

Chapter 12: Cycling to Newgrange

*O nobles of Breg, a might that is not deceitful,
with featful points (royal is the road):
know ye the story of every lord
that is here in the Brug of the Mac ind Oc?*

*Behold the fairy mound before your eyes:
it is plain for you to see, it is a king's dwelling,
it was built by the harsh Dagda:
it was a shelter, it was a keep renowned for strength.*

(from 'Brugh na Bóinde II' in the Metrical Dinnsenchas, volume 3, translation by Edward Gwynn)

Ledwidge Country

I left my brother's house early. I had a full day ahead of me and was excited; today I would get to Brú na Bóinne (Brugh na Boinne) and visit Newgrange and Knowth, the greatest stars of all the stars along the Boyne. I headed back to Slane. Although I was already very close to the two monuments on the north side, access to them is only possible through the visitor centre which is located on the south bank of the river, which meant crossing at the Slane bridge. On my way I stopped at the Francis Ledwidge Museum at Janeville, just outside the village, which had been closed when I'd passed by the previous evening.

The museum is housed in the small labourer's cottage where Ledwidge was born in 1887 and where he lived for most of his short life. It is a pretty building, like many built at the time by the rural district councils and known as Parnellite cottages: cut stone and slated, with red brick detailing around the door and windows and a flower-filled front garden behind red railings. Semi-detached, the house has only four rooms. Two rectangular rooms flank either side of the entrance hall, one presumably for the boys and the other for the girls, and behind them there is a larger kitchen and the parents' bedroom. The museum has also acquired the adjoining cottage, which will enable it to expand the exhibition when funds permit.



Fig. 119: The Ledwidge house museum at Janeville near Slane

As it is it doesn't take long to see, and it's easy to understand how the young Francis (or Frank, as he was always known), one of nine children, came to spend much of his time out of doors and intimate with nature. Disaster struck the family when his father, Patrick, died in 1892. Frank was only four and the youngest child three months old, but his mother, Anne, worked as a field hand, took in washing and mended clothes in order to keep the family together. She was clearly a proud woman and a great influence on the young boy. In a letter he wrote: 'I am of a family who were ever soldiers and poets . . . I have heard my mother say many times that the Ledwidges were once a great people in the land and she has shown with a sweep of her hand green hills and wide valleys where sheep are folded which still bear the marks of dead industry and once, this was all ours.' Ledwidge went on to be both poet and soldier, and the two images of him in the museum reflect this: the poet with the spectacles, thick upper lip and



serious expression, and the soldier in his greatcoat with trim moustache and dreamy gaze. Indeed, you have to look closely at the photographs to be sure they are of the same person. His glasses are a poignant exhibit in the museum.

Fig. 120: Francis Ledwidge, poet of the Boyne (courtesy of the Francis Ledwidge Museum, Janeville)

Frank attended the national school in Slane, where his teacher, Thomas Madden, imbued in him a great interest in local folklore and in the historic and prehistoric sites at his doorstep. He recalled being deeply moved by Goldsmith's *The Deserted Village* and began to use whatever money he could earn by odd jobs to buy books. However, his family's poverty meant he had to leave school when he was thirteen, and he became a farmer's boy for a wage of seven shillings a week. When he was fourteen or fifteen, he went to Dublin to become an apprentice in a vintners and grocery shop in Rathfarnham. After only six days, he became so homesick that he left his lodgings one night and walked the thirty-odd miles back to Slane, waiting outside the house until the family woke.

In his short time in Rathfarnham he composed or, as he put it, 'framed up' his first recorded poem *Behind Closed Doors*. I thought of this as I headed into Slane and his striking image of the village:

With its whitewashed walls and roofs of brown
And its octagon spire toned smoothly down
As the holy minds within.

And then:

And wondrous impudently sweet,
Half of him passion, half conceit,
The Blackbird calls adown the street
Like the piper of Hamelin.



Fig. 121: View of Slane in Ledwidge's time, taken from the Square (courtesy of the National Library of Ireland)

I have to confess that, up to recently, I had not been a great fan of Ledwidge. Lord Dunsany dubbed him the Peasant Poet and the Poet of the Blackbirds (compliments) but, knowing him only through anthologies, I felt there were too many blackbirds, robins and linnets for my taste and I gave him little attention. However, dipping into his *Complete Poems* (there are over two hundred), I kept pausing to admire a phrase, then a few lines, and then a whole poem. From the museum I cycled on into Slane, turned left at the Square and continued down the steep hill to the bridge. Stopping there, I inspected a simple plaque commemorating Ledwidge by the Cork sculptor Seamus Murphy (a copy, as the original is now outside the Ledwidge Museum).

After his Dublin experience, Ledwidge worked around the Slane area as a farmhand, a road mender and later as a supervisor of roads. He was a founder member of the Slane branch of the Meath Labour Union in 1906. In 1913, after his dismissal from the Beuparc copper mine for organising the workers, he was appointed secretary of the union branch but dismissed the following year for faulty book-keeping. All this time he was writing verse and, encouraged by a local curate, Fr. Smyth, he began to publish his poems in the *Drogheda Independent*. In 1912, on the suggestion of a friend, he sent a copybook of poems to Lord Dunsany, who later wrote that they astonished him by their freshness and their beauty. Dunsany encouraged Ledwidge, invited him to Dunsany Castle to work in its library and introduced him to his literary friends. In October that year he gave a lecture to the National Literary Society entitled *A New Poet*, promoting Ledwidge and his work.

It was an unlikely friendship between the wealthy unionist aristocrat and the poor socialist and nationalist, for Ledwidge by this time was also a member of the Irish Volunteers. It shows a broadmindedness in both, inspired no doubt by their love of literature, although Ledwidge also wrote admiringly about the Conyngham family of Slane Castle. Despite his nationalism, when war broke out in 1914, he volunteered with Dunsany's regiment, the Royal Inniskilling Fusiliers, and was soon promoted to lance-corporal. It is possible that rejection by Ellie Vaughey, with whom he was in love, may have influenced his decision to join up.

In July 1915 he was sent to Gallipoli, where he saw action near Sedd-el-Bahr. He described one day under Turkish sniper fire as 'a horrible and a great day [which I would] not have missed . . . for worlds.' Evacuated from the Dardanelles in October, he was sent to Serbia, where he endured many hardships and received injuries requiring convalescence in Cairo and later in Manchester. While in Serbia he had received an advance copy of his first book *Songs of the Fields*, with an introduction by Lord Dunsany. The book was dedicated to his mother: 'The first singer I knew'. The use of the word

Songs in the titles of his three books reflects the lyrical nature of his work, some of the early ones being set to traditional Irish airs.

He was still in Manchester when he heard news of the Easter Rising and the executions that followed it, including those of his friends Thomas McDonagh and Joseph Plunkett. Enraged and heartbroken, he was court-martialled for insubordinate talk and overstaying his leave. Some of his finest poems deal with these events, including his best-known one, *Thomas McDonagh*, the first verse of which is inscribed on the Murphy plaque:

He shall not hear the bittern cry
In the wild sky where he is lain,
Nor voices of the sweeter birds
Above the wailing of the rain.

The lines are used on the plaque to refer to Ledwidge himself, who had little more than a year to live when he wrote them.

I crossed the bridge and pulled into the adjacent car-park for a longer look at this ancient structure and the long mill-weir beside it, running askew of the river. The bridge has twelve arches, including a canal arch and two flood arches, and was possibly a rebuilding after the great flood of 1330 – it may even incorporate elements of an earlier bridge. It was altered on a number of occasions and was widened on the downriver side in the late eighteenth or early nineteenth century; today, it has to carry traffic on a scale unimaginable when it was built.

After the bridge I cycled up the steep hill on the other side, past Fennor Castle, a ruined seventeenth-century building attached to an earlier tower house. Ledwidge wrote a poem that speaks of an 'Ethereal maid of Fennor Plain/ Yearn I to hear, to hear thee sing again.' The traditional style of Ledwidge's early poems in particular reflects his desire to have them published; he was writing for a market. He wrote many love poems, including one about a milkmaid who worked at Rossnaree, who may have been his first love and who died young. His greatest passion, however, was for Ellie Vaughey, and we can trace this love in a series of poems beginning with *Thoughts at the Trysting Style*, where he imagines her coming 'With yellow on her hair and two curls strayed', and ending with a sonnet *The Burial of Love* when 'I knew the storm was over, and the calm/ Would empty out the sorrow in her eyes.' However, Ledwidge continued to love her and mourned her after her death in childbirth in June 1915. He wrote many elegies for her, including *Nocturne*, written in Serbia during a blizzard in November 1915 which ends 'And the grey days fall/ On my grief, Astore.'

Many of Ledwidge's later poems, written when he was on active service or in barracks in England or Derry, reference local names like Currabwee, Crocknaharna or Crewbawn, which now lay below me on the opposite side of the river as I continued my climb up the quiet road towards Rossnaree. Crewbawn is directly across from Rossnaree Lock, where the Boyne Navigation joins the river again. Writing in Basingstoke in 1915, Ledwidge envisions 'A river broad and deep/ A slow boat on the waves/ My sad thoughts on the sleep/ That hollows out the graves.'

I cycled on, thinking about the desperate sadness and waste of those years. How terrible that a man like Ledwidge should be blown asunder by a stray artillery shell while he was taking a break for tea at the third battle of Ypres. It was 31 July 1917, just a few weeks before his thirtieth birthday. What might he have produced if he'd had the chance to live as long as Yeats, what might he have done if he had gone to Paris and encountered the modernist movement of the 1920s? He could have lived well into my own time; his brother was still in Slane when Heaney and Bailey went by there in 1979. Another poet, the Welshman Head Wyn, also born in 1887, died on the same day in the same battle and they are buried a few rows apart in the same cemetery in Flanders.

Lord Dunsany had tried to keep Ledwidge out of the war, and offered him a regular stipend to that end. Dunsany showed great loyalty to Ledwidge, bringing out his last two books, *Songs of Peace* and *Last Songs*, and the *Complete Poems* in 1919. His encouragement meant everything to the young poet who wrote about the 'beautiful afternoons' he spent at Dunsany Castle. A cyclist himself, he wrote in a letter to Dunsany:

Then the long ride home with beautiful memories of your appreciation, reciting my latest all the miles until the pedals of my bicycle turned to the rhythm of the piece, delaying me often, for you know I love slow rhythm and slow words.

I was now close to Rossnaree crossroads and I thought of another of his greatest poems, *The Dead Kings*, which has the same rhythmic structure as *Thomas McDonagh*; I wondered how this might play out as I cycled along.

All the dead kings came to me
At Rosnaree, where I was dreaming,
A few stars glimmered through the morn,
And down the thorn the dews were streaming.

And every dead king had a story
Of ancient glory sweetly told.
It was too early for the lark,
But the starry dark had tints of gold.

It was written in France in January 1917. It was not his last poem; he was incredibly productive in those last difficult months but it could be regarded as an epitaph of sorts. Its last two verses are:

And one said: 'Since the poets perished?
And all they cherished in the way,
Their thoughts unsung, like petal showers
Inflame the hours of blue and gray'

And one said: 'A loud tramp of men
We'll hear again at Rosnaree.'
A bomb burst near me where I lay.
I woke, 'twas day in Picardy.

Rossnaree - the salmon of knowledge - the ford of Broe - the start of the Battle of the Boyne

I went past the gates of Rossnaree House. This house, an Italianate late-Victorian villa, must have one of the most romantic situations in Ireland and one of the most romantic names. *Ros na Riogh* means the headland or wood of the kings and, in this case, it could mean both for the house is on a wooded height commanding the so-called Bend of the Boyne. The views here are north to Knowth where the river turns sharply south, having encountered a geological obstruction, and east to Newgrange and the river floodplain below it, ancient and beautiful. The house is also conspicuous from both of the mounds.

Rossnaree has been identified as the site of Clettech, or the house of Cletty, a place that features in a number of ancient tales. Most famously it was the location of Speláin's fort where Cormac Mac Airt choked to death on a salmon bone; in some versions this was contrived by the druids enraged by his adoption of Christianity. He is supposed to be buried here too, as I recounted in the previous chapter when I was at Broadboyne Bridge. Local tradition had him in a mound here known as Cormac's Grave but, when a defensive pillbox was inserted in it during the Emergency, it was found to contain the bodies of a woman and her child in what is thought to have been a Viking burial.

Clettech was also named in the story of Oengus as the place given to Elcmar in compensation for Brú na Bóinne: it was a land that was no worse than the Brú, according to the Dagda, where Elcmar could continue to watch the boys from the *síd* playing every day and where he would have the fruit of the Boyne for his enjoyment.

Clettech was also the location of the death of Muirchertach Mac Erca, a possibly real king who is said to have died about AD 535. His death tale is, however, from the realm of fantasy and fairies. In it, Muirchertach is bewitched by a beautiful woman, Sín, whom he meets at his palace at Clettech. She feasts him with wine, that is really water from the Boyne, and has him fighting blue men all day that are actually stones and goat-heads. He is visited by the bishop Cairnech, his senses return and he repents to God. But Sín wins him back and his descent continues. Finally, she arranges for a mob to attack his house and set it on fire; Muirchertach gets into a cask of wine where he is drowned. It is subsequently revealed that Sín took vengeance on Muirchertach because he had killed her parents and sister in a battle on the Boyne. Wagner might have made a good opera out of it.

From Rossnaree House (or Clettech) the road descends steeply to the river which it meets beside an ancient looking building, known locally as Johnson's Mill. The late historian of Meath, Elizabeth Hickey of Skryne Castle, began her book (almost an extended prose poem) *I Send My Love Along the Boyne* at this exact place. The building, described as a vernacular mill, has its gable wall to the road, with its door and windows seemingly placed at random on this front like a child's drawing. It is of indeterminate age but a mill has stood on this site since the Middle Ages. It was already defunct when Mrs. Hickey was writing in 1966 and I remember it myself from those days, still occupied but looking rather forlorn and, as I recall, prone to flooding. It had then a small carved figurine on the wall beside the entrance, a sheela-na-gig or fertility symbol. There is a photograph of the mill, unoccupied and derelict, in Geraldine Stout's *Newgrange and the Bend of the Boyne* but, happily, it has since been restored as a home and the garden is furnished with some of the old millstones.

It may seem an odd place to start a book about the Boyne. As Hickey says: 'The business of mankind has all gone from this quiet backwater; the blossoming water-weeds, overhanging trees and spiralling water-beetles create an atmosphere for dreaming.' Her reasoning becomes clear just a little to the east of the mill, for this was the site of one of the most important fords on the river at what may have been its tidal limit in pre-historic times. I cycled on to the car park that gives access to the river, and walked out on a small pier provided for anglers. Just to the left is the ford of Broe, which name derives from Brú; it was known in the old manuscripts as Áth na Bóinne, the ford of the Boyne. It would have been used by the builders of the great tombs as they passed to and from their work. The ancient road known as Slí Mhidluacra passed over it on its way from Tara to Eamainn Macha (Navan Fort), the royal seat of the Ulstermen. You can trace the route of the old road in the small lane that starts on the other side, beside Broe House. The great army of Maeve and Allill came by here on their way to seize the brown bull of Cooley, as told in the *Táin*. Cúchulainn fought in the ford here, where the

battle goddess Morrigan, whom he had just spurned, took the shape of a great black eel and wound herself about his legs.



Fig. 122: Looking upriver to Áth na Bóinne, the ford of legend and history

The area drips with legend and history. After his *Táin* defeat Conchobar Mac Nessa achieved revenge at another battle here against the men of the west and south of Ireland. During this fight, his warrior Fiacc was chased into a pool just above the ford where he was drowned. This pool became known as Linn Feic after him and was the very place where a wise old druid, Finegas, later spent seven years trying to catch the salmon of the pool; it had been prophesised that when he ate it 'nothing would remain unknown to him.' The young Fionn Mac Cumhaill had come to stay with him to learn poetry and while he was there Finegas finally caught the fish. He ordered the youth to cook it but told him not to eat anything of it. But Fionn touched the cooking fish, burning his thumb; he put the thumb in his mouth to cool it, and because of that he acquired all the knowledge of the world.

The ford was also the location of the first crossing by the Williamites at the Battle of the Boyne. At around 8 a.m. on the first of July 1690, a force of some ten thousand dragoons and foot soldiers appeared out of a thick mist coming down the slope from Newgrange. They were led by Count Meinhard Schomberg, the son of William III's

Captain General the Duke of Schomberg, who had celebrated his forty-ninth birthday the day before. Facing them were 480 men with three small field guns, under the command of Sir Neil O'Neill of Killelagh. It was lucky that there was any force there at all, because O'Neill had been ordered to Slane; finding that the bridge there had already been destroyed, he came back to Rossnaree as it seemed to be the more vulnerable place.

James II later acknowledged in his *Memoirs* that O'Neill and his dragoons 'played their part well.' On seeing the enemy, he brought up his three guns and sent a steady stream of fire across the river. Count Schomberg sent one hundred of his toughest grenadiers into the river followed by his Dutch dragoons. As they crossed, O'Neill mounted his men and charged them. During this charge, O'Neill received a serious wound in his thigh and the Jacobites were beaten back, leaving some fifty dead at the scene. By 9.30 a.m. Count Schomberg had secured the bridgehead and O'Neill's men had retreated two miles towards Donore.

When William, based at Tullyallen on the north side of the river nearer Drogheda, learnt about Count Schomberg's success he sent reinforcements of a cavalry brigade under Lieutenant-General Douglas. By now the mist had cleared. James, camped on Donore hill, had heard about Count Schomberg's crossing and could see the reinforcements heading in that direction. He concluded that the main attack was going to be from Rossnaree, rather than Oldbridge as he had expected. He gave orders that the greater part of his army should march there, including the French regiments, the most experienced troops he had. Count Schomberg and Count Lauzun, who was leading the Jacobites, headed towards each other but were halted by a boggy ravine unknown to either of them, through which a stream flowed down to the Boyne at Roughgrange, a bit over a kilometre from where I was standing. The two forces remained there all that day, facing each other immobile, while the real fighting took place further downstream.

The origin myth of Newgrange

I was already looking forward to following the course of the battle when I got to Oldbridge, but I now turned my mind to Brú na Bóinne as I wheeled my bike along a stretch of the towpath that starts beside the car park here and runs for a bit less than two kilometres. It is one of the lesser-known delights of the Boyne with the great quartz faced mound of Newgrange clearly visible across the canal and the river as you walk along. The plain between the river and the tomb is now known to abound in Neolithic

remains, most of which lie below the surface. One of the most conspicuous, known simply as site B, a passage tomb very close to the river, now came into view.



Fig. 123: Site B, a Neolithic passage grave, seen from across the Boyne canal and river. The great mound of Newgrange can be seen in the distance

Shortly after this I crossed the gurgling stream coming from the Roughgrange boggy ravine and a little further on the walk terminated. I re-mounted my bike and headed on to the Brú na Bóinne visitor centre. Nowadays this name is used to describe the assemblage of monuments in the Bend of the Boyne. It was probably William Wilde who started this practice, but in fact the name Brú is very specific to the Newgrange site. The word *brú* (or *brug* in old Irish) translates as abode, hall, mansion or castle. It can also mean hostel and Elizabeth Hickey thought that the ancient references to Brú na Bóinne might actually refer to a hostel (which she likened to a caravanserai) near the ford, which would accord with the survival of the name at the ford and at Breo House, but the *Dinnshenchas* associates it clearly with the great tumulus. In this literature it is celebrated both as a *síd* or fairy mound built by the Tuatha Dé Danann and as the burial place of the pagan kings of Tara.

The origin myth of Newgrange is quite distinct from those of Knowth and Dowth. There are several versions but the kernel of the story, as told in *Tochmarc Étaíne* (The Wooing of Étaín), is that the Dagda (or great father, one of the Tuatha Dé Danann) fell in love with Boann, the wife of Elcmar who owned the Brú (Elcmar was another name for Nechtain or Nuada, who also owned Carbury Hill). The Dagda sent Elcmar away so that he could sleep with Boann. Nine months went by as though it were a night and a day and Boann, unknown to Elcmar, gave birth to a son by the Dagda. The boy, who was named Oengus Mac ind Oc (Aengus, the young son), was given up in fosterage until he was grown, whereupon he was reunited with the Dagda.

The Dagda promised Oengus the Brú as an inheritance, and told him how to win it from Elcmar. This involved Oengus visiting Elcmar at Samhain and threatening to kill him unless he gave over the Brú for a day and night. Elcmar agreed, but Oengus then said that the Brú was his forever because day and night go on forever. The Dagda then gave Clettech (Rosnaree) to Elcmar in compensation for this trick. After the defeat of the Tuatha Dé Danann by the Milesians, they retreated to the otherworld but they could emerge from time to time. In this way, Oengus was able to come out years later when Diarmait was killed at Ben Bulbin and bring his body back to Brú na Bóinne.

Oengus is most famous for *Aisling Oengussa* (The Dream of Aengus), the story that lies behind Yeats' great poem *The Song of the Wandering Aengus*. It is a poem I have always loved, telling how our hero fell into a love-sickness for a girl and had to travel the country to find her again. I started cycling along to the rhythm of the poem:

I went out to a hazel wood
Because a fire was in my head
And cut and peeled a hazel wand
And hooked a berry to a thread.

The sublime verses, lush as the scenery, took me along and, as I got closer to the Brú Centre, I found my pace increasing.

Though I am old with wandering
Through hollow lands and hilly lands
I will find out where she has gone
And kiss her lips and take her hand.

And walk among long dappled grass
And pluck till time and time were done
The silver apples of the moon
The golden apples of the sun.

Yeats, of course, took considerable liberties with the tale. For a start, it was not Oengus himself that went in search of 'the glimmering girl' as he was incapacitated by his love-sickness. First, his mother Boann spent a year searching for her; then his father, the Dagda, got involved and he commissioned Bodb the king of the Síde of Munster to find her. After another year the girl was discovered at Loch Béal Dracon and Oengus was brought there to confirm it was her. Her name was Cáer Ibormeith and she was the daughter of Ethal Anbúail from Síd Úamuin in Connacht. Ethal refused to give her to the son of the Dagda but, after his *síd* was destroyed and 'three score heads' brought out from it, he confessed that she had greater power than him, being in the form of a bird one year and of a human in the following year. So, it was arranged that Oengus went to her at the following Samhain; then he put his arms around her and they flew as two swans to Brú na Bóinne.

The tales of the Brú may seem like medieval fantasies at one level but archaeologists don't dismiss their relevance to the site too readily. They point to the mnemonic quality of great structures and the probable strength of oral tradition in pre-literate peoples. M. J. O'Kelly considered that the concept of Newgrange as both a house of the dead and an abode of spirits was not contradicted by his excavations. He pointed to the efforts of the builders to ensure the tomb was dry and to allow the sun in at the solstice, linking it with role of the Dagda as a sun god. Not the least interesting aspect of Newgrange is this confluence of archaeology and mythology.

Discovering Newgrange

I had arrived at the great bronze gates of the Brú na Bóinne centre, which incorporate motifs of Neolithic art. A visit to Newgrange today is very different from that experienced in the past. In their books, Eoin Mac Uistin and Tony Holten describe their first visits, when candles were still being used. There was electricity installed by the time I first visited, not much later, although I do remember candles still being used at Dowth at that time; combined with a more complicated tomb layout, it led to an exciting experience.

Frank O'Connor began his book, *Irish Miles*, at Newgrange. It's an account of a cycling tour of Ireland taken by him and his wife during the Emergency, when travelling around by car was impossible. I find it particularly interesting because this was the time when my family was living at Little Newgrange House and my copy of the book has my father's bookplate from those days, a lovely old woodcut of the shrub-surrounded entrance to the mound.

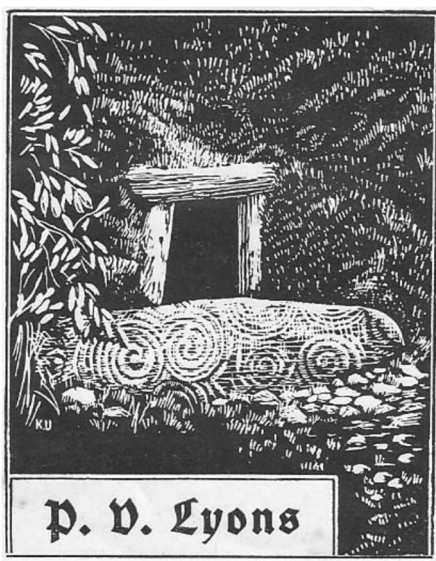


Fig. 124: My father's bookplate from when he lived at Little Newgrange House

O'Connor gives a humorous account of his visit when he first had to find the caretaker and then the caretaker had to find the candles. Two military officers, who looked 'damn unhistoric', were visiting at the same time and a semi-informed discussion took place. One of the officers opined that it was the Milesians who built the tomb. 'It's supposed to have been the Tuatha De Danann,' O'Connor replied. 'Whoever the blazes the Tuatha De Danann were.'

O'Connor at least had the Tuatha Dé Danann connection, but earlier visitors hadn't even that much information. The passage tomb at Newgrange was rediscovered in 1699, shortly after the Battle of the Boyne, when workers on the estate belonging to Charles Campbell (a Williamite officer who had leased the land from the dowager Countess of Drogheda) came across the entrance when quarrying for stones. Shortly afterwards it was visited by the antiquary Edward Lhwyd, the keeper of the Ashmolean Museum in Oxford, who made a detailed survey of the 'cave', as he called it.

He concluded, based on the discovery of coins on top of the cairn, that it predated the Roman era and must have been 'a place of sacrifice of the ancient Irish.' However, Thomas Molyneux, writing in 1726, opined that it was a Viking structure. General Vallancey, who produced the first accurate drawings of the tomb in the 1770s, suggested that it was built by people from ancient Babylonia. At some point a 'Connacht peasant' dreamt of treasure buried in the tomb and, helped by locals, broke the stone basin in the back recess of the chamber in an attempt to get at it. The illustration in Grose's *Antiquities in Ireland* published in 1791 is remarkably accurate:

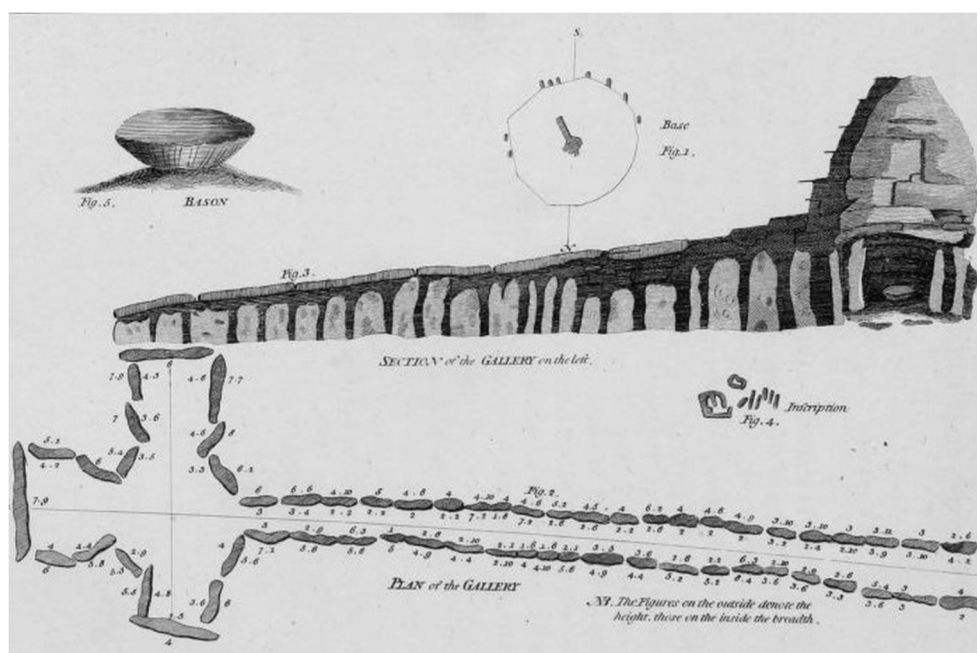


Fig. 125: Section and plan of the 'Gallery' of Newgrange from Grose's *Antiquities of Ireland* (1791)

The rediscovery and translation of the ancient Irish texts in the early nineteenth century by O'Donovan and others led to a closer identification of Newgrange and other monuments with the mythological tales, and it was with this background that Wilde approached what he called the Royal Cemetery of Brugh na Boinne.

Late in the nineteenth century George Coffey, described as the first professional archaeologist in Ireland, made a detailed study, originally published in the 1890s and later (1912) developed into a book, the first specifically devoted to Newgrange. By then the mound had come under state protection. The Board of Public Works undertook some repairs and conservation work in 1890 and an iron gate was placed at the entrance to stop tourists carving their names or initials in the chamber. Concrete and wooden props were also put in place to shore up some of the orthostats, a few of which Michael O'Kelly had to retain during his later excavations, lamenting that they contrasted unfavourably with the Neolithic building work.

It was around this time that two great decorated stones in the kerb were discovered; these are now known as K52, on the north side opposite the entrance stone, and K67, on the north-east side. R.A.S. Macalister, a later professor of archaeology at UCD, whose book *Ancient Ireland* (1935) was long in print, further explored the kerb in 1928,

exposing some fifty-four stones. He later carried out a similar operation at Knowth remarking about the carving 'that nothing more pointless or undignified could be conceived' and that it would have been better to have left the great burial-mounds in their 'unadorned simplicity'. Macalister also came to the conclusion that the kerbstones were the gravestones of an earlier people and that the 'zig-zag or spiral would have told a contemporary passerby all that he needed to know about the dead man underneath.'

The distinguished TCD scholar, G.F. (Frank) Mitchell first visited Newgrange in the mid-1930s to meet Macalister. In his memoir, *The way that I followed*, he describes him as a small alert man with twinkling eyes, always dressed in a blue serge suit and starched collar and carrying an umbrella. He adds: 'he had a fertile imagination.' Mitchell had been brought along as a scientist to try to convince Macalister that the black encrustation in the roof of the great central chamber was not caused by Bronze Age funeral pyres, as he believed, but by a deposit of manganese oxides from evaporating water.

Mitchell describes how at one point, when they were in the tomb, Macalister produced a small bob attached to a string that he tried, with the aid of his umbrella tip, to push under the great stone basin in the right-hand recess. He thought that the basin might be the cap of an open vertical shaft, such as are found in Mycenaean tombs, and hoped that, if he could get the bob in, he would be able to find the depth of the shaft. Mitchell was amazed and embarrassed by these attempts, but after a short time, Macalister emerged from the tomb 'quite undisappointed by his failure.'

It was during this period that Michael O'Kelly, known as Brian, and his future wife Claire O'Donovan, came to study archaeology in University College, Cork. Claire later described this time as the 'steam age' of Irish archaeology, when teaching was focussed on the arts and the interpretation of Gaelic artefacts rather than on surveying and on-site excavation. Today a wall on the ground floor of the Brú na Bóinne centre is devoted to this remarkable couple and the excavations led by Michael O'Kelly at Newgrange over a fifteen-year period from 1961.

O'Kelly had originally studied engineering and then switched to architecture but, after working as a surveyor for Seán P. Ó'Riordáin, the then professor of archaeology at UCC, on the excavation of a ringfort in Co. Cork, he changed courses again. He also took courses in Irish, geology and geography, all of which, as the encomium on the wall says, 'uniquely qualified and equipped him to take on the challenges that Irish archaeology would present in the second half of the twentieth century.'

Claire O'Donovan had qualified as a national school teacher, but then decided to do a BA degree at night with archaeology as one of her subjects. She had to give up her teaching job when she married O'Kelly in 1945, but this freed her to support her husband's work, especially during the summer excavations. They were rather quaintly and romantically described as partners in prehistory.

O'Kelly succeeded O'Riordan as professor of archaeology in UCC in 1946. In 1961, one of his former students, P.J. Harnett, was archaeologist to Bord Fáilte, the Irish Tourist Board. He realised that something had to be done to protect Newgrange, which was being damaged by increasing numbers of visitors, and called a meeting of all those with a professional interest in the monument. The emphasis was on improving access to the chamber, which was difficult due to inward-leaning orthostats in the passageway. It was agreed that an exploratory excavation was necessary before undertaking any repair work. Although he had reservations about taking on the job because of the pressure of other work, O'Kelly agreed to do so, expecting the task to be very dull. The RIA made £800 available and O'Kelly thought that would go a long way in the excavation of a thirty-degree sector in the entrance area. His idea was to see how this went and then decide whether to ask for more and plan any further seasons.

In fact, the excavations, which began in 1962, lasted for a four-month season each summer up to and including 1975 and led to the transformation of the site into what we see today. The exhibition in the centre is worth visiting before going up to the monuments themselves as it gives useful information about the Neolithic people, their lives and religion.

The Neolithic people of Newgrange

The great mounds of Brú na Bóinne (Knowth, Newgrange and Dowth) stand on a ridge below which the river describes a great bend. This landscape was created at the end of the last ice age, around 10,000 BC. The melt water flowing east was blocked by the shale rock at Knowth and forced to follow a course through the fault lines in the shale; it turned south there before being turned eastwards again at Rossnaree, then being forced north-eastwards by the shale ridge of Red Mountain and then more sharply north by Donore hill, going through a gorge and finally resuming its easterly course near the gates of Townley Hall. The melting ice also created the flood plains below the ridge, giving the landscape a terraced appearance under Newgrange. The River Mattock flowing behind the ridge completes the delineation of what is sometimes described as a near-island or peninsula, a place apart in every sense.

It was probably the fertility of the alluvial flood plain that drew Neolithic man to the area in the first place. In another book, the *Shell Guide to Reading the Irish Landscape*, Frank Mitchell gives a convincing picture of the first farmers coming to Ireland in currach-type boats, perhaps ten metres in length; they made landfall first in the north, where the shortest sea crossings were, and then progressed around the coast and up the rivers. With space on each boat for a crew of eight and a load of perhaps two adult cows and two calves (or six pigs, or ten sheep or goats) it would have taken many precarious journeys to colonise the country. Although they would have brought some cereals and grasses with them, the paucity of pollen data for these and the abundance of cattle bones found suggest it was largely a beef and dairy agriculture with the cattle grazing on shrub rather than pasture. The clearing of woodlands may have been helped in the early days by an outbreak of elm disease.

These early settlers would have brought their religion with them and as well as the three great tumuli there are many other smaller passage tombs in the area. There are probably more than fifty of these, of which about twenty are located around Knowth alone. Most of the smaller tombs are thought to be older than the three great ones, which themselves were probably built over earlier ones.

Excavations have provided many insights into life in the Neolithic era. While most bodies were cremated, enough unburnt bones have been found to derive a picture of what these early people were like. It is suggested that they were similar to us today, not as tall but strong, and with similar hair and eye colours. They had high mortality at all ages, especially in their twenties, and very few made it to the age of fifty. There is evidence of bone conditions and pitting of eye sockets due to vitamin deficiency, and teeth were badly worn due to eating flour containing stone particles. The remains of five uncremated individuals found in a cave at Annagh in Co. Limerick, including two who were over fifty-five, had severe dental attrition from using their teeth as a tool for cutting fibres and other materials. Wear on ankle bones showed that they would have been used to squatting on the floor. There is also evidence that they had some knowledge of medicine, and the clean repair of fractures shows that splints were used.

The survival of large numbers of round scrapers implies that animal skins were used extensively, but it is also likely that clothes were made from grasses or from flax and nettles which would have been soaked and pounded before being woven into fabric. Wool and dog hair would also have been used. Bone and antler pins found along with cremated remains may have been worn in the hair or on the body as clothing fasteners, although Frank Mitchell posits that they may have been used to hold together leather bags of cremated bones. The amount of jewellery excavated, including decorated pins,

pendants and clay beads with spacers, shows that Neolithic people also wanted to look nice.

Other items that would have been used include wicker baskets and coil pottery bowls, saddle querns for grinding corn, flint knives and polished stone axe heads as well as arrow heads and yew bows. The discovery of arrowheads embedded in bone shows that Neolithic man was not always peaceful. No doubt scarce resources led to intense competition, but hunting was also an important part of life in those days and deer and other wild animals would have formed a vital part of the economy; fishing would also have been important on a seasonal basis.

Their houses were circular and consisted of a timber frame covered with straw. There was a fire within, which was never let go out, and a storage pit near the fire. They were quite basic dwellings and it is striking that a society which could build such extraordinary tombs did not put more effort into its domestic comfort. Of course, the need to move on as areas of land became sterile would have militated against building more permanent houses. Furthermore, the straw-covered structures would have been warmer and more comfortable than stone buildings.



Fig. 126: Reconstruction of a Neolithic house in the old visitor centre exhibition. The displays were extensively re-modelled in 2020 when many of the models and replicas were replaced by photographs and videos

It is also likely that chieftains would have had bigger and grander houses. Neolithic society would have had to be highly organised, and strong leadership would have been required. The fact that the great tombs of Brú na Bóinne could not have taken all the population of the area (which Mitchell estimated at around 1,200 in Neolithic times, similar to today's population in the locality) implies that they were reserved for an elite, and the presence of the remains of women and children in the tombs suggest that they were used for noble families. It is probable that the society was quite hierarchical.

The visitor centre exhibition includes excellent reproductions of some of the great finds at Knowth: the beautiful flint mace head and the extraordinary spiral phallic stone, the originals of which can be seen in the National Museum in Dublin, and the wonderful large carved basin from the east passage which cannot ordinarily be seen because it is still in the inaccessible chamber.

There is also a full-scale reconstruction of the Newgrange passage that one can walk through. This is useful if you are not able to go up to the monument itself or if the tours are sold out, but is no substitute for the real thing.

The tour

The announcement of the next tour to Newgrange had already been made and I had to hurry to catch the bus a few minutes away on the other side of the river. Locating the visitor centre on the south side of the Boyne was a controversial decision at the time it was built in 1997; it has turned out to be a good one, not least because it brings the visitor right down to the river, so important to the overall topography of the archaeological area and so beautiful at this point. The visitor centre is almost invisible from the river, surrounded by native species such as the oak, ash, alder, willow and hazel trees that would have been here in Neolithic times

I boarded my bus and in less than ten minutes we were being greeted by our OPW guide at the entrance gate of Newgrange. It was my first time back there since the memorable winter solstice morning described in the Prologue. The guide quickly marshalled us to the front of the mound and began to tell us about it. Although he was friendly and light-hearted, his talk was somewhat breathless as he had a lot of information to convey. We had only about forty minutes in total on the site, split fairly evenly between an introductory talk, the visit inside the tomb and time to walk around the outside.

He first emphasised the great antiquity of the tomb which has been radiocarbon dated to around 3000 BC, 'a thousand years older than the Pyramids,' he added with a

flourish. Until the advent of radiocarbon dating, no one had realised that Newgrange could be quite that old. Dating was possible because the builders had used putty made of burnt soil mixed with sand to caulk the gaps in the roof slabs of the passage.

The guide spoke about the method of construction. The passage and chamber walls are formed by huge stones called orthostats and these are of a material called greywacke, a green-grey variety of sandstone that is believed to have been quarried at Clogher Head, the headland at the north of Drogheda Bay. Many of the kerbstones around the base of the mound are also greywacke, including the beautifully-carved entrance stone (K1) and the magnificent stone directly opposite it on the other side of the tumulus (K52). These stones each weighed about the same as a small elephant, according to Geraldine and Matthew Stout's book on Newgrange. They would have had to be carried by boat seven kilometres along the coast and then twenty kilometres up the river, then pulled one kilometre up the bank from the river before being put in place. The Stouts illustrate how this might have been done by strapping the stones below a boat, but it must have been a perilous journey. It is hoped that a jettisoned stone might be found at the bottom of the sea or river some day, helping to prove this hypothesis.

As well as the greywacke orthostats and kerbstones, there are also some limestone kerbstones which are probably local glacial erratics. However, unlike the greywacke, the limestone is unsuitable for carving and these stones are left undecorated. The mound itself is a complex structure built of local water-rolled cobbles with layers of sods here and there helping to hold it in place. The large amounts of quartz at the front of the monument most likely came from the Wicklow Mountains, some seventy kilometres away, although Rockabill Island off the coast of Skerries is another possible source. The round granite boulders interspersed with the quartz came from the shores of Dundalk Bay, more than forty kilometres away. Clearly the assembly of all this material was a major task requiring detailed planning and careful organisation and would have taken many years. Our guide suggested forty years, meaning that it would have been the work of several generations. One of the panels in the visitor centre suggested fifteen years. Frank Mitchell had speculated that four hundred able-bodied persons would have been available in a fifty-square-kilometre catchment area during a two-month spring lull in farming work, and that such an amount of labour could have assembled the material over a four-year period; allowing an extra year for its erection, this would imply five years in all for the construction. However, in his account of his excavations at Newgrange, M. J. O'Kelly pointed out that the materials there are four times what Mitchell had estimated, and he also noted evidence of some interruptions in construction. He acknowledged that it is only a guess, but suggested that the time scale might have been upwards of thirty years.

We approached the tomb entrance. The mound at Newgrange is not a perfect circle but is slightly kidney-shaped, with a rather flat entrance front. The quartz wall extends on either side of the entrance but only covers about a third of the circumference. It was this slice of the Newgrange pie that O'Kelly excavated, as well as a small section at the back of the tomb around kerbstone K52. All the material in this area was carefully removed, allowing access to the stones of the passage, which enabled the method of construction to be studied and the necessary repairs carried out to improve the access to the chamber. The chamber itself was not uncovered. O'Kelly's book describing the work conveys the excitement generated by the discoveries made: when the orthostats near the front were straightened and the roof slab covering them raised, the structure of the roof-box became clear; the measures taken to damp-proof the passage and chamber was another revelation, not just the caulking but the grooves cut in the stones to take the water away; the false arch covering the chamber end of the passage was another discovery - this enables the great weight of the corbelled roof to be distributed at what would otherwise be a weak point, an ingenious piece of engineering for its time.

The entrance is located in a recessed area behind the great entrance kerbstone. To the right of it, the large closing stone is propped against the wall. Originally the quartz wall would have gone up close to either side of the entrance kerbstone and one would have to climb over it to gain entry to the recess. In reconstructing the area, O'Kelly widened the recess to facilitate access and built up the wall here of new stone to make clear it was not original. The great entrance stone with its swirling design of spirals and diamond lozenges has long been the symbol of Newgrange and is one of the finest pieces of megalithic art anywhere. The left-hand side consists of a great triple spiral which flows at the bottom into a series of spirals on the right-hand side. A deep groove down the centre points to the entrance behind. The gaps in the spiral design are filled by the lozenges. It is deeply carved and has survived long exposure to the elements very well. It was clearly carved on the spot, as the bottom of the stone which would originally have stood in a pocket in the earth is not carved at all.



Fig. 127: The entrance of Newgrange today, showing the entrance stone (K1) with its spirals and diamond lozenges and the roof-box above it

Some Neolithic decoration was made by incising a line along the stone but the best carving, as here, was created using a technique known as line-picking. This involved making a series of small pits in the stone using a sharp point made of quartz or flint, possibly following a line initially scratched on the surface. In some cases, the line was finished off by rubbing with a pebble to produce a smoothed groove. Area-picking is when all or part of a design is picked all over; for example, in some cases a lozenge will be half-filled with picking but the other half will only be outlined by line-picking. Pick-dressing is when some or all of the stone is picked away to remove its weathered outer coat, improving the appearance and colour of the surface. The entrance stone exhibits all of these qualities. It is a very abstract but very complete and satisfying composition. If it has a meaning, it has not yet been deciphered.

The tour before us were now coming out of the tomb, and our guide divided our group in two as we would not all fit in together. As I had booked my ticket early, I was allocated to the first group and we ascended the wooden steps that took us over the kerb and into the entrance recess. I lingered at the back of the group, as I wanted to examine the artwork along the passage without being hurried by the people behind.

The passage is nineteen metres long and is lined by great stones or orthostats, twenty-one on the right-hand side and twenty-two on the left-hand side. The first decorated stone is the third one on the right, designated R3, which has spirals at and below floor

level. The passage tends slightly to the right here and the ground level begins to rise. The tomb is built on a small knoll, and the floor of the passage rises by some 1.6 metres between the entrance and the end of the chamber. After the third orthostat, there is a gap in the capstones overhead which allows the light to come through from the roofbox onto the floor of the chamber. The following capstone is a monster, supported by five stones on each side. The last of these on the right, R8, is decorated with horizontally-divided lozenges which are picked out in contrasting ways. There is a small spring after this and a gap after stones R10 and R11, which has led some scholars to conclude that the passage was made in two stages and that the original entrance was around this point.

After stone R10 the capstones ascend like the underside of a stairs and the height of the passage rises to 2.5 metres at stone L17 (on the left side), when it suddenly narrows and drops to 1.4 metres. This is where the relieving arch is inserted in the roof structure, and after this point the roof of the passage, now part of the supporting structure of the corbelled chamber, rises until we enter the chamber. The decoration on the stones becomes more abundant and sophisticated as we approach the chamber. Stone L19 is very finely carved with spirals and zigzags, the effect heightened by careful pick-dressing around the design. It suggests a face with bulging eyes, a screaming mouth and wild hair and is sometimes described as a guardian stone like that in the western passage at Knowth. The ribbed carving on stone R21 is reminiscent of the much smaller-scale carving on the phallic object that was found in Knowth's eastern passage, and the Stouts suggest that it could have been carved by the same craftsman. While radiocarbon dating has put Newgrange and Knowth at roughly the same date, it is usually assumed that they were built sequentially and the possibility that they were built contemporaneously is quite intriguing. This stone, which marks the end of the passage, also has deep oval cup marks and a number of lozenges.

By the time I got into the chamber the guide had already launched into his description of it. No matter how many times I visit Newgrange, the achievement of the Neolithic builders with this space never fails to move me. The central space is covered by a magnificent corbelled dome six metres high, with three recesses off it. The dome begins at the top of the supporting upright orthostats, and rises over ten overlapping courses until it is closed off by a single slab at the top. The structure was further strengthened by the insertion of stone wedges into gaps between the roof slabs. The slabs were placed so that they slanted downwards, ensuring that any water reaching through the mound would run off rather than accumulate on the slabs. Although the roof is estimated to have settled downwards by perhaps half a metre since it was built, and some of the stones have cracked, it is still standing essentially as it was built five thousand years ago. Fascinating, remarkable, astonishing: Newgrange is all of these.

The guide demonstrated how the roof-box works at the winter solstice, sending a narrow beam onto the floor of the chamber and into the back recess. He also pointed out the stone bowls in each of the recesses, and in particular the very fine upper bowl in the right-hand recess with the two curious carved indentations in it. This bowl is made of granite from the Mourne mountains. He drew our attention to the wonderfully-decorated roof slab in this recess, pointing out that in cruciform passage tombs the right-hand recess is often larger and more elaborately decorated than the others.

Some of the carving on this roof slab is hidden by the orthostats supporting it. Wilde noted that some stones were carved prior to being put in place and that they may have been used before. He could not have known the extent of the hidden art at Newgrange. Excavation has revealed hidden art behind a number of the kerbstones: K13 and K18 in particular have over a hundred individual motifs each. Nine roof-stones along the passage are decorated above, including the two stones under the supporting arch and a stone at the back of the roof-box. In addition, some art has been removed by pick dressing. In all, according to Robert Hensey, some eighteen per cent of the entire corpus of art at Newgrange is hidden.

Why is some of the art hidden and why has some been erased? No one can say for sure but that doesn't stop us from thinking about it. Hensey thinks it likely that many of the stones were recycled from an earlier tomb or tombs, and that the hidden or erased work did not conform to the views of the later builders. This accords with his theory that the smaller earlier tombs reflected an individualistic personal religion and that the motifs on the earlier art were individually symbolic and may have had shamanistic significance, whereas the later art, as exemplified by the great entrance stone, reflected a more public religion. As to what this religion believed and what rituals might have been performed in the chamber, we can only speculate.

Although the tomb had been open for centuries when O'Kelly excavated it and much 'dirt' removed, he found the remains of five people in the side recesses along with some grave goods. The bones included those of a well-built man and a slender person of indeterminate gender. The grave goods included chalk balls, pendants and beads and some burnt and unburnt pins. There were no infant bones. A possible scenario is that the dead were either cremated outside or the bodies left on platforms to be picked clean by birds and vermin; the bones would have been collected, washed ritually in the river and once a year solemnly placed in leather bags secured with bone pins, then put

in one of the bowls within the family vault-like recesses⁵. This would probably have taken place at a winter solstice ceremony linked to rebirth.

Our guide was attempting to get us out of the chamber, but I realised he had not shown us some of the art work that I particularly wanted to see. These included, in the left recess, a large spiral design that is said to cause hallucinations if looked at too closely, as well as the very atypical and delicate fern-like carving on the right side of this recess (there is also a *corpus* of nineteenth-century graffiti beside it). Another unusual piece of carving on the side of this stone has been interpreted in the past as a form of writing yet to be deciphered. Wilde considered that the carvings had sacred meanings and came up with a lovely word to describe what he meant: ‘tymboglyphics’, or tomb-writing. Sadly, this word has not made it into our dictionaries.

The requests to leave were becoming urgent, but there was still one carving I wanted to examine. This is on the back of the right-hand orthostat, just inside the end recess, which is tilted towards the rear of the recess and therefore only visible from within it. It is located in the bottom half of the stone on an area which is not pick-dressed, and consists of three deeply-carved interconnected double spirals forming a single motif. It is one of the most familiar images from Newgrange, having been adapted in the past as a logo for the Office of Public Works (OPW) and as a quality trademark for Irish-made products. The Stouts describe it as ‘the single most exquisite carving to be found in the entire corpus of European megalithic art.’ Be sure to seek it out if your guide does not mention it.

⁵ The elite theory got further support from Cassidy *et al*’s paper published in June 2020 and already referred to in a footnote in chapter 3. This paper, which was reported around the world, revealed that DNA analysis of an inner ear bone from the well-built male (denoted NG10) recovered from the right-hand recess showed that he was the child of a first-degree incestuous union. Such unions, which are only known between siblings, are very rare and are associated with god-kings such as Tutankhamun. No other such close relationship has been found in Neolithic Europe. The study also showed that NG10 was related to individuals found at the Carrowmore and Carrowkeel passage tomb complexes 150km west of Newgrange, suggesting links between elites at different locations. No evidence of such relationships has been found from samples taken from other Neolithic burial sites such as court tombs, portal tombs and natural sites.



Fig. 128: Newgrange chamber at the winter solstice with the three interconnected spirals in the foreground (© Photographic Archive, National Monuments Service, Government of Ireland)

Outside - the kerbstones - a second passage - the quartz wall

I was the last person out of the passage, where we met the rest of the group waiting patiently to get in. We had less than fifteen minutes left on the site, barely enough time to walk around the tumulus and examine some of the kerbstones. There were a number of other features I wanted to examine. O'Kelly had decided that Newgrange, unlike

Knowth and Dowth, was never used ceremonially after the Neolithic period, and speculated that this might have had something to do with its particular association with the Dagda and his son Oengus. He held this view despite the fact that many of the finds in front of the mound related to the late Neolithic and Bronze Ages. He considered the evidence of later occupation, including the finding of an arc of clay pits and post holes, pointed to 'squatting' by later people. O'Kelly believed that the twelve great standing stones around the tomb were of Neolithic origin, and questioned if a complete stone circle had ever existed. He suggested that the positioning of the great stones outside the tomb might have been merely a use for large stones brought on to the site and not needed for the tomb itself.

Further excavations in the early 1980s cast more light on the later history of the site. A dig at its south-east perimeter, to clear the way for a hut for guides, found evidence of a further arc of pits and postholes; further digging confirmed that it was linked with the arc discovered by the O'Kelly excavation, and that the two arcs were part of a gigantic circular 'woodhenge' extending beyond the site into the neighbouring field. Deposits found in the pits dated the henge, with 95% probability, between 2875 BC and 2455 BC. As the tomb itself is dated with the same confidence between 3370 BC and 2920 BC, the time difference between the two constructions might be as little as forty-five years or as much as nine hundred. It is probably a lot more than forty-five years, because the implication of the woodhenge is that the religious ceremonies had become more open and public than the secret rituals which would have taken place within the tomb. Nevertheless, the tomb must still have been a very important feature.

The Stouts liken the possible development of the religion over this period to the change in Catholic Church ritual after the Vatican Council of the early 1960s, when the altar was placed more centrally and the language of the mass changed from Latin to the vernacular. A further fascinating discovery, in which the Stouts themselves were involved, was that the great stone circle was built over the woodhenge, implying that it was erected at a later date. Further work by the archaeo-astronomer Frank Prendergast showed that solstice observance continued to be an important feature at Newgrange in the era of the stone circle, as the stone (GC1) in front of the entrance to the tomb casts a shadow on it at sunrise on the winter solstice.

Other stones also have significance at different times of the year. For example, GC-2, the great stone two stones away from GC1, casts a shadow on the entrance stone at the spring and vernal equinoxes, and the three stones GC1, GC-1 and GC-2 are themselves aligned on the rising sun at the summer solstice. An interesting feature of the great stone circle is that it follows a proper circle rather than the mound itself, which is irregularly shaped. At some points it was nearer the kerbstones than at others.

I began my walk around the tumulus, starting at the left side and looking at each kerbstone as I passed. It is extraordinary that all of them are still in place, especially as so many of the stones from the great circle are gone. However, the great circle would have interfered with agriculture, and it is estimated that about seven of its stones disappeared during the nineteenth century to facilitate ploughing of the land. Kerbstones K2 to K10 all have some decoration but nothing significant. As already mentioned, stones K13 and K18 are abundantly decorated at the rear but there is nothing to see at the front. Stones K22 to K47 have never been excavated.

The kerbstone K52 is directly opposite the entrance stone and, like it, superbly decorated. On the left-hand side are interlinked spirals sitting over a pattern of lozenges, the two motifs separated by a natural fissure in the stone. The right-hand side is quite different, with three groups of three natural hollows or cupmarks that have been deepened and rounded. These cupmarks are set within double-lined borders and are surrounded by horseshoe shapes containing triangles. While the left-hand side motifs are similar to those on the entrance and other stones at Newgrange, the right-hand decoration compares with that found at Gavrinis in Brittany. The cupmarks within the bands are reminiscent of the belt in the Orion constellation, and this has led to speculation about an astronomical significance. The stone has a deep groove, similar to that on the entrance stone, separating its two halves; this feature and the quality of its art raised the possibility that the stone marked the entrance to another passage.



Fig. 129: The intricately carved kerbstone (K52) at the rear of the mound

For this reason, O’Kelly, whose main focus was on the front of the tomb, also excavated this area. He didn’t find a passage, but did find evidence of a mound built up of overturned turves sitting on the original ground surface. This mound extended outside the kerb wall and the kerbstones cut across it. O’Kelly thought it might have been an earlier passage tomb, encased within the later great cairn. Later excavations showed that it could be up to fifty metres in diameter and would have extended nearly to the chamber of the main tomb, meaning that it would have been situated on the northern slope of the ridge, largely hidden from the river side. Even more puzzling is that the material in the mound has been radiocarbon dated to the period 3305–3020 BC, compared to the cairn itself at 3200-3000 BC. The lack of any humus growth on top of the turf mound also suggests that the cairn may have been built immediately afterwards; perhaps ambition increased as it was being built.

In June 2022 the film maker Neal Boyle brought a team of Slovakian and Irish geophysicists to Newgrange to test further the second chamber hypothesis using non-invasive means. He had only a budget for nine days on the site so the work was necessarily limited. Although there were theoretically a number of possible locations for a second chamber depending on the alignment chosen by the ancients, Boyle gambled on a summer solstice setting sun alignment and focussed on the area behind K52. Two principal technologies were employed: microgravity which had been successfully tested at Newgrange in 2011 when it was able to detect the known chamber, and ground-penetrating radar (GPR) which was able at Newgrange to penetrate to a depth of eight to nine metres. When the results came back there was no evidence of the clear reflective waves shown up by the existing chamber but there was evidence that could indicate two cavities in a collapsed state. Boyle cited some anecdotal support for this theory: a Mrs Hickey, the caretaker before O’Kelly’s excavations, heard an ‘almighty sound like thunder’ one evening and was convinced a second chamber must have collapsed somewhere inside the cairn. The only sure way to establish this, Boyle concluded, is to carry out an archaeological excavation or, at least, exploratory coring.

The kerb area from K52 to K80 was excavated between 1984 and 1989 to facilitate repairs to the tumulus, after a partial collapse of the revetment wall at this section. This collapse is thought to have occurred because the reconstructed quartz wall at the front didn’t allow enough water to drain out of the cairn. The 1980s excavations, led in their latter stages by Ann Lynch, made many further discoveries about the structure of the cairn and revealed more art. K67, which is in the middle of this section, was already well known and is the third really fine stone in the kerb. Again, the decoration differs between the left and right sides of the stone, with the left-hand side having a pattern of deeply-pocked lozenges and triangles while the right side has two connected spirals

with lozenges above and below, creating the appearance of a face. As with the backstone, K52, it was thought that the special quality of the decoration here must have had some significance but the excavation didn't enlighten us any further. It is thought that the three major kerbstones K1, K52 and K67 were all carved by the same master craftsman.



Fig. 130: Kerbstone K67 at Newgrange

Although the kerbstones vary in size, the pockets in which they sit are adjusted so that the tops are level, about one metre over the original ground level; this means that some of the pockets are quite shallow. Although propping stones were used to hold the stones in place, some of them were not able to hold back the highly unstable mound of loose stones behind them and collapsed forward at an early stage. The repairs carried out in the 1980s aimed to bring these stones back to the vertical wherever possible. In order to keep the cairn material in place, steel gabions containing loose stones were put behind the kerb. These gabions allow water to seep out of the cairn and also provide a base for concrete slabs which project out over the kerbstones, protecting them from the weather. The success of this arrangement led to it being also used at Knowth. It is a practical solution to the perennial problem of leaving ancient stone carvings in place while providing at least partial shelter from the elements. A low revetment wall was rebuilt on top of the slabs and the grass-covered mound was reinstated behind that.

I made my way back to the front and looked again at the great quartz wall. Even before it was put in place there were doubts about it, but O'Kelly was insistent it should be

done. He put the following quotation underneath the dedication at the front of his book on Newgrange:

‘To be a restorer of ancient monuments one should be sheltered by a triple coat of brass, but even a repairer of such required a coat of mail.’ (Dr E. P. Wright, President of Royal Society of Antiquaries of Ireland, 1900)

O’Kelly gave considerable thought to the large amounts of quartz found in the cairn spill around the front of the tomb, which was thickest around the entrance front and petered off around K18 on the west side and K78 on the east. He concluded that a high dry-stone revetment wall made of the quartz stones must have stood above the kerbstones on this front. He conducted an experiment by erecting a sample of such a wall and deliberately collapsing it, finding that the stones fell exactly as he had found them in the cairn spill. O’Kelly was determined to reconstruct this wall but, as it would also have been unstable, it was decided to build a reinforced concrete wall and set the quartz and granite boulders into it. The result is the rather modern-looking wall that we see today, which even his friend Frank Mitchell felt overstated the case.



Fig. 131: View of Newgrange with its controversial quartz wall inset with small granite boulders

Excavations under the quartz layer in the 1980s, just beyond O’Kelly’s wall, discovered two interesting things: firstly, that the quartz was lying on uncovered earth as though it had been prepared for it; secondly, a cow’s tooth was found that was dated to the Chalcolithic (early Bronze Age) period. This implied that the quartz layer was laid down centuries after the tomb was constructed. Ann Lynch believed that the quartz was

probably originally laid as a terrace outside the tomb, rather than built up as a wall. Another possibility is that an earlier cairn wall was deliberately removed and replaced by a terrace. A telling fact is that no quartz was found under the collapsed kerbstones. The Stouts began their book with a discussion of the quartz wall. Although clearly admiring much of what O'Kelly did, they don't believe that the constructors of Newgrange would have built such an obviously unstable wall. They also don't favour the terrace argument, pointing out that it would have hidden the kerbstones and prohibited the shadow-casting on the entrance stone which was a Bronze Age feature. They favour a sloping buttress of quartz placed in front of the cairn stones at an angle of 36 degrees, the 'angle of repose' at which it would have been stable until some momentous event caused the stones to slip forward.

Like everything about Newgrange, it is a fascinating story. It is also intriguing, as we try to understand what was once known but long lost. Known for perhaps a thousand years, sometime during or after the great Irish Bronze Age the mysteries of this place came to be forgotten. Its importance was not; Roman coins found near the entrance showed that votive offerings were made here and that pilgrims came during the Iron Age. The stories surrounding it, tales of the Tuatha Dé Danann and the burial of the kings of Tara, show that its memory continued into the Christian era.

The ritual landscape of the Brú – medieval surveys - recent discoveries

As I walked back to the bus, I looked over the landscape sloping down to the river. Although the tour is focussed on the great tumulus, it has long been known that the area around it contains many other archaeological features, few of which are visible to the casual observer. One that is, a small mound known to the archaeologists as site A, is quite noticeable looking down from the hill but not much else stands out.

The medieval writers of the *Dinnshenchas* had a lot more to say about this landscape which has since been impacted by centuries of agriculture. Cinead h-Ua Artagain's poem 'Brug na Boinnde I' listed the nine *dingna* or remarkable remains that were visible in his day (he died in 975). A slightly later poem, 'Brug na Boinnde II', attributed to Macnia Mac Oengusa lists some fourteen *dingna*. There are also a couple of prose inventories found in the *Book of Ballymote*. Geraldine Stout observes that there is some consistency between the different sources and has bravely tried to match a number of the *dingna* to known monuments. For example: site A is possibly the grave of Aedh Luirgneach, a son of the Dagda; the two paps of Morrigan, the Dagda's queen may be sites K and L (the remains of small passage graves immediately to the west of the great

mound; site P (a large henge close to the river) may be the cashel of Oengus. However, much remains unidentified, including the graves of Conn of the Hundred Battles, Cairpre Lifechair (the son of Cormac Mac Airt) and Boann herself. Perhaps the extraordinary discoveries of 2018 may enable further matches to be made.

May and June of that year saw the most prolonged dry spell in Ireland since 1976. The resulting drought conditions were ideal for the appearance of cropmarks in the landscape, allowing sub-surface features to be seen, especially from the air. Cropmarks occur due to differentiated growth in crops or grass caused by manmade features under the ground and are most distinctive where the plants grow tall, as wheat does.

At around 8.30 p.m. on Tuesday, 10 July 2018, Anthony Murphy and his friend and fellow researcher and photographer, Ken Williams, were taking advantage of the drought and the evening light to get aerial shots around Newgrange using drone technology. Murphy was particularly focussed on Site P, the bank and ditch henge close to the river, hoping to capture new detail that had become apparent because of the parched conditions. At 8.47 p.m. he clicked his shutter on a large circular feature in the wheat field just west of site P. He shouted to Ken Williams, 'What the hell is that?' The two men realised that they had discovered a previously unknown henge and took more photos. It was a striking feature, with what looked like two concentric circles of round postholes around an inner circle of oblong pits. After landing their drones they contacted some archaeologist friends, who confirmed that it was likely to be a henge and a major discovery. They decided to share the images on Facebook and within ten minutes they had gone viral. The following morning media calls began, and the story of 'Dronehenge' was reported around the world.

Shortly after this, the National Monuments Service decided to make an aerial reconnaissance of the area of the Newgrange floodplain to avail of the exceptional conditions. Its interim report on this survey, which took place over July and August, shows a remarkable ritual landscape on a scale not previously imagined. As well as discovering further sites, the aerial survey revealed much new detail about previously-known structures. Furthermore, the monuments seemed to fit into a pattern or framework not known before. The henge that Murphy and Williams had discovered, which has been designated the Geometric Henge because of its distinctive and hitherto unknown layout, is found to be in a line with two other henges: site P, which has been known since 1953, and another henge further west known as the Univallate Henge, which was discovered in 2010.



Fig. 132: Aerial view taken during the drought of 2018 showing the Geometric henge (Dronehenge) in the centre in a line with the Univallate henge in the foreground and the Site P henge (the cashel of Oengus) behind it. (courtesy of Anthony Murphy, Mythical Ireland)

The three henges are roughly the same size and are separated by about 100 m, making a line of about 650 m in all. Together with a number of other features close by, including another probable henge that has been designated the Hidden Henge, this area standing to the south-west of the main tumulus has been designated as Henge Complex 1. In the riverside area to the south-east of Newgrange tumulus another pair of henges has been identified, which has been designated as Henge Complex 2. These henges, which are close to the probable passage tomb known as site B (that I saw on my walk on the other side of the river), are roughly 160 m and 120 m in diameter and are of the earthen embanked enclosure type, like site P. Another henge nearer to the tumulus, and of a similar size to those in the two complexes, surrounds the probable passage tomb known as site A that I had noticed when leaving the great tomb.

One of the most surprising features discovered is what has been designated as the Great Palisade, a linear earthwork consisting of an inner double palisade on a bank with two outer (nearer the river) single lines of palisade fences. This feature, which can be traced for around 900 m, lies roughly halfway between the river and the Newgrange tumulus and seems to bend around the ridge on which it stands. As the interim report states, it is 'tempting to conjecture' that the palisade continued right around the ridge. Long earthwork features like this are known in several locations in Britain, but nothing of this scale or complexity has previously been found.

The purpose of the great palisade is unclear, as is the case with all these monuments, but it is interesting that a different set of monuments lies within it. A number of structures have been tentatively identified as mortuary enclosures, places where bodies would have been exposed on platforms for excarnation, the removal of flesh from the bones. One of these lies just north of site A, but the most dramatic is the so-called Four-Poster enclosure which is in the wheat field just south of the Newgrange farm buildings. It is similar to a site near the eastern entrance at Knowth and to another larger one at Ballynahatty, Co. Down, but twice the size of the latter. It consists of a double ring of palisades with a parallel line of postholes leading to the entrance. Inside are four large post-holes, the possible remains of an excarnation platform. It is possible that the great palisade was designed to keep unwelcome predators from desecrating the excarnation sites rather than just locking out uninvited guests.

The final major monument in the area, that closest to the tumulus, has been named as the Great Rectangular Palisade enclosure. This site was surveyed in 2015, leading to exploratory excavations being carried out on the site in July 2018 under the direction of Geraldine Stout. It was a complex structure, built on ground that had been levelled. It seems to have been about 200 m long with a double row of palisades on each side, separated by a bank, with rows of large and smaller pits within separated by a central aisle. There are indications that it might have been roofed. Its orientation is almost exactly due east, suggesting a possible equinoctial alignment. Its linearity seems to fit with the processional movement associated with cursus monuments and it is tentatively identified as a hybrid cursus. There is some suggestion that it may have been ritually destroyed. The interim report says that it 'stands out as one of the most remarkable features of the Newgrange ritual landscape. Its design and scale are unparalleled in the Irish archaeological record the scale of this building is indicative of the massive resources required to construct it and suggests that, whatever its exact function, it could have accommodated a huge gathering.'

Charcoal deposits found within the site date it to between 2632 and 2472 BC and nearly all the monuments in the floodplain are thought to date to this period, the end of the Neolithic era. The discoveries at Newgrange that came to light in the summer of 2018 soon disappeared again below the surface, but have opened the way for further research, analysis and excavation. It is clear that Newgrange and the Bend of the Boyne have a lot more to give.