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Edited By

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Editors' Foreword

Welcome to *Trowel* Volume XVIII! This year *Trowel* and the Association of Young Irish Archaeologists (AYIA) have partnered to produce a journal-conference proceedings hybrid! *Trowel* is comprised of four articles, all of which cover vastly different topics. These range from loom weights and their iconography in Greece, an analysis of Irish ringforts as defensive structures, the interaction between archaeology and folklore, and the impact archaeology has on mental health related to PTSD. *Trowel* highlights the constant passion archaeology students and graduates have for their research and discipline, demonstrating their fortitude to share their research through this publication.

The AYIA brings a further six articles, making up the conference proceedings from 2016 and 2017. These articles also cover a range of topics, and the information pertaining to those articles can be found in the AYIA Committee's Forward in that section of this volume. However, we want to acknowledge that these authors, in addition to the *Trowel* authors, also demonstrate their dedication to the discipline.

The AYIA and *Trowel* share the same inspiration of facilitating young academics, researchers, and workers interested in furthering archaeological knowledge. This shared initiative has allowed for this year's joint publication between *Trowel* Vol XVIII and the 2016 and 2017 Conference Proceedings. With working together to bring you, the reader, articles penned by aspiring young professionals keen to participate in archaeological research and dissemination of that research, we are helping build a better community of archaeologists, both present and future. It is our combined goal to work closely together in future and we hope that we can continue to help give students, recent graduates, novices, and the like a platform to be heard.

As stated in nearly every volume, we unfortunately cannot avoid the current environment into which we release this volume, particularly addressing the fact that archaeology is continually threatened by lack of economic stability and funding, general lack of interest, and destruction. Both *Trowel* and the conference proceedings contain articles written by individuals, whether archaeologists, classicists, or otherwise, who are not only committed to their research and personal interests, as so clearly seen in their writing, but who also exhibit determination to address important questions about the past, despite any and challenges they may encounter. These upcoming researchers display a genuine curiosity that will propel archaeology, and other disciplines, into the next generation and beyond.

We want to thank the contributing authors for all of their time and hard work in writing their articles, as without them, this publication would not exist. We enjoyed reading the article and, as like the AYIA, are keen to help bring their research to the public. Trowel continues to thank all of those involved, particularly the faculty and staff from the UCD School of Archaeology. We want to specifically thank Angela Mc Ateer for her continual assistance in publicising the journal on our behalf. We also want to acknowledge the constant support of the UCD Archaeology Society and, as always, we are happy to be able to share the launch of this volume with the 75th inaugural lecture of the Society.

KS, Ashley, and Kevin

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Contents

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Articles

Fruit of the Loom: Five Loom Weights in the UCD Classical Museum

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Abstract

Weaving was a major part of the average Greek woman's daily life in antiquity, whether the head of the household was doing the wool work herself, or was delegating the various tasks to her household servants. This article will discuss the principal archaeological evidence for weaving and loom weights through a close examination of four unpublished examples currently housed in the University College Dublin Classical Museum. This paper will concentrate first on the purpose of loom weights, it will then explore how the weight correlates to the type of fabric produced, and will finally discuss the iconography depicted on the UCD examples and their likely provenance.

Introduction

Weaving was a major part of the average Greek woman's daily life in antiquity, whether she was doing the wool work herself or was delegating the various tasks to her household servants. Wool work and weaving are often seen as the most important domestic duties of an ancient Greek woman's life, as evidenced by the many depictions on pottery and the high status it holds in ancient literature (i.e. Blundell, 2005; Homer, 1979; Pomeroy, 1995). Xenophon (2013, 7.5-6), in his fourth century BC dialogue entitled *Oeconomicus*, assigns the following sentiment to one of his characters when describing the desired characteristics in a wife, "Don't you think that it was adequate if she came to me knowing only how to take wool and produce a cloak?". In antiquity, the quality of the final product of a weaver was deemed the most important, with painters and authors often paying no regard to the actual tools used in weaving such as the loom itself and its weights. In fact, the ancient Greek word for loom weights, ἀγνύς, only appears twice in ancient

texts, Plutarch's (1976) *Septem sapientium convivium* and Pollux's (1967) *Onomasticon*. There are very few preserved textiles found from antiquity, and so we must try to decipher the ancient weaving techniques and practices from what survives in abundance: loom weights (see Harlow and Nosch, 2014). For a list of terms and their definitions, see Table 1.

The Vertical Warp-Weighted Loom

Loom weights were used on the vertical warp-weighted loom, which was the most commonly used loom in ancient Greece. The vertical warp-weighted loom had warp threads that would hang freely from the upper beam on the loom, and were kept taut by being tied to the suspended loom weights (Figure 1). Based on archaeological evidence, representations of weaving on ancient Greek pottery and ancient literature, we can assume that the vertical warp-weighted loom would have been very large. Davidson *et al.* (1943, 68) presumes the average vertical warp-weighted

loom would have been about 2 metres tall and at least 1.75 metres wide. It was probably taller than the actual weaver, very heavy, and usually kept in the same place to forego the trouble of moving it from room to room.

Term	Definition
Warp	Lengthwise yarns that are held in tension on a frame or loom.
Weft	Thread used to weave through the warp thread. Usually not as strong a material as warp thread because it does not require as much tension.
Pyramidal loom weight	A loom weight that has four sides of more or less equal width that slope directly from the flat top to the flat bottom.
Conical loom weight	A loom weight that is characterized by the flat top and bottom, and the very slightly sloping sides.
Discoid loom weight	A loom weight that is often circular or semi-circular in shape.
Acrostolion	An ornament on the stern of a ship.

Table 1. List of terms used.

However, while representations of looms on vases clearly illustrate the function of loom weights, they are seldom detailed enough to show accurately the type of loom weight being used, and the manner in which the weights were attached (McLauchlin, 1981, 79).

For example, the portrayal seen on the mid-sixth century BC Black Figure lekythos attributed to the Amasis painter shows two female figures working at a vertical warp-weighted loom (Llewellyn-Jones, 2003, 222). The loom is clearly taller than the two women and there are seven loom weights visible, attached to the warp threads by a ring that also goes through the weights. Looking at this lekythos, we know that it is not a completely accurate portrayal of a vertical warp-weighted loom because many more threads would have been needed, and therefore many more loom weights.
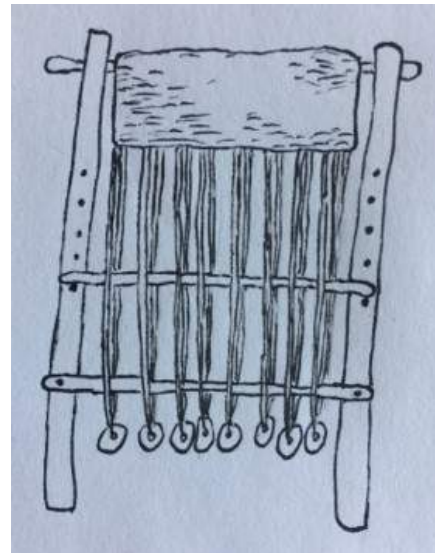

Figure 1. Drawing of a vertical warp-weighted loom (drawing by author).

Loom Weights

There are three different loom weight shapes: pyramidal, conical, and discoid (Table 2; Figure 2). Both lead and terracotta loom weights are found throughout the ancient world, although terracotta weights are more common. In Athens, generally, the most common loom weight was the pyramidal weight from the seventh to the fourth century BC. The conical loom weight was preferred at Corinth from the eighth century BC to the first century AD. Finally, the discoid loom weight is most often found at sites of Greek colonies in Italy during the fourth to first century BC (Davidson, 1952 and Davidson *et al.,* 1943 for more on pyramidal and conical weights).
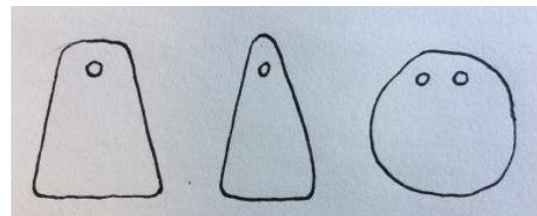

Figure 2. Drawing of pyramidal, conical, and discoid loom weights (drawing by author).

As stated, the representations of vertical warp-weighted looms were not accurate representations of an actual loom in use. Instead of seven loom weights as seen on the lekythos

2

	Dimensions	Weight	Shape	Condition & Material	Description	Provenance
UCD 647	Height: 64.4 mm Width: 68.8 mm Max. Thickness: 20.5 mm	115.5 g	Rounded with flat bottom. Two suspension holes at top.	Very worn. White-grey terracotta.	Figure kneeling on bent left leg with right stretched out. Figure turns to the left and holds an *acrostolion*. Dolphin or eagle in right field. Back side has two stickers; one "832", other mostly unreadable ("terracotta weight… Boy with dolphin.")	Acquired by Rev. Henry Browne, 1887. From Taranto.
UCD 648	Height: 64.7 mm Width: 65.5 mm Max. Thickness: 14.3 mm	80.9 g	Circular. Two suspension holes at top.	Very worn. Chipped. White-grey terracotta.	Main type exactly similar to UCD 739. Nude youth kneeling to left, holding cloak in right hand and animal in left by back leg. Bow in left field. Back side has two stickers; one "834", other "terracotta weight. Boy with hare."	Acquired by Rev. Henry Browne, 1887. From Taranto.
UCD 649	Height: 66.5 mm Width: 66.5 mm Max. Thickness: 17.6 mm	89.2 g	Circular. Two suspension holes at top.	Worn. Large chip on top right. Red terracotta.	Crude frontal head with long hair. Back side plain except for "M3028" written.	Acquired by Rev. Henry Browne, 1887. From Taranto.
UCD 739	Height: 58.7 mm Width: 61.2 mm Max. Thickness: 31.5 mm	121.2 g	Round with flat bottom. Two suspension holes at top.	Worn. Slightly chipped on backside. White-grey terracotta.	Main type exactly similar to UCD 648. Nude youth kneeling to left, holding cloak in right hand and animal in left by back leg. Bow in left field. Opposite side shows two confronted heads suggested to be Herakles/Zeus and Apollo/Taras.	Acquired by Rev. Henry Browne, 1887. From Taranto.
UCD 740	Height: 63.8 mm Width: 60.2 mm Max. Thickness: 28.7 mm	81.3 g	Rounded oblong shape. Bottom is flat but cannot stand on its own as UCD 647 and 739. Two suspension holes at top.	Both sides worn with backside more severe. White-grey terracotta.	Both sides show figure, probably Aphrodite, riding a swan.	Acquired by Rev. Henry Browne, 1887. From Taranto.

Table 2. Catalogue of UCD loom weights.

from the Metropolitan Museum (2017), it is more likely that each loom had about 65 to 70 weights at any time. The most accurate portrayal on ceramic is the Chiusi Skyphos (Brulé, 2003, 65), which has 46 visible weights, but through calculations there were meant to be 67 altogether (Davidson *et al.*, 1943, 69). Coincidentally, during an excavation at Olynthus, exactly 67 loom weights were found in the room of an excavated house, indicating what may be the ideal number for standard cloth production (Robinson and Graham, 1938, 209). In 2009, Mårtensson *et al.* (2009) completed a study in which they tested the amount and weight of loom weights needed for different types of warp threads (Table 3).

Type of Fabric	Size of Loom Weight
Coarse and open using thick yarn	Heavy and thick
Coarse and dense using thick yarn	Heavy and thin
Open using thin yarn	Light and thick
Dense using fine yarn	Light and thin

Table 3. Types of fabric with size of loom weight. Recreated from Mårtensson et al. (2009).

Based on their conclusions, the number of loom weights used would have varied due to the type of wool being used. While 65 to 70 may have been the standard amount, it is not surprising to find groups of more or fewer. In fact, finding more or fewer than the "ideal" number may indicate that whoever was using those particular weights was using a different type of thread for a thicker or thinner cloth.

As mentioned above, the loom weights in the image depicted on the Black Figure lekythos are attached to the warp threads by what looks like a ring. Some have said that ancient weavers used a metal ring to attach the threads, while others believe a wooden rod was used (see Davidson, 1952; Davidson *et al.*, 1943; McLaughlin, 1981; Sofianou, 2011). In either case, little physical evidence besides the weight itself survives. However, there is reportedly a pyramidal loom weight at the British Museum with a ring still intact

and a stamped image of a woman spinning (Davidson *et al.*, 1943, 68). Better evidence was found at Nemea where two conical loom weights were found with preserved portions of wooden rods inserted horizontally through the suspension holes at the top of the weights (McLauchlin, 1981, 79). Similarly, Sofianou (2011, 421) concludes that the loom weights found at Trypitos had no traces of metal in the suspension holes, making it more likely that wooden rods were used. Although the weights in McLauchlin's (1981) study are dated to the late second century BC, it is probable that the practice of inserting a wooden rod into the weight to attach to the warp threads would have been a common practice in the centuries prior.

Discoid Loom Weights

Discoid weights are often hard to date, but scholars generally agree they can be dated to the Hellenistic period (Davidson 1952; Davidson *et al.*, 1943; Sofianou, 2011; Thompson, 1934). Discoid weights are usually circular, but they can also have a rounded shape with a flat bottom, and are usually found with some sort of decoration on them. Discoid weights found throughout the ancient Greek world were regularly incised with letters, fingerprints, or small impressions from gemstones or rings (i.e. Sofianou, 2011, fig. 36.4). The weights found in Magna Graecia from the fourth century BC onward have a large relief stamp on one or both sides, often taking up the entire face of the weight. These pictorial relief stamps are often detailed, and include a large range of subjects such as satyrs, female figures, chariots, sphinxes, lyres, horses, birds, vases, the goddess Nike, and palmettes.

Five Discoid Loom Weights in the UCD Classical Museum

The Classical Museum, located in the School of Classics in the John Henry Newman Building in University College Dublin, was founded in 1910 with the collection assembled by Rev. Henry Browne. Among the collection of eleven loom weights in the UCD Classical Museum, there are

five discoid weights that are subject to examination here (see Table 2 for further detail).

General Description of UCD Loom Weights

Two weights are round with a flat bottom (UCD 647, UCD 739), and the remaining three are circular (UCD 648, UCD 649, UCD 740). UCD 648 (Figure 3) and 649 (Figure 4) are almost perfect disc shapes with decoration on just one side. The explanation for this may be chronological. For example, circular ones preceded the flat discoid weight, which perhaps indicates later standardisation and mass production (Sofianou, 2011). A second reason may be that because of the decoration on both faces of UCD 739 (Figure 5), a flat bottom was needed so that the weight could stand without damaging the stamp decoration during the firing process. UCD 740 (Figure 6) has decoration on both sides, but the bottom is rounded and cannot stand freely, making it interestingly distinct in the way it must have been placed in the kiln.

All five weights are made from terracotta and are similar in size (Table 2). Interestingly, four of the five are greyish-white in colour, while UCD 649 is red. As evident from Table 2, although the five weights have similar dimensions, their weights vary. UCD 647 (Figure 7) and 739 are between 26.3 and 40.3 grams heavier than the others, and even the remaining three vary in weight. This may be for one of two reasons. The first reason is that the weights may have been used with different types of thread, as discussed above. Therefore, UCD 647 and 739 may have been used by an ancient weaver using thick, coarse thread, while UCD 648, 649, and 740 may have been used with thinner threads. The second reason could be that because the edge threads of the product needed to be tauter than the others in order to create an even edge, the end loom weights needed to be heavier. Perhaps UCD 647 and 739 were then used for that purpose. Because there is no information on the provenance of these loom weights, nor does the looms themselves survive, it is all down to speculation as to the exact position and purpose they had at the time of use.

Figure 3. UCD 648.

Figure 5. UCD 739.

Figure 4. UCD 649.

Figure 6. UCD 740.

5

Figure 7. UCD 647.

Provenance

According to the museum catalogue, Rev. Henry Browne acquired these weights in 1887 from Tarentum, or modern day Taranto. Tarentum is located on the coast of the Ionian Sea in Italy, and was established as the Spartan colony Taras in the eighth century BC. Being a coastal city, it was known for trade and its seafood, but also for its prosperous manufacturing industry in wool and pottery. Ancient dyeing houses are found at Tarentum with an abundance of murex shells, which were used to create purple dye (Jensen, 1963, 107; Silver, 1992, 254). Pliny the Elder (1968) recorded that the best kinds of wool are from four Greek cities, including Tarentum. Unfortunately, there is not much archaeological evidence about Tarentum. The site has been inhabited continuously to this day, and therefore there is little opportunity for excavation (Malkin, 1994, 133).

Iconography: UCD 647, 648, & 739

UCD 739 has a different stamp on each face, and the catalogue describes the iconography on the weight in the following way:

> "Young Herakles (or Taras more probably) kneeling to left holding libation dish in right hand and animal (hare?) in left behind leg; bow(?) in field to left, buckle(?) in field above. Probably type borrowed from coin."

On the other side, there are two facing heads described as "Herakles/Zeus and Apollo/Taras".

UCD 648, while circular in shape, has the same decoration as the main type of UCD 739. As mentioned previously, the shape of the weight may have changed with mass production, although the iconography remained the same. Similarly, UCD 647 has a relief stamp of a figure kneeling, but it is in the opposite direction of UCD 648 and UCD 739 (see Figures 3, 4, and 6); instead of kneeling to the left, the figure kneels to the right with its left leg outstretched.

An interesting note about the descriptions provided in the UCD museum catalogue is that the recorder referred to the iconography on coins from Taras and Rhodes as comparable to that of the UCD loom weights. While not completely identical in design, the coins and loom weights do have some similarities. Often found on coins from Taras is a depiction of its patron god (also called Taras) riding a dolphin (Jenkins, 1972). There are a few loom weights with this depiction in the British Museum (2017) to which we can compare the UCD weights. It seems plausible that the figure on UCD 647 holds an object much like a helmet crest or *acrostolion* like the catalogue claims, when comparing it to a certain coin in the Arthur S. Dewing collection (Mildenberg and Hurter, 1985, 14). A man, clearly labelled Taras, sits on a dolphin holding an *acrostolion*; the object held in the hand of the figure on UCD 647 is long and curved like the *acrostolion* of the coin. This relief decoration and those of the other weights are in a state which allows for just the basic understanding of what the image truly is or represents. The images of a figure kneeling may not be young at all, as suggested by the recorder above, but may have represented the fully-grown Taras when in use two thousand years ago.

The RD Milns Antiquities Museum (2017) at the University of Queensland has a loom weight that is very similar to the UCD weights, with an image of a figure kneeling. It is a discoid loom weight with a flat bottom, and the figure is described as Herakles as a child holding an animal by its tail in one hand, and lifting a cloak in the other. The description from the UCD catalogue suggested that the right hand held a libation disk, but based on this weight, perhaps it is a cloak instead.

Iconography: UCD 649 & 740

UCD 649 and UCD 740 have very different iconography than those described above. First, UCD 649 has a relief stamp of a frontal face with long hair, which may be a representation of a female or the sun god, Helios. Like the aforementioned weights, the UCD catalogue suggests comparing this weight to that of the coins from Rhodes. With the establishment of the new Rhodes in 408 BC, one sign of its new existence was seen in the issue of tetradrachms displaying the head of Helios (Jenkins, 1972, 91-92). The head of the sun god is extraordinarily vivid, with the flame-like hair suggesting the radiating power of the god (*ibid.*, 92, 99, fig. 208). Conversely, there is a loom weight in the J. Paul Getty Museum (2017) collection with a depiction similar to UCD 649, and described as an image of the frontal head of a woman (Lyons, 2016, 220). The later UCD museum catalogue suggests the same. It was reportedly acquired by Rev. Browne in 1887 along with the other weights under examination, but because of the comparison to coins from Rhodes, and the reddish colour of the clay, it may have originally come from elsewhere. A loom weight in the RD Milns Antiquities Museum (2017) is of the same material and shape, but is reported as being from Metaponto (Strong and Brown, 1976, 170-172).

Lastly, UCD 740 is a loom weight that features the same relief stamp on both sides: Aphrodite riding a swan. There are no coins to which we can compare this particular stamp. There are, however, various vase paintings that portray Aphrodite riding a swan, sometimes surrounded by Erotes (Cyrino, 2010, 124, fig. 6.3), and the motif of Aphrodite riding in a chariot pulled by swans was suggested by Latin poets such as Ovid (1916) and Horace (2004). There are also many examples in other museums with which we can compare UCD 740. The British Museum, Metropolitan Museum of Fine Art, and the J. Paul Getty Museum each have at least one loom weight of this type. Both the British Museum and the Metropolitan Museum assign Taranto as the original provenance, with the Getty Museum simply saying their weight is from Southern Italy, but of Greek culture. Like the weights above, the weight was created sometime during the Hellenistic period, and is the same white-grey terracotta as UCD 647, 648, and 739. The biggest difference between this weight and the others, besides its iconography, is that it is a round shape with relief stamps on both sides. Unlike UCD 739, it does not have a flat bottom, which would allow it to stand freely, forcing us to wonder how it was manufactured and why it was not done in the same way as the others.

Conclusion

The question of loom weight manufacture and production remains. Some have suggested they were mould made, based on both inference and a pyramidal shaped mould found in Trypitos on Crete (Sofianou, 2011, 428; Thompson, 1934, 475). The lack of uniformity in size, shape, decoration, and weight of these artefacts suggests that they would not have been made in a mould. Rather, they may have been shaped and then pressed with a relief stamp, much like a coin would (Jenkins, 1972, 12-13). As mentioned previously, fingerprints are often found on loom weights, suggesting that whoever was making them had to do so by hand. Many times materials relating to loom weight production are found in potters' quarters, leading to the inference that there was some sort of organised loom weight production (Sofianou, 2011, 428). If they were made in a mould, none of appropriate sizes, shapes, or stamps has been found to date.

Permissions

This study has been carried out with the permission of the museum curator, Dr Jo Day, who is happy for me to publish these loom weights.

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The Use of Folklore in Archaeology

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Abstract

In the age of antiquarianism, archaeology and folklore were commonly paired together. Eventually these two fields of study grew apart as archaeologists started to focus more on scientific approaches. The resultant lack of communication has lead to these two fields studying many of the same locations, but with neither getting the full story of the site in question. Today, some archaeologists are recognising the value of using folklore to help understand how people viewed and interacted with archaeological sites, and what beliefs were held about those locations. Folklore can give archaeologists a glimpse into what people were thinking, something that cannot truly be explored using artefacts and features alone. Archaeologists focusing on Irish sites with an interest in studying relevant folklore have an advantage. Dublin, Ireland is home to the National Folklore Collection, which accumulated thousands of folklore interviews and completed questionnaires in the 1930s-1970s. These are available at University College Dublin to anyone with an interest. Archaeology and folklore in Ireland have begun to work together again with the goal of gaining a more complete understanding of life in Ireland in the past. This paper explores the question of how modern archaeologists are using folklore to gain a more complete understanding of archaeological sites and regions in Ireland.

Introduction

In the time of antiquarianism, archaeology and folklore were typically one in the same, or often associated together. Antiquarianism was borne from a desire to record, and in some way preserves the historic and prehistoric sites dotting the landscape (Paphitis, 2013, 4). These early researchers took advantage of all of the research tools available to them that seemed to have any merit. This included some archaeological excavation, investigations into local folklore, and connections to recorded history. The folklore and history were used to explain the presence of archaeological features on the landscape, with the local stories often being portrayed as the truth. Once a theory on a site was published, other antiquarians would build off of that new theory with little to no regard for how accurate or reasonable their predecessor's research was, as

illustrated in Julia Murphy's (1999, 242-43) article on Pentre Ifan in Wales. This is not to say that what the antiquarians were doing was bad or wrong. It served a purpose, and laid the groundwork for various fields of study as we know them today.

Eventually the theory developed that tangible, material culture items were a more reliable way to study history. As a result, archaeology and folklore made their formal split from antiquarianism into their own separate fields in the 19th century (Paphitis, 2013, 6). Today many archaeologists are starting to rediscover the value of folklore to their research and are exploring ways to use folklore as an interpretive tool for their sites. Many of these archaeologists, some of which are examined in this paper, are publishing their work as guides to using folklore and encouraging other archaeologists to view folklore as a potential tool (Champion and

Cooney, 1999; Gazin-Schwartz, 2001; Gazin-Schwartz and Holtorf, 1999; Matsuda, 2010; Murphy, 1999; Paphitis, 2013). In this paper we will define folklore, explore how it can be useful to archaeologists, discuss the National Folklore Collection, and examine some of the ways that folklore is being used in Irish archaeology.

What is Folklore?

We must be clear about how folklore should be defined. When most people hear the term "folklore", especially in association with Ireland, they immediately think of people telling stories about fairies and leprechauns. The study of folklore, however, covers a wide range of traditions. One archaeologist's definition of folklore states that it encompasses "oral literature and rituals" as well as "material culture, social customs and artistic performances associated with a group of people" (Gazin-Schwartz and Holtorf, 1999, 6). By giving such a broad definition of folklore, Gazin-Schwartz and Holtorf (*ibid*.) were attempting to encompass all of the ways that a culture might see themselves as being unique, and to ensure that everything that that culture may consider definitive of them is included. In short, folklore encompasses the study of folk medicine, food, songs, rituals, beliefs, and art, as well as stories. We even create new folklore today, but we refer to the stories as urban legends.

These traditions are orally passed on from one generation to the next. This results in something akin to a living thing. As time progresses and a tradition is passed on, parts of it may "die off" or new aspects might be added (Opie and Opie, 1980, 68). This occurs as cultures interact with one another, our knowledge of the world around us grows, or the people themselves change. These stories, medicines, and the like, change and adapt to the times and location. This results in great variation of beliefs. A simple example of this variation would be marriage practices in Ireland where arranged marriages, referred to as matchmaking, were practised into the 20th century. In some areas this was done through an actual matchmaker, a person who knew everyone in the community and everyone's financial and social situations. This knowledge allowed the matchmaker to arrange what would be deemed acceptable matches. In Co. Clare, women were considered bad luck as matchmakers (NFC 0591, 356, 357). In other areas like Leitrim and Donegal, however, women could be matchmakers; but it was stated that they were not common (NFC 0206, 280; 1028, 248). When you take the size of Ireland into consideration, it is amazing that one can easily find such different beliefs so close together.

How is this Useful to Archaeologists?

With folklore being so malleable in the face of change, how can it be used by archaeologists? In his 1948 Presidential Address delivered to The Folklore Society, H. J. Fleure, who was an anthropologist, archaeologist, geologist, and zoologist, discussed the connection between folklore and archaeology, and hinted at the importance of folklore to archaeological interpretation (Fleure, 1948). In the first half of his address, Fleure considered the history of Britain as we know it archaeologically, then cited Geoffrey of Monmouth, a Welsh historian from the 1100s (Jarman, 1966, 11-15), and the folklore he collected in Britain that explained the archaeology. Researchers must be careful when comparing archaeology and folklore. In Fleure's (1948) carefully chosen examples, Geoffrey of Monmouth put forth stories that connected perfectly with the archaeology. For example, Fleure said archaeologically we know two groups of people entered Britain during the Iron Age, and built roads and earthworks. Geoffrey reported stories of two sides fighting centuries ago, and as a result of their battles built earthworks, and roads (Fleure, 1948, 70). The problem is we do not know for certain that these stories are the result of the original events being recounted over time as Fleure suggests they might have been, or if they are the result of local people observing local landscape features, and telling a story that fit those features. If this is the case, the connection to archaeology may be coincidental.

Another example given by Fleure was of Stonehenge. Archaeologists discovered some time ago that the stones did not originate on the Salisbury Plane. Geoffrey of Monmouth told the story of the stones travelling from Africa to Ireland, then on to Britain. Fleure (*ibid*.) hailed this as an "edited version of something handed down in folk-memory". It is plausible that this could be an example of folk memory as Fleure suggests, or it could be local people who knew the landscape, and the flora and fauna on that landscape, well enough to recognise that the stones in question were not local, so they created a story to fit their observations. As archaeologists, it is important to remember in this case that both are plausible theories; therefore both avenues of research deserve to be explored.

In another point of his address, Fleur discussed how folklore is created. He explained that folklore helps people explain a mystery, and those explanations would grow and change over time, as described above. These mysteries could include the question of who built large features on the landscape such as standing stones or earthworks, or even explain "creatures" of which people would catch a quick glimpse (*ibid*., 74).

Once these sites make the transition to folklore, relevant data can become obscured in the more elaborate parts of the story or tradition. It then falls on archaeologists and folklorists to interpret these traditions, and separate the facts from the decoration. In one of her papers on the topic of archaeology and folklore, Gazin-Schwartz (2001, 267) talked about archaeologists having a tendency to see anything "anomalous" (a highly decorated ceramic vessel or an overly-elaborate tool for example) as ritualistic. She encourages archaeologists to consider that in some cultures the ritual and domestic spheres were not necessarily separate. Once we stop to consider that the mundane may have been more full of meaning and ritual than we think, then maybe we can stop thinking of what is traditionally classified as "ritual" (churches, megalithic tombs, and cave paintings being her examples), may not have been viewed quite a separately as archaeologists see them (*ibid*., 278).

While we cannot say with any certainty whether or not the people using these objects viewed them as appropriate for, or designed for a ritual, or if they were simply unique pieces, folklore can give us an idea of how people eventually came to view these items, and potentially their intended purpose. To reiterate, it is folklore giving archaeologists reasonable alternative interpretations of archaeological findings.

Folklore in general gives us an idea of how people in a certain area think or thought at a certain period in history. We can get ideas of who was interacting with each other based on where certain aspects of life were changing or reflecting the folklore in other areas. Furthermore, in some cases, we can make inferences on what past generations thought based on the more current folklore. We can also use folklore to understand how people viewed the world around them. Folklore cannot necessarily tell us of a site's original purpose, but it can help archaeologists understand a site's continued importance to a local community.

Folklore in Ireland: The National Folklore Collection

In 1935 the Irish government established *Coimisiún Béaloideasa Éireann* (The Irish Folklore Commission; Ó Súilleabháin, 1942). The goal of The Irish Folklore Commission (IFC) was to collect oral traditions and literature of Ireland, and to create a place where these traditions and literature could be housed along with material culture and reference books. The focus of these items would not just be on Ireland, but also England and Celtic-speaking countries. This would all be made available to the public. This was done at an important point in Irish history, when it was breaking away from England. "We have suffered great cultural losses as a nation, and can ill afford to let pass unrecorded and unappreciated the spirit of Ireland, the traditions of the historic Irish nation" (Ó Súilleabháin, 1942).

The materials collected by the Irish Folklore Commission are now housed at University College

Dublin (UCD) in the National Folklore Collection (NFC). The NFC is open five days a week to anyone interested in researching folklore. This means that archaeologists (or anyone else for that matter) can go to the NFC and search for folklore connected to a specific site, region, or even concept or material culture classification. Most of the material in the collection was gathered between 1935 and 1971 when the Irish Folklore Commission was active (Department of Irish Folklore, 1993, 1). The Main Manuscripts Collection contains 2,238 volumes and the university's collection contains 1128 bound volumes that are now all digitised, and can be accessed at www.duchas.ie, and 1124 boxes of unbound material (Department of Irish Folklore, 1993, 1). *A Handbook of Irish Folklore*, originally published in 1942, republished in 1970, and currently available as an e-book, gives us a general idea of what categories of material can be found in the collection, including settlement and dwelling, livelihood, communication and trade, human life, nature, folk-medicine, time, popular belief, mythological tradition, historical tradition, religious tradition, popular oral literature, and sports and pastimes (Ó Súilleabháin, 1942).

How are Archaeologists Using Folklore?

With a folklore collection like the one available at UCD, it is not surprising that folklore and archaeology are being used together with increasing frequency in Ireland.

A few books have been published detailing the combined use of archaeology and folklore at larger sites in Ireland. In 1997 Theresa McDonald published *Achill Island.* This book talks about the archaeology, history, and folklore surrounding this large Irish island (McDonald, 1997). In his 2012 book, *Lug's Forgotten Donegal Kingdom,* Brian Lacey used archaeology, historical sources, and folklore to study a small kingdom in Donegal, Síl Lugdach, and its long-continued devotion to the god, Lug. Where McDonald kept the archaeology, history, and folklore as separate parts of her book with little intermingling, Lacey worked to combine them. Both approaches have their benefits and drawbacks.

Champion and Cooney (1999) published a paper examining the names associated with various sites and mapping their usage, how folklore aided or hindered archaeological preservation, polyvocality, and the use of monuments in publicity (*ibid.*, 196). They found that, even though at one point in time folklore acted as a preservation tool, this is no longer the case (*ibid.*, 197). As late as the 1970s, Champion had difficulty finding workers to help excavate a ringfort in Co. Galway, because the owner of the site was badly hurt after cutting down a tree that was on it (*ibid.*). Today, these stories are considered part of the history of the sites, with people not actively believing them anymore. This means that people no longer hold on to the traditional fears, so there is no reason to avoid disturbing a site.

Matsuda (2010) published an article that dealt with the issue of folklore and archaeology, but not about an Irish site, rather an Italian one. Matsuda's (2010) team was specifically working at the Villa of Augustus in Somma Vesuviana. Matsuda put forward a very important question for archaeologists working with folklore-heavy sites. What do we as archaeologists do when we know the local folklore is wrong?

In Matsuda's (*ibid.*) case the site was associated by local legend with an ancient queen, her golden chariot, and a mysterious tunnel. After having many locals ask if the tunnel had been discovered, Matsuda decided to look into the story and decide from there what to do. The conclusion was that the queen was actually an amalgamation of four queens by the same name, and the Villa could not have housed the tunnel or the chariot because it was 1000 years too old (*ibid.*, 462). The team then had to decide what to do with this information; do they tell the locals they are wrong? Or find a middle ground? The team decided that while wrong, the story would not cause any harm. Instead it could cause harm to the local culture and potentially the archaeologists' relationship with the locals if they tried to eradicate it (*ibid.*, 461-462). Their answer was to write a pamphlet for those who were interested that explained their research into the legend and their archaeological findings, and explained that the archaeologists

were unlikely to find anything in regards to the legend, but never actually said the story was wrong.

Conclusions

Champion and Cooney (1999, 208) summed up the connection between archaeology and folklore well:

> "As archaeologists we have the challenge of trying to understand and present the record of this complex past from the palimpsest of evidence left behind, and our standard analytic device is to peel off the sediments of activity and experience one by one. The reality is that a number of images of the past may be contemporaneously drawn on and narrated by people to give it meaning. It is important to remember that the past would have been explained in mythic terms through oral history and folklore by people living and creating the archaeological record".

In many ways, archaeology and folklore have the same goals, and are even studying many of the same things. The problem is that they are approaching these studies from different angles, and are not always communicating with each other. As a result, we see many ideas being re-examined unnecessarily between the two fields, and studies with widely differing results due to the datasets being used, or not used. This is not to say, however, that folklore belongs in every archaeological project.

Archaeologists should begin by asking themselves what exactly it is they are attempting to achieve. Could folklore be of use in answering the research questions, or in helping to understand the broader topics within the research itself? This may involve doing a little research into the folklore available on the topic in question before deciding to officially use it, and broadening potential research directions. Another option is to ask research questions that purposefully combine folklore and archaeology. If archaeologists decide to use the

folklore, they should remain open-minded, and consider whether the folklore being associated with the project provides a reasonable potential interpretation for the site.

Finally, archaeologists working with Irish materials should take advantage of the National Folklore Collection at UCD. You never know what you might find to help you see things from a new perspective.

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A New Defensive Aspect of the Outer Earthworks of Irish Ringforts

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Abstract

One of the most common archaeology sites dotting the Irish landscape are the ringforts. These early defended homesteads are believed to have been primarily constructed to fend off small groups of attackers, with their moats, walls, and elevated positions. The collection of earthworks around ringforts was small and believed to be enclosures for animals and drainage for crops constructed by the forts occupants. These defences were successful against smaller forces but as time moved on and technologies improved warfare, a new type of fort started to appear. Star forts are large hulking defensive structures that use high stone walls and earthworks to defend against large forces. The massive constructions around star forts could endure cannon fire and long sieges. Both of these defensive structures have modified land around them but that is as far as the similarities seem to go.

The function of earthworks around these structures are believed to be too different, one defensive in nature and the other for drainage or agriculture. More differences appear when discussing the two types of structures side by side. The ringfort is a defendable post-medieval house with little focused on military action. The star fort, on the other hand, is purely military, lacking in most domestic properties attributed to those considered homes. This article explores the idea that if one looks a little closer at the Irish ringfort earthworks (i.e. their location relative to the buildings, their construction, and the shapes and patterns that are formed) and compare them to star artillery forts, new and insightful connections emerge. The banks and ditches may have more meaning to their purpose than previously thought.

Introduction

Ringforts were one of the early defensive structures in Ireland (Edwards, 1996). During the medieval period in Ireland (500 - 800 BC), a time when raiding bands of cattle thieves, and horseman were the main adversaries, ringforts stood strong. Ringforts were fortified homesteads created by using moats, walls, and elevated positions to protect the inhabitants. They were fortified domestic structures that left lasting impressions on the landscape. Mainly focused on the cultivation of land and herds, these forts provided a way to thrive in difficult times (*ibid*.). Over time, the effectiveness of these constructions decreased but at their peak there was little better. Even after the introduction of black powder and the change from sword and arrow to muskets and artillery, some of these early forts persisted.

When high stone walls and more military applications became needed in the way of defence, star forts took centre stage. These large military installations housed men and weapons in strategic places, ready to defend disputed territories and boundaries. Often acting as

footholds in hostile lands, these forts needed to be able to handle the heavy black powder fuelled artillery of the time (Gowen, 1980). Impressive feats of engineering, in the way of earthworks and new wall configurations, ensured that cannon fire stayed as far as possible from the occupants of the fort. The spiralling labyrinths disoriented attacking enemies, proving star forts to be a formidable defence.

These defensive structures both modified the surrounding land, but that is as far as the similarities initially seem to go. The function of earthworks around these structures are believed to be rather different, one defensive in nature, and the other constructed for drainage or agriculture (Edwards, 1996). More differences appear when discussing the two types of structures side by side. By looking closer at Irish ringfort earthworks (their location relative to the buildings, their construction, and the shapes and patterns that are formed), and comparing them to star artillery forts, new connections can be speculated. The banks and ditches may have more meaning to their purpose than previously thought.

Getting to Know Star Artillery Forts

The first star forts appeared in Italy at the end of the 15th century (Gowen, 1980). With the huge success of their construction, it is hardly surprising that they started to appear in other countries, including Ireland, and as far as the Americas. The main foe these forts had to contend with was the heavy artillery that came with the invention of cannons and muskets. Black powder allowed for the creation of higher powered weapons that easily decimated earlier fort walls not made of reinforced stone. The forts themselves usually followed a similar construction regardless of where they were built, making them an easily recognisable form. Tall, reinforced walls usually made from stone, but also found of earth with stockade additions, encircled a group of structures and protected the occupants (*ibid*.). The forts could also function as small towns, and continued to operate even when under siege as long as supplies lasted. The interior buildings usually

consisted of barracks, magazines, storehouses, trading posts, bake houses and many other structures.

What made them unique and so efficient was the angular format the walls were constructed in. No longer were circular walls being used, the angled flare made them hard to scale and eliminated blind spots (Harris, 2009). The name "star" came from their construction, as parts stuck out in points at regular intervals like the common illustration of the celestial body. The reason for the extreme angles was to eliminate "dead space" near the walls (*ibid.*). These dead spaces were areas that could not be defended, or places from which defenders could not attack enemies (Figure 1). Simple round- or square-walled forts both had a lot of dead space, making them inefficient when compared to the star forts. The blind spots made it easy for attackers to hide troops or weapons that could be detrimental to the fort's defences. Another way star forts eliminated dead space was to construct the walls with different elevated levels, all equipped with cannons and shooting platforms, to take down invaders. There were very few points around the fort that could not be seen and defended from another position (*ibid*.).
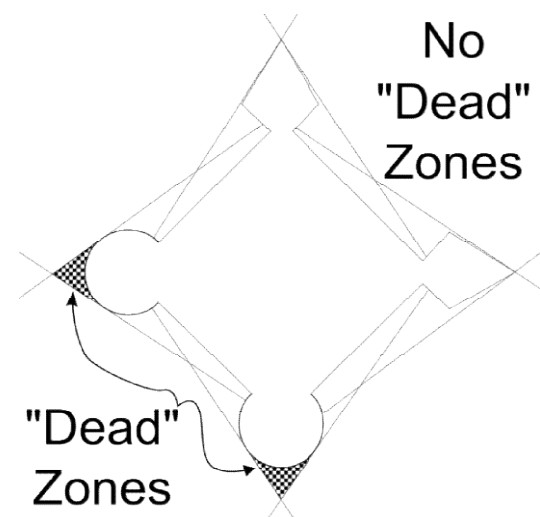

Figure 1. Illustration of dead zones (Foxhunt king, 2009).

The most important and the largest part of star forts defences were the earthworks surrounding them. Earthworks were comprised of vast

networks of modified landscape that stretched out around the high walls of the fort as a first line of defence. Whether composed of deep but narrow ditches, flat open terraces, or snaking mounds, these modifications rippled out in organised geometrical chaos. Their construction was rather simple; large mounds of earth were compiled in predefined patterns, sometimes reinforced with stockade posts. However, it was the layout of the mounds that made them very important rather than the raw materials from which they were made. Many of the ditches or walkways were constructed in such a way that they snaked an invading army around, putting them in the direct line of fire. The paths would create kill boxes that put whole patrols in front of banks of cannons. Some trenches created perfect ambush locations for the defenders to constrict attacking armies, and remove them from play using the smallest amount of ammunition as possible.

The Duncannon Fort in Duncannon, Co. Wexford, and Charles Fort in Summer Cove Kinsale, Co. Cork, are both great examples of this type of strategic architecture in Ireland. There are many twists and turns to the earthworks around the high stone walls. No space is big enough for a large group to move through on even footing. Large armies were forced to split up into smaller groups to get to the forts, making the invaders easier to ward off (*ibid.*). Some forts included terraces in the earthwork plans where cannons could be mounted, but if captured could not be used against the fort, thereby inhibiting its destruction. The disruption such uneven and uncharted terrain caused, won a number of battles stretching out sieges and adding additional stress on invaders (Guilmartin, 2003). The earthworks were not just around the main walls, but spread out over a large area, in order to put distance between the fort walls and cannon fire. In many ways these defences can be seen as similar to putting the fort in the centre of a labyrinth where each turn could present a deadly surprise for an advancing army (*ibid.*).

Nowadays, when visiting a star fort that has been restored or maintained, it is hard to get an understanding of the scope of the earthworks. Very little usually remains of the original earthworks due to modern constructions. The Old Fort Niagara, a star fort in Niagara Falls, New York, USA, keeps some of the original earthwork maintained and allows visitors to walk through them. The earthwork provides a better understanding of the fort and the reason the defences were built the way they were. As one is lead through the hills and valleys it is easy to get confused as to where one is situated in relation to the fort. One such path emerges at the fort wall but in a location that the tour group would be quickly attacked by cannon fire if the fort was still active.

Irish Ringforts: A Closer Look

The traditional understanding of ringforts saw them as fortified homesteads (Edwards, 1996). The elevated constructions and walled enclosures protected the people living in them. At first, it was believed that only the elites of the population built ringforts but there is some speculation that this may not be true (*ibid.*). After either finding a hilltop, or constructing a mound of land, tall stockade fences were put up. The top of the mound was typically large enough for a main structure or two with outlying sheds for storage or animals. The only type of attack this fort was built to protect from was small groups of men, some on horseback, with older weapons like arrows, spears, and swords that were used during the era (*ibid.*). The land around the mound was used for agriculture and raising animals. After working during the day, and grazing the animals, the occupants would retire with their animals to the inner ring of the fort for protection (*ibid.*).

Some of the fort builders got creative with the construction of their homes by adding interesting features. Deep flooded ditches acted as early moats around the base of the mounds. Crannógs, a variation of ringforts, were constructed in the middle of ponds and lakes, which were formed from the encroaching bog (*ibid.*). The builders of these marvels would create artificial islands of soil, rock and other debris until they were high enough out of the water to build on (*ibid.*). Like the other ringforts, multiple buildings would be constructed

within the walls to house extended family groups. Many Irish crannógs date to the Bronze Age, 2500 BCE to 500 BCE, but were reused and modified by medieval builders (*ibid.*). One crannóg found had a walkway that was submerged just enough beneath the water that it is not discernable to one's view. The only way to cross the water to the entrance of the fort was to know the exact place the path was. Only the occupants would know how many steps forward and left to right was needed to safely pass.

Other additions to the forts were underground tunnels that, if the fort walls were breached, would take the residents to safety (O'Sullivan *et al.*, 2010b). These passages were called souterrains and were as interestingly developed as the forts themselves (Figure 2). The escape routes were made so that even when escaping the occupants of the forts could still defend themselves. Changes in elevation, constriction of passages, and sharp turns allowed defenders to keep enemies at bay even if they only had sticks and rocks. Often souterrains covered far distances, putting a lot of land between the fleeing group and their attackers, making it unlikely that an enemy was waiting at the other end (Edwards, 1996). All of these engineering intrigues suggest that the forts were built to last, and were focused on protecting the occupants, even if the interior was mostly domestic spaces.

Before 2000, the study of ringforts was focused on their distribution rather than purpose. These early studies mainly found that most of the ringforts were relatively close together, and covered a large area (*ibid.*), because of the cost and work required, a limited number of sites have been   excavated (O'Sullivan *et al.*, 2008).

All information on ringfort sites came from a limited number of excavations, a number of which were not well documented; some even fell under controversial scrutiny. The interior buildings and sheds were categorised as the most important features of the ringforts during these early excavations, because it was believed that the area's kings and queens lived in these forts, it was thought that the structures held possible treasure. Therefore, the main focus had only been on the interior of the palisade fences. The walls and defences were not extensively investigated and the land around the compounds was only mentioned in passing, if at all (*ibid.*). In some cases the earthworks, unnoticed by these archaeologists, were accidentally destroyed by vehicles, and other activities.

In 2004, the National Road Authority (NRA) decided to construct new roads across Ireland (Deevy and Murphy, 2009). This project provided the funding, and the need to excavate affected ringforts more extensively. This project opened the doors to a better understanding of ringforts, and their purpose. One of the first things noticed about the new sites was the earthworks. Hidden under greenery, and partially filled in by erosion, were deep channels, more extensive network of ditches, and flat enclosures (O'Sullivan *et al.*, 2014).

The collection of earthworks all seemed to be situated away from the compounds in a chaotic manner that did not always have a rhyme or reason. They form an odd collection of shapes that do not easily define their intended function. An engineering approach went into their construction that is similar to that of the souterrains (Edwards, 1996). They pose the question as to whether they were meant as defensive constructions.

Figure 2. Photo of a souterrain (Lordjaysus, 2007).

The general thought after their excavation was that they were intended for agricultural work, with the channels possibly designed to keep livestock from wandering, and to drain off waste, or to be used as a form of irrigation for crops growing on the different plateaus (*ibid.*).

Unfortunately, not all of the sites excavated during NRA road constructions had earthworks, because of land manipulation by modern farmers (O'Sullivan *et al.*, 2010a). The main forts were somewhat protected by superstition but the earthworks did not have the same. It was believed that the ringforts of Ireland belonged to fairies of legend. If the mounds were disturbed, it was believed that misfortunes would occur. Many times ploughs and different farming techniques destroyed the agricultural networks around forts (Edwards, 1996). Fortunately, there remain great examples of earthworks, such as the Baronstown, Co. Meath site (Linnane and Kinsella, 2009), and the Dowdstown 2 site, County Meath (O'Sullivan *et al.*, 2014). With sites like these it is easy to see the odd enclosures formed by the manmade ditches. Some are circles while others are rounded squares that have been additionally divided by intersecting paths (*ibid.*).

same way, and share qualities with the drainage and agricultural ditches. Knowing this, perhaps the earthworks around ringforts had the same purpose as those of star forts, both being modifications to the natural landscape that could serve defensive purposes.

One of the best defensive and offensive strategies used in battles is to keep your opponent confused or unable to stay organised. One way the younger star forts, like Old Fort Niagara, try to accomplish this tactic is by creating earthworks, with their combinations of ditches, mounds, and open terraces around walls in various sizes and shapes. This forces the invading group to formulate their plan as they go because they do not know the terrain until they attack. The layout of the defensive earthworks was kept secret; only the defenders knew the true design. A similar strategy was used when developing the souterrains, which included multiple elevations, and deceiving corridors. Again the only people who knew how to use them were the ones who built them. The same could be said for the removable bridges and other clever tricks of other forts. This ingenuity could reasonably have been applied to the earthworks surrounding the ringforts.

Interesting Connections

As mentioned, the earthworks at the ringforts are believed to have an agricultural function. It is an easy assessment to make looking at the types of activities the people living in the forts participated in. Yet looking closer at the footprint left by these ditches, and the type of engineering the builders of this time were capable of, they seem somewhat sloppy and haphazard holding no real form or relation to each other. Observing these constructions as they stand alone, there does not seem to be any other explanations for their forms, but when compared to the earthworks seen around star artillery forts, another idea can be proposed. What if the earthworks around ringforts were for defensive applications? As stated previously, it is well documented that the earthworks around the star forts are purely for defensive purposes, yet they are constructed the

Conclusion

The earthworks around the ringforts could have been originally used as agricultural works but it could be argued that they did not always stay that way. A military benefit may have been observed during attacks, leading the inhabitants to adapt the forts. Surviving ditches around some ringforts show that work had been done on them multiple times (O'Sullivan *et al.*, 2010a). Some of the ditches and mounds seem to snake, not always forming a specific pattern that could contain animals. The routes to the main entrance were camouflaged in the different trenches, and mounds making it hard to gain entry unless you knew the way, like the earlier mentioned crannógs. Not only would these changes have made it hard for people on foot to make it to the wall unharmed, horses trying to manoeuvre through the landscape would have been at risk. All

in all, it seems that the purpose of earthwork constructions could be something more than for farming. These field works could have had a similar function to the defensive aspects of star forts earthworks.

Going back to the agricultural aspect of the earthworks, some of the manipulated lands around the forts show signs of cultivation and management. Perhaps these modifications served two functions. Looking at the accomplishments of the populations at the time of the ringforts, and the engineering knowledge needed to build the structures, one is able to say the people were not simple-minded. They worked with the land, and used it to their advantage. They thrived in a changing environment and adapted to it. The field systems they had created could have initially had defensive properties without intending to. Observing the effect deep ditches and confusing networks had on others could have sparked the conscious change in the formations. Trading occurred among peaceful groups for material objects, and mostly likely ideas, and observations were also exchanged, thus causing a distribution of similar earthworks. More in-depth work is needed on the construction and management of the earthworks to have a more definite response to the questions and ideas posed by this paper; the ending observations tell us there is still a lot left to research on the defensive aspects of Irish ringforts.

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Archaeology, PTSD, and Happiness: How the Dead are Helping the Living

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Abstract

Archaeology is a discipline known for its value in terms of culture and tourism, but its many benefits do not end there. The myriad health benefits of archaeology are being realised a little more every day. It has been proven through the work of University College London researchers to help promote increased well-being, positive thoughts, and happiness, as well as improving social skills. Additionally, due to increase physical and mental activity, there is an improvement in general health.

Perhaps one of the most unexpected developments in archaeology, is its value to those who suffer from Post-traumatic Stress Disorder (PTSD). PTSD has been noted in the archaeological record, with the first case believed to stem from the Battle of Marathon; this has recently been disproven, and PTSD has been linked to Mesopotamia's Assyrian dynasty. It is now being treated through the use of archaeology, for the general public, and military professionals in both the army and the navy. The Past in Mind project and Project Florence are examples of such initiatives, which proved widely successful.

This paper will discuss the development of PTSD from the first documented cases to the present, and its treatment, particularly through heritage and archaeology.

Introduction

Post-traumatic Stress Disorder (PTSD) is not something one would immediately associate with archaeology, yet it is becoming ever more prevalent in this field. Several studies have been conducted to determine the first documented case of PTSD (see Abdul-Hamid and Hughes 2014; Birnbaum, 2008; Greaves, 2013; Sheth *et al.*, 2010; Ustinova and Cardeña, 2014), with PTSD now being identified as early as 5114 BC (Sheth *et al.*, 2010). This is hardly surprising, as humans have a long history of conflict, and with any large scale or intense conflict or war, there is sure to be emotional trauma of some kind. With the improvement of archaeological techniques and further targeted studies of PTSD, our understanding of its beginning and how it was dealt with and treated in the past can only improve. This knowledge will enhance our understanding of past societies, and could potentially give greater insight into treatment methods for this disorder, thus enabling better treatment methods for current sufferers.

It has also been shown that the discipline of archaeology can help mitigate the effects of PTSD and other mental health conditions. This is achieved through engaging in artefact studies and excavations, people have been shown to have improvements in mood and overall wellbeing. There are significant benefits to being actively involved with archaeology, including personal enrichment from learning new information and skills, increased social skills and circle, and health benefits from increased physical and mental

activity (Thomas, 2014, 29). A recent investigation by University College London (2014) has also proven these benefits through introducing archaeology to hospital patients, and noting significant improvements in terms of positive emotions, happiness, and wellbeing. Clearly there are many benefits to archaeology; initiatives such as The Past in Mind Project and Project Florence are other successful examples of these benefits, and will be discussed further. Community archaeology has many established benefits, and its use as a form of treatment for PTSD could prove to be extremely beneficial in a thoroughly conflict-laden society.

A History of PTSD

PTSD as a condition existed long before the creation of the term Post-traumatic Stress Disorder; the first mention of a condition now believed to be PTSD in Western medical literature has been attributed to Erichsen in 1866 (Greaves, 2013, 90). Study of this condition greatly increased during World War I, as British soldiers became commonly affected with 'shell shock', as it was then known (*ibid.*, 90). Doctors concluded that it was not a physical but a psychological ailment, and that the psychotherapeutic treatments of Freud could be useful in treating it (*ibid.*). This was an important step as Freud's work recognised PTSD as a psychological illness, meaning it could likely be cured using psychological treatment (*ibid.*).

Another new name was given to the psychological trauma experienced by soldiers in World War II: 'combat fatigue', and 'Post-Vietnam Syndrome' at the start of the Vietnam War (*ibid*.). Finally the term PTSD was coined by the American Psychiatric Association in the third edition of the Diagnostic and Statistical Manual of Mental Disorder in 1980, recognising PTSD as a medical condition with set symptoms and criteria (*ibid*.). The Vietnam War and its effect on PTSD is still the most heavily studied conflict in this field, with over 500 papers written on the subject (*ibid.*). Other conflicts have been gaining increased interest, such as the Gulf War and the Korean conflict, meaning that the

dominance of the Vietnam War may not last much longer (*ibid.*).

PTSD is no longer just associated with the trauma of conflict; natural disasters, rape, torture, trauma of civilians affected by combat, and social trauma are among some of the causes of PTSD (*ibid*.). Symptoms of PTSD include an intense emotional response, recurring re-experience of the trauma, avoidance of anything that causes this re-experience, 'numbing of general responsiveness' (such as decreased interest in activities), and 'increased arousal' or difficulty sleeping (Abdul-Hamid and Hughes, 2014, 550; Birnbaum, 2008, 534). These symptoms must continue for at least a month, and have a significant impact on the person suffering from the condition (Birnbaum, 2008, 534).

PTSD in the Archaeological Record

Although Greaves (2013, 90) expresses doubt over the ability to clearly identify PTSD in the archaeological record, due to the difficulty of showing the defining symptoms of PTSD, such as flashbacks, given the frequency and trauma of conflict in ancient Greece, he does concede that PTSD and other psychological conditions were likely very prevalent, and awareness of them was almost certainly represented in some form in ancient literature (*ibid.*, 90).

Despite this difficulty in identification, several studies have demonstrated examples of PTSD in the record (Abdul-Hamid and Hughes, 2014; Birnbaum, 2008; Greaves, 2013; Sheth *et al*., 2010; Ustinova and Cardeña, 2014). Through an examination of the Five Books of Moses in the biblical text of the Torah, Birnbaum (2008) has identified symptoms of PTSD. He argues that Moses appears to display several symptoms of PTSD, such as intense emotional response; as he was the leader of former slaves leaving Egypt for the Promised Land, his PTSD would also have affected the group (*ibid.*, 540). His obvious distress would likely have added to the stress and anxiety of the group; for example, his need to consult with God and thus leaving the group temporarily at Sinai led to a lack of faith on their part, resulting in

the sin of the Golden Calf idol (*ibid.*). This distinct impact of Moses' distress on the group could have led to a greater risk of collective PTSD for the group, adding to the individual and collective trauma already experienced due to slavery, Exodus, and travelling the desert (*ibid.*, 540-543).

The first description of PTSD in Western literature has been attributed to Homer's *Iliad*, written *c.* 720 BC (Sheth *et al.*, 2010, 289). Achilles is believed to have suffered from PTSD, due to his betrayal by Agamemnon, his commander, and the death of Patroklos, his foster brother, in combat (*ibid.*). The Greek writer Gorgias is the first to recognise PTSD as a long-lasting psychological disease in Greek texts (Ustinova and Cardeña, 2014, 746). Furthermore, PTSD has been documented in Indian literature from 5114 BC, *Ramayana* by Valmiki, but it is not recognised as a disease (*ibid.*, 290). In this case, the demon Marrich appears to suffer from PTSD. Marrich is thwarted in his plans to ruin the yagna (ceremony for positive impact/avoid negative impact) of Rishi Vishwamitra by Rama, a 16 year old boy who he does not at first see as a threat (*ibid.*). Rama kills his demon cohorts and hits Marrich with a blunt arrow, knocking him unconscious and launching him 100 miles from shore into the sea (*ibid.*). Several years later Marrich is asked by Ravana to help kidnap Rama's wife, Sita, and displays PTSD symptoms such as intense emotional response (terror to the point of almost fainting), re-experiencing the trauma (flashbacks, avoidance of anything that reminds him of Rama), and difficulty sleeping (*ibid.*).

Hippocrates, who lived from 460-370 BC, wrote of two female patients who seem to have suffered from PTSD (Abdul-Hamid and Hughes, 2014, 551). One woman suffered from fear, depression, and incoherent speech (intense emotional response, numbing, difficulty functioning), and the other would not speak, engaged in obsessive behaviour such as fumbling, plucking hairs, scratching, weeping, and then laughing (numbing, intense emotional response, difficulty functioning; *ibid.*, 551). Herodotus' (484-425 BC) account of the blindness of the warrior Epizelus during the battle of Marathon in 490 BC is believed to be a conversion reaction to PTSD, as suffered by

soldiers in 20th century combat (Abdul-Hamid and Hughes, 2014, 551; Ustinova and Cardeña 2014, 742).

It is argued that one of the earliest descriptions of PTSD comes from the cuneiform medical tablets of Mesopotamia; the first cuneiform text dates to 3200 BC and was found in Uruk in southern Iraq (Abdul-Hamid and Hughes, 2014, 551). Ancient Mesopotamians believed sickness was punishment from the gods for sin or failure (*ibid.*, 552). Trauma was common in this society, from daily life, farming, industry, and combat (*ibid.*, 554). Combat was quite common during the Assyrian period (1300-609 BC), and trauma suffered by soldiers was recorded in medical texts from this period (*ibid.*). Symptoms associated with PTSD may manifest as incoherent speech, altered mental status, forgetfulness, depression, terror, and flashbacks in the form of vivid nightmares; in the case of soldiers they are believed to be caused by ghosts, most likely enemies killed by the affected soldier (*ibid.*, 554-557). It is argued that these soldiers suffered from PTSD up to 3000 years ago (Abdul-Hamid and Hughes, 2014, 554-557; Archaeology News Network, 2015). Another person potentially affected by PTSD was the King of Elam, whose 'mind changed', indicating some form of mental trauma (Abdul-Hamid and Hughes 2014, 554).

Archaeology and PTSD: An Unlikely Treatment Option

Ex-marine Richard Bennett was discharged after suffering from a spinal injury while on tour in Afghanistan in 2011; his PTSD was triggered by the suicide of a colleague (Heritage Lottery Fund, 2016). He became involved with Project Florence after seeking aid from a veterans' charity, which involved Wessex Archaeology excavating a Bronze Age burial site on Salisbury Plain with the assistance of wounded soldiers and their families (*ibid.*). Richard found the work cathartic, and learning new skills and working off the energy similar to the rigours and routine of military life helped him to manage his condition (*ibid.*). He became involved in other digs, and in mentoring

veterans; he then attained a degree in archaeology and intends to maintain the work of Project Florence by establishing a community interest company (*ibid.*).

A similar project also funded by the Heritage Lottery Fund is the Past in Mind project, a community heritage initiative working with 50 volunteers to investigate the medieval site of Studmarsh in rural Herefordshire (McMillan, 2013, 195-196). The project was based on the belief that engagement with the discipline of archaeology and the past would benefit mental health and 'promote recovery' (*ibid.*, 195-197). This promotion of mental health was one of the key objectives of the project, reflected in the involvement of health care professionals (*ibid.*, 197). Several of the volunteers involved went on to engage with other community heritage projects, excavations, academic study, and engagement through touring museums and archaeological sites (*ibid.*, 199).

Conclusion

Mental health conditions such as PTSD are not exclusive to modern society; these conditions clearly have a long association with the human past, from examples such as ancient Mesopotamia to ancient Greece. This complex and difficult condition is most often associated but not limited to soldiers involved in conflict; other traumatic experiences such as the civilian experience of conflict and rape can also lead to PTSD. The condition is found in ancient and modern societies, and its study is becoming ever more prevalent in archaeology. This examination of PTSD is an important method of showing those who are or have been affected by PTSD that it is not unusual; it has long been associated with humanity, and is likely to continue to be a part of the human experience.

Engaging with archaeology can be a way for those affected to manage their PTSD. There are myriad benefits to engaging with the discipline, highlighting the importance of funding initiatives such as the Past in Mind project. Thus archaeology can be used both to educate and heal the

community; it is a discipline which can clearly serve the community in many different ways. Mental health and conditions such as PTSD are an important part of the story of humanity, and this significance should be reflected in the archaeological narrative, and the community should be given the chance to actively engage with the discipline, for its benefit and theirs.

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UCD Archaeology Society
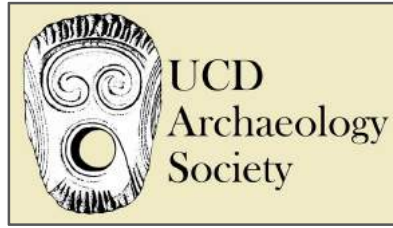
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Founded in 1942, the UCD Archaeological Society, as it was named then, was created to unite students from different disciplines who shared a passion for archaeology. The first of its kind in Ireland, the initial aim was to engage its members on a deeper level with the subject, but now friendships are forged as a common interest is shared amongst members.

On this 75th anniversary of the UCD Archaeology Society, we are still dedicated to running numerous events throughout the year and are focused on promoting archaeology as a subject. Events organised by the society include day trips, guest seminars covering a range of topics related to archaeology, and other extracurricular activities meant to inform and entertain.

The society is run solely by the students for the students. Offering a support network and working closely with the UCD School of Archaeology, the society encourages its members throughout their degree to participate and create lasting friendships and connections. The society is open to anyone inside and outside the college who shares a passion for understanding the past.

We'd like to thank Professor Seamus Caulfield for providing the anniversary inaugural lecture on the archaeology of north Mayo!

The primary role of the IAI is to act as the representative body of professional archaeologists in Ireland.

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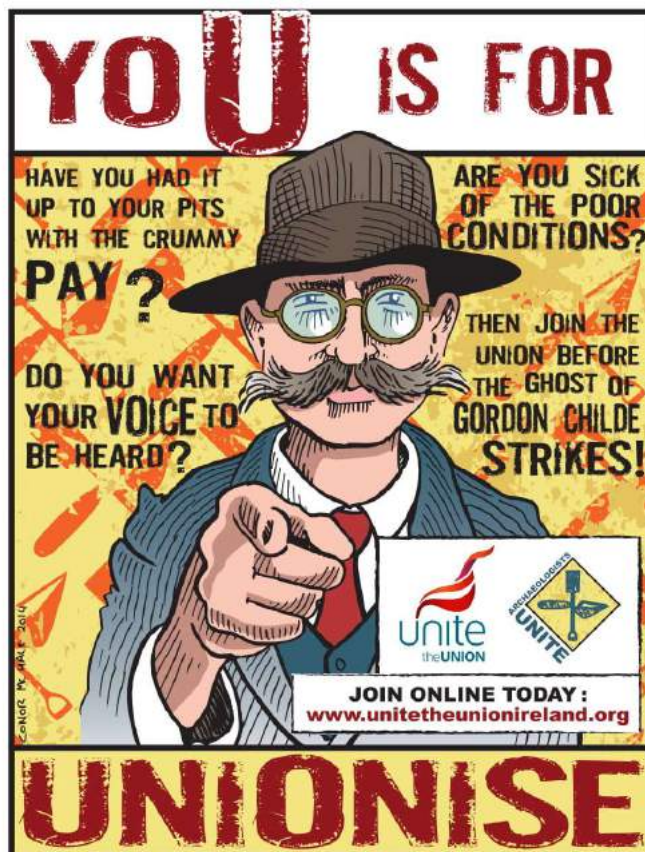
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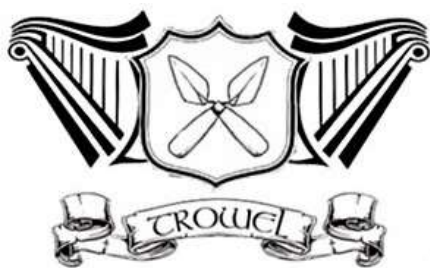
Trowel is searching for new editors for Volume XIX.

Becoming an editor will mean you become part of a long-standing UCD School of Archaeology tradition, but it's not just limited to UCD students! All individuals, whether residing in Ireland or not, are welcome to submit their interest in becoming an editor. There is no experience necessary, just enthusiasm!

Contact trowelucd@gmail.com for more information.

AYIA is looking for committee members and a new place to host the next conference!

Much like *Trowel*, the AYIA provides a platform for young researchers to engage with the wider community.

Do you want to gain experience working on a committee and organising a conference aimed at students and young or novice researchers?

Contact ayiacommittee@gmail.com for more information.

Association of Young Irish Archaeologists

Conference Proceedings

2016-2017

Edited By

Ashley McCall, Jordan Young, and Noel Carroll

AYIA Committee

AYIA Conference Proceedings (2016-2017) as part of Trowel Volume XVIII (2017)

For enquiries please contact:

AYIA Committee

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Published in 2017 in conjunction with Trowel.

Committee's Foreword

Welcome to the conference proceedings for the annual AYIA Conference. We are excited to bring you six articles, three of which are from the 2016 conference held in University College Cork and the remaining three are from the 2017 conference held in University College Dublin. These articles are based on the presentations given by the authors and cover a wide range of topics. These include Roman archaeology in Ireland, artistic reconstruction relating to archaeological interpretation, aerial archaeology and ringforts, the material archaeology of The Troubles, shamanism, and early medieval archaeology.

These combined conference proceedings provide a unique opportunity for students and young or novice archaeologists to publish work they presented on. These individuals, as well as the others unable to be included in this volume, all demonstrated their hard work and dedication to their research. The authors in this section clearly show their commitment to archaeological investigation and disseminating their knowledge. We hope that they continue this determination and wish them the best of luck in their pursuits, whether academic or otherwise.

As stated in the last volume of Trowel, Volume XVII, the AYIA is an organisation that encompasses what an all-inclusive student and amateur-led organisation is and should be about. This association is run entirely by individuals with a genuine interest in archaeology, both in academia and commercial. Additionally, the committee hopes to increase interest in the association and wants to raise awareness of not only its existence, but to create a community across the island.

For more information, we ask that you visit the new and improved website at http://ayia.ie/ to find information about membership, sponsorship, the association's constitution, and the current committee members. Also available from the new website are the previous Conference Proceedings from 2006, 2007, 2011, and these current proceedings. We hope that making this research available will facilitate communication and provide connections for young researchers.

We hope to continue this tradition of providing a venue for young researchers to present and publish their work. If you would like to volunteer to be on the committee or want to host the annual conference next year, please e-mail the committee at ayiacommittee@gmail.com.

Thank you,

Ashley, Jordan, and Noel

AYIA committee

ayiacommittee@gmail.com

October 2017

Contents

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Shane studied archaeology and Greek and Roman civilisation at University College Cork, graduating in 2016 with plans to return for his master's degree for the 2017-2018 academic year. His research interests include Roman military and small finds archaeology, Ireland and its interaction with the Roman world, classical archaeology, and Roman archaeology in an Irish context. His research focuses particularly on the 1st and 3rd centuries AD.

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Ben is a graduate of University College Cork with a BA in archaeology and English. He is currently undertaking a master's degree in prehistoric archaeology at Durham University. His research interests concern the domestic funerary landscapes of late prehistoric Ireland and Britain. He hopes to continue this at PhD level at UCC with a project focused on examinations of settled landscapes of Late Bronze Age and Iron Age in Ireland. Artistic reconstructions are a personal interest of his based on his liking for drawing and painting, an area in which he would like to further develop in his archaeological career.

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Ashley graduated with a master's degree in archaeology and is in her third year as a PhD student in the School of Archaeology at University College Dublin. Her interests include using scientific methods to analyse diet and mobility in prehistory, mainly using isotopic analysis. She also enjoys human osteology, bioarchaeology, and palaeopathology.

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2016 Conference Proceedings
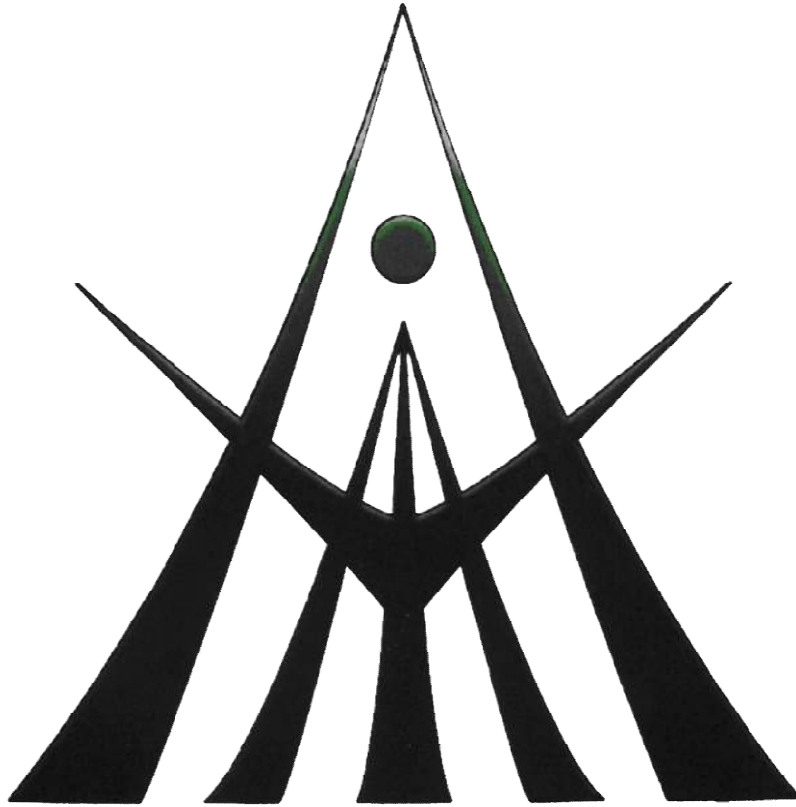
2016 Conference Summary

The 2016 conference was held at University College Cork and organised by Adel Coleman, a PhD candidate at the same university. Topics included megalithic tombs, rock art, artistic interpretation, ringforts, medieval landscapes and sculptures, Roman Ireland, early Christian churches, bioarchaeology, and archaeology of the modern pub. These presentations were all well done and we want to congratulate those who presented on their research. We also want to congratulate Caen Harris of University College Cork on winning the best paper/presentation for his presentation titled 'The industrialisation of brewing and the birth of the modern public house: The archaeological evidence from Cork city'. This award was kindly sponsored by the Institute of Archaeologists of Ireland.

For information regarding the authors, titles, and abstracts of the research presented at this conference, please visit the website (http://ayia.ie/annual-conference/) for more information.

In addition to the array of topics presented, Mary Teehan discussed Archaeology 2025. This is an initiative by the Royal Irish Academy in order to assess the needs, both current and future, of archaeology in Ireland. In Mary's presentation, she described the purpose of this initiative and how we, as attendees, could participate in developing plans and creating ideas for the future of this profession. All those present at the conference were invited to discuss the future of archaeology in Ireland.

The committee would like to thank Adel Coleman and all of those involved in the 2016 conference. It was a great success and helped reinvigorate the AYIA. We also appreciated the outing arranged by Adel, which was a walking tour of Cork that included the archaeology and history of Cork sites.

We now invite you to read a selection of three articles based on research presented at the 2016 conference.

Roman Client-Kingdomship in Ireland

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Abstract

This project will work to prove or disprove the existence of a Roman client-kingdomship in Ireland during a time when Britain was part of the Roman Empire 43 AD to 410 AD. This research and approach use the following resources to draw conclusion from: literary (written historical sources and myth) and archaeology. One of the objectives is to blend archaeological and classical methods for this paper and give a multi-disciplined approach to address the issue surrounding the presence of a Roman client-kingdomship in Ireland.

Introduction

The objective of this article is to prove or disprove the existent of a Roman client-kingdomship in the Meath and Dublin region of Ireland, during the time that Britain was a province of the Roman Empire between the first and third centuries AD.

Ireland was next to a province of the Roman Empire from the first through fifth century AD (Edwards, 1996, 1) for a span of over 400 years. Yet the image of Ireland as a land untouched from Roman influence is not only still popular, but is what Martino (2006) fittingly describes as "nonsense". This just simply cannot be the case, as the Roman Empire under Trajan (AD 98 to 117) was at its largest size, from Northern Britain as far south as Mesopotamia, across Egypt, and all of Northern Africa. It was a super state of the ancient world (Wilson, 2014, 11), but yet its power and influence was supposedly never felt in Ireland. Thanks to recent archaeological work, it has been acknowledged that there was contact and influence between Roman and Ireland, but what was the nature of the contact between the two during the Iron Age? There has been a general disinterest for Ancient Rome among scholars. Could this be because of neglect or disinterest as Ireland was never part of the Empire (Ó Ríordáin, 1948, 43)? As material from the classical world has

been found in Ireland this cannot be the case, but what is clear is that the Roman material in Ireland was considered "intrusive" or "foreign" and it just did not fit into the archaeological record of late Iron Age Ireland (Guglielmi, 2014, 9-10). This "foreign" material went against the accepted story in an Irish historical context, and it is only when Saint Patrick comes to convert the Irish to Christianity that classical culture is internalised by the Irish people. Yet the possible involvement of the Roman Empire at an earlier point in the development of Ireland at that time has been less well received (*ibid.*) and has fuelled arguments that have been far from academic (Warner, 1996, 39). It is the purpose of this article to be a conversation starter on this topic for further examination.

Method of research

There are two main lines of research included in this article: literary (which will include classical sources and Irish myth) and archaeology. Written records were used, in addition to the culture-historical approach and elements of post-processual archaeology (see Mytum, 1992, 7-8). Additionally, examining how material and ideas spread from a complex society like Rome to a

seemingly simple one like Iron Age Ireland is also incorporated into this research (*ibid*., 17).

The area of focus is the Dublin and Meath region on the east coast of Ireland between the River Liffey and the River Boyne and the south-eastern part of Ireland. The time period in question is between the first and third centuries AD during the pinnacle of the Roman Empire.

Criteria were created to determine what to expect for a client state in order to analyse the conditions in Ireland. In order to formulate this, classical sources were used as a starting point. The timeline of the written sources are dated from 52 BC to the second century AD. The reason for this research using both written and archaeological evidence is so that the evidence presented is more rounded and supported.

What is a client-kingdom?

As Rome expanded through the Mediterranean and beyond, it deployed two basic instruments of rule: direct and indirect administration, each with its inherent logic, benefits, and hazards. A client-kingdom is a form of indirect rule and was defined by Edward Luttwak (Sidebottom, 2004, 69). This method of governance was the key to the long term success of Roman expansion (Wilson, 2014, 12). Luttwak (Sidebottom, 2004), in his book *The Grand Strategy of the Roman Empire,* gives two models that the empire used as it expanded. From the late Republic to early Empire (50 BC to 50 AD) it was a 'Hegemonic Empire' with Italy and the provinces ruled directly while the borders were surrounded by client states governed by client kings. The leaders of these client states were often hand-picked or educated in Rome and theses states acted as a buffer to the empire. They operated as a normal state and were responsible for their own internal affairs, but they were on-hand to defend the heart of the empire (*ibid*.) freeing up Roman legions for the conquest of new lands the model changes to a territorial empire and the land is ruled directly by the imperial state.

Client states from Roman writers

The Roman historian Suetonius writes in 39 to 40 AD of Gaius Caesar accepting the surrender of a British prince who, with a few followers, was banished from his land and came to Rome. Gaius Caesar used this event to give himself legitimacy as he was lacking military glory and he claimed in a letter to the senate that the whole island was conquered (Suetonius, 2007). This would be useful to Caesar as he needed legitimacy from a military campaign to boost his emperorship and by 40 AD had assembled several legions for an invasion of Britain. Having a friendly king as a ruler of a British tribe would be useful for the campaign and Suetonius refers to the father of Adminius as a 'rex' (Latin for king).

Another example of a king in a client state comes from Cappadocia. King Archelaus of Cappadocia had a trial in 25 BC to judge his competence and to tighten the bonds of friendship for the young Tiberius, an advocate at the time (Romer, 1985, 79). Archelaus had been king since 31 BC but the benefit of having him in the region was gone. When Tiberius was Emperor in 16/17 AD, he summoned Archelaus to a new trial in Rome (*ibid*., 80). When the trial was held, Archelaus was a very old and tired man with gout, and even though he was fit in mind, it is suggested that he faked senility (*ibid*., 82-83). Archelaus remained in Rome until his death and Cappadocia was integrated as a province of the empire. He was removed partly because of the need of funds by Tiberius and the mutual benefit of having him as a client king in that region was exhausted.

In summary, the key evidence for the use of a client state are the following: the political will of an emperor to launch a new conquest to use tribal princes and leaders to sell Roman policy to their own people, to maintain order in their respective region or kingdom, contact via trade and/or warfare or by proximity to Rome as a long term factor political pragmatism, and a known tribal and leadership structure.

Evidence of Ireland in Roman sources

It is from Julius Caesar that we have the first Roman account in writing of Ireland from the Gallic war, written by Caesar in 52 to 51 BC and finished after his death in 44 BC. He writes, "[o]n the west side of Britain, but towards Spain is Ireland which is half the size of Britain, both are separated equal distant from Gaul and Britain" (Caesar, 1982). To the Romans, Ireland is the farthest point of the earth that the Romans knew of, even farther than Britain and, to Mediterranean-centred people; Ireland was beyond the edge of the known world. To write his book, Caesar relied on the historian Diodorus Siculus (Koch and Carey, 2003, 14) who wrote the *Bibliotheca Historic* and he described the savage nature of the peoples of Britain and Ireland. Unlike Diodorus, Julius Caesar never described the nature of the peoples or tribes of Ireland as he never set foot on the island so there is no firm evidence from him regarding any possible client kingdoms and mentioned Ireland because it was there.

Accounts of Ireland become more fixed in the first century AD. It is here that there are more realistic accounts of Ireland. It is in 98 AD that one of the most well know accounts of Ireland occurs and, within it, a reason to invade and set up a client kingdom in Ireland by Tacitus (1970)

> *Ireland is between Britain and Spain accessible also from the Gallic sea, is small in comparison to Britain, in soil, climate and in Character of its people much like Britain. The approaches and harbours have become better known thanks to Merchants, Agricola had in his retinue an Irish prince who was welcomed by the governor and was a 'friend 'of Agricola. I have often heard him say that a single legion and Auxiliaries could reduce Ireland.*

This is the first bit of evidence in order to prove or disprove the possibility of a client kingdom in Ireland, a political figure head to lead it, this unnamed prince, as mentioned by Tacitus is mirrored in the writtings of other historians, the prince Adminius by Suetonius and Augustus in his

Res guesti mentions that he had taken the surrender of two British kings.

Irish evidence

There is, unfortuantely, no historical record from Ireland until the medival period, but there is psuedo historical records to draw on, such as the myth of Túathal Techtma. The next part of evidence of a client state in Ireland is to examine the known political makeup of the country between the first and thrid centuries AD. This is extremely difficult as before the fifth century AD, the makeup of the country is obscure at best (James, 2003, 154). However, we do know of the royal sites that were often discribed as centres of pagan ceremonies (Raftery, 1994, 64). These settlements were not cities in the sense that a Roman would understand them, but were seasonal settlements with a warrior-based aristocracy elite ruling their region, and the fine metalwork that was found on these site would support this idea (*ibid.*, 65).The only list of tribes is from Ptolemy's map of 125 AD, totalling 55.

Eblana and sites of importance

The Eblana are a tribe mentioned in Ptolemy's map; a tribal confederation, located around Dublin, but was it a kingdom, tribe or place? Ptolemy's map most likely represents points recorded, not instantaneously but over time, written down and fixed at 100 AD (Darcy and Flynn, 2008, 50). From consulting the main sources of this article Ptolemy, Bateson (1971, 1973, 1976), and Tacitus (1970) what we know is this: all of the east coast facing Britain was known to Roman traders, according to Ptolemy, Eblana was not placed on a river, so if this was true it was placed between the Rivers Boyne and Liffey, it would be close to the coast with use of the river systems based on the writing's of Tacitus.

Drumanagh is located only 100 km from the island of Anglesey, Waleson the east coast of Ireland close to Loughshinney (North Dublin) and bounded by cliffs on three sides. Drumanagh is

approximately 40 acres in size and sits beside a sheltered natural harbour which makes it ideal to beach ships for the night or when travelling up the Irish sea (Raftery, 1994, 208).

Gallo-roman pottery dating to the first century has been found on the site and a collection of huts have been found on the fort (*ibid*., 19). Not too far away from the fort in Damstown in Dublin, bun-shaped ingots of copper were discovered. When compared to similar ingots found in Wales, they are comparable to Welsh examples (*ibid*.). There is exploitable mineral wealth here as there are deposits of copper ore along the coast north of the area of Loughshinney and the land is productive in terms of farming (Wilson, 2014, 60). The site has been compared to the fort of Hengistbury head in Dorset.

Newgrange is part of a larger landscape made up of other monuments such as Knowth and Dowth. The Neolithic passage tomb built around 3200 BC, takes up over an acre of land (Kelly, 1984, 13). In the Irish Iron Age, there is no evidence of native's religious votive offering to any god on the site, but there is evidence of Roman votive religious practice. The finds in question are concentrated at the mouth of the tomb (Raftery, 1994, 210). These precious finds seem to suggest they are religious in nature and because of this the site still retained ritual significance in the Iron Age, (Edwards, 1996, 44). In total 25 coins dating from 81 to 408 AD were found, of which 16 were found in an archaeological context along with jewelry and gold items. The majority of the coins are gold coins, which indicates its importance.

It is believed that Newgrange was the seat to the great god Dagda (Raftery, 1994, 210). However, with the known evidence there are two possible answers: Roman traders or visitors giving offerings to the great god or Romanised natives giving offerings to the great god.

In Knowth, a small number of Roman objects were found on the sites along with two shards of pottery (Eogan, 2012, 390). The objects found were called Ligular and they vary in size, could be made in various materials, and were used to remove cosmetics (*ibid.*) Ear scoops were also found and could be used in both a medical and domestic context. It is important to note that personal hygiene was important in Roman social life and there is no similar object found in Irish native tradition.

Two shards of Roman pottery have been found that lack any stratification but were dated on stylistic evidence to between the first century BC and the third century AD. It is most likely that these were made in Lezoux Gaul (*ibid*., 440). Called Drangendorf, this form pottery is a rare find in an Irish context and could have been used as a form of display, but the fragments show no signs of being re-worked and it's believed they were broken rather than deposited in a religious context (*ibid*.). A small tined dental mirror or stylus was also found (*ibid*., 391).

Tara is only 17 km from Newgrange and Roman finds have been discovered in the Rath of the Synods within the site. In the Rath, a figure of eight palisade with a hut plan that was dated to between first century BC and second century AD, burials of both cremation and extended inhumation have been discovered along with metal objects (*ibid*.). Sean O'Riordain, who excavated the site in 1952, concluded that the dwellers were in touch with the Roman world and the assemblage seems to indicate ordinary and domestic life (Slavin, 2002, 162). The pottery is of south Gaul design and the lead seal seems to have the impression of a bird holding something in its beak and with the lack of native material these people could be from the Provencal Roman world (Raftery, 1994, 212).

Conclusion

In conclusion, due to the lack of evidence of long term trade between Roman Britain and Ireland between the first and third centuries AD, a client state in Ireland is not likely. The evidence at Newgrange does not support the idea that it was part of a client-kingdom during that time, but had become popular in the fourth and fifth centuries AD as the majority of the coinage and jewellery dates to the late Roman period.

What the evidence does support is that the Dublin and Meath region was influenced by the Roman world and if we look at Tara and the Rath of the Synods, the metal material and the lead seal dating to the second and third centuries AD, along with the pottery and glassware found, it is tempting to think of this as a possible site of Romanised Natives/British settlement. However, the Rath was badly damaged between 1899-1902 by people looking for the ark of the covenant (Wadell, 2010, 330) so any archaeological context is compromised at best and there is not a volume of archaeological remains to prove long term contact or trade.

The venture to find Eblana was inconclusive, as with the Roman evidence on the sites mentioned in this paper is irregular, coming in groups of finds from the first century AD, then the fourth to fifth centuries AD. While Rome could have invaded Ireland, the Roman Emperor of the day had lost interest in the conquest of the whole of the British Isles for other reasons. There is also no clear evidence in Ireland of an organisational system that Rome could exploit and integrate into the empire. However, writers like Tacitus did write that the governor of Britain with four legions under his command and in his entourage an Irish prince, this is basic client state policy and in another area of Europe could have led to a client state, but it is not until the late third and fourth centuries AD that any strong influence of Rome in Ireland appears in the archaeological record. Based on the archaeological evidence, trade between Ireland and Rome was minimal at best, and focused on display of wealth or prestige (pottery, personal cleaning items) and one of the criteria of a client is long term contact by trade and a willingness to buy into the idea of Rome and there is not enough evidence to answer this question until more evidence is discovered. While the evidence presented is inconclusive, a more in-depth study, research or new archaeological evidence may give us a clearer understanding on whether Ireland was indeed a Roman Client State or not.

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Estate Maps and Aerial Archaeology: An Inclusive Study of Ringfort Numbers

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Abstract

Ringforts are recognised as the most common archaeological monument in the country. While of an uneven distribution, the same is true at regional and at many local levels. Originally dating from the latter half of the first millennium, these structures developed as a consequence of the organisation of Irish society during this period. Because of this, as society evolved, ringforts lost favour as habitation sites. Nevertheless, they remained a highly visible presence upon the Irish landscape, and fulfilled a variety of practical roles for later communities. Evidence also appears to show how they developed a strong presence within the mental landscape of the Irish people. Through the examination of several specific sites throughout south Munster, this paper will highlight the attitudes and beliefs held towards ringforts by various sections of Irish society during the 18th and 19th centuries. Also, how these beliefs may have influenced any subsequent behaviour towards these monuments throughout this period will be examined. For example, in encouraging behaviour that may have facilitated the destruction of the monuments, or perhaps encouraging their preservation. Finally, because of the existence of a notable relationship between Irish society and particular objects upon the landscape, what affect might these activities, in turn, have had upon these communities?

Introduction

Until recent decades it had long been accepted as an article of faith among archaeologists that the Ordnance Survey (OS) maps of the early to mid-19th century represented the field antiquities of the Irish countryside in a pristine and undisturbed condition. This was particularly the case regarding the most common field monument, ringforts (Ó Ríordáin, 1942; Stout, 1997). This notion is likely to have been influenced by the traditional belief that precluded any interference with these monuments. It is understandable that the OS maps were regarded as a point of departure, for in many areas these were the first detailed maps that were available.

Fortunately, in some areas, depictions exist of the Irish landscape that pre-date the OS and also contain evidence of archaeological monuments. Additionally, recent technological developments have facilitated access to aerial photographs and satellite images of these same areas. These high definition images may help in confirming original positions of ringforts that may not be visible on the ground. Available map sources contain differences in scale and representation and it may be difficult to coordinate the information contained in these maps to form an overall picture. Combining these earlier sources with modern technology would progress the establishment of original ringfort numbers and any changes in these over time. For this study, a

selection of townlands will be examined for which a range of cartographic evidence exists and this investigation will be bolstered with reference to aerial images.

Surveys and Surveyors

The focus area consists of several townlands located in the east Cork barony of Kinnataloon. These townlands were first surveyed in detail by a local man, Josias Bateman of Tallow. In 1716, he was engaged by the agents of the landowner, the Earl of Cork, to carry out a survey throughout his holdings (O'Flanagan, 2006, 70). These included some lands in the mid-Cork region. However, either the maps relating to this area have been lost or the survey consists solely of the east Cork portion of this estate (O'Flanagan, 1982, 52). The information gathered during this survey was presented in map form and compiled in book form (NLI. MSS.: 6148-9). Details include represent-ations of natural features, such as improved ground and mountainous terrain, rivers and streams, as well as man-made features, like slate houses, cabins, and dairy houses. Lime kilns and ringforts, which are referred to as 'Dane's Forts', are also displayed. Bateman used similar symbols to denote these two types of structures (O'Flanagan, 1981, 323). However, an examination of the index (Figure 1) shows that, while similar, the two symbols can be differentiated. Also, in their use it appears that each was used independently even when the two structures may have been combined, as in one of the townlands mentioned below.

A similar brief, concerning the survey of these same holdings, was entrusted to Bernard Scalé in 1773. Scalé also undertook to survey the totality of the holdings, including those in the mid-Cork area around Bandon (Duffy, 1997). Again the information collected during this survey was presented in map form with each map addressing one townland (NLI.MSS.: 7216-8). Scalé was a disciple of John Rocque and together they developed the style of what is referred to as the 'French school of Dublin land surveyors' (Andrews, 1965, 275). Scalé's work appears to be highly

Figure 1. Index (NLI, 2017).

artistic, as can be seen in the use of a crumpled paper illusion to surround townland names on the maps. Also, he appears to have a meticulous approach in his representation of ringforts, in that he attempts to include an indication of their size (Figure 2). This approach may be a result of his training and also, perhaps, due to a developing general interest in antiquarianism among certain sections of Irish society.

Figure 2. Map by Scalé (NLI, 2017).

Also of note is his use of the phrase 'Danish Forts' to describe these monuments. This is a convention of long standing that was initially established by the Welsh cleric, Giraldus Cambrensis, in 1188, and one which was readily accepted in some academic quarters. For example, by the beginning of the 18th century, this notion had expanded to include all

field monuments of importance (Molyneux, 1725). It should also be taken into consideration that Scalé used this term to refer to later square moated sites and that this has the potential to create confusion and may skew results concerning ringfort numbers. Later again, this area was included in the national exercise carried out by the OS which was established in 1824. The survey was comprehensive in its scope and the maps, which were produced at a scale of six inches to a mile, were extremely detailed. For example, in the case of ringforts, efforts appear to have been made to highlight differences in their size, form, and perhaps even to depict their state of preservation. Possibly, it is this attention to detail that encouraged later scholars to assume that all points of interest on the landscape had been recorded.

The use of aerial images produced either by satellite or low flying aircraft is a comparatively recent development. Raftery (1944, 120) claims that by 1929 or 1930 aerial photographs were being taken from private airplanes by means of "the hand camera being held over the side". Following the pioneering work of J. K. St. Joseph in undertaking aerial surveys, aerial archaeology was used extensively by others, such as Dr Daphne Pochin Mould (Monk, 1989, 66). Currently, however, high resolution aerial images are readily available online. For example, Bing Maps (BM), a service provided by Microsoft, contains very high quality satellite images of the entire country. Another feature, referred to as 'bird's eye' involves photographs taken at an oblique angle from low-flying aircraft, rendering monuments no longer observable from the ground visible again.

Comparative Study

An initial study of the available maps produced by the three early surveys reveals a correspondence involving several townlands within the area. These townlands are fairly well distributed throughout the barony of Kinnataloon. Table 1 details the depiction of ringfort numbers in each of these townlands over the period under examination. It can be readily perceived that, in the majority of cases, fewer ringforts are depicted in Bateman's

(1717) maps despite this survey having been conducted much earlier. This may raise questions about the diligence of Batemans investigations but also of the possible prominence upon the landscape of the un-noted monuments.

	Bate-man (1717)	Scalé (1774)	OS 1 (1841/2)	Aerial (2017)*
Ballylusky	5	7	0	3
Garraneribeen	1	1	1	1
Garycaheragh	4	6	1	5
Glentrasna	4	10	6	6
Kilphilibeen	0	3 1/2	1	3
Knocknagapple	3	4	2	3
Mogeely Upr.	1	0	0	1
Mogeely Lwr.	5	3	2	4
Rathdrum	1	4	3	3

*Table 1. Comparative study table. *includes any evidence of possible ringfort existence, such as soil marks, curved field boundaries, and circular tree patterns.*

Ballylusky

In this townland, Bateman (1717, 50) indicates the presence of five ringforts, located along the western boundary of the townland and arranged in a north – south pattern (Figure 3: south uppermost). The three northernmost ringforts appear grouped together and the other two are slightly separated at equal distances to the south. Scalé (1774, 22a) shows four ringforts arranged along this western boundary, and, SMR No. CO045-130004 appears to be no longer visible. However, Scalé (*ibid.*) does show three further ringforts closer to the southern boundary and approximately centre ways in the townland. The most westerly of these is shown close to the southern boundary and as having an attached bank that follows the local field boundary but is marked differently. The most easterly ringfort is located right on the townland boundary. The final ringfort is in the centre of the group and slightly further north of the other two monuments.

Figure 3. Source: National Library of Ireland.

Unfortunately, by the time of the first series OS (1841, 45) maps all of the monuments mentioned above are no longer visible. A comparison of the maps that detail these two latter surveys shows the construction of a roadway traversing the southern portion of the townland and connecting with an existing north-south running road in the eastern area. Uncommonly, it also appears that fields in the south-western area of the townland were subjected to increased sub-division during the same intervening period. Nevertheless, examination of aerial images provides an indication of the location of some of these monuments. Curves in the ditch marking the western boundary of this townland show where ringforts No. CO045-130003 and No. CO045-130005 may have been located (BM, 2017). Furthermore, a soil mark close to the southern boundary appears to indicate the position of the central ringfort shown on Scalé's map (National Monument Service [NMS], 2017).

Garraneribeen

Garraneribeen is the only townland that shows no change in ringfort numbers over the time period under examination. In each of the three surveys a single ringfort is shown located at the north-east corner (Bateman, 1717, 46; Scalé, 1774, 19a; OS,

1841-2, 55). This ringfort, SMR No. CO055-005, is a univallate example with the bank standing 1.3 m high and surrounded by a shallow fosse 0.4 m in depth (Power *et al.* 1994, 100-1). Comparison between first series OS maps and recent satellite images shows that some field clearance has taken place nearby and some bog drainage and marginal land reclamation has also been carried out. However, the boundaries of the field containing the ringfort appear to be unchanged and the ringfort's bank is defined by a circle of trees or bushes (NMS, 2017).

Garycaheragh

Bateman (1717, 56) shows four ringforts located along the northern boundary of Garycaheragh, including one situated where the southwest-northeast running boundary line veers in a northwest-southeast direction (Figure 4). One of these ringforts, CO045-141, is not shown on the later map and, because of Scalé's (1774) meticulousness, this can be taken as a sign of its destruction.

Figure 4. Source: National Library of Ireland.

However, Scalé (*ibid.*, 10a) does appear to have uncovered three further ringforts during his survey. One of these is located just north of the

main settlement while the other two lie closer to the western boundary. It is the omission of these ringforts from the earlier Bateman (1717) survey that raises an interesting question regarding their visibility.

Study of the two latter surveys of this townland also shows the construction of a road running east-west through it and two other roads branching from this in a northerly and southerly direction. There is also evidence that significant field clearance took place during the intervening period (NMS, 2017). An examination of aerial photographs and satellite images relating to this townland shows three circular soil marks, two of which are located in the positions associated with CO045-131 and CO045-073 (Figure5). Two soil marks are situated in the south-west corner corresponding to those represented on Scalé's (1774) map. Another soil mark is located east of the main settlement (BM, 2017). This, again, raises the issue of the visibility of these monuments, particularly when the proximity to a settlement area is taken into account.

Figure 5. Aerial image showing ringforts in the Garycaheragh townland (BM, 2017).

Glentrasna

This is probably the most intriguing townland of this study due to the number of ringforts which are present and also because of the changes to townland boundaries which occurred between 1774 and 1841. On Bateman's (1717) map the townland is divided into approximate thirds by a road running from west to east in the northern sector and by a stream running northwest-southeast in the south. These appear to have acted as readymade boundaries when the

townland was subdivided. Bateman (*ibid*.) shows a total of four ringforts, one of which is located north of the road-way, close to the northern boundary and centre-ways in the townland. The other three are shown positioned between the road and the stream, one very close to a crossroads and the others closer to the stream. The ringfort (CO045-099001) beside the northern townland boundary is still present. This ringfort had a bank 2.4m in height and a fosse 0.5m in depth at the time of its inspection by the Cork Archaeological Survey and can be considered as well preserved (Power *et al.*, 1994, 103).

Scalé's (1774, 15a) map, however, contains a total of ten circular enclosures in addition to two square moated sites (Figure 6). He refers to each of these as 'Danish Forts'. Three ringforts are located north of the road, including that mentioned above. One of the others, CO045-097, is located to the south west of this ringfort and a smaller enclosure is indicated almost due south of the ringfort initially mentioned. Scalé shows five sites between the road and the stream, in addition to the two moated sites. Of particular interest, the monument shown near the crossroads on Bateman's (1717, 55) map is shown on Scalé's (1774, 15a) map as being bisected by the road. This appears to draw attention, once again, to Bateman's stylised representation of monuments. Another small enclosure is shown near to the main settlement of the area, while the three other monuments are distributed roughly in a north-south pattern across the centre of the townland, CO 045-100, CO054-051, and CO054-052 (NMS, 2017). The latter of these, and the most southerly, is also shown on Batemans (1717) map. Another of those shown on the 1717 map, CO054-138, has disappeared by this stage. The presence of two further monuments south of the stream is also indicated (Scalé, 1774, 15a).

The first series OS map shows that at the time of survey the townland had been broken up into three separate townlands, named Glentrasna North, Glentrasna South, and Glentrasna. The same overall number of monuments is now distributed over a larger number of townlands. This increase may have had the potential to influence the calculation of ringfort numbers and

associated destruction rates. In Glentrasna North, the two ringforts, CO045-099001 and CO045-097, are still present (OSI, 1841, 45). In the townland of Glentrasna, the bisected ringfort near the crossroads has disappeared, as has the small enclosure near the settlement. The three other monuments shown on Scalé's (1774) map are still in existence however. In the townland of Glentrasna South, the enclosure shown immediately south of the stream, CO054-050, is shown as an irregular circular site (OSI, 1842, 54). However, the monument shown on the 1774 map to the south-east, closer the stream, is no longer visible. Incidentally, no sign remains either of the two square moated sites.

Figure 6. Source: National Library of Ireland.

Examination of aerial photographs and satellite images of these three townlands shows that CO045-099001 is still present and in a good state of preservation (NMS, 2017). In addition, a soil mark to the south-west of this site indicates the position of CO045-097 (BM, 2017). In the townland of Glentrasna, no evidence remains for the ringfort near the crossroads. However, it is possible that the position of CO045-100 is indicated by a curved field boundary on the southern section (*ibid.*). CO054-051 is shown complete and is noted as having 'a substantial earthen bank' of 2.4m in height. The third ringfort,

CO054-052, and the one shown on all three maps, is also shown as complete and as having a metre-high bank surrounded by a 0.6m deep fosse (Power *et al.*, 1994, 103-5). South of the stream, in Glentrasna South, no evidence remains of the sites shown on Scalé's (1774) map. A section of a field boundary near where ringfort CO054-050 is shown has been disturbed and a slight curve in the tree line to the north might provide a clue as to its location (BM, 2017). It must also be said that here particularly the cast of shadow from nearby trees hinders a close examination of potential site locations.

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Strangely, Bateman (1717, 43) provides no information on ringforts for this townland. This is despite clearly showing the road where Scalé (1774, 18a), in his map, indicates the presence of three and a half ringforts which parallel the road in a north-south direction and extending southwards from noticeable left-hand bend in the road. The first series OS map (1841, 46) also shows this ringfort, and a feature on the adjoining ditch shows it to be the southernmost of the ringforts depicted by Scalé. It is CO046-041001 and is noted as having 'a damaged earthen bank' 2.4m high with a basal width of 4m (Power *et al.*, 1994, 108). This could be an indication of slippage and may suggest that the monument has not been disturbed over time. Aerial images clearly show two soil marks close to and extending northwards from this ringfort (BM, 2017). These likely correspond to the middle two ringforts depicted on Scalé's 1774 map. Neither of these have been attributed an SMR number. However, there is no direct evidence of the other ringfort noted as being present to the north of this stretch.

Conclusion

This study has highlighted the benefit of a wide-ranging approach of this kind to site survey. Consultation of early cartographic sources allows for conditions at the time of survey to be appreciated, and this understanding may be of

benefit regarding the nature of certain sites at present; of which there may no longer be any surface trace. For instance, both Bateman (1717) and Scalé (1774) use the phrase 'Dane's fort', or a derivative, to describe the circular structures apparent on the local landscape that are now named ringforts. It is common practice in contemporary archaeology to refer to circular structures that may no longer be intact, or barely discernible, as 'enclosures'. The availability of first-hand evidence of surveyors such as Bateman (1717) and Scalé (1774) may serve as a clear indication of their initial form. In such cases surely the word ringfort may be used with some certainty? It is important to highlight the extent to which proper archaeological skills and training are vital for the investigation of such topics. Otherwise, slight details may be overlooked that have the potential to seriously skew any results obtained. This appears to be sometimes the case when non-archaeologists have studied these resources.

It is clear that the combination of these cartographic sources with readily available aerial images can also be of value when studying ringforts. Early sources allow the general location of a particular ringfort to be ascertained. This then narrows the range of the area that needs to be examined using newer technological methods. Such an approach in this study yielded some interesting results. Several potential sites were uncovered, and because in the majority of cases these conform to the location of ringforts depicted on earlier maps, it may be claimed a fair degree of certainty, that these soil marks refer to ringforts. This approach yielded evidence of some sites which were not previously noted on any earlier maps. This development serves to validate the work of the early surveyors and their depiction of field monuments. These results also increase the total of the number of ringforts in these selected townlands.

However, an interesting question is also raised concerning the nature and level of ringfort destruction. The non-representation on earlier maps of some ringforts that are depicted on later examples, and are confirmed through the analysis of aerial images, suggests that these sites may

have been degraded, either naturally or intentionally, from their initial state. The presence of previously unknown sites, especially in proximity to settlement sites, indicates that some destruction seems to have taken place prior to the compilation of the earlier map. Furthermore, the personal elements, such as skills and training mentioned above, can facilitate the comparison of a range of cartographic sources, from which potential findings can be extrapolated. These conditional results can then be reinforced with reference to newer technologies, such as aerial imagery. Such an extensive approach then permits new and exciting information to be developed concerning the study of the most common field monument in the country.

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The Uses and Limitations of Artistic Reconstructions in Archaeological Interpretation

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Abstract

Artistic reconstructions can be invaluable in expressing interpretations of archaeological sites and material. The use of images is effective in increasing the understanding of archaeology and in encouraging an individual thought process through visual thinking strategies. However, the quality of reconstructions and the way in which we use them varies widely and sometimes provide more limitations to our understanding than advantages. There is a long history of reconstructions providing a limited view of archaeology, presenting evidence in very specific manners that may do more to misinform than educate the viewer.

Given these potential issues in the usefulness of artistic reconstruction, the purpose of this essay is to examine the uses and limitations of reconstructions. This includes the thought processes involved behind viewing the image, some different forms of reconstruction and their potential to inform, and the most effective ways of visually interpreting archaeology while still encouraging independent thought and critique from the viewer. Reconstructions are a tool that fulfils one of the basic goals of archaeology: the need to visualise the past from material remains. It is hoped that this essay explains how they do this and also that they are, by themselves, an important and informative aspect of the interpretative process.

Introduction

Most archaeological studies will include, at some point or another, an artistic reconstruction. This is with the intention of incorporating all of the excavated features and artefacts into an image that resembles a real life scenario. It is something that both archaeologists and non-archaeologists can use to relate to and understand the archaeology in question. Often included at the end of a study, artistic reconstructions can be considered to be a sort of finished product; a synopsis of all of the evidenced-based interpretation that has taken place (Noble, 2004, 276). This is both an advantage, in that it offers the most effective method of communicating any given theory about a particular site, but can also carries limitations to individual interpretation. It is the goal of this paper to show ways in which reconstructions are used to delineate information from archaeology, ways in which reconstructions limit our own individual interpretations, and some of the most effective ways for reconstructions to effectively represent archaeology and become an active part of the interpretative process.

Visual thought, reconstructions, and interpretation

The initial and principal issue is that for the viewer, the process of differentiating between what is fact-based and what is artistic embellishment for the purposes of visual and narrative effect is difficult (Watterson, 2012, 21). Art is a method of visualising what does not exist or is unattainable, which is invaluable when dealing with the past that, in reality, does not exist anymore, as it is an unattainable construct. However, it can also be problematic when the engaging imagery used in a reconstruction can retain out-dated or unrealistic theories or concepts in favour of a more pleasing depiction, which is easier for the viewer to retain (Frankland, 2012, 25). The value of a reconstruction lies in its ability to make a narrative generated by excavation and text become 'real' in some shape or form; to allow us to make multiple observations at once and draw meaning from them (Yenawine, 2013, 40). Even more importantly, unlike a text, which often expresses concrete ideas, art has the ability to present a relatable scene that is still puzzling and still open to interpretation (*ibid.*, 60, 73). The challenge presented here then, is how to create an interesting and engaging scene, that is suitably informative of the archaeology, but also remaining explicit of the its hypothetical nature, allowing for that individual interpretation.

It may seem obvious that reconstructions offer the most effective measure of visualising the past from archaeological data. Nevertheless, quantifying the best techniques of succinct, understandable, and realistic archaeological depiction requires an examination of the psychology behind artistic images. Reconstructions should be a platform facilitating the viewer to critically engage with the subject matter and given interpretation of the scene, rather than a by-product of or quaint addition to the archaeological interpretative process (Watterson, 2012, 14). In other words, one of the main characteristics of artistic reconstructions is to encourage visual thinking on the part of the viewer.

The main reason why visual reconstructions are useful in helping us understand a past that does not exist in the real world is that the human mind possesses natural visual abilities that are used constantly to help us understand the present world that we inhabit (Yenawine, 2013, 9). Many of the subjects that are included in artistic representations directly aim to capture the elements of daily experience: people, expressions, moods, places, interactions, weather, nature, light or colours, all of which are experienced daily by our senses. Evoking these senses in art has the potential to transform sub-surface features recorded on an excavation into a more relatable and believable construction of the past. Crucially, by invoking a sense of familiarity within the image by offering readable information from a recognisable perspective through visual senses, and then intertwining them with a touch of ambiguity and unfamiliarity, the viewer is encouraged to start their own interpretative discovery process; to engage with the image by making their own observations on what is being depicted. These different responses to the visual senses can be summed up as cognitive (the clarity of a reconstruction), affective (the emotional response to the interesting or imaginative elements of a reconstruction), and motivational (the encouragement a viewer is given to critically engage with the reconstruction process) (Frankland, 2012, 27).

Reconstructions, even though they can have such dramatic impacts on how people view archaeology, are surprisingly under-theorised in most cases. It is only recently with the advent of digital reconstructions that any serious theoretical considerations of reconstruction have been made. It is imperative to realise that the artist, like any person engaging in archaeological interpretation, has only a partial, or even minimal, aspect of the full record. In order to successfully create a believable or cognitive image, the artist is consistently using middle range theory. This refers to the theory used by archaeologists to link human social processes with material present in the archaeological record (Johnson, 2010, 50). Making sense out of a body of archaeological data and believably depicting it requires using assumptions of how people and places functioned in the past. This is based off analogies experienced directly or indirectly by the artist (*ibid.*). These assumptions

can be gathered from various sources. For example, ethnoarchaeology or experimental archaeology can be used to understand physical processes that could have been related to the archaeological data from a site, if we assume that present conditions are similar to those in the past (*ibid.*, 57).

An instance of ethnoarchaeology being used to visualise invisible elements of the past is how Irish Middle to Late Bronze Age cremation practices have been compared to modern day Hindu funerary traditions (Grogan *et al.*, 2007). This comparison allows us to form ideas of how a cremation funerary scenario might have looked, something we cannot see from the archaeological record. In some cases, the assumptions of artists are actually based on previous, popular reconstructions. While these may present visually pleasing sights and intriguing ideas, these can encourage less scientifically grounded assumptions on the part of the artist in their own reconstructions (Zambelli, 2013, 366). It is impossible to create a reconstruction without making middle range assumptions. The challenge for the artist is how to create a convincing reconstruction, while at the same time being explicit about the assumptions they are using in order to inform the viewer of the interpretative process (Johnson, 2010, 52).

Effective types of reconstruction

Reconstructions have always been employed in archaeology for demonstrating ideas and visualising research and interpretations, both within and outside the academic sphere. Drawings or paintings are the most classic form of reconstruction, but different forms of reconstruction are also currently used with the aim of visualising archaeological sites and material. Good examples, particularly for the purposes of public engagement with archaeology, are museum models and mannequins. Many museums will include examples of scaled models of archaeological sites or landscapes. For example, museums based in cities with medieval archaeology will include models of the layout and

morphology of those medieval towns such as in Cork Public Museum or Waterford Treasures (Figure 1).

Figure 1. Example of overview model of a Viking town (Værk, 2008).

These models are very useful for giving interested museum patrons a quick impression of the possible scale and appearance of the past, but criticism has been given to this 'overview' vantage point of reconstruction. The argument being that this reconstruction type offers an unrealistic and detached view of the archaeology, where the viewer sees the subject matter in a way totally unlike anything that would have been experienced in antiquity (Watterson, 2012, 20). This issue is being countered by an introduction of virtual reality reconstructions that provide a more first person perspective, thereby including the viewer within the scene rather than as an external observer. This approach also allows the visual senses discussed above to provide a sense of familiarity and realism to the scene, while also contemporaneously offering an intriguing new view of the past and encouraging inquisitive and individual thought processes about the reconstruction (*ibid.*; Anderson *et al.*, 2017).

One example of a museum integrating these emerging uses of virtual reality along with more traditional styles of reconstruction is The Waterford Museum of Treasures. This museum has developed a virtual reality tour of Viking Waterford in the 10th century AD. The virtual tour is set inside a reconstruction of a Viking Age house, which painstakingly built according to archaeological experts (Anderson *et al.*, 2017). This

interesting combination between more traditional forms of heritage reconstruction and newer mediums could prove effective in allowing the visual senses of the viewer to take a greater role in the interpretative process. Rather than seeing a flat scene that is very much a portrait of how one artist has interpreted the past, this 3D experience, both real and virtual, will generate multiple and independent viewpoints of how the past can be visually perceived and experienced.

Methods of reconstruction for the artist

This research has covered how to best view reconstructions and how they should be used appropriately as part of the interpretation process. However, the vital question remains for the artist: how best to represent the archaeology in an archaeological reconstruction? There is a risk when creating a reconstruction, to embellish the archaeological facts in favour of offering an engaging visual narrative, or to highlight a particular theory of a site. This can be problematic both for the archaeological specialist and non-specialist, as our first impressions of a site can often be taken in and permanently influenced by what we observe in an engaging reconstruction, eradicating our ability to remain sceptical and effectively critique an image (Watterson, 2012, 21).

What then, are effective counter measures for an artist to use, which allow enough artistic freedom to effectively create a scene in the past, but do not overstep the boundaries of the archaeological evidence, and still give the viewer an opportunity for individual interpretation of the image? A method that is particularly useful in this regard is the Ambrus' technique of simple pencil drawings on excavation sites. This rather simple observation is crucial to the process of an archaeological investigation, as a reconstruction can change many times over the course of an excavation as new evidence emerges (Ambrus and Aston, 2001, 14). Many initial reconstructions can be produced and critiqued before a more updated version is completed, allowing for multiple possibilities, subject matters and viewpoints to be explored, i.e.

using artistic reconstruction as a primary method of the interpretative process (*ibid.*, 11).

Another effective method used by Ambrus is a technique of using partial colour. We, as viewers, possess colour vision (sometimes): the ability to distinguish between lights of different spectral composition. This is an important part of reconstructions as it adds to the cognitive and attractive elements of the image by adding a 'natural' appearance reflecting how we experience the world in real life (Mather, 2014, 112, 120). However while colour is useful in creating a more vivid scene, it is not an essential element of meaningful representations. The independence of luminance and chromatic processing in our brains makes it possible for an artist to create a successful scene composition in monochrome (*ibid.*, 118). In Ambrus' method, colour will be added to specific parts of a picture, with other areas being left black and white. The coloured parts are usually the actual archaeological features or artefacts (Figure 2).

Figure 2. Example of partial colour reconstruction where artefacts are coloured (drawing produced by author).

For example, in a reconstruction of an Early Bronze Age man (Figure 3), Ambrus specifically coloured in the features of his garb that were present in the archaeological record, namely beads, jet buttons, a Bronze axehead, etc. While the clothes, which would have been made of organic material and therefore do not survive in context, were drawn in black and white. Likewise, in depictions of an Early Bronze Age inhumation burial (Figure 4), where the grave goods accompanying the burial (surviving in the archaeological record) are coloured, the initial body of the deceased person left is uncoloured.

Figure 3. Early Bronze Age man. Note the coloured objects as opposed to the black and white interpreted objects (Ambrus, 2017a).

This method is very effective in addressing the issues initially outlined above. It is possible for the artist to create an interesting visual scenario, while at the same time we know exactly what subjects in the reconstruction are based on archaeological evidence, because colours invoke the strongest visual reaction from the viewer (*ibid.*). Similarly, we know what elements of the image are specific interpretations based on the evidence. In this way, the viewer has been given a scene in which to view and immerse themselves. By knowing the interpretations versus the archaeological evidence, they have the freedom to critically engage with the material and carry out their own interpretative process. It also serves the important purpose of being explicit about the middle range assumptions being used by the artist, which are in this case represented in the black and white.

Figure 4. Bronze Age cist burial. Note the coloured objects as opposed to the black and white interpreted objects (Ambrus, 2017b).

This concept of explicitly outlining the definite archaeological facts with the interpretative features of a reconstruction has been experimented with other mediums. For example, in the TII's monograph of human activity in the Súir valley, one image depicts a fulacht fiadh (burnt mound) in Co. Waterford (Eogan and Twohig, 2011, 184; Figure 5). The background of the reconstruction was a photograph taken of the site as it was from excavation, precisely showing the features of the fulacht as they appeared in the archaeological record. However, the reconstructed fulacht (in this case representing a sauna structure) has been added in via a graphics programmes. This is an interesting perspective on the same idea, using photorealism as representing the 'real' landscape (Frankland, 2012), letting the viewer know exactly what is real by stimulating a cognitive response to something they would visually recognise in real life. Furthermore, the interpretative factors are added in as a layer on top of that 'real' surface. This again allows the viewer to easily differentiate between the viewer to easily differentiate between the archaeology and the informed interpretation of the artist,

Figure 5. Fulacht fiadh sweat house reconstruction. Note the interpreted features placed over a site photo. Created by Jonathan Miller (Eogan and Twohig, 2011).

leaving an opportunity for independent thought and ideas on how they might interpret the image.

A recurring issue is that we can never be sure if the reconstruction is a final and correct representation of the past. It is imperative if we are to gain an image of sufficient archaeological and interpretative quality that the artist remains sceptical of the reconstructions that they produce. Rather than putting all effort and research into one specific theory or concept, perhaps it is a more preferable option that they remain critical of their work, accepting that no one conclusion is exclusively representative (Watterson, 2012, 16).

This is possible and has been done on occasion: for example from the excavation plans of the large Iron Age timber structure at Navan fort. This 40m structure had initially been interpreted as one of the largest roundhouses ever excavated from prehistoric Europe (Bradley, 2007, 272). Many reconstructions have been developed from this large roundhouse theory. However, some have argued against this interpretation, pointing out the general lack of roundhouses of that size during this period. Another suggestion for the structure is that it, and the concentric circles of timber posts with a large central post, represents a ceremonial un-roofed post structure, connected with ritual activities on the Iron Age royal site. Reconstructions of this particular interpretation have also been produced. In this way, the exact same archaeological data from a site can be interpreted, and visually represented in completely different ways. So how does the artist cope with a problem such as this? One possible solution, as discussed earlier, is to include more than one final reconstruction of the site. Rather than pushing an interpretation that is possible, but debatable, it may be more beneficial for the artist to include multiple images of multiple theories. In this way, every possibility is explored and it further allows for independent viewing of archaeology and the individual interpretative process.

Conclusion

This research has examined many important elements of the artistic reconstruction process. The visual thinking encouraged when viewing an image is vital to the process of archaeological interpretation. This is because it is only through visualising the subsurface evidence from excavations that we can begin to understand how the archaeological record may have been manifested in the past. There are many criteria that an artist needs to address when creating an archaeological reconstruction, namely the need to remain sceptical of their own middle range assumptions when imagining how the past may have looked. The artist should be explicit in showing that scepticism to the viewer. This will help the viewer immerse themselves in the scene, and also retain the ability to remain critical and form their own independent observations on the archaeological evidence. There are many possible ways to achieve this goal in the reconstruction. One discussed in detail above is the use of partial colour, a technique of explicitly outlining the archaeological evidence or definite fact in colour and leaving all interpreted subjects or indefinite speculation in black and white. While this provides a useful way of creating a reconstruction that leaves room for independent thought and analysis, it is still important to remember that no image will ever deliver a concise, definite view of the past. The best we can hope for is an informed estimate based on archaeologically grounded theories. Though, like any aspect of archaeological interpretation, these theories are always open to debate. Perhaps then, rather than only expecting a final 'best guess' reconstruction, we should expect multiple reconstructions, considering all of the possible scenarios, leaving the viewer the chance to pick the most likely one. If nothing else, it has been made clear that reconstructions are a fascinating and exciting way of engaging in archaeological material from the past. Rather than being a static end product of a long process of interpretation, reconstructions are a very active and important element of the process, encouraging new ideas and perspectives on archaeology from both specialists and non-specialists alike.

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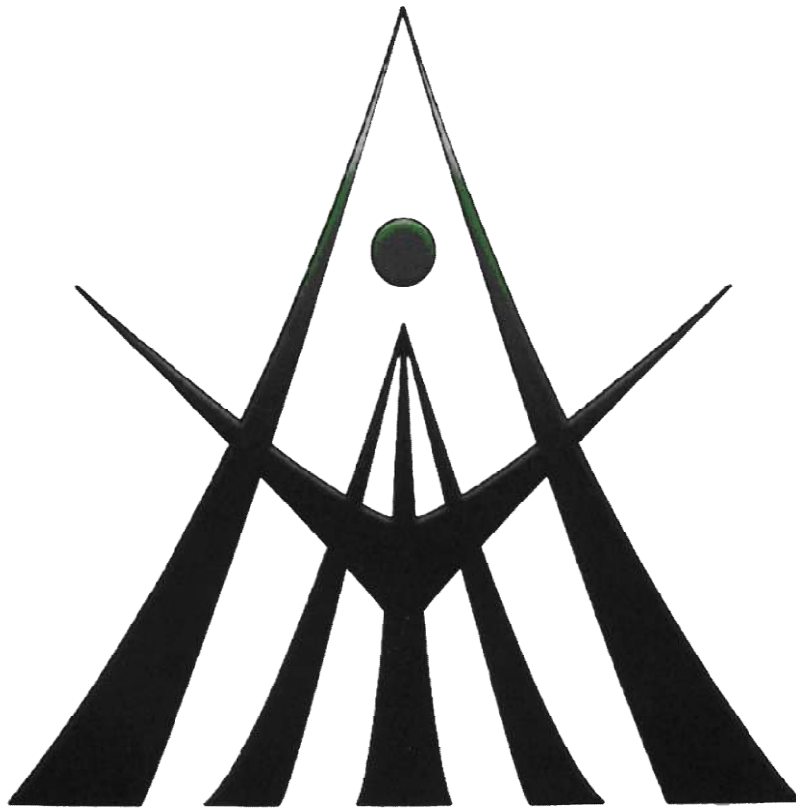
2017 Conference Summary

The 2017 conference was held at University College Dublin and organised by current committee members. Topics presented included bird remains in the Mesolithic, employment in the commercial sector, Medieval Bərde in Azerbaijan, the archaeology of baton rounds, Iron Age swords in Ireland, túatha of Uí Chonaill, and shamanism. In addition to the speakers, there were three posters from five presenters and another poster in absentia. These also ranged in isotopes in Irish research, Irish passage tombs, and palaeoenvironmental approaches in Ireland. Everyone did a superb job and we want to thank the participants for sharing their research and wish them all luck in their future endeavours.

We want to congratulate Thomas Meharg of University College Dublin on winning the best presentation for his research titled 'An archaeology of the plastic baton round in Northern Ireland: a less than lethal form of riot control, 1970 to the present day'. We also want to congratulate Elise Alonzi of Arizona State University, Niamh Daly of University College Cork, and Saskia Ryan of Trinity College Dublin on winning the best poster for their research titled 'What have isotopes done for Irish archaeology lately?'. These awards were generously sponsored by the Institute of Archaeologists of Ireland. Other sponsors for this conference include the Irish Archaeology Field School, the Discovery Programme, Unite, and the student union at University College Dublin. We also want to thank the Discovery Programme for providing free copies of their reports and monographs.

Information regarding the authors, titles, and abstracts presented at this year conference, and that of the previous conference, can be found on the website (http://ayia.ie/annual-conference/).

The committee would like to thank Brendan O'Neill of University College Dublin, who gave a tour of the Centre for Experimental Archaeology and Material Culture. Everyone in attendance enjoyed themselves immensely.

We now invite you to read a selection of three articles based on research presented at this conference.

An Archaeology of the Plastic Baton Round in Northern Ireland: A Less Than Lethal Form of Riot Control, 1970 to the Present Day

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Abstract

This study focuses on the plastic baton round, a less than lethal form of riot control still in use today. The plastic baton round has little history published about it, and security forces withhold many of the sources related to them. Although a modern item, there is very little information available to the public, and this project approaches the object from an archaeological perspective. Focusing on the materiality of the object by outlining the physical qualities of the projectile will allow an objective perspective, free from the political bias that gives these artefacts meaning. The chronology and development of the baton round 'typology' will explain the reasons for the various incarnations over time. In order to understand the biography of the artefact, a full investigation into the wider contexts of riot control and non-lethal weaponry itself is also presented. The notoriety of the 'rubber bullet' in Northern Ireland is certainly significant; the value of this artefact is not derived from its material composition, rather the sentimental position it holds in the memories of those who experienced the conflict in Northern Ireland. Fully assessing this aspect is crucial to the understanding of conflict related archaeological items.

Introduction

Introduced to the police arsenal in 1970, the baton round and subsequent reincarnations, have successfully placed themselves in a position of infamy in Northern Ireland. This paper has two key focuses, the first is to remove the political connotations related to the object and provide a typological analysis explaining its evolution. The second is to investigate the cultural significance applied to a slug of rubber or plastic and how the 'rubber bullet' gained infamy. Due to the classification of information relating to The Troubles many researchers have approached this era from an archaeological perspective. This research will therefore begin with a brief background to archaeological studies of the conflict in Northern Ireland in order to place this paper in the wider field of 'archaeology of The Troubles'. Following this, a description of the four incarnations of the rubber and plastic baton round will outline their physical properties and the reasons for the development of their design. Investigating how they were used during conflict will provide a biography of the objects prior to their current condition. This is an important aspect for understanding why these objects are collected as they hold a strong cultural significance for those who experienced the conflict. This paper will therefore conclude on how the notoriety of the baton round has been employed for political

purposes with the imagery of the object appearing in a multitude of campaigns and mural art.

A background to the archaeology of the Troubles

'The Troubles' in Northern Ireland was a sustained period of conflict between the state and paramilitary organisations representing extreme nationalist and unionist ideologies. Between the late 1960s and the signing of 'The Good Friday Agreement' in 1998, over 3,600 people were killed and 40,000 injured, with an estimation that over half of the population knew someone who could be placed in either category (McAtackney, 2014, 1). In the past several decades, attempts have been made to approach the conflict through archaeological practices. These mainly focus on the permanent remains of the conflict such as the heavily fortified police stations or the 'peace walls' still dividing communities in several cities and towns (Jarman, 2003, 283).

Rolston (1991) has investigated the popular medium of cultural expression of mural art that originated in the unionist shipyards of Belfast in the early twentieth century. This art form saw a resurgence during The Troubles as a form of political defiance within both nationalist and unionist communities. The study of the nature of these paintings over time provides a rich tapestry of events that were meaningful to the communities of Northern Ireland at certain periods, ranging from the commemoration of a local paramilitary hero or victim, to internationally significant movements, such as the conflict in Palestine (Rolston 1991, 95). One such example would be the differing interpretations of the Miltown Cemetery grenade attack at an IRA funeral, where loyalist artists celebrate the attacker (Figure 1), whilst nationalist muralists commemorate the victims (Figure 2). These images form a semi-permanent narrative of important moments or figures within respective communities and Rolston (2003) presents them as part of a landscape of political messages.
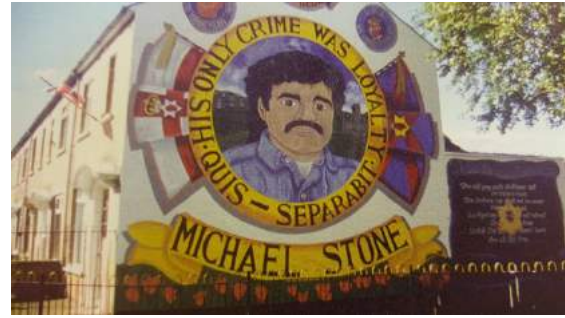

Figure 1. Mural celebrating Michael Stone, a loyalist paramilitary activist who murdered three people with grenades during an IRA funeral at the Milltown Cemetery in Belfast (Rolston, 2003, 39).

Figure 2. A nationalist memorial to those killed and injured by Michael Stone's 'Milltown Massacre' (Tripadvisor, 2015).

A less obvious investigation of meaning is presented in McAtackney's (2014) book, 'An Archaeology of The Troubles, The Dark Heritage of Long Kesh/Maze Prison'. Here, an institution that was both a creation and a remnant of The Troubles is dissected to understand the significance of the architecture and its current state of degradation. Of particular interest is the juxtaposition of the remaining artefacts such as prisoner crafts, exported from their original context, and the confiscated contraband items, such as weapons made from bed frames or dinner plates, found within the prison stores (McAtackney, 2014, 101-5). The creation of these items, often from prison-issued materials, provides evidence of how an object is not necessarily what it is made to be, but what it can become.

This theme will be explored in detail when investigating the significance of baton rounds amongst certain communities within Northern Ireland. Unlike the stationary murals or prison architecture, the subject of this research is highly mobile; the baton round is cheap and disposable. The rounds that become collector items also differ from McAtackney's (2014) prison artefacts as they have no real connection to a place or time, but instead they inhabit a space in the consciousness of those who experienced The Troubles, often as a symbol opposing the regime that used them.

L3A1 anti-riot baton round

The first use of non-lethal riot control munitions dates to the 1880s, when short sections of broom handles were fired at rioters in Singapore, and then this method was reemployed in Hong Kong in the 1920s (Fortnight, 1981, 5). At the start of The Troubles in 1969, the chemical agent o-cholorobenzylidene malononitrile or CS gas received criticism as 'too indiscriminate' for riot control (Wade, 1972, 1102). The effects cause painful irritation of the skin, eyes, and respiratory systems, with symptoms lasting from 5 minutes to 6 hours (Olajos and Stopford, 2004, 263). Problems arose with poor visibility for the police and the conditions of wind direction effecting efficient deployment. The broom handles of Hong Kong, classified as unsuitable for use in the United Kingdom, were also unpredictable and prone to splintering (Fortnight, 1981, 5).

The L3A1 Anti-Riot Baton Round (Figure 3) was introduced in 1970 and it was made of a rubberised plastic compound with a metal core to increase density. This soon became known as the 'rubber bullet', a name that would remain with each incarnation of the baton round until the present day. The rubber bullet was fired from a modified L67 Flare Gun, where the operator was to aim at the ground in front of the target and the bouncing round was intended to incapacitate or force 'compliance through pain' (ibid., 4). The development of the rubber bullet was the result of this inability to find a suitable, non-lethal response to rioting that kept the police and agitators at a

Figure 3. L3A1 anti-riot baton round (photographed by author).

safe distance. This example of a rubber bullet was likely fired in a riot due to the surface scratches. However, it is not possible to know exactly when it was used as only a timeframe of 1970 to 1974 can be provided.

The rubber bullet was too unpredictable when it bounced, thus becoming an indiscriminate weapon. Due to this factor and the abuse and misuse of the weapon, three people were killed and nine lost their sight as a result of direct impact from rubber bullets (ibid.). Wade (1972, 1102) comments that the rubber bullet is 'Ulster's gift to mankind's arsenal', as similar devices are used as riot control devices worldwide.

L5 plastic baton round

In order to improve upon this riot control concept, the L5 Plastic Baton Round (Figure 4), developed in 1974, phased out the rubber bullet. The official title of 'baton round' was intended to reduce the stigma of this type of ammunition, however, many referred to them as 'plastic' or 'rubber' bullets, holding on to the negative connotations (Omega Foundation, 2003, 7). Like the rubber bullet the plastic baton round was intended '[t]o inflict non-penetrating blunt force trauma' (Ritchie and Gibbons, 1990, 1027). Police and military with sufficient training are cleared to use these rounds to target individuals inciting public disorder; one shot to the 'belt buckle area' is intended to deliver a comparable blow as that from a policeman's baton (BBC NI, 2001). The canister of the baton round used a black powder charge where the firing causes smoke and a loud visible flash, which was

preferable to the available silent charges as it added a level of intimidation and warning (Omega Foundation, 2003, 15). Throughout the 26 years of use, a further fourteen people died as a direct result of an injury from a baton round (Williams 2013). Due to the reduced frequency of riotous behaviour and the improved accuracy of the weaponry used to fire the baton round, no one has died since 1989.

Figure 4. L5 plastic baton round (photographed by author).

Due to the rifling marks on this example of the L5 plastic Baton Round it is possible to provide a terminus post quem of 1994 when the rifled Hekler and Koch anti-riot gun replaced the smooth bored Royal Ordinance Arwen-Multishot (Omega Foundation, 2003, 15). The terminus ante quem for this round is 2001, as the model 'L21A1 Plastic Baton Round' replaced it in this year (Williams, 2013).

L21A1 plastic baton round

In an attempt to improve accuracy in baton round technology in the wake of increased tensions surrounding the Drumcree crisis of 1996, where baton rounds caused multiple serious injuries, a new round was developed and introduced in 2001 (Omega Foundation, 2003, 16). The L21A1 Plastic Baton Round (Figure 5) had an aerodynamic shape and Government Ministers claimed it would be less likely to hit bystanders. Furthermore, this accuracy would reduce the risk of seriously damaging vulnerable parts of the body, such as the head or chest, as they could be avoided (*ibid*., 16).

Figure 5. L21A1 plastic baton round (photographed by author.

The round was short lived as several inquiries identified that the tip had a smaller surface area and was therefore 2.3 times more likely to penetrate the skin and break bone. Furthermore, the shape and material were prone to greater ricochet and therefore higher chances of hurting an innocent bystander (*ibid.*, 8). These publications resulted in the retraction of the L21A1 round in early 2005. The round pictured in Figure 5 is still within a canister and has been deactivated meaning it is safe to sell. The canister is dated '06/04' providing a date of production, and the fact that it was not fired is likely because it was made fairly late in the deployment of this type of round.

AEP L60A1

Following the criticisms of the L21A1 round, the AEP L60A1 (Figure 6) was introduced as a less lethal replacement. The round was also officially rebranded to 'Attenuated Energy Projectile' with the intention to remove the negative connotation of its predecessors (British Irish Rights Watch, 2005, 8-9). The major design development was a hollow nose at the tip of the round that deforms under sufficient pressure. This feature provides two benefits: firstly, the impact, spread to a larger area, means skin penetration is less likely, and secondly, if the breast plate or skull is hit then the cushioned tip will not fracture the bone (Knight, 2005, 2).

Figure 6. AEP L60A1 round (photographed by author).

Furthermore, the black powder canister was changed to a smokeless, quiet charge to prevent the officer with the weapon becoming an obvious target (Omega Foundation 2003, 20). A deterrent warning of: "ATTENTION. UNLESS YOU DISPERSE, BATON ROUNDS WILL BE USED AGAINST YOU" is to be sounded prior to the firing of any rounds (*ibid.*, 61). It is probable that the pictured AEP round was fired during a riot as there are scratches and damaging on it.

Cultural significance

As a slug of rubber or plastic, a used baton round is essentially valueless, however, they hold a strong cultural connotation in Northern Ireland. It is important to mention that the British security authorities did not deem it suitable to use the rubber bullet or the pre-2001 plastic baton round in the rest of the UK (Hunter and Greaves, 2002, 30). Methods of riot control elsewhere mainly involved actual police batons, CS gas, and/or the use of water cannons (Omega Foundation, 2003, 56). Water cannons (Figure 7), currently used in Northern Ireland, have debatable effectiveness. The high powered jet is used to douse individuals causing discomfort and obstruction; however, the power is ineffective unless at closer range, meaning rioters can still throw projectiles and petrol bombs at the police line whilst out of range of the water cannon (DOMILL, 2004, 8).

The use of other, less violent forms of riot control throughout the rest of the UK meant that for the duration of the conflict the baton round was seen as a Northern Irish phenomenon, much like

McAtackney's (2014, 2) assessment of the Maze Prison it is both a creation and a remnant of The Troubles. Since the deployment of the baton round in the rest of the UK, an average of 25 are fired in Scotland, England, and Wales combined every year. Throughout the course of The Troubles a total of 120,000 were fired, nearly 3,000 per year, however, in periods of particular unrest as many as 20,000 were fired in a year (Williams, 2013). In several cases injuries were left untreated as going to the hospital with wounds obviously obtained with this weapon may lead to arrest for riotous behaviour (Ritchie and Gibbons, 1990, 1027). Many view the use of baton rounds as a sectarian issue; there was certainly a belief that during The Troubles they were a 'last resort in Protestant areas and a first resort in Catholic areas' (BBC NI, 2001). This argument holds some weight as of the 17 people killed only one was a Protestant (Melaugh, 2015). The fact that seven of those who died were children aged between 10 and 15 also contributes to this infamy (*ibid.*). The introduction of both the 'safer' L21A1 plastic baton round and the water cannon coincided with the growing unrest from the unionist community. Many feel this was an act of leniency by the government fuelling a victim ownership of the baton round as a symbol of defiance.

Figure 7. Water cannon, a form of riot control (DOMILL, 2004, 8).

The baton round as a political tool

Throughout The Troubles the imagery of the baton round has been used as a political tool by the nationalist community who believed the weapon was used unfairly against them. Such arguments have influenced many investigations into the

appropriate use of baton rounds against rioters. These campaigns have developed in many forms of cultural expression, mainly mural art condemning the use of them through imagery of police firing baton guns or a round flying through the air. A particularly harrowing example by The United Campaign Against Plastic Bullets shows the faces of the victims superimposed onto baton rounds (Figure 8). The second is a mural erected on a gable end near the site of the death of the youngest victim to act as a commemoration (Figure 9). The murals provide a voice for a community with little representation and a visible reminder of the perceived police brutality for all of those who pass the painted walls. In republican music the issue is revisited by several rebel bands, both 'The Wofle Tones' and 'Justice' wrote ballads to the victims whilst 'The Barleycorn' chose satire in the song "rubber bullets for the ladies" with lines such as "If your family's going hungry, curfew needn't break your heart / The Army's solved your problem: they've baked a rubber tart" (The Barleycorn, 1978).

The graphic reports of some of the injuries, such as Emily Groves, blinded when a rubber bullet aimed directly at her face broke the bridge of her nose and collapsed both eye balls (Wade, 1972, 1102), has left a sincere and vivid legacy. Shot through her living room window for playing republican music on her gramophone, Emily and several other survivors campaigned against the use of plastic bullets (Figure 10). Her blindness and the multiple other life changing injuries show how The Troubles affected the lives of many innocent people (Fields, 1980, 152). Such campaigns against the state forces or for peace in Northern Ireland remind people that the conflict caused long lasting distress to individuals and families, leaving deep scars in small communities.

In the post-Troubles era, the rubber bullet holds less cultural significance, it has been nearly thirty years since the last death from rubber bullets. With newer riot control options and a decreased frequency of civil unrest, the baton round is now an unfamiliar curio of the past. The sheer volume of them collected after riots when they littered the streets means that they can be purchased for very little at market stalls. The rounds displayed in this paper were obtained from such a stall, a modern AEP round costing £5 with the older models ranging between £10 and £30. Along with the baton rounds, vendors sell many items of Troubles-related ephemera, such as police or paramilitary insignia and flags. Like the Nazi memorabilia of replica Iron Crosses or cheap reproduction World War II equipment, the items

Figure 8. Mural of victims of plastic bullets (Belfast Murals, 2005).

Figure 9. Republican mural against plastic bullets (BBC NI, 2001).

of The Troubles have entered a new phase of meaning. They no longer hold such a political or culturally significant weight, at best they act as a reminder of a troubled time in the history of Northern Ireland; at worst they are merely a currency of a dark heritage.

Figure 10. Emily Groves campaigning against plastic bullets 35 years after being blinded (AnPhoblacht, 2007).

Conclusion

Studying the plastic baton round from an archaeological perspective is important, as the lack of sources on such objects means certain information is unavailable. Investigating the physical properties of the object along with the effects of the use, misuse, and abuse allows one to understand the purpose of, and arguments related to, baton rounds. In the wider context of Troubles-related archaeology, the baton round has a unique place, unlike murals or architecture they are mobile and can be obtained easily. The portrayal of this object in media, murals, and campaigns indicates a cultural aspect related to sectarianism and proposed police brutality allowing the image of the baton round to become a political tool. By comparing the object to other anti-riot weaponry, such as CS gas and water cannons, the baton round proves to be highly dangerous and occasionally lethal. A cylinder of hardened plastic, whose purpose is fulfilled at a riot, has no physical value, but the sentimental, political, and historical value attributed to the baton round transforms it and similar items into a unique symbol of The Troubles in Northern Ireland.

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Shamanism without Shamans: Possibilities and Limitations of its Use in Prehistory

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Abstract

Shamanism, shamans, and religion are all historically and culturally defined and therefore cannot be assumed as human universals. So how can we use these constructs to understand the past and how can we use material culture to do this? I will use prehistoric Scandinavia and Japan as case studies to explore the viability of applying these concepts to interpret their material culture.

Shamanism is a term often used to describe and understand prehistoric religions. I argue that the shaman as an individual is not crucial to the use of shamanism as a construct. There can be an individual who takes on the role of a shaman, but the usefulness of shamanism as a concept is not just the existence of an individual but rather the worldviews of the culture that could produce one. Using shamanism as a construct helps to better identify different ontological categories of past cultures, which is why shamans and shamanism are important to the understanding of past cultures. What are the implications of a culture where a shaman could exist? What attributes do they have? What is the nature of that kind of person? This paper will investigate these questions.

"... he who holds a certain opinion ought not to feign recantation, or publicly disown it."

- Celsus, AD 177.

Introduction

The term shaman comes from the Evenki word "saman", originally meaning to excite or arouse. The term first comes from expeditions in the Arctic in the 1800s. At that time shamanism was not associated with religion, but more so with particular arctic conditions. Shamanism was solidified in the western ideology and associated with religions when Christian missionaries needed to identify the native religion in order to begin the conversion process. As the term shaman spread, it was applied to the regional circumstances of the cultures. This also appears in the first use of it in neighbouring cultures in the arctic (Price, 2007, 2011; Bradley and Nimura, 2013). Early Soviet scholars thought that shamanism was a concentration of power from shifting resource access. Then it was thought to be an effect of arctic hysteria. In the mid-twentieth century it was believed that the shaman was a mix of arctic hysteria and mental instability (Price, 2007, 2011). In the 20th century, the debate on whether shamanism was a part of a primitive religion was becoming more common place. The question being discussed was: is shamanism self-contained rituals or is it part of a wider way of understanding the world? Looking at Mongolia there seems to be the idea that shamanism is an early way of understanding and seeing the world, nature, and the self.

In the Oxford Dictionary, a shaman is defined as having access to and influence over the world of spirits (OED Online, 2017). Shamanism is a commonly referenced cultural construct when dealing with past 'religions'. There are many books, articles, and lectures concerned with the topic of shamanism (i.e. Andrén, 1993, 2011; Hedeager, 2011a, 2011b; Price, 2002, 2007, 2011, 2012). Shamanism has become so ingrained in the lexicon and understanding of the past that most scholars do not question it in any meaningful way. The people who do engage with it mainly stay within a very insular community of scholars without further discussing the concept of shamanism.

Applying shamanism

Shamanism, as it is applied to prehistory, is a direct product of the Protestant Reformation and the rise of liberal democracy, and is a blatant act of presentism to use it to interpret prehistoric cultures. Shamanism is not a useful model to investigate past cultural concepts and constructs. Shamanism has very particular fundamental assumptions about the nature of reality and to project those assumptions onto people of the past removes their perspectives. The most common unifying characteristics of shamanism are experiential and influence over the world of the spirits in an influential way through an altered state of consciousness (Price, 2007). Problems arise in that this model is suspiciously close to those of other religions seen today, primarily some of the world religions. There is no unique characteristic of shamanism that makes it separate from other religions or cultural constructs or unifies it in a distinct shaman definition. Shamanism focuses on a few qualities of altered states of consciousness as well as communing with another state of existence. Altered states of consciousness are included but not limited to religious traditions. The problems that arise with the use of shamanism in the past are that the ideology of today is being projected back onto the past as well as an understanding of religion as a universal.

Shamanism and religion

In the modern world, religion is studied in theological and comparative ways. Two of the most influential anthropologists who have studied religion are Clifford Geertz and Talal Asad. These two men have defined what religion is and it is through understanding these definitions that we can better understand and engage with the idea of shamanism. Geertz had a widely accepted definition of what religion is:

> "(1) a system of symbols (2) which acts to establish powerful, pervasive and long-lasting moods and motivations in men (3) by formulating conceptions of a general order of existence and (4) clothing these conceptions with such an aura of factuality that (5) the moods and motivations seem uniquely realistic." (Asad, 1993, 90).

This definition is all inclusive but not unique. There are other cultural systems that could be considered a religion when looking at these terms.

That was the issue that Asad (1993) faced when he devised a new definition of religion that is simple and to the point and as an anthropological category. This allows the term religion to mean everything that we understand it to mean. One of the reasons that religion is difficult to define is in part due to the lack of consistency seen between religious traditions throughout the world. One definition could not be inclusive enough to cover all of what are today considered religions and unique enough to exclude parts of cultures that are not deemed to be religious. Asad's (1993) definition simply takes the systems and traditions that people understand to be religion and uses that as the definition. This was a clever and ingenious solution to addressing what religion is in our modern world. The problem arises when this concept is applied to the past and especially to prehistory. For the study of living and historical cultures, this becomes less of an issue because we can engage with how people express their culture and with their worldviews in dynamic ways. The trouble arises in archaeology when ideologies need to be dug out of the ground and have shamanism placed in.

If religion is not properly defined outside of what is considered religion then it should be acknowledged there is a culturally and historically defined foundation to what religion is. In this situation, to interpret the use of religion in the past is presentism (Fischer, 1970). In terms of studying the past and putting it into categories that we can understand today then the term religion would and could be used to try to understand the past. There is an inherent danger in using modern terms to describe and explain the past and especially in prehistory. No matter how careful we are today when modern concepts are used without nuance; the modern values attached to those words remain and contribute to the interpretation of the past. This undermines the legitimacy and the work went into researching them.

The basic principles of shamanism mirror modern day cosmology. The fundamental ontological categories of modern Western religious thought are that there is a natural and supernatural world, there is an understanding of the intangible self as being the true self, and that there is a distinction between the physical body and the ethereal soul. There is a strong focus on belief and personal faith that permeates almost all modern religions today and that there is a way to commune with this supernatural world. All of these are characteristics of shamanism. Shamanism is a layman's generalisation of contemporary religious or spiritual thought packaged in exotic terminology. It is this reliability on a core level that makes people feel comfortable with and relatable, but there is also the allure of the exotic and the idea that it is an ancient tradition passed down, giving it historical merit. The projection of worldviews and identity into the past has encouraged modern people to feel like there is ancient wisdom that frankly is not there. This is completely understandable and what has made shamanism so prolific in the study of prehistory.

Modern ideas

In the modern world, there are outlier 'religions' that are vastly different from what is understood in western cultures. Taoism, Shinto, orthodox Buddhism, and Confucianism all have different cosmologies. The vocabulary used to describe and study these religions is misleading and impedes a proper understanding of them. This is due in part because our thoughts are conditioned by our language and any translation will change the meaning in some way. This makes articulation of different cosmologies difficult and confusing at times because our words are so valued latent. The English language is very much conditioned by Abrahamic traditions as well as the Protestant Reformation and the rise of liberal democracies. To highlight the diversity of cosmological thought even in an ever globalising and Euro-American influenced world there are some aspects of religions that fall outside of post-reformation thought. Buddhism is an atheistic religion, it does not have personal faith or belief, and there is no true self in its core doctrine. Looking to Taoism and Shinto, both have no concept of an afterlife or deities in the Western sense and the aim of Taoism is to become immortal (Nelson, 1996; Tsu *et al.*, 2011; Wong, 2004). Even within Judaism, the Kingdom of God is to be on earth and it is the physical world that is the focus for the Jewish traditions. Even within a globalising world, there is great diversity in the cosmological ontologies of religions around the world. When dealing with shamanism as it is understood today, is it fitting to project that onto the past and expect it to have any semblance of truth to it? When we consider our own ontological categories they have well defined historical origins that we can see arising in the Protestant Reformation and the Enlightenment movements.

Past and present understandings

Today we have a cultural understanding of what we consider religion and what we do not. Religion in the euro-American context is heavily based upon faith and belief on a personal level. When these dispositions are retroactively applied to the past we end up with meaningless categories. The advent of the personal faith and belief emphasis in religion can be seen historically as arising from three historical movements, the Protestant

Reformation, the Enlightenment, as well as the rise of liberal democracy. The Protestant Reformation leads to a more individualised Christian worship and then the Enlightenment pushed for a more logical pursuit and engagement with the problems of the day. In the late 18th century shifting attitudes about odours, hygiene, and one's person in Paris directly lead to an increased concern about cleanliness. This growing concern with cleanliness enforced the repugnancy of other people's bodily odours and secretions creating increased concern with separation of the individual. This intolerance for the bodily functions of other blended into a social intolerance for contact and the move to a more individualised citizen was in motion. This set the stage for philosophers to re-evaluate politics and religion. To negotiate the world that they inhabited and to give agency to the everyman it was the mind that became the bastion of the self and freedom. The combination of "I think, therefore I am" (Descartes, 1637) and the idea that a government should guarantee life, liberty and estate" (Locke, 1690, sec 87) have set the ideological environment that the social dispositions of today exist in.

If the ideology of today were to be compared to that of earlier periods within church history the stark difference becomes very clear. Looking into the Middle Ages the dominant church was the Catholic Church. Soren Kierkegaard criticises it and even in his own day that within Christendom there can be no Christians (Kierkegaard and Bretall, 1973). Meaning that with no other option, the Christian living in Christendom has no other option but to be Christian and they are so with no effort or engagement on their part. This is what Kierkegaard and Bretall (1973) claim as a lack of faith. This statement reflects this influential philosopher's position on the nature of Christian-ness. It is faith-based and focuses on the individual. Kierkegaard's and Bretall's (1973) world view is in harsh contrast to that of the Middle Ages where the church was a cultural institution. To believe in God was a very different meaning in Latin. The word translated to mean faith is what the modern word of trust and fulfil means (Asad, 2008). The church of the Middle Ages has a disposition that there is no need for belief or personal engagement but for trust in God. The

church was the way to commune with God and only through the church could one do so. There is a parallel here with a shaman as this person acts on the behalf of the people, therefore being the instrument in which they commune with the world of the spirits.

Due to the nature of the term and the modern usage of it, it would not be possible to salvage the term. Shamanism has become too value laden to take on any kind of useful definition. If it were possible one such definition could have been:

> An anthropological category, which distinguishes cultural dispositions that have essential ontological differences from those of contemporary society.

This definition could describe a Shaman as a person that has authorizing abilities within shamanistic constructs.

The emphasis of the definition here is that it highlights the differences that need to be considered when trying to understand the past. Its purpose is to facilitate critical and philosophical engagement with how archaeological materials are interpreted. This definition highlights what should be considered when trying to understand any tradition or culture. What cultural dispositions exist and what are the ontological categories employed in constructing a world view, and how is power authorised within these systems? Much of that cannot be discovered or deduced from archaeological evidence but that should not permit wild speculation on the part of a researcher.

Conclusions

What I have put forward in this article is a critical commentary on the use of shamanism in its application in the past. My aim is not to convince anyone to either love or hate shamanism but it is to express an argument on the matter. It is my deepest intentions that any archaeologists, cultural anthropologist, historian or sociologist looking into religion in the past seriously consider what they are delving into and to engage with the

material on an intimate level. Without this magnitude of engagement with the theoretical perspectives that drive and interpret the past, the best that can be accomplished is well informed historical fiction. It would be advisable to be wary of anyone who would continue to use shamanism to describe and interpret the past. Shamanism is an antiquarian term in its conception and adoption that has created a very particular and specifically informed understanding of past religious constructs that are based on dubious grounds. This impatience and unwillingness to accept that there are some things that we do not have evidence for have led many archaeologists to interpret inappropriately. Perhaps avoiding this antiquated term might change the way we look at belief systems of past societies.

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The Early Medieval and Royal Significance of Shanid Hill, Co. Limerick

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Abstract

The content of this article emerged from my thesis work which is an archaeological investigation into the early medieval túath, which also draws on historical, place-name, and geographical evidence in order to add to this picture. The túath was one of the territorial divisions that existed in the early medieval period in Ireland and was applied to different levels of territory, such as the regional kingdoms, local kingdoms, and sub-divisions of these local kingdoms.

The focus of my work is sub-divisions of the local kingdom that varied in character, with different types existing such as 'secular' túatha, royal túatha, and ecclesiastical estates. Such an investigation is rarely possible with some exceptions, with my study area being one of them. My study area is the túatha of the Uí Chonaill, which geographically corresponds to the western half of the modern county of Limerick. An investigation was made possible here because Paul MacCotter (2008, 2009, 2012, 2012/13), a historian based in University College Cork, was able to reconstruct the boundaries of the sub-divisions of the Uí Chonaill. His research used various historical sources to reconstruct these sub-divisions. This article particularly focuses on the evidence that emerged from the royal túath of Shanid, and Shanid Hill, which is a key site in this estate.

Introduction

The focus of this article is Shanid Hill in the townland of Shanid Upper in County Limerick. This article will look at Shanid Hill's role as the suggested *óenach* site of the Uí Chonaill. The *óenach* was the principle assembly of a kingdom. It will also look at its role as one of their chief residencies. The Uí Chonaill was a group that dominated much of west Limerick during the early medieval period. Historical knowledge of the boundaries of the local kingdom of the Uí Chonaill means that it is possible to suggest that Shanid Hill was located within the royal estate of the Uí Chonaill. This article will look at Shanid Hill's place within this estate, and suggest that it may have lain in the political and symbolic core of the estate.

This hilltop forms part of a range of upland that runs from Foynes in the northwest corner of Limerick to Dromcolliher in the south (Finch and Ryan, 1966, 1). To the east of the hill, the landscape is lowland, which shifts from flat to undulating. From the hill, one has an extensive view of the landscape, which can stretch as far as the River Shannon on clear days. Archaeological significance of the hill is suggested by an early medieval trivallate ringfort, a motte and bailey, and an Anglo-Norman masonry castle.

Early Medieval historical and territorial context

Before looking in more detail at the archaeology of Shanid Hill and its surrounding landscape, this paper will outline the historical and territorial context of the site in the early medieval period.

We are in a fortunate position in that, due to the work of the historian Paul MacCotter (2012/13), which the present author has built upon, a considerable amount is known about this subject.

MacCotter (2012/13) has reconstructed, as accurately as possible, the *túatha* (singular *túath*) of the Uí Chonaill (Figure 1). *Túath* was a flexible term that was applied to different levels of the territorial hierarchy that existed in early medieval Ireland. It was applied to the regional kingdoms, local kingdoms, and the principal subdivisions of local kingdoms.
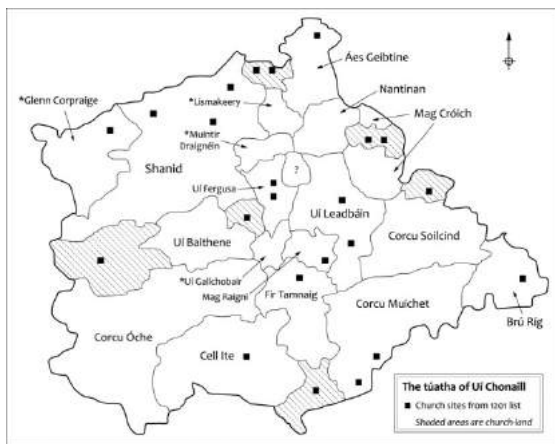

Figure 1. Paul MacCotter's (2012/13) map showing the reconstructed extents of the túatha of the Uí Chonaill.

In the present study, the latter category is the primary concern. By the eleventh and twelfth centuries, at least, most of these subdivisions were controlled by local rulers of noble stock referred to as *taísigh* (singular *taísech*), while a minority of them (usually one per kingdom) were the home *túatha* of royal lineages, though these also had a *taísech*. The other principal type of subdivision within the local kingdom was the ecclesiastical estate, some of which were as large as a *túath* (Ó Carragáin, 2014, 296). Shanid Hill is located in Shanid, one of the two royal estates reconstructed by MacCotter (2012/13).

Shanid: The royal estate of the Uí Chonaill

The Uí Chonaill was a segment of the regional kingdom of the Uí Fhidgente, a group that rose and came to dominate Limerick during the early medieval period. The first recorded kings of the Uí Fhidgente are from around the mid-seventh century. Their original homeland may have been around Rathkeale and from here, it is suggested, that they first expanded eastward to occupy the Maigue Valley, followed by a second expansion that saw them move westwards (MacCotter, 2009, 42). By the ninth century, Uí Fhidgente had expanded to such a degree that it divided into two segments. These were the Uí Chonaill (or Uí Chonaill Gabhra) and the Uí Chairpre, who competed with one another for control of the kingship of the Uí Fhidgente (*ibid.*, 43; Bhreathnach, 2001, 18). The Uí Chonaill dominated the western half of Limerick while the Uí Chairpre held lands further east (MacCotter, 2012/13, 94; *ibid.*).

Shanid was the royal *túath* of the Uí Chonaill. It is located in the northwest corner of Limerick and is roughly co-extensive with the modern parishes of Kilmoylan, Robertstown, Dunmoylan, Rathronan, Loghill and Shanagolden. Archaeological evidence would seem to corroborate the boundaries drawn by MacCotter (2012/13). This is indicated by the distribution of bivallate ringforts near the boundaries of the estate. This distribution contrasts with that of the univallate ringforts, which are predominantly located throughout the estate (Figure 2). The location of the multivallate ringforts near the boundary of the estate would seem to validate these boundaries and reinforce the idea that this estate has early origins.

The Uí Chonaill may have been based here by the ninth century. This is indicated by a reference in the Annals that states Dúnadaig, the king of the Uí Chonaill, won a victory over the Vikings at Shanid in AD 834 (Bhreathnach, 2014, 96; MacCotter, 2009, 43). They may have taken over from the Corpraige who seem to have been located in the 'Shanid area' previously. This is a group who had been impacted by the expansion of the Uí Fhidgente. They had been pushed from their home near the Maigue by the expansion of the Uí Fhidgente (MacCotter, 2009, 43). From the 'Shanid area', they resisted the Uí Fhidgente, in alliance with the Ciarraige, their neighbours to the west. According to MacCotter (2009, 43) this alliance
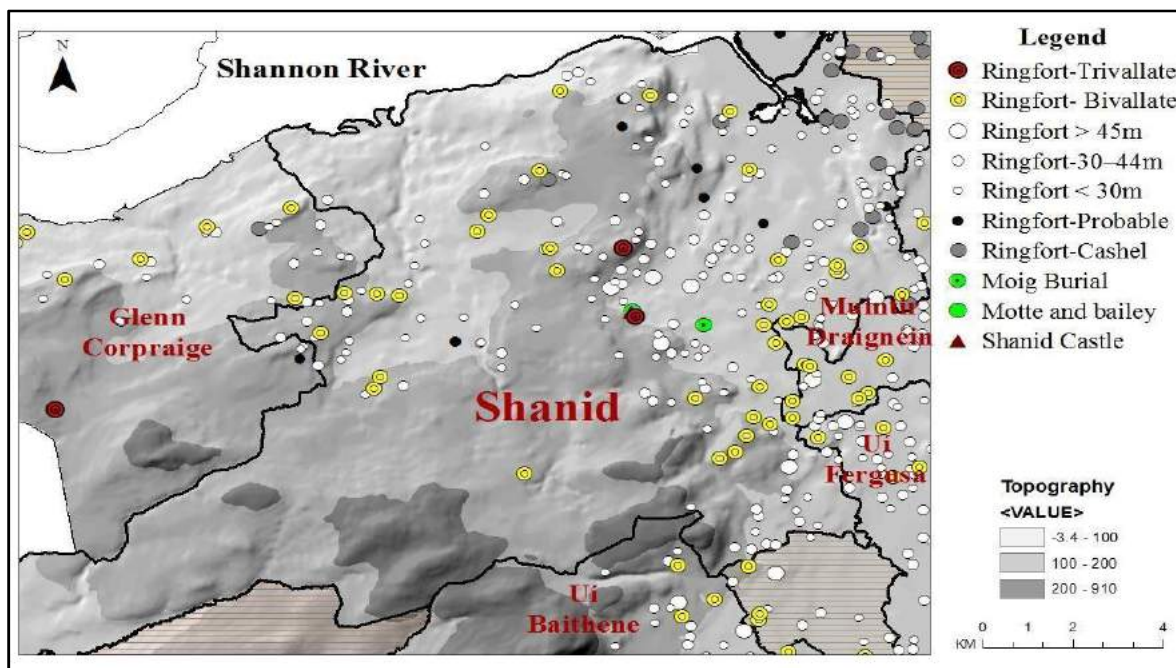
Figure 2. Map showing the extent and archaeological signature of the royal estate of Shanid. Note the contrasting distribution between the univallate and bivallate ringforts, and the location of bivallate ringforts near the border. Hachured areas on the map represent church lands drawn by MacCotter (2012/13) (map produced by author).

must date from AD 700 as the Ciarraige came to dominate north Kerry in the decades preceding this date. This suggests that Corpraige were established in this area by the eighth century and, perhaps, had been in the region by the late seventh century. It is suggested that the Corpraige control of this region had ended by the ninth century (*ibid.*). This group may have continued to rule as the local lords of Glenn Corpraige, the *túath* bordering Shanid to the west, the extents of which were also reconstructed by MacCotter (2012/13). By then, they would have been subordinate to the Uí Chonaill (MacCotter, 2009, 43).

Shanid Hill: Location within the estate

Shanid Hill is located in the centre of the royal *túath* in what seems to have been its symbolic and political core. This is suggested by the presence of early medieval archaeology at the boundaries of four townlands that appear to form a cohesive unit at the heart of the *túath*. These townlands were Shanid Upper and Shanid Lower, which undoubtedly formed a single townland at one point and the adjoining townlands of Moig and

Clashgannif (Figures 3 and 4). It is speculated that perhaps this unit represents a royal *baile* (O'Sullivan, forthcoming).

The *bailte* (singular *baile)* were the principal subdivisions of the *túath* (MacCotter, 2008, 41, 45). The number of *bailte* in a *túath* could vary significantly from 4 to 24 (*ibid.*, 48). There is evidence of *baile* that were connected specifically with those of royal lineage (Ó Carragáin, 2015). While *baile* is a term that originated in the eleventh century, a strong case has been made that they often had roots in earlier land units (MacCotter, 2008, 103). The evidence from Fir Maige shows that there is correlation between multivallate ringforts and the elite *bailte,* which would seem to support the antiquity of these land units (Ó Carragáin, 2015, 112).

The archaeology that marks the boundary of this possible *baile* includes an early medieval burial, one of the very few examples excavated in Co. Limerick. This is located in Moig, near its eastern border. This site contains the burial of three individuals in a slab lined grave. The site was discovered within the southwest corner of a ringfort as it was being levelled (Prendergast, 2011, 101–102). This is not unusual as elsewhere
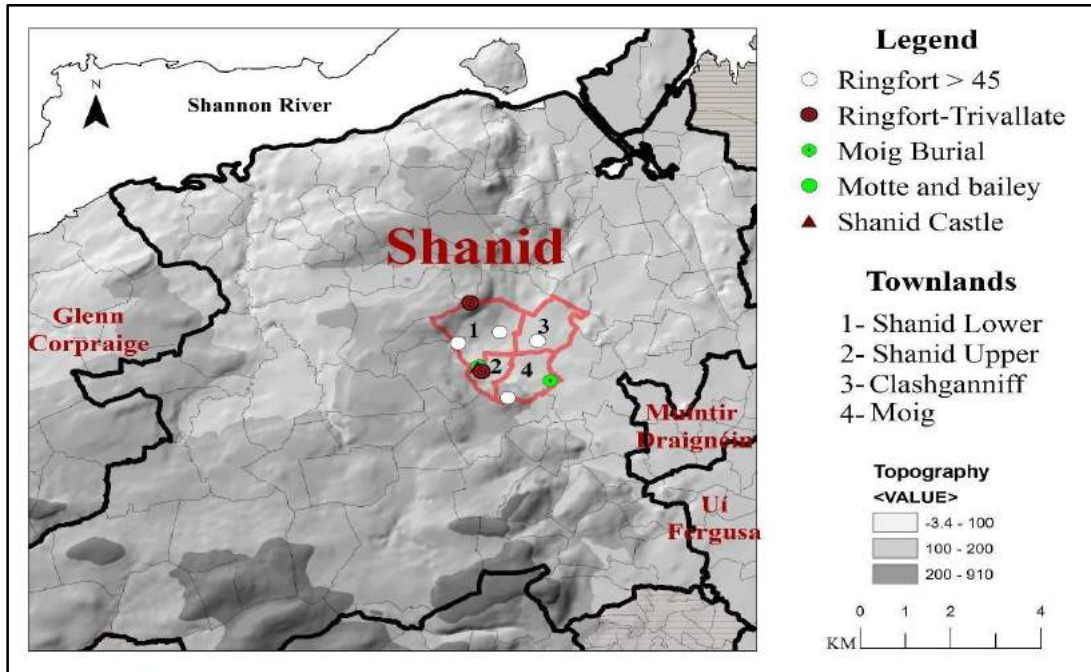
Figure 3. Map showing the location of the possible royal baile within Shanid. Hachured areas on maps represent church lands drawn by MacCotter (2012/13) (map produced by author).
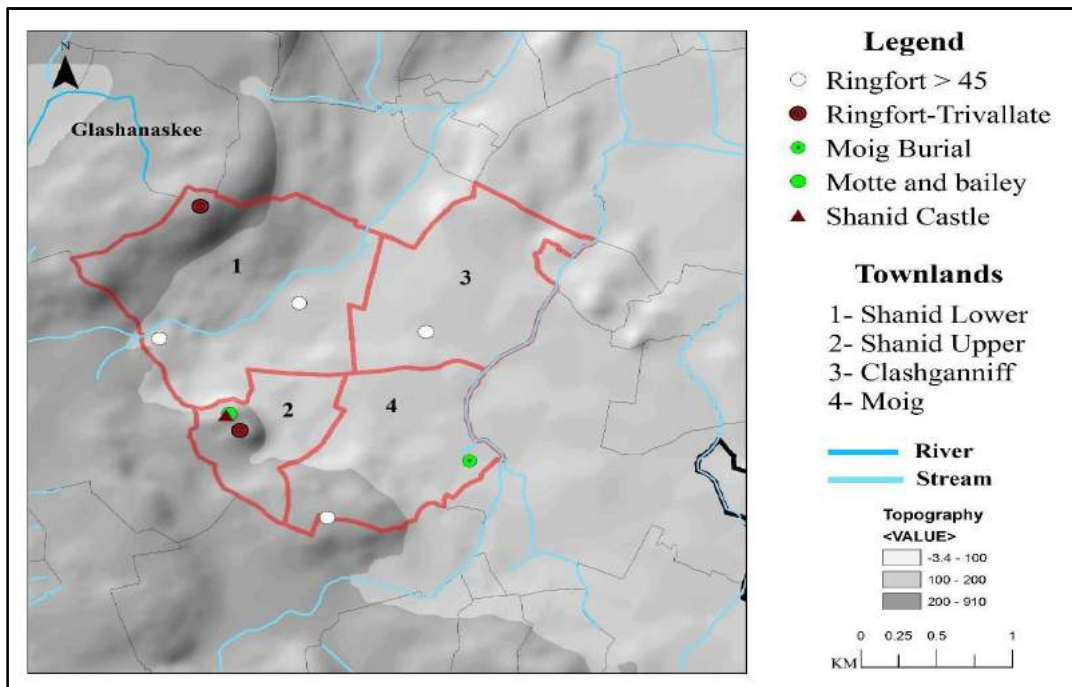

Figure 4. This map shows the possible royal core of Shanid. The four townlands appear to form a cohesive unit (map produced by author).

there is evidence of settlement enclosures which have burials within them (O'Sullivan *et al.*, 2013, 56). Burials are important as, in other works, it has been shown that burial monuments were used to demarcate and define the assembly landscape and royal estate (Gleeson, 2015, 40). For example, the assembly landscape of *Óenach* Carman was focused upon Sillothill in Carnalway parish, Co. Kildare, while several other burial complexes were placed near the boundaries of this assembly landscape at Corbally, Greenhills, Mullacash, and Coughlanstown (*ibid.*; Gleeson and Ó Carragáin, 2016).

In contrast, Moig is not located near the suggested boundaries of the estate but is within the centre of the *túath.* However, its location near the modern boundaries of the Moig townland may mean that, while it did not demarcate the boundaries of the estate, it may have marked the boundary of a royal *baile* within the centre of the *túath*.

It may also be significant that the trivallate ringfort located on Shanid Hill is near the border of Shanid Upper while, to the north of Shanid Hill on Knockourha Hill, another trivallate ringfort is located near the border of Shanid Lower. A parallel for this is found in Fir Maige, Co. Cork in the royal *túath* of the Eóganacht Glenomnach. At this location, a trivallate rath abuts a much larger circular enclosure (*c.* 164m) along the Dunmahon/Killeagh boundary. It is suggested that Dunmahon formed part of the royal *baile* of Maghbh Fhece within the royal *túath*, while Killeagh formed part of the adjacent *baile* of Killeenemer (Ó Carragáin, 2015, 113). Here, there is an example of a trivallate marking the boundary between the royal *baile* and another *baile.*

Other possible archaeological indicators of the boundary of this possible *baile* include two unusually large univallate ringforts located near townland boundaries. One is located in Shanid Lower near its western border. The other is located on the southern boundary of Moig with Dooncaha, on a spur of a south to north ridge. Dooncaha ringfort overlooks the trivallate on Shanid Hill to the northwest. Elsewhere, unusually large univallate ringforts, which are ringforts greater than 45 metres, have also been taken as

tentative evidence of elite settlement (*ibid.*, 110). Finally, the eastern boundary of this putative land unit is delineated by a small stream. Overall, the evidence here would appear to suggest that this could have been a cohesive unit, possibly the royal *baile* of Shanid.

Shanid Hill: Role within the estate

One of the reasons for the importance of Shanid Hill is that it is likely to have functioned as the *óenach* site of the kingdom of the Uí Chonaill. Here, people from all over the kingdom would have come to attend the assembly. The clearest indicator of this is the fact that Shanid comes from *Seanad*, a borrowing from the Latin word *Synodus*, which meant assembly place (MacCotter, 2008, 187).

Assembly in early medieval Ireland was hierarchal in nature, like any other aspect in this period. Some of the assemblies were 'closely proscribed and convened for specific purposes, but all were embedded with the structures and practices appropriate to the different levels of polity and community' (Gleeson, 2015, 34). It is suggested that the *óenach* was the most important assembly of a kingdom and its period of existence is defined as a time as wherein 'ties of allegiance, kinship, and political economy were negotiated, agreed and renewed' (*ibid.*). It was convened on *mruigrí* (royal land/estate) by the king (*ibid.*). The *óenach* played an important role in the construction of identity in the early medieval period. This is because it was an annual or bi-annual event that would have marked the year for those within early medieval society and would have been a structuring influence on their life. It was associated with festivals that marked the year such as *Imbolc*, *Samhain*, and *Beltaine*, but it was predominantly associated with *Lughnasadh* and, as a result, the harvest in early August (*ibid.*, 35, 43).

Much work has been done on the *óenach,* and its function in early medieval society. An excellent discussion of the *óenach* has been presented elsewhere and what is given here is a simple summary of the various functions it is believed to have held (see Swift, 2000; Gleeson, 2014a, 2014b,

and 2015 for further detail). Its primary function was as a political institution which is reflected in the unambiguous nature of the sources in describing the legal and judicial functions from an early date. At an *óenach*, the king could enact a law or ordinance or pledge his people (Gleeson, 2015, 35). These are also associated with the negotiation of treaties and alliances (Gleeson, 2014b, 172). Another function may have been to act as the 'local royal centres' where tributes were rendered and redistributed (Swift, 2000, 36-37; Gleeson, 2015, 35). It has been suggested that the 'traditional' understanding of *óenach* as a market/fair may have arisen from this latter role (Gleeson, 2015, 35).

century (Kerr, 2007, 99). For example, in the case of Garranes, Co. Cork, this is suggested by the presence of imported Mediterranean pottery dating to *c*. AD 500 (Doyle, 2009, 24). In light of this, it seems possible that Shanid Hill was already a royal residence and assembly site in the period when this area was controlled by the Corpraige, prior to the arrival of the Uí Fhidgente around the ninth century. This site may have then been taken over by the Uí Fhidgente.

At Shanid, the trivallate ringfort is located on the south-eastern end of the hill (Figure 6). It was built on top of a knoll on the otherwise flat summit of the hill. This has the effect of exaggerating the scale of the ringfort in a manner that was unlikely

Figure 5. Image of Shanid Hill taken from Knockourha, taken facing southwest (image taken by author).

Finally, the *óenach* is closely associated in narratives with feasting, entertainment and horse and chariot racing (Gleeson, 2014b, 172).

Shanid Hill is conducive to the assembly of large groups of people as the summit of the hill is wide and largely flat (Figure 5). Historical evidence would seem to suggest that it had this function from at least the ninth century (MacCotter, 2008, 187; MacCotter, 2009, 43). However, the presence of a trivallate ringfort raises the possibility that it was already an assembly site in earlier centuries. There is evidence suggesting multivallate ringforts have a slightly earlier origin than the majority of univallate ringforts, perhaps as early as the sixth

to be solely motivated by defence. It seems reasonable to conclude that this monument was, or became, the central focus of the assembly that we know took place at this site. Given its location at the heart of the royal *túath*, it seems likely that it was one of the chief residences of the Corpraige, and later the Uí Chonaill kings. Early medieval kings were peripatetic, moving between residences in their kingdom in order for them and their household to consume surpluses (Bhreathnach, 2014, 117–121). It also seems likely that they resided there when assemblies were convened.

Figure 6. Image of Shanid trivallate ringfort taken from Shanid Motte (image taken by author).

Twin Foci and Later Medieval Significant of Shanid Hill

Later medieval significance is indicated by a motte and bailey on the northeast side of the hill, which is situated around 60m from Shanid trivallate ringfort (Figures 5 and 7). It is a conical mound with a flat top enclosed by an earthen bank (Archaeological Survey Database (ASD), 2017). Shanid is suggested to originally have been a William de Burgh possession by the late 1190s but by the mid-1200s was held by the Fitzgeralds (Empey, 1981, 12). The earthwork is speculated to have been built in the initial stages of the conquest *c.* 1198 (ASD, 2017). On top of the motte is an Anglo-Norman masonry castle. The construction of the Anglo-Norman earthworks and castle further underscores the earlier importance of the site as it shows that Shanid Hill was strategically important enough to be chosen as a site for renewed investment, not least because the new castle could then serve as a powerful symbol of conquest (Ó Drisceoil, 2002, 191).

The motte may have been built on top of a natural hillock, although evidence from elsewhere has shown that a motte and bailey could incorporate earlier features (Sweetman, 1999, 84). Ó Drisceoil (2002) discusses the evidence of pre-existing monuments being utilised in the construction of mottes, and he mentions a number of examples where ringforts were re-used in the construction of mottes. For example, in Dunsilly in Antrim, a small motte was built over a ringfort (*ibid.*, 191).

What is significant about this is that if the motte was built on the natural hillock, or had incorporated an earlier or natural feature, then already in the early medieval period there may have been twin foci on the summit of the hill, the primary residential ringfort and perhaps another feature used in the ceremonies performed at the site during the time the *óenach* was taking place.

Figure 7. Image of the Anglo-Norman castle on top of the motte on the Shanid Hill summit (image taken by author).

For instance, Gleeson (2014b, 176) in his discussion of the assembly landscape of *Óenach Clochair,* noted that the barrow on Knockaunatariff was the focus from which a king could have presided over the gatherings alongside his officials. Similarly, if the motte at Shanid was a natural hillock or the site of an earlier feature, such as a mound, perhaps it was from there that the king of the Uí Chonaill presided over the events and received tribute. Proclamations also could have been made from such a feature or the genealogy of the king could have also been recited.

Conclusion

Using historical, archaeological and place name evidence, this article has shown the importance of Shanid Hill in the early medieval period. It was suggested that Shanid Hill functioned as the assembly site and caput of the Uí Chonaill from the ninth century. In earlier centuries, it may have served a similar function for their predecessors, the Corpraige. Like other assembly sites, it was

convened within a royal *túath*, the extents of which have been reconstructed by Paul MacCotter (2012/13). The site would have played an important role in the construction and expression of identity. It was an important representation of royal authority on the landscape. For instance, status and rank may have been performed, reinforced and renegotiated through formal and ad hoc processions and reiterated through the personal ordering of space and personal appearance (Gleeson, 2015, 43).

It was a focal point where people otherwise dispersed throughout the kingdom came to attend the *óenach* (Swift, 2000, 39). Here, social identity would have been negotiated and reinforced through interaction with the variety of people and the rituals and events that would have occurred.

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