carving tool. The gouge was pressed in with differing levels of force and held at different angles progressively working in towards the centre or out towards the edges depending on whether the inside or outside of the shield was being shaped. The treadle and chain assured a reasonably constant pace of turning. Beech wood being a soft wood made the turning relatively easy to use and this method was less labour intensive than method 1. The straight gouge removed ribbons of wood with great ease and as long as the tool support was stable accuracy was relatively easy to maintain. The inside of the shield was completed within 1 day. For practical reasons (speed prime amongst them) the edges and thickness of the block were dealt with in the same manner as replica 1. The block was then reversed for the outside to be turned. Creating the convex outside of the shield proved more difficult and required more skill. It did however allow for the outer rim to be scored in sooner, faster and more accurately. With the general convex shape achieved the sureform was used in combination with sandpaper to smooth off the outer side of the shield (see Fig. 5). Replica 2 was completed in approximately 3 days.

Replica 3

A poplar beam of approximately 487cm in length, 20cm in width and 10cm thick was cut into 5 pieces each 90cm in length. Due to the thickness of the wood and the probable difficulty turning such a thick piece a different method than the aforementioned was adopted for replica 3. Instead of laminating these together to form a block each piece was first halved lengthways leaving 10 planks 90cm in length, 20cm in width and 5cm thick. These pieces were then laminated to form 2 square blocks of 90cm x 90cm x 5cm. Each block was then cut into a circular shape with a diameter of 90cm by a carpenter. The premise for this was to build the shield in two stages (this method was suggested to me by a wood turner). This would allow for large amounts of the respective blocks

to be removed in one go (thus speeding up the process) and allow for greater control and accuracy when turning the wood. Block A was designated to become the shield rim and the wall of the body: block B would constitute the remainder of the body (see Fig. 6). A circle with a diameter of 80cm marking the inner rim was pencilled in on block A. A second circle with a diameter of 60cm denoting the limit of block A (and starting point of block B) was also marked. After securing block A to the lathe the area between the two marked circles was shaped and removed using the same method as described for replica 2 (see Fig. 4). Considering the size, weight (15 kilos) and type of wood (hard wood) this proved harder than for replica 2. Having completed the inside of block A. the outer rim was carved using a gouge and hammer. Finally, the centre of block A (with a diameter of 60cm) was removed with a jigsaw. That left a band of wood with an inner rim 5cm in width, an outer rim 3.5-4cm in width with an overall rim thickness of 1cm and the start of a domed wall 5 cm in height and protruding 5cm from the wall.

The corresponding piece of block B which was to become the inner piece was removed with a jigsaw. Given that block A already contained the highly convex wall and that block B needed only a gentle slope, method 1 (using a gouge and hammer) was adopted for the inside part. The outer part convex part was tackled using a spoke-shave. When it was complete both sections were sanded down and laminated together cross-grain. Replica 3 was completed in approximately 15 days.

Conclusion

The introduction and evolution of the hoplon remain somewhat shrouded in mystery; although the process of making replicas is by no means definitively conclusive it has highlighted some possible methods of construction for the hoplite shield and provided some data regarding the respective approaches. Given the highly developed wood working industry of ancient Greece, notably in ship building, the carving method adopted for replica 1 seems like a plausible candidate, certainly for the early hoplon. In early representations the hoplite shield appears less convex than in those of the Classical period. This may simply reflect a

changing artistic style, but could also reflect that early hoplons were less convex due to the different method of manufacture.

The lathe was certainly in use by the Classical period. Whether it was used for making shields is less certain. Turning shields on a lathe is no easy feat and this method would only have been employed if it provided a real benefit to production. Even with a lathe different methods can be employed. Method 2 appears the most straightforward, but the thickness and weight of the block of wood raises serious questions. The approach adopted for replica 3 may well have been used and offers some real advantages. Along with it being faster and less labour intensive than method 2, it also offers the possibility of adding more rigidity to the shield by having the 2 sections running cross-grain. If nothing else, this experiment has provided another reason why the shield was so highly prized. It is the most labour intensive and time consuming of the hoplite's weapons to make and to replace it would have been a costly and time consuming process - if a shield was tailor-made for you, as some appear to have been, it is unlikely to have been completed in less than 2/3 days.



Figure 1 (courtesy www. vanells.com)



Figure 2 (Courtesy of the KMKG, Brussels)



Figure 3



Figure 4



Figure 5

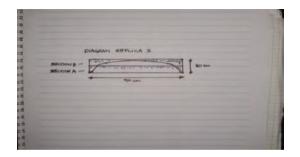


Figure 6 (Diagram illustrating the profile of the shield replica 3)



Figure 7

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The Ancient Greek Kopis and Machaira Catherine Sara Parnell

Abstract

This paper is concerned with swords, specifically the 'single-edged' chopping swords from ancient Greece, called the kopis and the machaira. This morphological shape probably had its origins in the Balkans during the 10th to 7th centuries BC and was most frequently illustrated in Greece during the black and red figure periods (7th century BC to late 3rd century BC). In this paper I will examine the morphology of this curved sword shape, its origins and the manner in which it was used

The kopis and the machaira are termed "single-edged" swords. Although swords of this morphology are referred to as "single edged", from the preserved examples it seems that the kopis and the machaira were not in fact completely single-edged as the blade has been brought around the dorsal edge for about 1/3 of the length. "Single-edged" is the easiest term to use because these swords were most often used for chopping and slashing with one side of the blade as opposed to cutting and thrusting swords which use both sides of the blade equally. They have a forward sloping blade and were wielded with one hand¹. This morphological shape first appears in Greece during the 7th century BC, then during the Black figure period and then appears in great frequency later, in the Red figure period. The *machaira* is mentioned in early literature such as Homer's *lliad* and both swords continued to be mentioned by high profile writers such as Xenophon and Plutarch later on.

There are problems with the classification of these chopping swords. There are some morphological variations among the kopis and the machaira and this has led to debate as to what exactly constitutes a machaira and or a kopis. Authors have described this curved shape as either the "kopis" or

the "machaira" although often the same sword is being described and the ancient writers were even more flexible in their descriptions. The ancient Greeks did not feel the need to pigeonhole variations of a chopping sword. Similarities in shape and design between the kopis and machaira are especially well illustrated when examining the iconographic examples. In fact in many cases it has been almost impossible to tell with any certainty if the example depicts the kopis or the machaira². However flexible they were with their terminology though, the ancient authors did provide us with two separate terms for this type of sword: the 'machaira' and the 'kopis'. The term kopis/κοπίς is referred to in Ancient Greek texts separately from the term machaira/μάχαιρα. This would seem to point to the fact that the kopis as a proper noun was recognisable as a separate entity to the machaira. Snodgrass (1967, 67) says that this type of sword would have been "covered by the old and widely-applied Greek term machaira, and it may also have borne the stricter name of kopis; the Greeks seem to have been highly inconsistent in their nomenclature of weapons". The term 'kopis' appears in the work of the ancient authors from the 5th Century and the term 'machaira' appears in the Homeric epics although only once in relation to a weapon of war³. It has even been put forward that there was one sword which combined features from both the kopis and the machaira called the "kopis-machaira" (Tarrasuk & Blair 1982, 299), However, I think this was highly unlikely as there is no mention in any of the ancient literary sources about a sword which combined both terms.



Fig 1: Ancient Greek chopping sword, iron. From Dodona, late 4th Century BC.

The single edged sword may be defined as a sword principally used for chopping or cutting (as opposed to one used to stab and slash) and one

which possesses a blade more appropriate in shape for chopping rather than stabbing. Hanson (1991, 26) cites a size of 20 inches (51cm) including the hilt at 3.3 inches (8.5cm) and Everson (2004, 125) says that most surviving machairas are 35 to 70 cm long. He also cites the example from Prodromi, which measures 78cm long. He cites, and I agree, that the longer machairas would have been more useful for cavalry officers than infantry. However, the iron, preserved example of what has been classified as a machaira (Dixon 1940, 58) from the sanctuary of Dodona⁴ has a preserved length of around 71.5 cm, including the hilt/ handle which measures just over 14 cm (the grip itself measuring 10 cm)⁵. It is dated to the late 4th Century BC. The Dodona example is a fine specimen of a single edged sword. Although this example has not been subjected to too much corrosion, it bears signs of combat damage in the form of nicks and hitches to the blade. On the top end in particular there are at least 5 clear and obvious points where the sword has impacted with another object and there are a few other nicks especially towards the point where the blade reaches its maximum width. The edge damage also attests to the fact that this was a sword which was actually used in combat as opposed to a sword used for ritual or non combat purposes. Since the tip is broken and the sword has been subject to corrosion it is difficult to say how the short dorsal edge compares in terms of sharpness to the main edge.

It is at the highest point of the spine that the convex edge is at its fullest. The resulting shape means that most of the weight is concentrated towards the end of the blade and is therefore morphologically suited to chopping, as the extra weight at the tip causes the blade to 'fall' forward onto its target. The morphological shape of the blade means that the 'working weight' of the blade is placed at the upper third of the blade length. This would allow for effective slashing and chopping, but it would have been less effective as a thrusting weapon. It has been argued by writers such as Sandars (1913, 234) that the kopis and the machaira would not have been particularly suited to stabbing techniques but I disagree. In the context of battle it would be unreasonable to presume that a warrior would not use this blade to stab simply because it was *better* suited to chopping. Also, the 5 to 7.5cm of point which the kopis/machaira seemed to have would have caused

adequate damage to internal organs. It is obvious that the form of this sword is related to its function (Burton 1884, 129). By balancing the weapon upon the pommel the effect becomes evident; the edge of the sword falls forward in a motion similar to that of an axe. Thus, when the blade is used for chopping the inside cutting curve meets its target every time (Sandars 1913, 128 ff). The handles of the machaira and the kopis are often hooked (in varying degrees), sometimes at both ends to form a 'c' shape. If the hook is a semi-oval rather than a full oval then the blade often thickens slightly as it reaches the hilt in order to enclose the hand. This thickening allows the hand to be held firmly in place when chopping, a necessary trait when chopping with force. The tight handle is guite important, as on the battlefield clutching at the sword for hours at a time would have meant numb fingers⁶. The handle was sometimes formed into a bird or horse head. The bird is of course a popular motif throughout Greek art but it is interesting that it is paired with the horse and used with these swords. Perhaps the horse/birds could be related to the manner in which they were used. It seems reasonable that this sword would have been used by cavalry, an idea given weight by Xenophon's On Horsemanship (12.11) so perhaps this could explain the horse motif.



Fig 2: Handle of ancient Greek machaira, iron. From Dodona, late 4th Century BC.

The popularity of this morphological type of sword is easily justified; it is a natural reaction in combat to chop and slash at someone rather than stab. Heightened emotions mean that the temptation to lash out, covering the front of the body and the face takes over the body. Grossman (1996, 121)

discusses the idea that Roman soldiers had to be trained to stab at the enemy rather than slashing wildly in their general direction. It is certainly true that in the absence of structured weapons training soldiers are more likely to chop and slash rather than stab at their enemies, a sentiment which has surely contributed to the continued popularity of chopping and slashing techniques in armed combat. Another point in favour of chopping and slashing techniques is that generally they do not require the aggressor to be so close to his opponent in comparison to if he was using a stabbing technique even though the kopis and the machaira were essentially short swords⁷

The term "machaira" appears in the annals of Homer⁸. As the term "kopis" does not appear with such frequency until later, we can tentatively posit that "machaira" as a term may have been used to describe the larger versions of this morphological shape which often had a straighter back and the term "kopis" is used to describe the later examples.

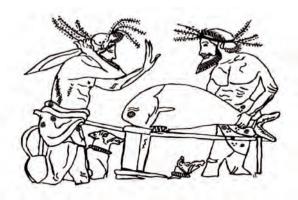


Fig 2: Cooks chopping a tunny, detail of a Black Figure olpe attributed to the Leagros Group.

Snodgrass (1967, 97) describes the introduction of the chopping sword into ancient Greece:

"In the 5th Century the cut and thrust sword with cruciform hand guard

was eclipsed by the appearance of the machaira. It was regularly used in a downward slash, often brought from far behind the left shoulder in an overhead motion"

Burton says that writers on hoplology have mostly ignored the origins of the kopis (1884, 235). By the time of the high red figure period this chopping sword was a familiar illustration on vases. One possible hypothesis as to the origins of this shape is put forward by Snodgrass (1967, 100): that the curved, sloping shape of the kopis/machaira had a precursor in the curved, sharp edged swords of the type found in Fortetsa (Tomb II) and Halos. I do not agree with this though, I believe that the kopis and the machaira are not of the same type as this sword. However, there is much dissension between modern archaeologists when it comes to the origins of these swords. Sekunda (2000, 16) suggests that they come from the Near East, Connolly (1998, 63) posits that they are an Etruscan development, Quesada Sanz (1997) says that the origin of this shape is in the Balkans while Snodgrass thinks that a Thracian origin is most likely. I think, like Quesada Sanz, that it is most likely that this shape has its origin in the Balkans from which this shape spread out to Northern Greece etc.

This shape, when it first appears, is portrayed in a domestic or sacrificial context as well as in the context of war. Dixon (1940, 57ff) says that its first appearance as a weapon in Greek art is in the early 5th century on the Harpy tomb at Xanthos in Lycia. It seems likely that this shape was already used in ancient Greece as a useful chopping weapon and was then adapted to be used more effectively in the context of battle. According to Dixon (1940, 58) "it may be conjectured that the Greeks conceived the idea of adapting a domestic implement to martial purposes in the course of contact with eastern warriors during the Persian Wars of 490-480 BC". This shape of sword may have acquired status value after its appearance on the battlefield as Harmodius supposedly struck down the tyrant Hipparchus with a kopis, and with its characteristic overhead, left to right chopping stroke. However, in most of the artistic renderings of the kopis and the machaira it seems that as weapons, they have unfavourable connotations due to their association with the losing party/barbarian in most iconographic representations. It is also puzzling that the kopis and the machaira are so frequently rendered in red figure images but so rarely in sculpture (relief or free standing)⁹. This may be explained by the fact that if the ideology behind ancient Greek sculpture is to glorify the subject then they are unlikely to be portrayed with a weapon that is often associated with barbarians and/or the losing party.



Fig 3: Details of red –figure vases showing the popular chopping motion most often illustrated when using a machaira/kopis.

Whilst the effectiveness of the kopis and the machaira as weapons cannot be called into question as a whole it remains something of an enigma. Although there are preserved examples to study, I have found that there is a lack of in-depth work on these swords. Thus, my research relies heavily on iconographic and literary evidence. There are many issues with these two classes of evidence (propaganda, artistic license, conventions of style). However, taking a more optimistic view, I think that the examination of the kopis and the machaira is richer because so many aspects require reconciliation and defy categorisation. It is most likely that this shape of sword began in the Balkans, from where it spread out and gained in terms of usage. The effectiveness of the morphological shape is well illustrated by the continuing use in Greece from the 6th century BC up until it was eclipsed by the Roman gladius. The forward weighted, chopping shape had a remarkably long life span, from the 5th Century BC right up until the Punic Wars and continues now in the shape of the Gurkha khukuri.

I think it is most likely that most techniques involved only one hand since the curved handle only has room to enclose one hand. However, it would have been possible to wrap your hand around the grip while your other hand was enclosed during combat.

However, generally speaking the kopis has a more dramatic curvature of the spine in comparison to the machaira. This difficulty could, of course, be attributed to the artist's difficulty with the shape of his medium/artistic conventions of the period.

In other places the word 'machaira' is used to describe knives in a domestic or sacrificial context. When it is described in a context of war it is during the description of the shield of Achilleus

Previously of the Carapanos collection, the sword is now housed in the National Archaeological museum in Athens.

These measurements are courtesy of Mr Kevin Rowan deGroote who received permission from the National Archaeological Museum in Athens to study several of their spears and swords in their extensive Bronze collection (Summer 2009).

In fact, Japanese warriors have been known to tie their hands onto their sword handles.

It is interesting to note that when we staged a group re-enactment using only the kopis and shields that it was generally the weaker fighters who used the most slashing/chopping techniques.

However, in this case it is unlikely that the term 'machaira' is being used to describe this particular shape. It is more likely that the term is just describing some sort of knife.

I have only been able to locate 2 examples of the machaira, 1 of the falcata and one of the kopis in sculpture.

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Occupant, house and state in Hellenistic Greece: A case study of the houses from New Halos.

Maeve McHugh

Abstract

This paper is a case study of six houses from the ancient city of New Halos. It discusses the relationship between occupant and state by highlighting the possibility of the house as facilitator in how the occupant relates to wider social mores through spatial practices and the use of material culture.

The aim of this paper is to outline and discuss the relationship between the occupant, house and state in New Halos, focusing on the plans of the houses in relation to their type, size and context. The differences and similarities between the houses and their material culture will be discussed as possible indicators of changed social ideals in the Hellenistic world. During the Hellenistic period there is a greater level of ambiguity concerning the extent of political boundaries and social aspirations (Walbank 1984: Shipley 2000), Alexander's campaigns left an indelible mark across the Greek world not only by enlarging it but also by breaking down the boundaries of the model provided by the Classical polis (Alcock 1994). Within this changed and enlarged Greek world both cities and individuals sought to redefine themselves (Westgate 2000a; 2000b). From archaeological and epigraphical evidence we know that in terms of the built environment, power, status and identity found expression in new public buildings and monuments dedicated to the city (Shipley 2000; Camp 2001) while in the private sphere, the changes impacted on the plan, layout, degree of elaboration and decoration of houses (Westgate 2000; Nevett 1999).



Fig. 1. Map of Greece with New Halos (Reinders & Prummel 2003, 2).

The city of New Halos is located on the southern part of the Almiros plain between Mount Othris and a salt marsh along the Pagastikios gulf (Fig.1). A field survey conducted by Reinders (1988) showed visible remains of stone structures comprising of a lower town on the plain and an upper town on a hill west of the lower town (Fig. 2). The lower town was a built up area surrounded by an *enceinte* a type of fortification wall measuring 700x700 m. The *enceinte* had a total length of 2.8 km. and was reinforced with 68 towers, two large gates on the northwest and southeast side of the *enceinte* and a number of posterns allowed access into the town. The considerable size of the walls and location to the gulf indicates that New Halos had a function as a defense along the western coast of Greece (Reinders 1988; Will 1984). Two walls measuring over 1km. extended uphill to a small acropolis at an altitude of 200m; upon the acropolis now lies a 12th century AD fort. The remains of the housing blocks in the lower town were separated from each other by 14 streets running east to west and three

streets running from north to south, indicating the possibility of over 1000 houses and 9,000 inhabitants for the lower town (Reinders 1988).

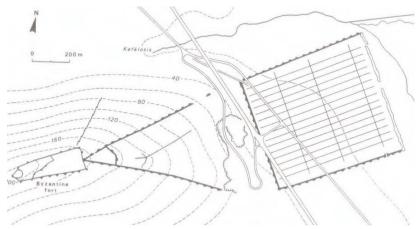


Fig. 2. Plan of the city of New Halos (Reinders & Prummel 2003, 3).

Six houses were excavated in the Hellenistic city of New Halos between 1978 and 1993 (Fig. 3). The date of the founding of New Halos is not certain, however, it is possible that the city did not exist before 302 B.C. as New Halos is built on the site of a battle between Kassandros and Demetrios Poliokretes (Reinders & Prummel 2003). A coin hoard found with the foundations of the city's southeast gate indicates that Demetrios Poliokretes was the founder of the city due to the large quantity of coins found associated with him (Reinders 1988). Furthermore, Demetrios was active in this area of Thessaly during the time that the city was founded (Will 1984). The city had a short life and was destroyed by an earthquake in 264 B.C. Based mostly on the excavated material from the houses of New Halos the excavators assumed that the inhabitants of the city were made up from the inhabitants of the old Classical city of Halos which was destroyed in 346 B.C by Philip's army and non-combatants of Demetrios Poliokretes' army (Reinders 1988). Despite the impressive walls and a militaristic

founder of the city there is little evidence of a large amount of weaponry in the houses excavated. Instead the artefacts of the houses indicate a domestic urban society with little luxury; work focused on farming, small industry and trade among near towns and cities (Reinders & Prummel 2003, 241).

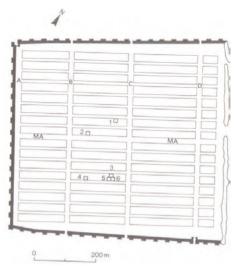
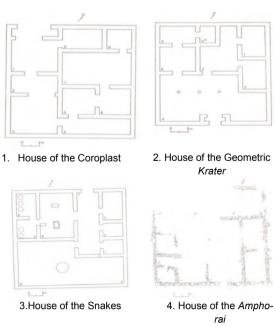


Fig. 3. Plan of the lower town of New Halos with the location of excavated houses (Reinders & Prummel 2003, 4).

Little is known of the public buildings from New Halos, though excavators have identified that the western slope of Mt. Orthis contained the agora of the town (Reinders 1988). The discovery and excavation of the houses of New Halos provide insight into the use of the houses from this period. However, it is still difficult to understand their place in the wider social context of the city and furthermore their relation to the surrounding towns without understanding the town's political position. From what little evidence there is, it seems that the settlement had little political power amongst its neighbors (Reinders 1988). Clues to the identity of the settlers of New Halos are based on the very limited information from the site, mostly from the coinage depicting Helle riding a ram, a motif associated with the founder of the older Classical city of Halos (Reinders & Prummel 2003, 243).

The houses (Fig.4) were built in one phase therefore they were created as one overall design (Reinders 1988, 147). Furthermore, despite the short life span of the city, only 62 years, the houses were adapted and changed; for example some doorways were walled up and new spaces created as in the House of the Coloplast and the House of the Geometric *Krater*. It is interesting to see that during the period of one generation the houses changed to adapt to the needs of the occupant. Therefore the occupant in a physical way adapted their living environment to suit their needs, instead of adapting themselves to suit the fixed plan of their houses. This may seem an innocuous point especially to modern sensibilities but this change comes about during the time between the shift from the Classical to the Hellenistic world.



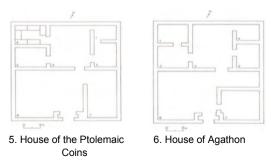


Fig. 4. Ground plan of excavated houses (Reinders and Prummel 2003).

During the Classical period houses were secondary to the state: a person's position was important in relation to the importance of the state and the house played a secondary role (Davis 1984). Consequently, the houses were constructed to match the political ethos of the city, in doing so house construction had simple identical design so no one house would overshadow the rest or take focus away from the city, therefore house design was directed towards isonomia (Hoepfner & Schwander 1993) where there is a collective pull in the people to work and live with the state's best interest in mind. As political power moved away from the people of each city to the distant warlords of the Hellenistic world the occupant was forced to turn inward to their houses as expressions of their own aspirations which once manifested itself in political power. This fundamental shift caused not only a transformation of the political landscape but a shift in focus from the occupant to their house, which manifested itself in the creation and adaption of new techniques of house decoration such as highly decorative mosaics (Westgate 2000a: 2000b). This display of luxury and wealth infused the Hellenistic period, and combined the move away from local power bases to larger areas controlled by Hellenistic monarchs. This political shift created an opportunity for trade between cities to grow and created a new wealthy merchant class, who being stifled in their political aspirations directed their attention to public euergetism and decoration of their houses (Ogden 2002). However, unlike the rich centres of Hellenistic trade where the occupant could afford to create an opulent display of luxury, how, if any, did the occupant of New Halos adapt their houses to suit this new demand?

There are two clear types of house excavated in New Halos, the north facing houses such as the House of the Coloplast and the House of the Snakes have a different layout to the south facing houses. The House of the Snakes has an enclosed corridor (Area 7) which has rooms on either side of it and terminates in a larger courtvard space. The House of the Geometric Krater, the House of the Ptolemaic Coins and the House of Agathon have a large courtvard area to the front with a series of rooms to the back. One reason for this difference may be related to the courtvard space as in both cases the courtvard area faces the south hence this area would be the side that gets the most and longest amount of light. Nonetheless, excavations have not given up much information about the use of the courtyard area. Some utilitarian finds and evidence of dumping pits mark this area as a functional space therefore, it would stand to reason that this would be an important place for natural light. Consequently, there appears to be a clear design purpose in mind in the direction of the houses and layout of the rooms. A second feature connected with the layout of the house is two clear size categories in the houses from New Halos. The first being 12 m² and the other being 15 m² (Haagsma 2003, 82). Furthermore, it appears the smaller of the houses were located on the corner of the blocks and the larger houses located in the centre of the blocks of houses. Despite the disparity in size, there is a clear pattern in the layout of rooms in the 6 houses consisting of a central room surrounded by two smaller rooms on either side; this appears to be the 'canon' of New Halos room layout (Haagsma 2003).

There are two elements at work within the houses of New Halos; larger city design created by the city and the occupant's adaption of it. Turning to the use of space within the house, the finds are mostly connected to the storage and preparation of food and the manufacture of cloth. If one were to test older opinions regarding the social structure of ancient Greek houses, one would expect to find clearly defined gendered spaces in the house, such as an *andron*, a uniquely male space, and a *gunikon*, a female space. Within these gendered spaces one would expect to find specific activities.

for example, the andron would be connected with feasting and the qunikon connected with food preparation and the manufacture of cloth (Derrup 1965; Hoepfner & Schwander 1993). The finds in the houses indicate that the use of space was much more flexible than this. There are clearly areas that were designed for the storage and preparation of food stuffs and supplies such as rooms 5 and 6 in the House of the Snakes, whereas other rooms appear to be the centre of 'everyday' activities in the house, such as the preparation and eating of food, religious practice, making of cloth and grinding of corn, as in room 8. The generality of the finds and the common spread of finds throughout every room in the house goes against the older accepted norms of what an ancient Greek house should be and is more akin to more recent scholarly views that the entire house was open for use by both men and women and only during certain times were areas of the house closed off (Nevett 1999). Elements of these divisions and associations are available in the houses of New Halos, however, they are not as clear cut as other scholars have identified in Classical sites such as Olynthus (Robinson 1946). The house of the Ptolemaic Coins, a large house in the style of the House of the Snakes, had what appeared to be a room with platforms along three of its walls. At first glance this appears to be the typical Classical andron, however excavators found no real evidence for any banqueting but rather came to the conclusion that these platforms served a more practical use as raised storage areas (Haagsma 2003, 69).

There are a few indicators of social aspirations in the houses, such as the banqueter terracotta figurine found with its close links to elite values. This common motif continued from the 7th century B.C. onwards as an expression of elite ideals (Dentzer 1971; 1982). Furthermore, during the Hellenistic period and particularly after the death of Alexander the Great, the motif of the banqueter began to depict deceased individuals, mostly the ruler of the town or city, and by doing so that individual would form part of the *heros* cult of the state as a method to legitimize his authority (Uhlenbrock & Thompson 1990, 38). It is unclear if the persons represented on the terracottas from New Halos are the founders of the city or a deceased family member represented in the form of the *heros* cult (Van Boekel & Mulder 2003, 114). Therefore, finding terracottas like these in the

houses of New Halos indicate that there was a deeply imbedded connection with the personal aspirations of the occupant and new elite ideals. The terracottas were not imported items however, but rather were found in the House of the Coloplast, a site identified as a workshop for the making of terracotta figurines (Reinders 1988). Subsequently, the evidence of figurines such as the banqueter indicate that there was a demand for elite symbols throughout the town and finding these figurines in houses and in the workshop where they were manufactured and sold indicates that there was a need amongst the populace for aspirational items connected with elite status (VanBoekel & Mulder 2003, 114).

In conclusion, the finds in the houses indicate the aspirational ideals held by the occupants, while the layout of the house point towards the entire area of the house as a centre for work rather than one or two rooms. Therefore, the houses were based on the premise laid out by the state but changed for the criteria of social aspiration and family manufacture in the house. In this brief discussion it is clear that the older definitions related to the occupant and house in the Classical world created a too rigid structure for the fluid and ever changing landscape of domestic space and a beginning of a move away from uniformity to individuality within the Hellenistic world.

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An Examination Of The Iconographic Exchange Between The Aegean & Egypt In The Bronze Age

Leon McNamee



Fresco from Avaris

Abstract

The iconographic exchange between Egypt and the Aegean throughout the Bronze Age is a large and complex subject. Direct trade between the two encouraged artistic ideas and motifs to be exchanged while indirect relationships via merchants and artists also contributed. In many ways it is the symbolic exchange of material between Egypt and Crete that is more interesting than the primary traded materials. Symbolic imports to Crete from Egypt include the sphinx and the goddess Taweret while Aegean influence on Egypt is evident from the Minoan style frescoes found at Avaris. These motifs and technologies are significant as they penetrate and modify, to a certain degree, the beliefs and thinking of each culture.

Introduction

The relationship between the Aegean and what Herodotus called "the land of the Nile" in the Bronze Age is clear from historical documents and archaeological evidence. There is ample archaeological evidence in Egypt and Crete of trade links between the two countries. Written and pictorial evidence of the Minoans, the Keftiu as they are referred to in Egyptian literature, is also available. Written sources from Egypt mention the Keftiu by name, where they come from and the products they traded. Pictorial and inscribed images, such as Egyptian wallpaintings, depict male gift-bearers with inscriptions naming them as the inhabitants of the "islands in the middle of the sea", or inhabitants of the "land of the Keftiu and the islands in the middle of the Great Green (Sea)" (Sakellarakis, 1984, 197). The Keftiu are also mentioned in Egyptian official records, stelai, papyri, stone vessels and statue bases. iii There is no doubt that relations between Crete and Egypt were always peaceful and contact seems to have been frequent. Interaction increased from the Middle Kingdom (2160-1788 BC) to the New Kingdom (1580-1085) which coincides with the time of the so-called Minoan Thalassocracy. Contact between the Minoans and the Egyptians became even more frequent during the 18th Dynasty (1580-1335 BC) and reached its peak during the reign of the Great Thothmes III (1504-1451 BC) (Sakellarakis, 1984, 197). I intend to examine selected evidence of artistic exchange between Crete and Egypt. I will discuss fundamental examples of this such as the adoption of the Egyptian god Taweret by the Minoans in their artistic media. Moreover, Egyptian motifs such as sphinxes and griffins will be discussed in their Minoan context. Finally, I will also study Minoan influence on Egypt, with the Minoan style frescoes from Avaris being my principal example.

Reasons for trade

It is likely that direct commercial trade between the Aegean and Egypt began at least as early as the emergence of the Minoan Palatial centres. Much of the archaeological evidence for exchanges between Crete and Egypt in the Bronze Age is Minoan style pottery found in Egypt. These ceramic vessels would have originally contained wine, oil or perfume and

are found throughout Egypt and relate to the New Kingdom period. Ongoing excavations continue to unearth more of these artefacts which according to Cline numbered 1800 vessels of various shapes and sizes. in 1994 (Cline, 1994, 31), LH/LM III pottery as a whole appears to have been consistently imported into Eavpt throughout most the 14th-12th centuries BC. Transport amphorae, storage jars, jugs, bowls and vases in ceramic, stone and glass, as well as scarabs and figurines of faience, frit and steatite were traded between the Aegean and Egypt. Perishable goods such as grain, textiles and metals may also have been exchanged between the two areas but these do not survive. However, they are depicted in Egyptian tomb paintings and are occasionally mentioned in written texts (Cline, 1994, 31-42). It is unclear whether the Minoans sailed directly to Egypt from Crete or if they followed the coastal route of Asia Minor, Syria and Palestine; indeed alternative routes dependent on weather conditions, time of year and the nature of the goods to be transported seems most likely (Watrous, 1998, 21). Nonetheless, it was not just physical goods that were traded along these routes; ideas were also exchanged as evidenced by wall-paintings and other examples of art in both Crete and Egypt. However, we do not know how Egyptian prototypes came to inspire Minoan craftsmen; did they see a physical image or a rough copy? Was there a conscious guest for Egyptian images? Clearly many concepts travelled between the two regions in the minds of envoys, merchants and craftsmen (Wedde, 1997, 75).

The Sphinx & the Griffin

The image of the sphinx is one example of the exchange of artistic ideas between Egypt and Crete. The sphinx is a mythical creature and is not an image taken from nature so it is unlikely to have been imagined in two different places at the same time. The earliest Minoan sphinxes were truly Egyptian in form, reclining royally, male and wingless. The Malia sphinx plaque, now in the Herakleion Museum, was originally found in Quartier Mu, Building D, Room IV (fig.1). It was found amongst the MM II (c.1700 BC) destruction debris. It is a predominantly Egyptian sphinx, with Osirian beard and tail but the head is purely Minoan (Warren, 1995, 3). Excavated by Jean-Claude Poursat, he concluded that this locally made terracotta plaque was a specific Minoan conception and rendition

of the sphinx. He suggested that the plague was perhaps a royal portrait related to the famous "Priest King" seal impression of the Knossos Hieroglyphic Deposit, while at the same time the object expressed exactement la conception égyptienne du sphinx, corps de lion et visage du pharaon (cited in Warren, 2005, 223). He concluded by asking how this representation of royal power was transferred from Egypt to Crete. Warren suggests a model of transfer which is useful to consider. The Egyptian concept of royal power was transformed into a visual form. such as sculpture. The Great Sphinx of Chephren (4th Dynasty) and the rendering of Sesostris III (1872-1853 BC) are examples of this. (figs. 2 & 3). These sphinxes may have been viewed by Minoan artists, travellers or traders who also understood the Egyptian concept. This was then related to the Minoan conception of ruling authority and expressed visually, with the sphinx plague from Quartier Mu being an example (Warren, 2005, 223). The idea of winged monsters was first found in Crete on sealings from Phaistos at the end of MM II or the beginning of MM III. The Phaistos sealings demonstrate how several different, experimental monsters were given wings; there are examples of goats. griffins and lion-bodied creatures being given wings. By the time of the wall-paintings in the miniature style from the New Palace at Knossos, the Minoan style sphinx had been established complete with wings. Distinctive wings were given to both sphinxes and griffins throughout the Aegean between c.1600 BC and c.1500 BC. We can see how over time the Minoans adapted the image of the sphinx as well as its meaning and it came to be a symbol and quardian of vegetation (D'Albiac, 1995, 64-68). Similarly to the sphinx, the griffin was a mythical creature, a combination of elements from two living creatures. Evans thought that the griffin came to Crete from Egypt but it has been argued that it may have come from Syria. Among the earliest depictions of griffins in the Aegean are those on the seals from Phaistos (MM II) and Avia Triada (LM I) (fig.4) (Morgan, 1988, 50).

Taweret

Taweret was a popular Egyptian hippopotamus goddess and almost certainly the inspiration for the Minoan Genius. The Minoan adoption of this foreign deity was proposed by Evans, however this theory was debated until seemingly confirmed by the discovery of three primitive

Genii on Middle Minoan sealings from Phaistos and Knossos (figs. 5 & 6). (Weingarten, 1991, 3). Egyptian Taweret had a long history before being adopted by the Minoans: a hippopotamus demon was represented on amulets possibly no later than the 6th Dynasty (2345-2181 BC). Middle kingdom Taweret can be more closely studied on the so-called magical knives (figs.7 & 8). They are incised with apotropaic figures and frequently short texts. Inscriptions show that they belonged to women and children and were intended to provide protection. The earliest Middle Kingdom figures were slender but the familiar enlarged belly appeared quite quickly. The lion's mane was another early characteristic (this diminishes over time but does not disappear) and the breasts were always shown pendulous. The changing contour and decoration of the dorsal appendage (a crocodile carapace in the clearest depictions) were the most useful features for charting the deity's development. The seal from Knossos appears to be a close reproduction of an Egyptian original complete with elongated hippopotamus head and dorsal appendage of Taweret. The swollen belly, pendulous breasts and lion's hind legs are all characteristic of Middle Kingdom Taweret: the surrounding vegetation also appears Egyptian. It is suggested that the image on which the Knossos Taweret was based left Egypt between 1800-1700 BC (Weingarten, 1991, 3-6).

Taweret often appears with a lion's head instead of the head of a hippopotamus in the New Kingdom but it is difficult to pinpoint when this transformation first took place. The Minoans imported both forms of the deity, but we cannot say if both types of the goddess were imported at the same time. Taweret's role from early on was of nurse and protector of mother and child. The hippopotamus-demon was a divine nurse whose earliest name was Ipy which may have meant "(wet) nurse" (Weingarten, 1991, 7-10). The Minoans also knew of Taweret's lustral role and it was this that they chose to emphasise. The Minoan Genius's earliest attribute was a libation jug (the ewer) and, significantly, Taweret's arrival on Crete coincided with the first appearance of the Minoan rhyton vessel (Weingarten, 2000, 114-119). During LM I the Genius branched out from Taweret-based preoccupations with rituals relating to the handling of liquids and is depicted carrying out a variety of tasks which imitate human activity. The Genius carried large animals to sacrifice and engaged in hunting. Moreover, within two hundred years

the fat hippopotamus deity had been transformed into a more slender shape: it appeared lion-headed and only the thin back ridge invoked images of its Egyptian origins. It seems that the capture and slaughter of animals does not fit in with what we know of Egyptian Taweret (protection and nourishment). However, the apotropaic demons could all be violent. Middle Kingdom Taweret was a combative demon, the threat of the broad knife or sword it carried was not meant to be an idle one. She was even depicted biting and devouring human figures though this was not a trait the Minoans chose to emulate (Weingarten, 2000, 114-119). Warren suggests a similar model of iconographical transfer for Taweret as for the sphinx. The Egyptian conception of Taweret was expressed in visual form: these images were then viewed by Middle Minoan artists, craftsmen and other visitors to Egypt. The Minoan artists then related their understanding of Egyptian Taweret to Minoan beliefs and consequently the Egyptian beliefs were modified to suit Minoan needs. It is worth noting that our knowledge of Egyptian Taweret beliefs is based on textual as well as iconographic evidence while our reconstruction of Minoan beliefs is based on iconography only (Warren. 2005, 225-6).

The Avaris Wall-Paintings

Iconographic transfer could work in both directions and unexpected evidence was discovered recently at Tell-el Dab'a (eastern Nile Delta). In the site known as ancient Avaris, the capital of the Hyksos, large quantities of Minoan murals were found decorating palatial buildings. The frescoes have been dated to the 18th Dynasty, this coincides with Minoan expansion towards the end of the 16th century BC (LM IA). The very isolated finds of Minoan pottery in the early 18th Dynasty however suggest that no permanent colony of Minoans lived at Avaris; the paintings should be considered as a one time royal commission (Bietak, Marinatos, 2000, 42). Although the frescoes from Avaris are fragmentary and in a bad state of preservation, the Minoan characteristics remain clear. The blue scalp of an acrobat indicating a shaved head, the characteristically Minoan flying gallop of leopards and lions and the flounced skirt and anklet of a female representation are some key examples. It is the small details which prove that the artists at work were indeed genuine Aegean-trained artists. This is in contrast to Egyptian artwork in Crete which was copied and adapted by the Minoans; here we have Minoans in Egypt bringing with them new themes in art. The blue scalps are reminiscent of the Boxing Boys fresco from Thera (fig.9) or indeed The Fishermen. The woman wearing the flounced skirt and double anklets around her feet has good parallels among the Theran frescoes as well, especially The Crocus Gatherers; while leopards are thematically at home in Minoan iconography, for example the spotted head of a leopard from the Palace of Knossos (Bietak, Marinatos, 2000. 43). Many of the Minoan, as well as the Tell el-Dab'a landscape frescoes, contain characteristic oval rocks, often referred to in Minoan art history as "Easter eggs". They are realistic depictions of pebbles smoothened by the water of aquatic settings. Evidence of relief frescoes has also been found at Avaris: several pieces of moulded plaster have been discovered, some representing bulls and bull leapers. The well known Taureador Fresco from Knossos can be used as a parallel for the theme (see fig. 10 & and cover photograph) (Warren, 1995, 4).

The quality of the execution of the Avaris wall-paintings and the nature of the scenes depicted (hunting, feline pursuits) suggest aristocratic themes and highly competent artists. Bietak and Marinatos suspect that there were palatial workshops in the various centres of Crete and that the tradition was spread by itinerant artists. The artists of a given workshop must have been directed by a master planner who was responsible for designing the entire pictorial programme. The planners of the Avaris wall-paintings were probably gifted and educated artists who had visited many aristocratic buildings and built up an archive of motifs. Nonetheless, the frescoes were never exact copies and there was always room for innovation. It is suggested that such a team of artists was invited to Avaris for reasons unknown. The group must have been quite large as the wall spaces that are painted are extensive. Since there is no evidence of Minoan artefacts of everyday use it seems that the artists did not dwell long at Avaris and moved on to their next job (Bietak, Marinatos, 2000, 44). Bietak had previously proposed the idea of an inter-dynastic marriage between the Hyksos and a Minoan princess^{iv}. He suggested the importation of artists does not explain the ritual aspects of the paintings. Acrobats performing in palm groves, bull leaping scenes framed by half-rosette triglyph friezes and blue shaved heads would have had a ritual meaning which only Aegean peoples could fully understand and appreciate. However, there is no evidence to support the hypothesis of an inter-dynastic marriage. A special relationship between the two courts is nonetheless a possibility. Nilotic landscapes with reeds, papyri and palms as well as monkeys and, as we have seen, sphinxes and griffins all appear on the Knossian and Theran frescoes. These motifs may well have been transported to Crete and Thera by Minoan artists working in Avaris, however without definitive evidence we cannot be certain (Bietak, 1995, 26).

Hunting Scene

It is worth noting that direct transmission of artistic themes and motifs between the Aegean and Egypt is not always proven with certainty, similar artistic ideas could potentially develop independently in each region. Hunting scenes in which lions attack their prey and are in turn attacked by humans is one example. A stele from Grave Circle B at Mycenae shows lions attacking bulls and humans attacking lions (fig.11), while paintings from Egyptian tombs use the exact same visual rhetoric of the double attack. In the Old Kingdom tombs of Mereruka and Ptahhotep, there are hunting scenes in which a bull is attacked by a lion and the lion itself is hunted by humans. The reason for the pictorial rhetoric here, as on the Shaft Grave stele from Mycenae, is to emphasis that the human hunter is superior. Human dominance over the animal kingdom is being stressed and it is interesting that both the Aegean and the Egyptians used the same subtle devices. The possibility of transmission between the two areas can not be excluded but it is possible that these visual modes were invented independently (Marinatos, 1993, 74-78). It is useful to consider how similar artistic themes could possibly develop independently in different regions and that direct contact, usually via trade, is not the only reason for the development of similar artistic themes and motifs in the Bronze Age.

Conclusion

The relationship between Egypt in the Pharaonic period and the contemporary Aegean world is a large and complex subject. The complexity is increased due to the fact that relationships were both direct and influenced by intermediaries such as merchants and artists from the Levantine states (Warren, 1995, 1). The search for copper and tin, of

critical importance for weapons and tools, seems to be the most likely explanation for the controlling elite of Minoan Crete going abroad in search of trade. However, the question remains, did the inspiration for the Egyptianising motifs come from the movement of Egyptian objects via trade or from the movement of Minoan artists, as we have seen at Avaris (Wiener, 1991, 327 - 339). A combination of both is the most likely answer. In many ways it is the symbolic exchange of material between Crete and Egypt that is more interesting than the primary traded materials. We know that the Minoans imported semi-precious stones. gold, ostrich eggs, animals and possibly ivory as well as alabaster and faience vessels from Egypt while they exported grain, oil and textiles to the East and Egypt. However, the symbolic imports to Crete, such as Taweret and the sphinx, are more significant since they penetrate and modify, to a certain degree, the beliefs, ideologies and thinking of each culture (Warren, 1995, 12). It has also been suggested that Egyptian influence on the Minoans even penetrated their administrative and political structure. It has been argued that the administrative system governing the storage and redistribution of goods in the First Palace at Phaistos is so similar to the many such systems in Egypt and the Near East that it must have been derived from the East (Watrous, 1998, 23). The archaeological, literary and pictorial evidence shows us that the second millennium BC was a period of continuous contact between the Late Bronze Age Aegean and Egypt. During this time a complex network of exchange and trade developed resulting in the transfer of ideas and innovations between both regions.

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ⁱ For example, the official records of the 42nd year of the reign of Thothmes III which mention a jug that was made in the technique of Keftiu

ⁱⁱ There is much debate about the term *Keftiu*; it is most likely the Egyptian name for Crete and the Bronze Age Minoans but it has also been argued that the term refers to Cyrus or is indeed a more general reference to all Aegean and even Levantine seafarers. See Cline, 1994, 32 and Cline, 1999, 124 for discussion.

For example, the frescoes from the tomb of Menheperesenb, priest of Amon during the reign of Thothmes III, where the people are called Keftiu.

iv Bietak has now dated the frescoes to the subsequent New Kingdom 18th Dynasty

Images



Fig.1 The Malia Sphinx from the Herakleion Museum (Warren, 1995)



Fig.2 The Great Sphinx of Chephren (http://pharaohs-en.blogspot.com)



Fig.3 Sphinx of Sesostris III (http://www.insecula.com)



Fig.4 Griffin Seal from Ayia Triada (Morgan, 1988)



Fig.5 Seal depicting Taweret from Phaistos (Weingarten, 1991)

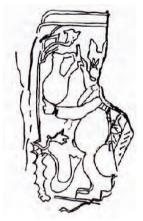


Fig.6 Seal depicting Taweret from Knossos (Weingarten, 1991)



Fig.7 Magical knife now in the Metropolitan Museum of Art (Weingarten, 1991)

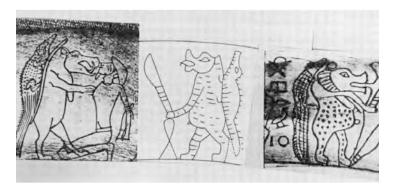


Fig.8 Detail of Taweret on different magical knives (Weingarten, 1991)



Fig.9 Boxing Boys fresco from Thera (www.therafoundation.org)



Fig.10 Bull Leaping fresco from Knossos (http://crete.classics.ox.ac.uk)

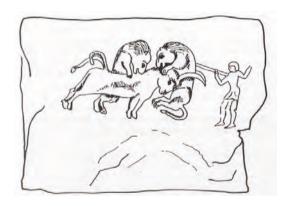


Fig.11 Stele from Grave Circle A at Mycenae (Marinatos, 1993)

Acknowledgements

This author wishes to thank Dr. Christine Morris for her assistance and support in the writing of this paper.

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The story of a fragment: the mummy wrapping of Khnum-Nakht

Michael Ann Bevivino

Abstract

This discussion will focus on a small fragment of linen that was recently donated to the Classical Museum by the UCD School of Archaeology. The linen comes from a mummy that was uncovered during the excavations of Rifeh, Egypt headed by Sir William Matthew Flinders Petrie, at the turn of the twentieth century. The paper will concentrate on the modern life of the fragment — from the excavation of the mummy from which it came, to its unwrapping in front of an invited audience in 1908, and scientific research carried out on it by the Manchester Museum in the 1970s, to its recent rediscovery in UCD. It will focus on one question: who brought the linen to UCD?

Introduction

This paper concentrates on the modern life of a fragment of linen from an Egyptian mummy of the Twelfth Dynasty (*c*.1985–1773BC). It follows the remarkable journey of this tiny piece of textile from the excavation of the mummy of which it was part, to the unwrapping of that mummy in front of an invited audience in 1908, and the scientific research carried out on the mummy by the Manchester Museum in the 1970s, to its recent rediscovery in University College Dublin (UCD). The linen highlights the fragmentation of collections and shows just how much can be learned from a seemingly unassuming, non-descript artefact.

A small, finely woven fragment of linen (UCD Classical Museum catalogue number: UCD 1620; approximately 7.5 x 9cm; Fig. 1) was recently found in the School of Archaeology in UCD and is now in the UCD Classical Museum. It is a dark tan colour, with threads of approximately 0.1cm thick. Although the linen appears to be

undecorated, there are a number of darker threads running vertically through it. It is in very good condition. When found recently, it was contained in a paper envelope along with a card (Fig. 2). This card contains the name of the mummy and the name of the Manchester Museum, and provided the starting point for provenance research on the linen



Figure 1: Fragment of linen from the mummy of Khnum-Nakht.



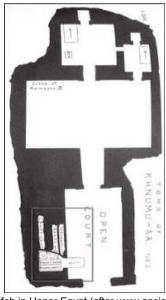
Figure 2: Manchester Museum card found in the envelope with the linen.

The Tomb of the Two Brothers

In 1907, during Sir Flinders Petrie's excavations at Der Rifeh in Middle Egypt, a previously undisturbed Twelfth Dynasty tomb was found and excavated. It contained the mummies of two brothers (as identified by inscriptions on their coffins) named Nakht-Ankh and Khnum-Nakht. The brothers were accompanied by wooden figurines and models, pottery, a set of canopic jars and tomb furniture (David 2007, 18–19). The tomb was fully excavated, using scientific methods that were being pioneered by Petrie at the time. As theirs was the only non-royal tomb in the area in Der Rifeh, and considering the types of objects found in the tomb, it can be assumed that the brothers were of a high status. In fact, the

inscriptions on the coffins name Khnum-Nakht as a priest of Khnum, the local deity of Der Rifeh. Early analysis of the mummies identified Nakht-Ankh as a possible eunuch, but this has not been confirmed (Murray 1910, 33).





(Left) Figure 3: Map showing location of Der Rifeh in Upper Egypt (after www.ancient-egypt.co.uk).

(Right) Figure 4: Petrie's plan of the tomb, with the section for the Two Brothers noted (after Petrie 1907).

In the summer of 1907, the entire tomb group was offered to the Manchester Museum by Petrie in exchange for a £500 donation to his next excavations. Thanks largely to the patronage of a wealthy Lancashire industrialist, Jesse Haworth, the Manchester Museum was already establishing itself as one of the major centres of Egyptology in Britain at this time (David 2007, 99). On account of this, the money was easily raised and the materials subsequently entered into the Manchester collection.





(Left) Figure 5: Coffin of Khnum-Nakht (image courtesy of the Manchester Museum, the University of Manchester).

(Right) Figure 6: Coffin of Nakht-Ankh (image courtesy of the Manchester Museum, the University of Manchester).

The Unwrapping of Khnum-Nakht

One of Petrie's former students, Dr Margaret Murray (1863-1963), was Curator of Egyptology in Manchester when the mummies came into the museum's collection. On 6 May 1908, Murray led a unique interdisciplinary team to unroll the mummy of Khnum-Nakht in the Chemical Theatre of the University, in front of an invited audience of about 500 people, including members of the local history society, prominent archaeologists and Egyptologists, and important people from the museum (Alberti 2007, 138). Although Murray's 1908 team included some of the foremost specialists of the day, there was practically no technology available to them to help with their analysis, and most of their observations were made with the naked eye.



Figure 7: The audience watching the unwrapping of Khnum-Nakht (image courtesy of the Manchester Museum, the University of Manchester).

While unrolling mummies had been fashionable in the eighteenth and nineteenth centuries (David 1979, 83), Murray's team was the first to include experts on anatomy, chemical analysis and the study of textiles, and the first to see the potential of mummies as a resource for scientific study. She defended her decision to unwrap Khnum-Nakht by saying that

"To most people, there are few ideas more repugnant than that of disturbing the dead. To open graves, to remove all the objects placed there by loving hands, and to unroll and investigate the bodies, seems to many minds not merely repulsive but bordering on sacrilege ... To such people, I have nothing to say. Their objections – their opinions even – are an offence to science." (Murray 1910, 7).

This event marked an important shift from the 'freak-shows' of Victorian curiosities to a more scientific, interdisciplinary method that was being espoused in archaeology at this time. However, the unwrapping was not entirely free from the questionable practices of the previous era. *The Manchester Guardian* reported on 7 May 1908 that

"The unrolling was witnessed by five hundred people and lasted one hour and a half. At the close of the ceremony, members of the audience who wished to have a piece of the mummy wrappings were invited by the Chairman of the Meeting to leave their names and addresses." (David 2007, 103).



Figure 8: Margaret Murray and her team with the unwrapped mummy of Khnum-Nakht (image courtesy of the Manchester Museum, the University of Manchester).

It is clear from this that pieces of the linen were given out as souvenirs to the attendees. While the parcelling out of objects like this may seem absurd to a modern audience, the selling off of finds from excavations to different people and institutions was not uncommon at this time (for example, see Trigger 1996, 68), and few would have taken issue with this practice in the early years of the twentieth century. To the audience, cutting up the mummy linen did not destroy the integrity of the mummy (which would have been the main interest); rather, they viewed the linen as a secondary element and a by-product of the research of Murray's team

Early Scientific Analysis

Murray's 1910 monograph, The Tomb of the Two Brothers, details much of the scientific analysis that was undertaken by her team. Upon inspection, it became apparent that the burial of Nakht-Ankh had received much greater care than that of his brother. During the initial excavations back in Egypt, it was noted that Nakht-Ankh had been buried with a set of canopic jars and two model boats, while Khnum-Nakht only had his coffin (Murray 1910, 17), In Manchester, Murray's team observed that the mummy of Nakht-Ankh was moist and relatively well-preserved, whereas Khnum-Nakht was completely dry and most of the tissue had turned to dust. Dr John Cameron, who undertook the anatomical study, stated that it was '...almost exactly like snuff in appearance' (Cameron in Murray 1910, 43). According to Murray, 'the difference in the condition of the two mummies was very striking' (Murray 1910, 32), and it soon became clear that they had been mummified using different methods: for instance. Nakht-Ankh's fingernails were sewn through to keep them attached, while no special care was taken with those of Khnum-Nakht. Two possible explanations have been posited for this. Firstly, mummification practices were still being perfected in the Twelfth Dynasty, which was the start of the Middle Kingdom, a fact that may have led to the improper mummification of Khnum-Nakht (David 2007, 90). If this were the case, it might explain why Khnum-Nakht was buried without a set of canopic jars: perhaps his internal organs were never eviscerated, and therefore did not require them. Secondly, it is possible Khnum-Nakht died suddenly, before preparations for a proper

burial could take place, while Nakht-Ankh had more time to prepare for the afterlife (David 2007. 5).

Cameron speculated that while Nakht-Ankh lived to be at least sixty, Khnum-Nakht was only around forty when he died (which, in fact, was much closer to the norm). He also noted a possible racial difference between the 'brothers', based on an analysis of their skulls and on their stature. He referred to the skull of Khnum-Nakht as being 'of negroid type' (Cameron in Murray 1910, 34), and this led him to believe that these were, in fact, half-brothers who shared the same mother. This maternal link corresponds with the inscriptions on the two coffins. The racial differences, however, have yet to be confirmed.

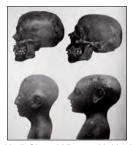


Figure 9: The skulls of Nakht-Ankh (left) and Khnum-Nakht (right) as compared by Cameron to the wooden figurines of the brothers (after Murray 1910).



Figure 10: The head wrapping of Khnum-Nakht (after Murray 1910).

The wrappings themselves were also analysed in detail. All of the wrappings were of linen, the quality of which varied, and it appears that some of the pieces were actually older, re-used scraps. This would have been normal practice at the time (David 2007, 112). Hieroglyphs were

written on some of the pieces (particularly the outer sheet). Murray noted that although the levels of preservation differed between the mummies (once again Khnum-Nakht was less well-preserved than Nakht-Ankh), the wrappings would have been similar to each other originally. All of the measurements taken in 1908 were approximate, but the team nonetheless made an attempt to describe and identify each bandage and wrapping. This was accomplished through a detailed analysis, undertaken by Thomas W. Fox, of the weaving of the linen of Nakht-Ankh, as it was similar to that of Khnum-Nakht. He noted many 'peculiarities' in the threads, and remarked that '[the wrappings] are all made from flax, but with two exceptions, are not remarkable for fineness, neither are the textures unusually close or beautiful' (Fox in Murray 1910, 65), and came to the conclusion that anything available was used.

All of Khnum-Nakht's wrappings were dyed yellow with the safflower plant (*Carthamus tinctoria*, or Bastard Saffron) immediately before they were used as bandages (Murray 1910, 76). This yellow is extremely fugitive (i.e. does not preserve well), which most likely contributed to the discoloration of the piece of linen in the Classical Museum. This dye would have been less costly than others in the Twelfth Dynasty. The wrappings of Khnum-Nakht could be placed into three distinct groups: those of a heavy, yellowish-brown colour, those of a light yellow shade, and those of a richer, more solid yellow (Hübner in Murray 1910, 75). Unfortunately, the piece in the Classical Museum is difficult to ascribe to any of these categories, as it has, no doubt, faded since 1908. Is it also impossible to know where on the mummy it came from, or even if it was a new or reused piece of fabric.

The Manchester Mummy Project

Many of the initial speculations of 1908 were confirmed (or rejected) through scientific studies that were begun in the 1970s through the Manchester Egyptian Mummy Research Project (MEMRP). Under the direction of Professor Rosalie David, the project set out with two aims: to extract as much information as possible from the mummies in the Manchester collection; and to set a standard methodology that could be used and adapted by other institutions (David 2007, 115). It achieved these aims by utilizing the most cutting-edge technology of the time, and

many of the studies were undertaken using the nearby resources of the Manchester Royal Infirmary and the University of Manchester Medical School (e.g. radiography; David 2007, 118). The project included a radiological study of all seventeen of the museum's human mummies; analysis of their teeth; pathology investigations to determine diseases; light and electron microscopy; insect identification; experimental mummification; fingerprint studies; and facial reconstructions (David 1979, Introduction).

The re-analysis of the Two Brothers shed some light on the interesting medical issues of the men. For example, during the initial investigations, it was postulated that Khnum-Nakht had a 'club foot' (*talipes equinovarus*), but this was not supported by the modern radiological tests (David 2007, 119). It is now understood that the visible deformity was caused by the tight bandaging of the mummy's foot. A 1910 assessment of Khnum-Nakht's dentition, on the other hand, was confirmed by the more recent test. Cameron, in his initial evaluation, stated that the teeth of the mummy 'must have endowed him with a somewhat forbidding aspect' (Cameron in Murray 1910, 38), a statement that was corroborated by Leek in 1978 through the observation of a double gemination (fusion) of two of Khnum-Nakht's teeth (David 2007, 121). It was also observed that he suffered from severe osteo-arthritis, which would have affected his posture (David 1978, 170).

The facial reconstructions of Khnum-Nakht and Nakht-Ankh are particularly interesting, as they seem to resemble the small wooden figurines found in the tomb (Figs 11 & 12). It is clear that these figures were depicted with traits that were specific to their owners, rather than just simply being idealised portraits. In fact, it appears that they were initially labelled incorrectly in antiquity (with their names swapped), but these identifications could be conclusively reversed by looking at the facial reconstructions (David 1978, 171). Interestingly, one of the figures was described in the 1910 monograph as holding 'what appears to be a folded piece of linen' (Murray 1910, 16)! The dedicated scientific research of mummies in Manchester continues today, and current studies of their DNA are investigating whether or not the two men were related by blood at all (David 2007, 132–33).





Figure 11: The figurines of Khnum-Nakht (left) and Nakht-Ankh (right) (images courtesy of the Manchester Museum, the University of Manchester).



(Right) Figure 12: The facial reconstruction of Khnum-Nakht (left) and the facial reconstruction of Nakht-Ankh (right) (images courtesy of the Manchester Museum, the University of Manchester).

Who brought the linen to UCD?

The small fragment of linen that is the focus of this paper came to light in UCD only recently, and was subsequently given to the Classical Museum by the School of Archaeology.

Although it is not certain (as no detailed contemporary account of the unwrapping or its attendees survives), it seems likely that the linen was brought to Dublin by Professor R.A.S. Macalister (Fig. 13), the first Chair of Celtic Archaeology in UCD. Macalister was a contemporary of Petrie's and is likely to have been invited to the unwrapping given his high status as an archaeologist. Macalister and Petrie ran in many of the same

circles and were involved in some of the same organisations. In 1908. Macalister was conducting excavations in Palestine on behalf of the Palestine Exploration Fund (PEF), whom he had worked with since 1898 (O'Sullivan forthcoming, 520). Petrie (Fig. 14) was another prominent member of this organisation, and although he and Macalister never excavated in Palestine at the same time (www.pef.org.uk), it is plausible that they would have known each other through this. Even more interesting, in relation to the mummy linen, is the fact that Macalister is named in Petrie's published excavation reports from Rifeh (Petrie 1907. iii) as a member of the General Committee of the British School of Archaeology in Egypt and Egyptian Research Account. The Egyptian Research Account was set up in 1893 by Petrie (www.cornucopia.org.uk) and was subsumed into the British School of Archaeology in Egypt in 1905, and it was this joint group that helped to fund the excavation of the Tomb of the Two Brothers. As it was Petrie who had organised the sale of the Tomb of the Two Brothers to the museum, it is perfectly conceivable that Macalister had travelled to Manchester to attend the unwrapping.





(Left) Figure 13: R.A.S. Macalister (image courtesy of UCD School of Archaeology). (Right) Figure 14: W.M.F. Petrie (image courtesy of the Petrie Museum, University College London).

Described by Muiris O'Sullivan as 'an intellectual giant with an interest in several disciplines, who had many friends and collaborators in the field and was universally recognised as a "character" (O'Sullivan forthcoming, 524), Macalister undertook his appointment in UCD in 1909 and, until his death in 1950, remained prominent in archaeology, both in Ireland and abroad. Unfortunately, Macalister's personal papers were burnt by his sisters upon his death (Aideen Ireland, pers. comm.), leaving us with few details of his specific whereabouts in the early twentieth century. Further

research is currently being conducted on this question, however, and perhaps more information will come to light in the near future.

Conclusion

Although it is not certain that Macalister was responsible for bringing the linen to Dublin, there can be no doubt as to the power of this artefact to yield information and act as a catalyst for future research. From the starting point of a small, seemingly non-descript, unmarked piece of linen and a museum card, it has been possible to place the object in its historical context, to piece together its story, and to highlight the fragmentation of a museum collection.

It seems that everyone who witnessed Dr Murray's unwrapping had the opportunity to take home a piece of the mummy linen. This raises two other questions: how many pieces of Khnum-Nakht's wrappings are present in other collections, both public and personal? And where are they?

The fragment of linen is currently (spring 2010) on display in the Classical Museum, Room K216, School of Classics, Newman Building, University College Dublin. The main contents of the Tomb of the Two Brothers are on display in the Manchester Museum.





(Left) Figure 15: The display of the Tomb of the Two Brothers in the Manchester Museum in 1912 (image courtesy of the Manchester Museum, the University of Manchester).
 (Right) Figure 16: The display of the Tomb of the Two Brothers in the Manchester Museum today (image courtesy of the Manchester Museum, the University of Manchester).

Acknowledgments

I would like to thank Dr Karen Exell, Dr Sam Alberti and Phyllis Stoddart of the Manchester Museum, as well as Conor McDermott of the UCD School of Archaeology. Thank you also to Aideen Ireland (National Archives of Ireland), Donal Fenlon (librarian, Royal Society of Antiquaries of Ireland), Pat Cooke (UCD School of Art History and Cultural Policy), Richard Langley (Petrie Museum of Egyptian Archaeology) and Dr Christina Haywood (UCD School of Classics).

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An Ethnographic study of the third gender and its application to the archaeological record.

Michael Harte

Abstract

The aim of this article is to use ethnographic and historical sources to examine the third gender and to use this data to explore how the third gender may be identified in the archaeological record. Ethnographic and anthropological evidence used as the basis against which the was archaeological data was tested. The main studies examined here are the third gender in native North America and in India. The results indicate that the third gender is not as rare as is often assumed. They also show that third gender individuals were usually seen as an important aspect of their societies, and that the same individual could hold varying and often conflicting statuses within society and be perceived in a variety of ways. The biases within archaeology are also discussed, and it is observed how archaeologists often infer their own cultural background onto their interpretations of sites. As a result. evidence for a third gender in the archaeological record is often overlooked

Sex, Gender and the Third Gender

<u>Sex</u>

Sex refers to the biological male or female. It is a given category for all humans. It is, however, related to gender, which is often based on sex (Preucel & Hodder 2005, 15). While the concept of gender has typically been the focus of feminists, who usually use it to highlight women's positioning in society, past or present, the study of sex has focused more on men (Beasley 2005, 117). The study of sex has revolved around sexuality and sexual identity (ibid.)

<u>Gender</u>

Gender is culturally and socially constructed. Certain roles and behaviours are assigned to a certain group of individuals, which leads them to be regarded as a particular gender. However, gender and sex are still related (Nelson 1997, 15). Humans have replaced an instinctive division of behaviour along sex lines with a learned division of behaviour built on gender, which is based on, but not entirely dependent on, sex. Therefore the roles of a particular gender may be performed by another (Taylor 1996, 50). This is because gender is not a fixed state determined at conception, but rather a fluid category that is always in the process of being contested and negotiated (Preucel & Hodder 2005, 418). Due to this, the relationship between biological sex and gender must be treated differently for every culture and time period (ibid.)



Figure 1 Charlie the weaver, c. 1895. This photograph shows the Navajo nadleehi, a third gender individual, known as 'Charlie the weaver' (on the right) dressed in a style distinct from men and women (Roscoe 1998, 42)

Third Gender

Within many societies, there are those who cross gender lines and assume genders different to those typical of their biological sexes (Fig.1; Donald & Hurcombe 2000, 72). Traditionally, when these individuals were studied by anthropologists, they were classed as transvestites and were incorporated into the Freudian model of gender inversion. In recent years this idea has been challenged, and rather than a question of 'either-or', these people have come to be seen as a third gender (ibid.) Third gender status encompasses occupational, religious and sexual elements

(Hollimon 1997, 173). Blackwood (1998, 3-4) gives his interpretation of the third gender in native North America by saying that it 'is not a deviant role, nor a mixture of two genders, nor less a jumping from one gender to its opposite. Nor is it an alternative role for non-traditional individuals who are still considered men or women. Rather, it comprises a separate gender within a multigender system'.

The Third Gender in Native North America

Many Native American groups did not just recognise two genders, men and women, but rather lived in a multigender social system. Males and females who adopted alternative gender roles are referred to as berdaches and are classed as a third gender (Hollimon 1997, 173). Male berdaches typically wore women's clothes or at least clothing that was more effeminate than that of the other males of the group (Fig. 2). They did the work of men, women, and at times work that was associated with neither men nor women but just berdaches. They often gained places of power, becoming artists, innovators, ambassadors and religious leaders (Roscoe 1998, 4). Female berdaches became warriors, hunters and chiefs (ibid.) Out of around 400 different ethnic groups living in North America when Europeans arrived, about 150 of them had alternative genders where males could adopt a non-masculine lifestyle. Of these 150 tribes, about 50 had alternative genders where females could adopt lifestyles that were not typical of the majority of the females of the group (ibid. 6).



Figure 2 "Squaw Jim and his Squaw. Jim with the mirror". This photo shows a Crow berdache on the left with a Crow Woman, c. 1877- 1878 (Roscoe 1998, 33).

Economic Role

One of the most important aspects of berdaches was their economic contribution to society. Among most groups it was not sexuality or temperament that made a person a berdache, but rather the work that they were inclined to do. There are several instances where it was noted that a boy's skill at women's work was the first indication that he was to be a berdache (Fig.3; Donald & Hurcombe 2000, 73).

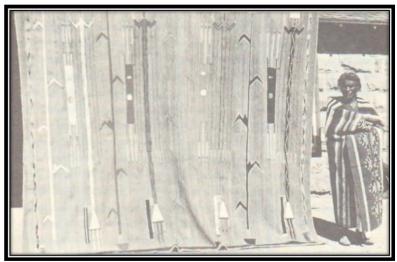


Figure 3: A Navajo berdache standing beside a tapestry of a sandpainting that he has woven, c. 1930 (Berlo and Phillips 1998, 35).

Shamanic Role

Berdaches also played a religious role in many Native American groups. Among various tribes of Southern California, such as the Chumash and the Yokuts, berdaches acted as shamans. Among the Chumash, berdaches conducted funeral activities (Hollimon 1997, 176). Berdaches did not have to become shamans but often did due to their greater spiritual power. This was often connected with their own liminal status within the group. Their intermediate gender position was seen as a reflection of their spiritual position between the earthly realm and the supernatural (ibid, 183).



Figure 4 A Crow male berdache dressed in the clothes she has prepared for her burial, standing outside her cabin, 1928 (Roscoe 1998, 29).

Perceptions of Berdaches

How berdaches were perceived by themselves and by their communities varied greatly from tribe to tribe. Within many groups, berdaches were not just tolerated but honoured. Among the Navajo, their berdaches, or *nadleehi, were* regarded as an important element of society; one that was necessary for the survival of their people (Fig.5; Donald & Hurcombe 2000, 75).

The Hijra of India

Hijras are a third gender group in India. They are males who, as a result of being homosexual, undergo emasculation and have their genitals removed (Nanda 1996, 373). They are devotees of Bahuchara Mata, one of the many versions of the Mother Goddess worshipped throughout India (Fig.6). The general understanding of hijras in India is that they are hermaphroditic, or intersexed (ibid, 380).

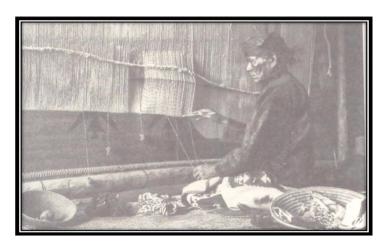


Figure 5: A Navajo Nadleehi working at a tapestry (Roscoe 1998, 61).



Figure 6: Bahuchara Mata, one of the many versions of the Mother Goddess worshiped throughout India and the deity to whom the hijra devote themselves (Nanda 1996, 378).

Becoming Hijra

Hijras claim that a defective male sexual organ causes their lack of desire for women. Children with ambiguous genitals will be classed as

born hijras (Nanda 1996, 381). However, most hijras are not born with a defective male organ and so must be castrated in order to achieve hijra status (ibid.) Although all hijras say 'I was born this way', this is intended to mean their innate essence, rather than a physical condition (ibid.)

Social Role of Hijras

The caste system of India incorporates social units and occupational exclusivity. It maintains control over its members and the hierarchically based group allocation of rights and privileges (ibid, 409). Hijras are not fully part of the caste system and the institution of the hijra is often seen as having the features of both a caste and an ethnic group, and is incorporated into the Indian social system as such (ibid.).

Hijras as Ritual Performers

Hijras are present at celebrations, especially in households where a male child has been born (Fig.7; Suthrell 2004, 79). The hijra come to bless the child and the family, and to provide entertainment (Nanda 1996, 386). The hijra also mimic the behaviour of women at these events, often exaggerating feminine characteristics, such as displaying an aggressive feminine sexuality (ibid, 386). They may also imitate women by pretending to be pregnant, stuffing material against their stomach to simulate a pregnant belly, then going on to act out labour through a great deal of groaning (Suthrell 2004, 80).



Figure 7: Two hijras bless a male child (Nanda 1996, 389).

Perceptions of the Hijra

Hijras identify themselves as 'neither man nor woman'; they are 'not man' because their male organ does not work and 'not woman' because they cannot bear children (Nanda 1996, 381). Hijras take on certain feminine roles, such as their wearing women's clothes, performing women's occupations, their liking for children and their erotic fantasies and experiences with men (ibid.).

The Third Gender in the Archaeological Record

Archaeologists must be conscious of gender differences in burials and also the potential for a third gender. Holliman (1997) puts forward these hypotheses for the presence of gender differences or third gender in Native American burial contexts (Table 1).

Hypothesis 1:

Gender is not symbolically marked in mortuary contexts.

Test implications:

- High or moderate (51-100 percent) overlap in burial accompaniments of males and females
- b. No spatial differentiation between female and male burials.
- No stylistic differences (material, form, colour, etc.) of clothing or ornaments

Hypothesis 2:

Gender is symbolically marked in mortuary contexts.

Test implications:

- Dichotomous treatment of male and female burials (artefacts buried with males are never found with females or vice versa).
- b. Spatial segregation of male and female burials.
- c. Stylistic differences between male and female clothing and ornaments.

Berdache burial can be identified when:

- a. A male burial is associated with female artefacts.
- b. A male is buried in the female portion of the cemetery.
- c. A male is buried with female or third gender clothing and/or ornaments.
- d. An individual is buried with tools used in a third-gender craft or occupation (e.g. digging sticks and baskets). These tools must be sufficiently uncommon among other burials to indicate specialized use.

Table 1: Hypotheses put forward by Holiman (1997)

Signen am Hohentwiel, Germany

Signen am Hohentwiel is a cemetery located in south-western Germany, and dates from 2175 to 1950 B.C., spanning the end of the Neolithic and the very start of the Bronze Age (Weglian 2001, 138). At Signen, biological females are usually buried on their right side with their heads in the southern portion of the grave, while males tend to be buried on their left sides with their heads in the northern portion of the grave.



Figure 8. The cemetery at Signen with the graves of the possible third gender individuals highlighted in the red square (Weglian 2001, 145)

There are two graves that do not adhere to this system; one an elderly male buried in the female position, the other an atomically female skeleton buried in the male fashion (Fig.8). There are a number of reasons as to why this might be so. Firstly, both of these individuals may have taken on alternative gender roles; the male may have taken on some feminine position in the community while the female may have taken on a masculine one (ibid, 142). However, other theories have been put forward. The corpse of the male may have been regarded as

dangerous in some way, and so was buried in the 'incorrect' position as a means of confusing the spirit. Also, the female skeleton could have been assigned to the wrong sex by the archaeologist who excavated it, as this skeleton's pelvis was in too poor a condition to determine its sex, and so only the cranium could be used (ibid.).

Chumash Berdache Burials

Among the Chumash of southern California, berdaches were responsible for the funerary rites of the community (Ramet 1996, 63). Chumash graves in southern California have been excavated and evidence of berdache burials has been noted, though not directly through grave goods. Of 210 graves studied, the examination of grave goods did not determine if any of these graves belonged to berdaches. It is known that Chumash berdache undertakers were paid with unused baskets which. along with digging sticks, they used to dig the graves (Hollimon 1997, 186). Basket numbers did not show any signs of having been gendered. as 14 of those found were with males and 15 with females (ibid.). Instead degenerative joint disease was used to identify berdaches. Females from this region usually show much greater degeneration of the spine than males, regardless of age, a characteristic that is associated with occupation (Ramet 1996, 63). Degenerative joint disease is often an activity-induced condition, caused by habitual motions and postures. (Hollimon 1997, 186). Two males, both of about eighteen, were found with spinal arthritis that could indicate that they undertook work that placed their spines under great mechanical stress. Such work may include the use of digging sticks to harvest tubers or dig graves; both of these activities were carried out by berdaches (ibid.). However, the grave goods present do advance this theory, as these individuals were buried with the tool kit associated with berdache undertakers, including digging stick weights and baskets (Ramet 1996, 63).

Conclusion

The commonality of the third gender must be taken into account while considering its importance in society. The case studies examined here constitute a sizable part of their populations. As has been stated, alternative gender roles were found in over a third of the indigenous

groups of North America. They were not found in a particular part of the continent, but rather were spread throughout North America, which leads the author to consider that these roles were by no means recent additions to these societies at the time of the arrival of Europeans, but had been present for centuries if not millennia. The Hijra of India also make up a sizable proportion of the overall population, numbering from 50,000 to 1.2 million.

In light of this evidence, the third gender must not be regarded as a fantastical or bizarre phenomenon, one that is highly unlikely to have existed in a past society. Instead it should be seen as a social feature that occurs more than anthropologists or archaeologists would credit. The third gender must be considered while trying to understand a society, especially while trying to interpret gender diversity.

The bias of archaeologists to try and avoid speaking of the third gender and to simply overlook it can also be seen in the case studies examined here. A bias can be seen while examining the third gender over larger populations. The exact number of native North American tribes that had berdache roles has never been determined for certain, though it is largely accepted that of about 400 ethnic groups on this continent at the arrival of Europeans, around 150 had alternative gender roles (Roscoe 1998, 6), accounting for about 38% of all the tribes. However, it is often overlooked that it isn't certain that there were 150 groups that had berdache roles, but rather there are this number that the role has been recognised; where it is certain alternative gender roles were present. There are a high number of tribes that have never been studied by anthropologists, which died out or were greatly influenced by Europeans before their customs and social structures could be properly documented. In these cases, it is still accepted to assume there were no berdache roles unless there is definite evidence that there was. Therefore the number of groups that had berdache roles may well have been higher than is currently believed.

In order for archaeologists to properly understand the status of third gender individuals, it is vital that the possibility of varying and conflicting statuses be considered. As is seen here, it is never enough to identify one status or social standing for a person and assume that all the people of that gender held the same standing. It is certainly a mistake to infer modern Western ideals of the status of alternative genders and gender deviants onto other cultures.

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Reflection Section

Digging towards the light

Seamus Heaney

Archaeology: it begins for me with the broken-off bowls and stems of clay pipes, shards of old cups and plates, all that glimmered in the garden mould when I was a youngster. With a spike of frazzled iron on a high windowsill at school, supposed to be a Viking sword or dagger found somewhere on the banks of the Bann. With Newferry on the Bann itself, a name that kept appearing on the labels of flints and scrapers in the Ulster Museum's collection.

Newferry was also a place close to where I grew up, where the road ended at the water's edge. That part of the river was wide and deep and silent, unhurried and smooth-sufaced, fringed with reeds, conducive to stillness and reverie. I went there early on with my father who had cousins living about half a mile away, men as native the ground as the Mesolithic inhabitants millennia before, moving as unobtrusively and purposefully as those hunter-gatherers with their fish-spears. Even then, I had some intuited sense of the prehistoric in the parochial ground, a feeling I retain and indulge when I return to the spot, as I often do, 'for tranquil restoration'.

Stationed there, susceptible to the atmosphere, sensing an extraness, wishing for some further revelation – that mood of need and anticipation is not unlike the mood and need that precede the composition of a poem. Not unlike my feelings in 1972 when I stood with Seamus Caulfield on the bog at Belderg and heard him tell of the stone age fields under the lid of the peat and rehearse his excitement at the continuity and congruence of lives lived on his home ground for as long as those Bannside farmers and fishers had lived on mine.

His father had noticed the unlikely appearance now and again of stones out of the bog, some of them quernstones. Each of them was called locally a *cloch lochlannach*, thereby deemed foreign or norse, yet they

would turn out to be as native to the ground as the Caulfields themselves. And when Seamus went on to excavate and make an exhibition of all that he found in Céide Fields, he was making his own kind of poem. The establishment of the interpretive centre, in other words, was an outward manifestation of his inwardness with the place and his emotion about it – an emotion which until then had probably been a bit of a mystery to himself. But now he had given it what Shakespeare says the poet gives to the important yet elusive and insubstantial stuff in our lives, 'a local habitation and a name.'

Important, elusive and insubstantial was the aura that surrounded the subject of a different bog poem I'd written a couple of years before visiting Belderg. When I saw the photograph of the head of the Tollund Man in P.V. Glob's bewitching book *The Bog People*, an account of Iron Age bog bodies found in northern Europe, I was within another field of psychic force. I had already imagined the bog as a repository of memory, where 'They've taken the skeleton/Of the Great Irish Elk/Out of the peat,' and even though that poem – 'Bogland' - was the one that closed my second collection, it had felt like an opening when I was writing it. And with the discovery of the Tollund Man, the dig, you might say, had begun in earnest.

It was a matter of being led deep and far by the discovery of a significant object, which is one of the main ways that poetry resembles archaeology. Just as a bronze age field system can be projected from a few chanced upon stones, a whole underlife of memory and imagination can swim up at the sight of a significant image. When I saw the photo of the Tollund Man's head in Glob's book, for example, I could have been looking at the face of my great-uncle Hughie, with his countryman's gaunt face and his stubble of moustache, so there was an immediate deep familiarity with this Iron Age predecessor, an at-homeness that grew as other associations began to gather. The body preserved by the action of acids in the peat reminded me of stories of saint's bodies remaining fresh and fragrant in the tomb, and the fact that the Tollund Man was presumed by Glob to have been a sacrifice in an old fertility religion only enriched that dimension.

This was early in 1970, when the British Army was already in the north and military action, murders and explosions were now common and ominous. We knew that the atmosphere was darkening and it seemed that something like prayer was maybe the best defence of the spirit: what happened, at any rate, was an invocation to the victim of the fertility ritual, a prayer that he would make the bodies of these latest victims 'germinate', renew life in a place where we were 'lost, unhappy and at home.'

And that orientation towards Denmark and Baltic Europe coincided with the great moment of interest in Viking Dublin in the early 1970s, Breandán O Ríordáin's Wood Quay excavations, the renewed sense of the Norsemen as founders rather then fell destroyers. Out of which excitement came many of the poems in *North* (1975), a book which completed a chapter of my work that had begun with a poem called 'Digging'. The next book, *Field Work* (1979) would not be going 'down and down/For the good turf' but seeking to trust 'the clear light/Like poetry or freedom/Leaning in from sea.'

Seamus Heaney.

Archive of Local Knowledge.

Professor Seamas Caulfield

My furthest memory is of his daily visits to our house, our nearest neighbour who was already in his eighties when I remember him. In appearance, in dress and even in name he was unlike anyone else who came to our house. He had long sidewhiskers down to his clean shaven chin, he usually wore a sleeved waistcoat, a black waistcoat front with white bainin tweed sleeves and back added. His name was Michael Regan (pronounced as Reagan) but he was known as "Shannon", his grandchild's pronunciation of his home name Sean Dhuine, the Old One. Irish was his first language but he was beautifully eloquent in both Irish and English. He had a firm belief in the world of the Sidh, the spirit world which co-existed within the physical world which he inhabited and he was very conscious of a special relationship between the Sidh and the Regan name.



Fig. 1 - Michael Regan 'Shannon'

Shannon was very conscious that Belderrig had been inhabited in earlier times. He told by father of the bró Lochlainn, the "Danes" quernstones which on occasion were uncovered in the bogs during turfcutting. The explanation for the occurrence of these random finds was that the Danes when they went to their work in the fields during the day suspected that the Irish women they had working at home as slaves were using the querns to grind for their own families so to avoid this possibility they carried one stone of the quern with them into the field. The bró Lochlainn was readily distinguishable from the modern rotary quern in being much smaller in size.

Shannon had another story of the Lochlannaigh in Belderrig, one that is particularly relevant to the folk observation of buried landscape under the bog. Two elderly Danes after years of travel met in their own home country. One said to the other

"That stick you carry was cut from a tree that grows in Shralaghy". (Shralaghy is a townland four kilometers to the south of Belderrig.)

"You are right" said the other, ''agus nach bhreá an saol a bhí againn in Éirinn fadó nuair a bhí Cnoc a' Thanaidh gach ré bliain faoi cruinneacht agus faoi eorna".

"And did we not have a great life in Ireland long ago when Cnoc a' Thanaidh was every second year under wheat and under barley".

Shannon was always at pains to point out that Cnoc a' Thanaidh had nothing to do with Tanai Mor and Tanai Beag, the two mountains to the west of Belderrig but was an old name for Cruinnioc, the low hill on the east side of the valley. Cruinnioc was a bog-covered hill from which most of the bog has been cut away revealing two megalithic tombs and very extensive traces of pre bog field boundaries. It is certainly not the place where one would contemplate growing wheat or even barley today.

There was also an awareness of the phenomena of environmental change in the explanation Shannon had for the remains of fallen trees and in situ pine stumps near the base or on the mineral soil beneath the bog with many of the stumps showing traces of burning. According to Shannon there had been

"Three years of wind which had felled many of the trees, Three years of drought which had dried up the forest Three years of fire which had destroyed the forest."

There is a well-known comparison of the relative lifespans of humans and dogs, that one year in the life of a dog is the same as seven years in the life of a person. Shannon had a series of comparisons where the life(span) of three living creatures was the single life of another creature, starting with

"Three lives of a fly is the life of a?"

and coming up to

"Three lives of a horse is the life of a person,
Three lives of a person is the life of a whale,
Three lives of a whale is the life of a ridge, agus
Saol trí iomaire saol an domhain,
Three lives of a ridge is the life of the world".

This folk observation of the relative ages of living things but culminating in the identification of an earthwork less than a metre wide and less than five centimetres high as having a great antiquity is extraordinarily acute.

When my father Patrick wrote to the Director of the National Museum in 1934 describing the bró Lochlainn and field boundaries under the bog, his principal informant adding to his own observations was Shannon. In 1964 when I was seeking a topic for my MA thesis I chose quernstones because of the bró Lochlainn which gave the lie to the professional archaeologists' regular observation in excavation report after excavation report at that time that the rotary quern was typologically unchanged through time.

By a happy coincidence it was Shannon himself turned out to be responsible for the survival of the proof of the great antiquity of the ridge. Phenomena in the landscape which were not directly attributable to the contemporary community or to a source remembered in folk memory could be attributed to the Lochlannaigh of a past or to the paranormal community of the present, the Sidh. In the 1920s Shannon's son Pat decided to enclose their four hectares of largely cutaway bog with the intention of cultivating part of it. Shannon put a stop to the venture because of the presence of a circle of stones in one corner of the plot of ground. To him it was a dwelling place of the Sidh and none of it should be disturbed. Fifty years later Pat had no problem in allowing us to excavate this same land in the Belderg Beg excavation programme throughout the 1970s and to enclose the property to preserve it for archaeological research. Pat had no problem even with our excavation of the circle of stones his father was so fearful about and which turned out to be a very substantial second millennium BC round house.

Our neighbour John Dan McCann, even though a few years younger than Pat, and employed on the dig, did have the same worry as Shannon about the circle of stones and had asked me discreetly not to request him to work within that area. We had by that stage discovered and marks in the subsoil beside the round house and John Dan, the finest spadesman on site was shaving off the last traces of black bog remaining there to allow deeper excavation of the brown topsoil to try to establish the extent of the ard marks preserved in the pale subsoil underneath. As he planed off the last of the black bog like a carpenter planing a piece of rough cut timber we could hear the spade grate on the stony surface of the brown soil underneath. But as he worked across the cutting, at regular intervals the spade would go silent and the black colour would not turn to brown. Over half an hour as I staved talking with him, a regular pattern of strips of almost metre wide brown soil separated by 30 centimetre wide strips of black bog slowly became discernible. We were looking at cultivation ridges to add to the discovery of plough cultivation of the previous year, and similar to the ridges also discovered by Professor Michael Herity the previous year at Carrownaglogh, forty kilometers to the south of Belderrig.

What made the circumstances of discovery of the ridges to be for me one of the magic moments of forty years in archaeology was that John Dan as he continued to plane off the remaining bog told how he had grown oats on identical ridges on his own farm less than a kilometre from the excavation forty years earlier - an extraordinary repetition if not continuity of agricultural tradition across more than three thousand years. Ultimately it was Shannon's respect or fear of the circle of stones which led to the preservation of the ridges and the uncovering of the archaeological reality of the great antiquity of his "saol trí iomaire".

When Seamus Heaney spent a day with us at the beginning of our research we were honoured to receive from him, his beautiful poem "Belderg". Given the enduring nature of poetry it is probably the most lasting tribute to the Belderrig discoveries. The opening lines of his poem are:

They just kept turning up And were thought of as foreign One-eyed and benign They lie about his house Quernstones out of a bog.

To lift the lid of the peat
And find this pupil dreaming
Of Neolithic wheat

Those lines encapsulate what was to remain the main focus of my research throughout my career, all of it emanating from the local lore of my next door neighbour, passed on to me, some directly, but mainly through my father. Heaney's poem was the subject of light-hearted argument between father and son as to who was the "pupil" referred to, the father always winning the argument by quoting the line: "....they lie about his house" followed by the rhetorical question: "and whose house is it?"

Whatever about the ambiguity surrounding the pupil, there is no doubting who was the original teacher, our old neighbour who in the 1860s was

held in the arms of his grandmother whose age he always told was "eighteen years the year of the French" (1798) and in whose arms I myself am fondly held in the photograph from 1941.



Fig. 2 – The author with Shannon

If there is something for a younger generation of archaeologists to learn from the above it is to respect and investigate all potential sources of knowledge and in particular where this relates to the lived in landscape. Here again Shannon had advice inevitably framed in triadic form, advice originally meant for people searching for lost sheep that had strayed from the valley onto the grazing lands of distant farmers

"Is fearr lá ag fiafraigh ná tri lá ag siúl"
"One day enquiring of others is better than three days walking (alone)".

It is a motto appropriate to any research endeavor. In archaeology, the "day enquiring" should not ignore the wealth of knowledge accumulated through acute local observation and archived in local folklore.

Professor Seamas Caulfield, M.A., Ph.D.

Reflections

Elizabeth Shee Twohig

An archaeologist is by definition concerned with the past, but I have always been wary of boring people with tales of how things used to be in my own archaeological past. So I was very pleased to be legitimately allowed to do this by the editors of *Trowel*, and we agreed that my reflections about being a young woman student archaeologist from 1963 onwards might be of some interest. And yes, I know all you younger folks are thinking "OMG!!!...that's so-oooo long ago :-o". It doesn't seem long to me, but people are somewhat surprised when I say that when I last saw a particular site forty years ago it was such and such a location or condition.

Back then, as they say, archaeology was seen as rather a strange interest, and was nearly always confused with geology, particularly when my bedroom began to fill with rolls of tracings of passage tomb art, which confirmed my preoccupation with what they called in South Tipperary "Them Old Stones". But my mother was more sympathetic, perhaps influenced by memories of her uncle, the Reverend Canon William Burke, author of the imposing vellum bound History of Clonmel, a copy of which was owned by every respectable household of our acquaintance. She introduced me to the local standing stones at Giantsgrave, told me the folklore about the women Finn McCool had sent racing to the top of Slievenamon in a competition to marry him and heroically organised a trip to the local museum, the key of which was eventually found after three days' insistence and complaint to one of her cousins who was a Maybe the reason I have always preferred field town councillor. archaeology to museums is that childhood memory of supremely dusty old displays of the keys of Clonmel Gaol, soldiers' buttons and coins, the only saving grace being a small Yeats painting; this coupled with the fact that the muck, cattle and barbed wire fences of archaeological fieldwork were all perfectly normal for a horsy farm child. We didn't have archaeology by television until much later in Ireland, but one of my books involved English children's adventures in finding "potsherds", which intrigued me for years because I wasn't guite sure what they were.

Leaving school at fifteen, I spent a useful year doing secretarial and English in the Clonmel Technical School, before heading to UCC where archaeology was only my fifth choice of Arts subjects, but by the end of the year I was hooked and there was to be no looking back. In those days all the NUI archaeology departments were pretty much one-man operations, and our man was Michael J. O'Kelly, known to his contemporaries as Brian - apparently his mother wanted him called Brian, but she wasn't at the christening, and the father declared for Michael Joseph. Lectures started a few weeks later than in other subjects, the rumour being that he was still digging at Newgrange, though I now think he was probably away on what he would have called a fact-finding mission around European archaeology which he and Claire always went on in September.

Several of us first years went on to Newgrange after the summer exams. and the practical side of excavations really appealed to me. together with the buzz of meeting students and academics from other places. You might be given the task of showing random visiting professors or local societies around if O'Kelly was otherwise engaged, or even left in charge of the whole dig. He gave us a lot of responsibility very guickly. though he supervised us closely: by 18 I had joint-directed my own little excavation of Site C standing stone near Newgrange and had it published in JCHAS the following year. The 11 am tea-break seminars were intense and often went on till lunchtime, and every Sunday and some full weekends were spent on "expeditions" to other sites, mostly north wards from base camp, and thus we Munster people saw much of the archaeology of Sligo, Donegal and the Ulster counties. During the winter months back in Cork we all got roped into post-excavation work. particularly the marathon of animal bone-washing, master-minded by Claire.

At the end of second year I was invited along on the September expedition, together with Frances Lynch who was second-in-command at Newgrange, and we spent ten days examining the megalithic tombs in Brittany, met all the archeologists based in Rennes, and at Claire's insistence had one non-megalithic tomb day at Mont Saint Michel.

All Master's degrees were by thesis only and took a minimum of two years, and as part of the outreach of the Newgrange researches mine took the form of recording all the megalithic art outside the Boyne Valley: my abiding memory is of tramping up and down the Loughcrew hills and single-handedly tracing all the carvings. This was the first Masters thesis presented in UCC for 18 years and led on to my winning the NUI Travelling Studentship, which was offered only every three years and was the only form of research funding available for most faculties. I was the first woman to win the Archaeology Studentship, and inevitably I staved with megalithic art topic, moving on to record the sites in Brittany. Portugal and Galicia. Up to then I had naively seen what I was doing as perfectly normal, perhaps having role models in the highly competent women as my mother. Claire O'Kelly and Frances Lynch and a next door neighbor who was a lecturer in bio-chemistry at UCD. In Brittany there were hints that this was a bit unusual, but only subsequently did I find out that it was a huge landmark for me as a female student to be given facilities and allowed onto excavations by the big boss, M. Pierre-Roland Giot, a breakthrough partly made possible by the 1968 "evenements" in Paris the year before, where students fought for basic rights. following year's fieldwork brought me to Franco's Spain and Salazar's Portugal where one learnt to lower one's voice in public places and all the young Portuguese men had served in the army in Angola or Mozambique. I soon found that there was no point in seeking directions to a site by showing the name written down, since nearly all the rural adult population were illiterate, and best progress was made by showing a generic photograph of a megalithic tomb and asking to be directed to the nearest example. Here even more than in France the idea of a young woman travelling alone, staying in hotels and dining on her own was seen as hugely odd - in one hotel I was mistaken for Dana, who had iust won the Eurovision song contest for Ireland and was the only young Irish women they had heard of!

They were exciting times, with never a dull moment, except perhaps when it came to transcribing the rolls and rolls of cellophane tracings during the winters back at home. The tougher challenge came later, the age-old one of juggling family life and academia, but now I am enjoying retirement, which is almost like being a student again because it gives

me the freedom to pursue my archaeological interests without being tied to lecturing and administration schedules of University life.

Elizabeth Shee Twohig.

Book Reviews

An Introduction to Early Irish Literature by Muireann Ní Bhrolcháin.

Four Courts Press. 240pp; 16 pp colour ills section. 2009. €45.00.

Reviewed by Maura Farrell MA.

'I love (it is better than all fame)

To be quiet beside my book, diligently

Pursuing knowledge. White Pangur does not envy me;

He loves his childish craft'

So wrote an early medieval monk as he watched his cat, Pangur, chase mice around his feet. This is just one of the many human moments in this book which discusses early Irish literature of the 6th to 12th century AD, with a particular focus on the sagas and poetry.

The sagas dealt with a world where music could cause men to die of weeping and sadness (Táin Bó Fraích), where disembodied heads recited poetry (The Poem of Fothad Canainne), and where sex was used to cure madness (Aithed Muirne re Dub Rois).

It's not all sex, music and madness though. There are also tales of cattle raids and battles, beautiful strangers with magical powers, as well as love stories. There is a surprisingly non-judgemental approach to some of the racier subjects considering the authors of the literature were mainly clerics.

Chapters are organised thematically. The first chapter provides an introduction to the origins of the tales and looks at the impact of Christianity on Irish literature. Various branches of literature are also discussed such as the Brehon laws and wisdom texts including one

attributed to High King Cormac Mac Airt in which he, controversially, advises his son about women

'Better to beat them than to coddle them Better to smite them than to please them...'

Kings feature prominently in the literature and two chapters are devoted to the subject; the Cycles of Kings, which are composite tales of prehistoric and historic kings, while the chapter on Kings, Goddesses and Sovereignty discusses sacral kingship as a major theme.

Many of the characters familiar to Irish school children are discussed throughout the book. There is a chapter on the Hero Cycles in which Cú Chulainn and the Táin Bó Cuailgne feature. Finn mac Cumaill and his warriors appear in a chapter on the Fenian Cycle and the Tuatha Dé Dannan are discussed in the Mythological Cycle. The possibility that the Fianna may have been high on henbane during their exploits is unlikely to feature on a school curriculum but this kind of detail is a strength of the book. The asides and the speculation as to the meaning of the sagas make it particularly interesting for those already familiar with the tales. The book is aimed at the general public as well as students of medieval literature and both are provided for with a broad overview of the literature as well as academic interpretations of the stories.

The final chapter looks at the poems of the period which are possibly less well-known than the sagas. As well as religious poems, there are praise poems and laments for kings. Of particular interest were the 'lyrics' which deal with more personal matters. What is remarkable is their modernity; many would not be out of place in a contemporary poetry collection.

The main body of the book is only 150 pages. To my mind this contributes to a slightly rushed feel and an occasional lack of clarity. The author obviously knows her subject well; she is a lecturer in Irish literature and history in The National University of Ireland and there may be some assumption about the readers' knowledge. For example, Cú Chulainn strikes a potential lover with a stone while she is in the form of

a bird, then sucks out the stone when she regains her human form. This apparently makes him related to her and they cannot marry, but there is no explanation as to why. Perhaps that's because there *is* no explanation and while the book might have benefited from more detail there is an excellent bibliography for those who wish to pursue the subject further.

There are also several striking images from the National Museum of Ireland, as well as an excellent illustration of Diarmait and Gráinne by Jim Fitzpatrick which, however, seems a little out of place amongst the pictures of archaeological artefacts and sites.

As the author points out there are very few serious books on this subject aimed at the general public. This publication certainly bridges the gap. It is an excellent introduction to early Irish literature, with a useful index and a comprehensive bibliography for those who wish to explore further.

Maura Farrell .

Plantation Ireland: Settlement and Material Culture, c. 1550-c.1700 edited by Lyttleton, James and Rynne, Colin.

Four Courts Press for Irish Post-Medieval Archaeology Group and Group for the Study of Irish Historical Settlement.

Pp. 323; Illustrations, colour plates. 2009. €45.00.

Reveiwed by Katherine Fennelly

Plantation Ireland is a collaborative collection of fourteen papers compiled between the Group for Irish Historical Settlement and the Irish Post-Medieval Archaeology Group. This period of Irish history is characterised by the introduction of foreign goods, new cultures and new economics, and its history does not fall within the remit of any one discipline. The material culture of plantation Ireland is investigated through multi-disciplinary means, employing methodologies from history, archaeology and cultural geography, amongst others. The scope of the book is broad, ranging from approaches to plantation, famine and cartography in the material culture record, to archaeological perspectives on domesticity, alehouses, ironworks and mortuary practice. Popular literature and poetry are also employed to determine social identity and custom. The authors cover the geographic areas of plantation (Ulster, Munster, Laois/Offaly), and there is no bias towards any particular ethnic group. This book represents an effective synergy of humanities subjects towards constructing the story of a problematic period.

Unlike most literature on early modern Ireland, *Plantation Ireland* utilises multiple sources from the period and builds a multi-faceted picture. This lies apart from political overviews of early modern Ireland that have been published in the past. The authors assess various historical sources including diaries, legislation, manifestos, inventories, literature and plans.

Of particular use to further plantation studies is *Certeyn notes & observations...*, an historical document describing various historical precedents to the Ulster Plantation. This document is printed in this volume for the first time and is accompanied by a commentary laying out

sources, authorship and historical context. Annaleigh Margey follows a similar vein, providing a history and analysis of cartographers and the mapping of Ulster throughout its plantation. She supplements her discussion with eight well chosen colour maps.

Raymond Gillespie and Colin Breen both present alternative viewpoints for the study of this period. Gillespie's contribution offers interesting perspectives on plantation, as viewed by the academic observer. He proposes that plantations be used as a guide to understanding change in material culture and society, rather than as an explanation of those changes. This shifts the historical viewpoint and offers a heretofore underplayed agency to the people of plantation period Ireland. Breen concentrates on a specific historical event, famine, and its academic treatment. Breen calls on researchers to reassess their means of studying famine in general. He uses the famine of the late sixteenth century to demonstrate its study through material culture.

Archaeological and geographical approaches form the core of this volume. The first such chapter is an outline of the history and geographical distribution of Irish Fortified Houses. This chapter, by Sharon Weadick, is a necessary quantitative analysis and collation of geographic, archaeological and cartographical data on these widespread features in the Irish landscape. The natural progression from Weadick's chapter is a case study of a contemporary site, Ightermurragh Castle. Tadho O'Keeffe and Sinead Quirke present an archaeological study of this building. They further contextualise their work within the global development of historical archaeology over the past forty years and reassess the concept of 'post-medieval archaeology'. contextualisation and reassessment is, in this reviewer's opinion, necessary in these early days of later historical archaeology in Ireland. Audrey Horning's study of Alehouses at this period indicates the importance of interdisciplinary study. In her assessment of a feature that is not archaeologically prolific, she uses historical sources to point out the importance of the material culture in social ritual.

Colin Rynne draws upon the wider debate of colonialism, a hot topic in Irish humanities subjects at the present time. He describes innovation in

the development of the ironworking industry, and the nature of mining and iron-working settlements in Ireland in this period. Rynne makes good use of historical sources and social geography to demonstrate the relationship between Ironworkers and their adopted country, through technology and innovation. His chapter is an in-depth multidisciplinary study, and stands out as such.

Harold Mytum's chapter is centred on mortuary practice as social indicator. He treats monuments as textual and material sources, and studies them from an archaeological perspective. Interestingly, Mytum calls on archaeologists of this period to concentrate on the un-conscious agency of mortuary structure builders in articulating their interpretation of life and death. John Lyttleton follows Mytum with an examination of the Gaelic aristocracy in Co. Offaly during the sixteenth and seventeenth centuries. Lyttleton also makes use of inscriptions as textual and material sources, using lintels, plaques, churches and mortuary practice, in order to examine the Counter-Reformation as experienced by the people of the Irish midlands.

Clodagh Tait and Thomas Herron's contributions appear alongside each other, both representing literature-centered assessments of material culture. Tait's study of Catholic Martyrdom in the modern period utilizes local folklore, historical and popular literature, cultural and political geography, social and political historical sources and art history. She makes reference to the relationship between Ireland, various saints and 'holy people', and the articulation of sainthood and religion in street names, holy wells and veneration of relics. This reader found Tait's contribution the most accessible chapter in the volume.

An ongoing debate in Spenserian study on the interdisciplinary cooperation between the archaeologist, the historian and the Spenserian is hypothesised at the beginning of Herron's chapter on the poetry of Edmund Spenser. Through poetry and literature, Herron analyses material culture, architecture and political history as seen by Spenser in the sixteenth century. This chapter hints at the possibilities of further disciplinary collaboration. The last chapter, by Tony Barnard, looks at the final phase of plantation. He focuses on the fortunes of three migrant families during this period. This assessment reads like a social history. Barnard makes reference to the various material cultures employed in establishing identity in an alien land.

Any criticism of this volume is purely superficial. The price tag of the hard back edition may hinder some students from purchasing their own copy, but purchase is highly recommended. The strength of the volume lies in its broad subject matter and multi-disciplinary approach. In this, it stands out from other histories of this period. The authors present research from across Plantation period society, and, though dense in data at times, they avoid political and social generalisations. The collaboration between these two groups has produced a readable, varied and comprehensive history of life in Ireland during the Plantations. Hopefully their efforts will herald further collaborations.

Katherine Fennelly

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Uncovering Medieval Trim: archaeological excavations in and around Trim, Co. Meath edited by Michael Potterton & Matthew Seaver.

Four courts Press. 392 pp. Colour ills. 2009. €40.50.

Reviewed by Niamh Kelly MA.

Uncovering Medieval Trim is one of the recent edited volumes brought to us by Four Courts Press. Published in late 2009 and edited by Michael Potterton and Matthew Seaver, the book presents a series of papers based on recent archaeological excavations within the well known medieval town of Trim and its hinterlands. The book itself was born out of a conference organised by Meath County Council and CRDS Ltd in 2008 to provide a forum for archaeologists and specialists to bring information on archaeology, environments and artefacts to the public and to provide discussion and feedback on interpretations of the past.

The book opens with a foreword from John Bradley and then an introduction by Michael Potterton. This introduction by Potterton provides an overview of our current knowledge of prehistoric and medieval Trim from archaeological and historical sources, looks at the significance of recent archaeological excavation in the area and its contribution towards current knowledge and interpretations, some thoughts on the future of Trim and aspects of study that should be considered for further research. Overall this narrative is extremely well written and provides a strong overview and contextualisation for the following papers.

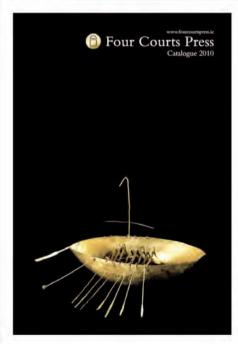
The tone of the book shifts slightly to a more formal and standardised language during the individual papers, however they remain highly accessible to general readers with the more specific specialist and scientific analysis's being placed in individual appendixes where necessary. The placement of the papers within thematic divisions such as Town Defences, Religious Houses and Cemeteries etc coupled with a consistent editing style gives the book a coherent and methodical feeling of natural progression throughout.

The individual papers themselves focus on a wide range of diverse topics. Fiona Beglane discusses votive deposits of pigs' feet during the Iron Age; Dominic Delany and Brian O'Hara discuss two forgotten cemeteries located outside the town of Trim; Matthew Seaver recounts excavations at the likely place of the Athboy Gate and part of the town wall in Trims northern area; Alan R. Hayden looks at excavations in Market Street and High Street in two separate papers and Rosanne Meenan outlines plans for the management and conservation of Trims town walls now and in the future to name but a few.

Overall this book is well written, presented, illustrated and edited providing a strongly structured overview of recent archaeological excavations and discoveries in Trim, County Meath.

Niamh Kelly.





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