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I. Introduction – the role of the blacksmith in Irish society

The blacksmith's trade is much beloved of many experimental archaeologists, and those examining a sacral or spiritual aspect to metalworkers of the past.[1] This may be the case in later prehistory, as the skills needed to transform ore into objects by using fire and water must well have seemed like a form of magic to many in the past[2]. This ability to manipulate materiality likely accounts for folkloric traditions in Ireland that blacksmiths were capable of vanquishing evil spells and supernatural beings, although that power was also questioned by the Church, as shown by an 8th century AD prayer which repels the "spells of women, smiths and druids."[3]

By the 18th and 19th centuries, the role of the blacksmith was increasingly prosaic, in that no swords or battle axes were being made. However, the profession was necessary to daily life, as not only did the blacksmith shoe horses, the main form of transport and haulage until the 20th century, but they also repaired and modified farm machinery, tools and household implements. They also maintained a place in folk

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1 R Barndon, 'Sparks of life: the concept of fire in iron working', *Current Swedish Archaeology* 13. 1 (2005): 39-57.
2 A. Millar, *The Three Stages of Initiatic Spirituality: Craftsman, Warrior, Magician*, (Rochester NY: Inner Traditions: 2020).
3 Fergus Kelly, *A Guide to Early Irish Law* (Dublin: Dublin Institute for Advanced Studies 1988), 62.

traditions, believed to be capable of healing – and cursing, so much so that the threat of potent maledictions were sometimes the only way blacksmiths were paid on time.[4] This multi-faceted status ensured that the blacksmith and their forge were at the heart of rural communities until relatively recently. Yet the importance of the modern-period forge is often overlooked within the archaeological record, too often consigned as a performance in living history museums.

II. The historical landscape of Annakisha South and Clenor South

Three recent excavations at Annakisha South (ITM 561940 603415) and Clenor South (ITM 562290 603640), County Cork, Ireland (Fig. 1), offered a chance to examine the archaeology of a working blacksmiths of the 18th and 19th centuries.[5]

The excavated sites examined are some 450 m from each other, a few miles north-east of the north Cork town of Mallow, on the N73 road that connects it with Mitchelstown.

There is considerable evidence of persistence of settlement in the area, with numerous multi-period monuments listed in the Sites and Monuments Record, including prehistoric burial cists, *fulachtaí fia* (sites where hot stone was used to heat water for a variety of purposes, typically Bronze Age in date), early medieval semi-defended farmsteads known as ringforts, Anglo-Norman moated sites, medieval churches and later grand houses and farms. Recent archaeological investigations, including the sites discussed here, have added substantially to the picture of local settlement through the last five millennia[6]. It is clear that people have been living in and visiting the area since at least the time of Ireland's first farmers in the Neolithic, interacting with landscape features with rituals that we cannot hope to understand, building houses in the Early Bronze Age, burying their dead in the Late Bronze Age, working precious metal in the Iron Age and farming the land in the early medieval period. The arrival of the Anglo-Normans in the 12th century is evident in the types of monuments seen in the landscape and investigated by archaeologists, and later settlement can be widely recognised, both in upstanding monuments and in archaeological remains surviving beneath the ground. The townlands of Annakisha South and Clenor South, and the parish of Clenor, have an extensive chronology of

[4] T Waters, 'Irish Cursing and the Art of Magic, 1750–2018', *Past & Present* 247 (2020): 113-149.

[5] E Ruttle, *Combined N73 Annakisha South and N73 Clogher Cross to Waterdyke, Road Realignment Schemes Archaeological Consultancy Services, Clenor South 1, Co. Cork (12E0082) Stage (iv)* Final Archaeological Excavation Report, unpublished TVAS (Ireland) Ltd report 2013.also E. Ruttle, 2014, 'A County Cork smithy', *Archaeology Ireland* 28 (2014): 23-25. See also Graham Hull and Katherine Hurley*, Annakisha Realignment Scheme, Co. Cork, Archaeological Consultancy Services, 19E0715, Clenor South 2, Stage (iv) Final Archaeological Excavation Report*, 2022, unpublished TVAS (Ireland) Ltd report to be read alongside Graham Hull and Damien McCarthy, *N73 Annakisha Realignment Scheme, Co. Cork, Archaeological Consultancy Services, 19E0714, Annakisha South 2, Stage (iv) Final Archaeological Excavation Report*, 2022, unpublished TVAS (Ireland) Ltd report.

[6] Hull and Hurley unpublished, 2022, at https://doi.org/10.7486/DRI.v6936m966 , see also Hull and McCarthy, 2022 https://doi.org/10.7486/DRI.v6936m966 and https://doi.org/10.7486/DRI.qv345g59r.

agricultural land-use, having been ecclesiastic estates during the early medieval period, with Clenor being a rare example of land managed by an early convent.[7]

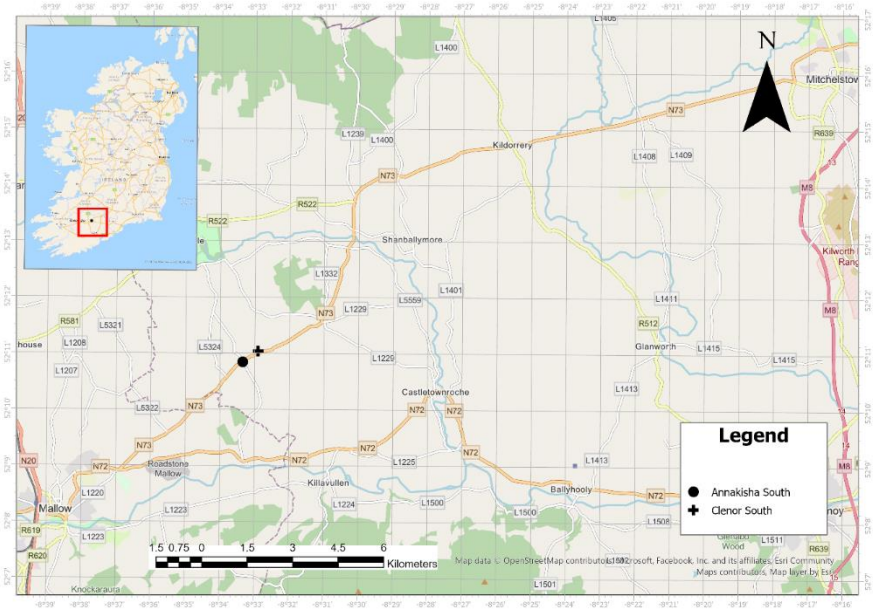

Fig 1. Locations of Annakisha South and Clenor South archaeological sites

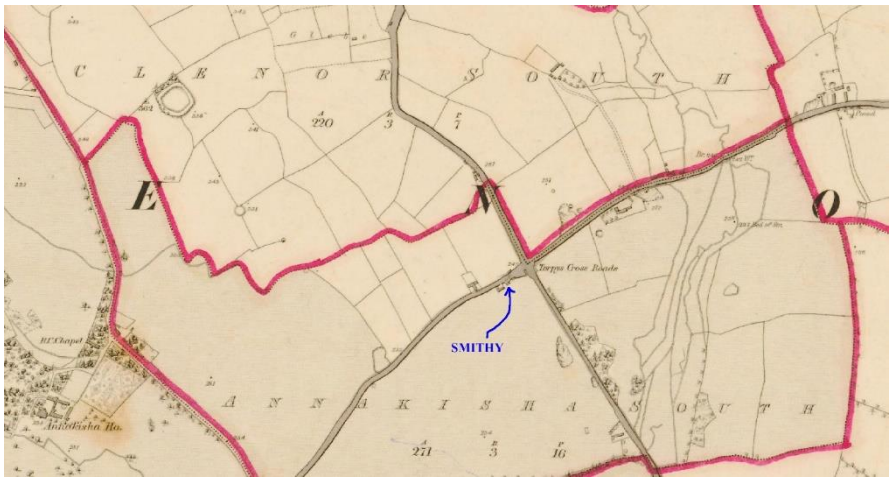

Fig 2. Ordnance Survey map of 1840 showing Torpy's Cross Roads and smithy in Annakisha South (Material from Ordnance Survey Ireland is reproduced with the permission of the Government of Ireland and Ordnance Survey Ireland under permit number 2023/OSi_NMA_273)

[7] Tomás Ó Carragáin, 'The archaeology of ecclesiastical estates in early medieval Ireland: a case study of the Kingdom of Fir Maige', *Peritia* 24(2014): 266-312.

The first detailed cartographic source available for the area is the First Edition Ordnance Survey (OS) map of 1840, which shows the townland of Annakisha South to be part of Annakisha Demesne. The location of the excavated site is shown at Torpy's Cross Roads on the Mallow to Mitchelstown Road (Fig. 2). Several buildings are shown at the crossroads, most of which appear to be cottages; however, a horseshoe symbol is printed on the map to indicate that there was a smithy here at the time of the survey. Further north-east in Clenor South townland a cluster of buildings is shown on the road edge within a large enclosure.

The OS map of 1903 (Fig. 3) shows significant changes in buildings and field systems. With regard to the sites of the archaeological excavations, the buildings at Torpy's Cross have apparently been removed and the road edge straightened. Similarly, at Clenor South most of the buildings are no longer shown on the map, but significantly, the remaining structure is annotated as a smithy. Also notable is the addition of Annakisha House, south-west of the crossroads. A further new development is the presence of St Craunacht's Roman Catholic Church, to the north-east, which was built in 1860.

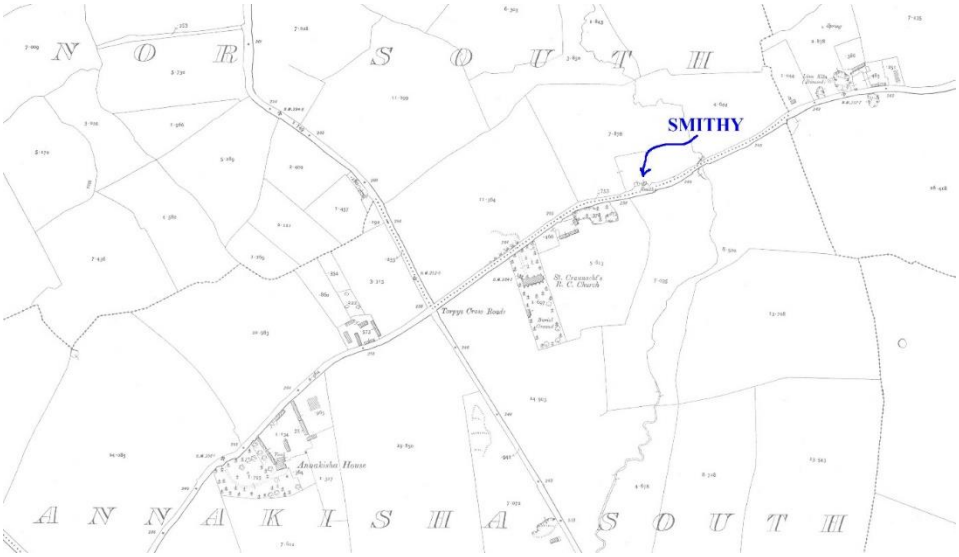

Fig. 3. Ordnance Survey map of 1903 showing the smithy in Clenor South. (Material from Ordnance Survey Ireland is reproduced with the permission of the Government of Ireland and Ordnance Survey Ireland under permit number 2023/OSi_NMA_273)

Annakisha House, a 'gentleman farmer's'-style residence, built in 1847, is some 300m south-west of Torpy's Cross and no more than 650m from the excavated archaeological sites. Annakisha was the home of the aristocratic Nagle family, with the original building, standing 750m further west and now demolished, dating to the late 17th century. Sir Richard Nagle (1636 to 1699) was a Jacobite politician and lawyer, who ended up in exile after the defeat of James II. The house and lands would

be maintained by less politically active members of the family[8]. Pierce Nagle was the last Nagle to live in the old house and 'is remembered as a very 'advanced' farmer and is said to have introduced the first threshing machine and hay tedder to the district'[9].

The 17th century house was a ruin by the 19th century, and the demesne sold, resulting in a new Annaskisha House being built in 1847, on a new site. The 19th century farm complex is described by the National Inventory of Architectural Heritage as a working farm that "contains many notable structures, which are well-constructed and retain much of their form. The numerous vehicular entrances are of particular note […] The buildings retain notable early materials such as the slate roofs and timber fittings."[10]

Another large local property, Castle Kevin, is less than 1km south of the smithy sites, and carries an equally impressive history to match its flamboyant castellated façade, built in 1835.[11] Once the defended home of the Roches, folklore states that the Nagles were offered the house and lands by Cromwell after the grisly execution of the original owners [12] The present Victorian structure includes outbuildings and stables.

By way of relevance to the excavated sites, Annakisha House presents as an excellent example of a well-to-do working farm of the 19th century, just the kind of place which would have had equids for both sport and work, as well as reflecting the other metalwork needs in an area of active farming. The Victorian Castle Kevin House would also have had draught and riding horses, making the area around Torpy's Cross a perfect site for a working smithy. Each category of finds recovered from the two archaeological excavations has helped construct a robust biography of the past, and a workscape which also has passed largely into history.

III. The excavations

The three excavations discussed here (each named after the townland in which it was situated - Annakisha South 2, Clenor South 1 and Clenor South 2) were carried out in advance of the N73 Annakisha Realignment scheme by archaeological consultants TVAS (Ireland) Ltd between 2012 and 2020. The archaeological fieldwork and post-excavation work were funded by Transport Infrastructure Ireland through Cork County Council.

[8] Edward T. Corp, *A Court in Exile: the Stuarts in France, 1689–1718*, (Cambridge: Cambridge University Press, 2009)

[9] Anne Marie Hajba, Houses of Cork: Vol. I, North, (Whitegate: Ballinakella Press 2002), 30.

[10] National Inventory of Architectural Heritage. www.buildingsofireland.ie/buildings-search/building/20902524/annakisha-house-annakisha-south-cork Accessed 4th May 2023

[11] www.buildingsofireland.ie/buildings-search/building/20902518/castle-kevin-castlekevin-cork, Accessed 11 May 2023; see also Hajba 2002, 105.

[12] Padraig Ó Síothcháin, www.duchas.ie/en/cbes/5190451/4895237/5190729?ChapterID=5190451 Accessed 4th May 2023.

Fig. 4. Excavating the ruined smithy at Clenor South 1
(Image by permission of TVAS (Ireland) Ltd)

Fig. 5. The smithy building at Clenor South 1 12E0082
(Image by permission of TVAS (Ireland) Ltd)

At Annakisha South 2, the excavation (licence 19E0714) encompassed three areas around the crossroads and revealed a number of early modern walls and wall foundations, pits and drains, likely to be related to the buildings seen on the mid-19th acentury historic mapping but not shown on later map editions. Although the smithy or forge indicated on the historic map was outside the footprint of the road realignment, associated iron smithing remains were retrieved during the excavation.[13]

Half a kilometre to the north-east, further along the road to Mitchelstown, two excavations were carried out in 2012 and 2019-20 on adjacent parcels of land: sites Clenor South 1 (licence 12E0082) and Clenor South 2 (licence 19E0715). The first excavation investigated the site of the smithy noted on historic maps[14] whilst the later excavation examined the land around and behind the smithy.[15]

Investigations of the partially upstanding remains of the smithy and an adjacent building (Figs. 4 and 5) revealed that the structure had existed on that spot since at least the late 18th century. This was further confirmed by an anecdote involving hidden pikes connected with the United Irishmen's 1798 Uprising.[16] Two pike-heads, which had been concealed beneath the water trough, were discovered in 1895 by the then-blacksmith, Joseph Hunter, who maintained the smithy until the early 20th century, after which it fell into ruin. The 2019-20 excavation, in addition to investigating a large multi-period archaeological site, recovered a large amount of waste material from the smithy that had been dumped in an adjacent ditch.

The smithy at Clenor South (Fig. 5) was a typical rectangular forge building with waist-high hearth. However, examination of the iron waste products, or slag, combined with documentary evidence allowed a strong chronology to be proposed for ironworking at the site, illustrating technological changes through the post-medieval period into modern times. There was evidence of some smithing activity during the 17th century, but not enough to suggest an actual permanent forge there.

A large rectangular enclosure which produced radiocarbon dates between the late 15th century and the 17th century was present within the excavated area. This has been interpreted as a medieval fortified farm[17], and may have had an even earlier phase of use than that indicted by the radiocarbon dates. It is within this fortified enclosure that the later smithy was constructed. The continued occupation of a medieval enclosure into the 17th century has a parallel at another excavated site at Ballinvinny South townland, also in Cork.[18] At any rate, it indicates the *longue durée* of the site, and persistence of occupation. If these were farming structures, then the smithing activity of the 17th century would be expected. The presence of horse teeth and bones within the excavated area[19] also adds to the evidence, as smiths could be called on to extract

[13] Hull and McCarthy 2022, https://doi.org/10.7486/DRI.v6936m966.
[14] Ruttle 2013 and 2014, 23--25.
[15] Hull and Hurley 2022, https://doi.org/10.7486/DRI.v6936m966.
[16] The same anecdote is told by Captain James G White, Historical and Topographical Notes, Etc. on Buttevant, Castletownroche, and in Ruttle (Cork:Guy and Co 1913),13 and Ruttle, 2014, 23-25.
[17] Hull and Hurley, 2022, https://doi.org/10.7486/DRI.v6936m966, 185.
[18] Ken Hanley and Maurice Hurley, Generations, The archaeology of five national road schemes in County Cork (Dublin: National Roads Authority, 2013), 278-281.
[19] N. Duhau, 'Animal bones' in Hull and Hurley, 2022, 90-104.

teeth from equids and to dispatch them where necessary, in times before veterinary practitioners.

The 18th century offers the first strong evidence of a permanent forge at Clenor South.[20] Archaeological remains of slag show the use of bituminous coal.[21] The 1840 First Edition Ordnance Survey map of Ireland shows the building at Clenor South, but it is at Torpy's Cross, 400m away in the townland of Annakisha South, that the map carries a horseshoe shape, denoting the presence of a smithy. Slag from this latter site was almost entirely smithing hearth cakes (accumulations of iron waste which forms just below the blowing hole of the furnace, often still with part of the lining attached), with embedded anthracite and bituminous coal.

By 1847, the Griffith's Valuation Tenure book shows the Clenor South smithy was active again, with archaeological evidence showing that the fuel used was mainly charcoal with some anthracite. The Third Edition of the OS maps of 1932 indicate that the smithy had been abandoned at some time before this. Rondelez's report[22] suggests that iron-working technology had changed considerably with remains of mild steel, rather than hearth cakes of iron. The fuel used was now porous coke, coal from which sulphur has been removed.

The weight distribution of the hearth cakes from the Clenor South excavation suggests an increase in the size of the pieces of iron used in the second half of the 19th century and this period is also when charcoal was used in forges instead of coal. This is, of course the period in which mechanisation was increasing, and the blacksmith had to be capable of responding to creating iron tools, and fixing farming machinery.

The Annakisha South smithy is first noted on the 1840 OS map but appears to have been decommissioned and replaced by the Clenor South smithy by 1847. The archaeological evidence provided by excavation shows the use of iron tuyeres on site[23], with the slag indicating the use of different kinds of coal as fuel for the forge. The Annakisha site, then, was relatively short-lived.

Nothing is known of the people who inhabited and worked the Clenor South site in the 17th and 18th centuries, but some details of the smiths of the 19th century exist. The 1847 Griffith's Valuation Tenure records that a forge at Clenor South was occupied by Michael Crow, followed by Cornelius Herlehy, while the published Valuation of 1851 names one Michael Hickey as leasing the forge. By 1895, the smith is Joseph Hunter, who recorded finding pikes from 1798 in the structure, perhaps indicating he was carrying out refurbishments when these were discovered. Hunter is described as a widower with two sons and continued to work the smithy into the early 20th century.[24]

[20] White 1913, 194.
[21] Paul Rondelez, 'Metalworking remains', in Hull and Hurley 2022, 125-138.
[22] Paul Rondelez , in Hull and Hurley 2022, 145.
[23] Paul Rondelez 'Metalworking remains' in Hull and McCarthy, 2022 31-34.
[24] White, 1913, 184.

IV. The farriery finds

The iron objects recovered from two of the excavations, Annakisha South 2 and Clenor South 2, were examined specifically from the perspective of the information they could potentially provide about farriery on the sites. Fig 6 shows an example of the assemblage found.

Fig. 6. A selection of the horseshoes from the Clenor South 2 excavation

V. Horseshoes

Today, ready-made horseshoes can be purchased off the internet and fitted by the horse-owner themselves, but the traditional method of the past was hot-forging the shoes which were made bespoke for each animal. The farrier/blacksmith started with a length of iron, which was often "fullered" by making a crease down the centre to give traction. Holes were then punched into the hot, fullered iron to take the horseshoe nails. Moving from forge to anvil, a selection of hammers, knives and tongs were used to shape the shoe for length and width to suit the individual horse, finally quenching the shoe in a bucket of water before putting it, still hot, on the horse's hoof.[25] Shoes are measured as shown in Fig. 7.

[25] J. Sherer, *Skevington's Modern Farriery* (London: John Murdoch,1880).

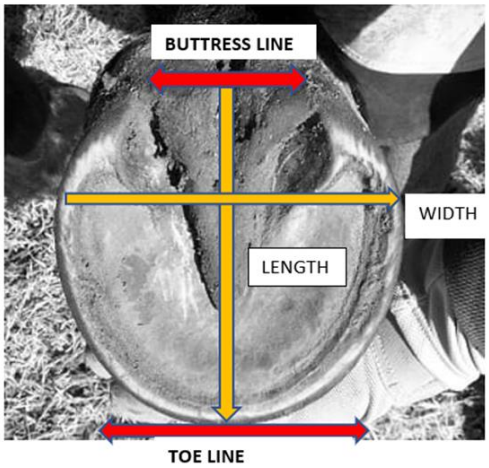

Fig. 7. How to measure a horseshoe

Dating shoes has long been problematic for archaeologists. As with everything equestrian, there is continuity of practice until it can be replaced by something more efficient – and even then, there is often hybridisation between old and new. Later prehistoric shoes are often easier to date because of their unusual details such as wavy ridges; but by the 17th century, the typological differences compared to the present day are minimal, mostly connected with refinement or materials used.

Horses do not need shoes in the wild; the horn-like hoof is strong enough for feral animals and those in areas with tracks rather than roads, and there is some movement back to 'barefoot' equitation in the 21st century. The roadbuilding Romans were the first to regularly use horseshoes, made of metal, and sometimes of wicker and straw, some of which have survived.

Roman metal shoes tend to be quite ornate, with arches of metal between the apertures which the distinctive 'violin-key' nails fitted into. The early medieval period (5th to 12th century AD), used wide 'webbed' shoes with very fine nails, and dense calkins at the buttress end of the shoe, leading many to consider that shoes were only fitted in icy or wet weather[26] . The 16th and 17th centuries saw a refinement of shape, with most of the technological advances occurring in Europe, where haute école dressage was a popular activity with the great, the good and the aspirational. Most farriery practices, however, fell below the standards of later antiquity.[27]

Farriery, as we now understand it, did not develop until the 18th and 19th centuries, and owes much to Etienne Guillaume Lafosse, and Claude Bourgelet, both of whom advanced veterinary knowledge of the horse's hoof. Many versions of shoes were created, for different purposes and corrective purposes[28] . The United States and Canada chose their own standardisations for farriery, and Europe did likewise. The

[26] J. Hickman, *Farriery* (London: JA Allen and Sons 1977), 24.
[27] Sherer, 1880.
[28] R.W Murray, 'Dating Old English Horseshoes', *Journal of the British Archaeological Association* 2.1 (1937), 133-144.

sizes used here are those of the United Kingdom, which were adopted in Ireland in the past due to British control.

There is no single style of shoe which is a universal solution for every animal. The correct shoe for an individual horse depends on a variety of considerations: work, intensity, duration, terrain and conformation of the animal all refine parameters to shoe selection. Horses can have very large round feet while ponies tend to have far smaller and slightly more pointed feet, although as with all living creatures, there are always some rare outliers. The front hooves of a horse have different shoeing requirements than the back. Peaty, wet land will often produce horses with wider hooves, just as barren, hilly landscapes influence small, very hard hooves.

The landscape of the region is one of pasture, with stony limestone inclusions, very typical of agricultural land in the south of Ireland and would be unlikely to influence the hoof shape of animals used.

VI. Horseshoes from Annakisha South 2

Two fragments of horseshoes were found at the Annakisha South excavation site. One of these has a projected toe to heel buttress length in excess of 12 cm, making it a standard pony/small horse size. It is more difficult to give a complete sizing for the other fragment, as it is damaged and misshapen, although it looks possibly similar in size. There is nothing in their shape or style which suggests anything earlier than the 19th century.

Both of these examples are fullered shoes, with creases along the centres where the farrier places the nails that hold the shoes to the hooves. The fullers fill with dirt as the horses move, providing traction. A small hammer-like object called a fuller is used to create the groove while the shoe is being hammered out. They are likely to be the shoes of animals used for sport or recreation rather than those used for heavy draught or farm-work, although they may have been used for light driving, which would have been a regular means of transport in 19th to early 20th century rural Ireland.

VII. Horseshoes from Clenor South 2

The finds here indicated a wide range of measurements within the assemblage. Most indicate animals with wide hooves. This does not necessarily indicate larger animals, as hooves are an intensely complicated subject, but does reflect body weight to some extent, which can be associated with size. A miniature Falabella pony may take a modern size 0 or 1, while a Clydesdale shoe (size 10 or 11) will be of similar size to a dinner plate! In between, there can be a dizzying amount of variation of horse size and hoof size.

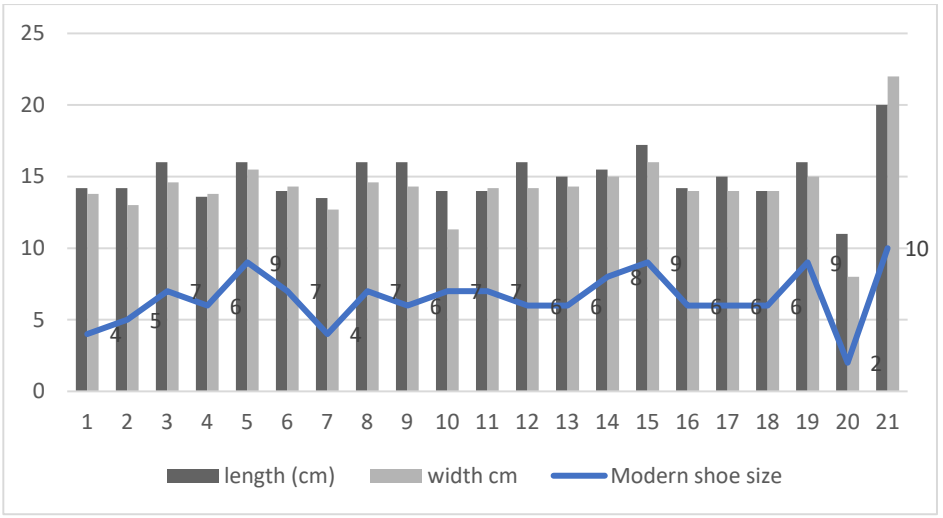

Fig. 8. Chart of horseshoe sizes found at Annakisha and Clenor with modern equivalents.

After examination of the assemblage, it can be said that most of the shoes are no older than the late 18th/early 19th century, apart from one example which is likely to be 17th century. This is discussed further in the text. The sizes indicate mostly horse, apart from the small 11cm shoe (No. 20 in Fig. 8), which is a small pony, or possibly, considering the Irish rural countryside of the 19th and early 20th century, a donkey.

Some of these shoes are fullered, which would usually be used on hunters and hacks. A hunter has to gallop, jump and turn at speed, and requires a shoe with good foothold provided by the extra grip of the fullered shoe.

The assemblage of horseshoes indicates a wide range of sizes of animals, which would have had different uses, from the small pony at No 20 in Fig. 8, to the working hacks and hunters who measure between 7 and 9 on modern sizing, to the huge 20 cm shoe (No. 21 in Fig. 8) which may have been fitted to a large draft-horse, or even possibly an old-fashioned Irish Draught, often used as 'gentleman's hunters' due to their ability to bear weight and jump at the same time.

As mentioned, one specimen, from a securely dated context, appears to be a 17th century-style horseshoe (Fig. 9), with good parallels in contemporary farriery in Britain (see Figs. 9 and 10 for comparison). The shoes of this time were large, flat and heavy, with very small nail holes which often cannot be seen when rusted. A snaffle cannon was also found in the same feature and its narrowness would be consistent with a date earlier than the 20th century, possibly as part of a double or curb bridle.

Fig. 9. Probable 17th century horseshoe from Clenor South 2

Fig. 10. British 17th century (left) and 18th century (right) horseshoes, from Portable Antiquities Scheme. Copyrights: Somerset County Council; Berkshire Archaeology; CC-BY-SA licence

VIII. Blacksmithing tools

Most of the ferrous finds at the Annakisha South site are fragmentary and so badly rusted that they are basically unidentifiable, although we can speculate on them being remnants of hooks and pulleys used in the forge, with possible pieces of lorinery and farm machinery. Only one tool can be tentatively identified, which may be either a fragment of a hoof rasp or, more likely due to its curvature, a hoof knife. When horseshoe nails are driven into the wall of the hoof, they need to be filed down to blunt protrusions. The knife is used to pare the horn of the frog and the sole. It has a slightly curved one-sided blade. Both objects work in tandem with each other and are indispensable pieces of equipment to a farrier. The knife has improved in design over the years, with less risk to both user and animal, but the function remains the same.

Fig. 11. Corroded drawing knife from Clenor South 2

Fig. 12. Small flatter tool from Clenor South 2

Similar objects were found at the nearby Clenor South site, although more readily recognisable than the fragments at Annakisha South. Hoof cutters or trimmers had handles about 20 to 24cm long, and a pincer-like head, with one jaw extremely sharp, while the other was flat. These are still used as they are safer than toeing pincers, when it comes to removing overgrown hoof wall. When in use, the flat jaw is placed on the outside of the hoof, while the cutting edge is employed inside. Another hoof knife, for paring down the sole of the hoof, was found (Fig 11). It is of a drawing knife-style was largely discontinued by the early 20th century, apart from use in some exceptional circumstances, suggesting this is an Edwardian or Victorian period tool.

Other tools include a small flatter tool (Fig 12), of which there are many variations, depending on the preference of the smith. It is the object which the hammer hits to smooth out iron (pers. comm Oliphant blacksmiths and heritage crafts, Edinburgh). This could be used horizontally for fine work. Other tools include some kind of multi-purpose punch, a hoof rasp, used to smooth out the nail points through the wall of the hoof, and a hoof pick. One of the fragments may also be a small hand fullering tool, or hand-punch, used for working the hot metal. Its shape is somewhat generic, so could also be some variation of bottom swage tool, to generally function in a blacksmithing workshop.

Perhaps the most regional find is a metal plaque, bearing the name Pierce. The Pierce Foundry manufactured horse-drawn farming vehicles. The company was based in Wexford, and founded in 1839 by James Pierce, who came from a family of blacksmiths [29]. Initially his foundry specialised in making fire fans, but within eight years he had expanded into the manufacture of agricultural machinery and implements, as well as being contracted to build metal bridges in the region[30] . By 1910, they had become the largest agricultural machinery manufacturer in Ireland with a workforce of 1,000 and offices at Rue de Flandre in Paris and in Rio de Janeiro, Brazil. However, commercial success was interrupted in August 1911 during the 'Ironworks lock-out' when the Pierces sought to prevent workers from joining the ITGWU. Pierce's products were shipped worldwide, and they continued to export horse-drawn farm machinery to Africa and North and South America up to the 1920s, and also had a bicycle manufacturer just before the onset of World War I[31] . As the use of tractors became more common, Pierce's failed to modernise and continued to manufacture for the 'horse era'. The little metal plaque embellished with the company logo stands as a memorial of a different era of agricultural life, as it can be imagined that this was on some piece of equipment requiring repairs and modification.

Most other objects cannot be identified as they are in a fragmentary corroded condition, but it can be presumed they represent the daily life of a turn-of-last-century farrier and blacksmith, repairing equipment and vehicles, shoeing horses and making practical objects. The twisted hooks and rings all likely held equipment on the walls – a good example of this is demonstrated at the reconstructed forge at the Ulster Folk Museum at Cultra, Northern Ireland, and at Castlebar Folklife Museum, part of the National Museum of Ireland.

IX. Conclusions

There is evidence that the two smithies of Annakisha South and Clenor South would not have operated simultaneously[32]. Clenor South, being built within a fortified farmstead, appears to have had an earlier phase of ironworking in the 17th century. The slag found at Clenor South has offered a chronological snapshot of technological change within a rural Irish society, while the Annakisha South site shows its brief lifespan in the mid-19th century at Torpy Cross, perhaps to catch (literal) carriage trade between Mallow and Mitchelstown as well as local farmers and gentry.

What the excavation illustrated was the inexorable change from a rural horse-powered society to the mechanised 20th century. The slag analysis shows the technological changes as the Industrial Revolution affected even rural Ireland. What

[29] T O'Neill, 'Tools and Things, Machinery on Irish Farms, 1700–1981' in Gold under the Furze, eds Alan Gailey and Daithi O'hOgain,(Dublin: Glendale Press,1982) 129-137.
[30] M D Higgins, M.D. 2012. 'Unveiling of a memorial sculpture to commemorate the Wexford Lockout of 1911-12, The Faythe, Wexford, 12th May 2012'. *Saothar,* 37 (2012) 129-132.
[31] C. O' Gráda, 'Did Ireland 'under'-industrialise?', *Irish Economic and Social History,* 37. 1 (2010) 117-123.
[32] Hull and Hurley 2022, 187.

we see, displayed in a progressive timeline, is a glimpse into livelihoods and lifestyles which our own society was built upon, but which are all too often forgotten.

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