Michael J. & Claire O’Kelly
Michael or Brian? Classifying the archaeologists

The O’Kelys met for the first time as students at UCC in 1939 in the Department of Archaeology. “I was only there for the craic”, Claire later admitted, “so I already had a teaching qualification, but Brian was a serious student. In fact, the star of the show”. As students both Michael J. and Claire worked on Seán P. Ó Ríordáin’s excavation of the megalithic site of Lough Gar in County Limerick. It wasn’t long before a working relationship turned to something more serious. With their students years behind them and a position for Michael J. as curator of Cork Public Museum, they married in 1945. The times dictated that they should honeymoon in Ireland and it was in Dingle that a long and fruitful partnership in archaeology and marriage began. Together they spent their honeymoon checking the accuracy of R.A.S. Macalister’s records of ogham inscriptions which had just been published in Corpus Inscriptionum Insularum Celticarum.

Every summer thereafter they were spent excavating at sites, “ranging from megalithic to modern, from west Kerry to north Tipperary”. Much of this work was ground-breaking with scientific applications and experimental archaeology being introduced for the first time. Together this unique partnership would change the face of Irish archaeology.
Claire was born in Cork in 1916 and lived on the banks of the Lee for most of her life. She qualified as a national school teacher and while working as a teacher decided to study archaeology at night in University College Cork under the late Séan P. Ó Íodaráin.

Her working career in archaeology began alongside her future husband at Ó Íodaráin’s Lough Gur excavation. These were remarkable times, when the foundation of modern Irish archaeology were laid with the uncovering of settlements dating to the neolithic and the hitherto unknown beaker period.

She married in 1945, and was forced by the dictate of the time to retire from her teaching post. She now devoted her time to rearing her three children, but as soon as possible was helping out, particularly during the regular summer season excavation. Her role spanned the practical, managerial and domestic all in one day. Often she could be cataloguing finds in the morning, filing accounts in the afternoon and feeding the volunteers by the day’s end.

Among her greatest interests was the Irish language which found practical application when she created many of the archaeological terms for the English/Irish dictionary edited by Tomás de Bháldraithe. Her interest in Irish language and literature led her to research the references to Brú na Bóinne in early Irish literature, going back to the original sources and reaffirming its identification as Newgrange.

During the Newgrange campaign Claire developed other research interests, publishing papers on the Roman finds at the site and the megalithic art of the Boyne Valley. She painstakingly traced all the carved stones at Newgrange, thereby creating the first complete corpus of the decorated stones.

She also published together with Michael J., a detailed survey of Dowth, the result of countless hours below ground in the cold and damp, working by candle light and lantern. Her own publication, *Illustrated Guide to Newgrange*, was the first of its kind in Ireland, aimed as it was at the intelligent layperson.

As if this were not enough, she undertook to feed and house the army of archaeologists, distinguished visitors and international students who arrived every season to work on the excavation at Newgrange, as well as looking after her own three children.

In the years following her husband’s death, she embarked on the task of preparing for publication his unfinished manuscript *Early Ireland, An Introduction to Irish Prehistory*, while also ensuring that his papers and excavation archives were put in order and deposited in the relevant institutions.

In recognition of her work she was elected a Fellow of the Society of Antiquities of London in 1984.

During an excavation at Ballyvournay in Cork in the early 1950s, Michael J.’s attention was drawn to two sites nearby that were known as ‘fulachta’. They had variously been interpreted as smith’s forges or the cooking place of that famous band of warriors, the Fianna.

These small mound were found all over the country and consisted of a large heap of burnt or cracked stones. Determined that experimentation may provide some answers, Michael J. decided to test the cooking place explanation. He dug a trough in the ground, lined it with wood and added water. Hot stones from a fire were applied and to their amazement the 100 gallons of water duly boiled. Two legs of mutton of 5 kilos each, wrapped in straw, were added. Under the watchful eye of Claire and Michael J. the water was kept just below boiling. When the calculated time had elapsed, the perfectly cooked meat uncontaminated by the bitter taste of ash or bog water was shared out amongst those present.

“As we gorged ourselves upon the meat in the glade that day,’ wrote O’Kelly, “it required little imagination to picture the ancient hunter-warriors who had done just the same thing centuries upon centuries before.”

Shortly afterwards at a similar site, the President of Ireland, Eamon de Valera, came to visit. He naturally wanted to know how old the site was, a question which no one knew the answer too. Michael J. happened to mention a new discovery by Willard Libby in Chicago which could date organic material. “You send me a few samples”, said the President, “and I’ll see that they get to Dr Libby”. The samples returned from the Chicago laboratory and producing a date of 1500BC. It was the first use of C14 carbon dating in Ireland.
The O’Kellys at Newgrange

By 1961 Newgrange was in a dilapidated condition and despite the rapidly increasing number of visitors, there was no right of public access. It was becoming clear to many that this, one of the greatest monuments in Western Europe, could not be left in its then condition. PJ Hartnett, the archaeological officer with Bord Fáilte Eireann (Irish Tourist Board) and a former pupil of Professor O’Kelly’s, arranged a meeting at Newgrange of all those who had a professional interest in the monument.

1st Nov: A letter from Hartnett to Professor O’Kelly asks him to attend the meeting at Newgrange. ‘We have decided that you should join the sub-committee . . . at Newgrange. I enclose . . . the ten points we propose to discuss on the site and I hope I can count on your enthusiastic support in getting something done to improve the presentation of this most important archaeological monument.’

6th Nov: Professor O’Kelly attends at Newgrange as part of the committee. The monument was carefully considered and it was agreed that before any conservation work could be done, excavation must take place. ‘After some discussion it was agreed that Professor O’Kelly (Cork) would consider undertaking this exploratory excavation. Work would start not earlier than June 1962 and Professor O’Kelly could draw from the £800 available from the academy for excavation work.’

9th Nov: A letter from Hartnett to Professor O’Kelly urges him to take on the excavation. ‘I do hope you will make up your mind to do this excavation and I believe you will have wholehearted support from our organisation here.’

13th Nov: O’Kelly replies to Hartnett agreeing, with some reservations, to begin work excavating Newgrange. ‘I have hardly thought of this since due to pressure of other work, but I don’t see any reason why I shouldn’t take on this task. I feel that it will probably be very dull in itself, but it would give me a chance to become more familiar with the site on the east side than I am now.

15th Nov: Hartnett expresses his delight at securing O’Kelly to do the excavation. ‘Your letter of 13th instant [ly] raised the cockles of my heart. I am so glad that you are prepared and seriously considering doing the job at Newgrange. It was the unanimous wish of the meeting that Professor O’Kelly should undertake the direction of the excavation, being the acknowledged expert in archaeological excavation and exploration in Ireland. In the past he took the preservation of ancient sites very seriously and the preservation of Newgrange can in that respect be left in his capable hands. I have no doubt that I chose the right man for myself and for the committee.’

Netherville, 3km from Newgrange, was home for many years during the excavation season at Newgrange. Housed under its huge Victorian roof were the O’Kellys and their three children, as well as a large cohort of students from both Ireland and abroad. It was here that the domestic practicalities – feeding and washing – of a large excavation were organised by Claire O’Kelly.

Claire also co-ordinated her survey of the art of Newgrange here, spreading the huge tracings and drawings in the large rooms of Netherville in an effort to prepare them for publication.
Excavation 1962 – 1975

The floor of the passage and chamber were excavated. etc etc.

Newgrange stands was carried out.

The O'Kelly's at Newgrange (foreground centre) during the course of the 1964

E. Estyn Evans
courage of his convictions.'
to the end and has always had the
qualities of one who pursues truth
variety of sites but also the personal
experience of excavation on a great
years. To this mammoth task
Newgrange, which occupied him
remembered as the excavator of
ʻProfessor O'Kelly will long be
better methods and new scientific approaches, should have large areas untouched by us in which to test,
other two thirds should be left for a future excavator, who, working with new knowledge and perhaps with
structure and in its ornament, while radiocarbon had pushed its date back by 1,000 years. We felt that the
The last year of excavation
The original excavation radius was considerably exceeded in the southeast by the discovery of the satellite tomb (site Z). This area (5 acres) bounded by a hedge was purchased for the state on the recommendation of the 1961 Committee. The hedge enabled access for large-scale work to begin.

Unexcavated mound slip Site Z Kerbstones 51 – 53, raised back to the vertical, in the north cutting. GC–10 in the great circle Behind Kerbstones ? excavations revealed the bottom course of the original wall on the north side of Newgrange.

Area excavated between 1962 and 1975 by Prof. M.J. O’Kelly

The Great Circle
The great circle contains twelve surviving orthostats with a diameter of 103.6m. The purpose of the excavation was to:
• investigate the great circle
• establish if gaps in its circumference had originally contained orthostats
• to establish the chronological relationship between circle and cairn. Excavation established that the circle was erected before the cairn had collapsed.

1962 (far left) The great circle in the first season of excavation at Newgrange. (left) A large pit, 2m in diameter in the foreground, may have been the socket of another orthostat.

The north cutting A cutting was made centred around Kerbstone 52 which is diametrically opposite the entrance stone. Its purpose was to:
• establish a profile of the cairn slip on the north side
• to re-erect the highly decorated K52
• to test the theory that another entrance lay behind K52. None was found.

The aerial view of the excavation in 1967?
The passage and chamber

A considerable amount of disturbance had taken place over the centuries to the floor of the passage and chamber. A surprising number of finds, forming part of the original grave deposit were made during the excavation. They were; 7 marbles, 4 pendants, 2 beads, a utilized flint flake, a bone chisel and fragments of several bone pins and points.

A considerable quantity of human and faunal remains was found, the former comprising both burnt and unburnt material.

"To be a restorer of ancient monuments one should be sheltered by a triple coat of brass, but even the repairer of such required a coat of mail".

A favourite quote of Professor O'Kelly's by E.P. Wright on the perils of excavation and restoration.

The Cairn slip

Numerous sectional profiles of the periphery of the cairn and of the slip from were recorded and were found to be basically the same throughout. The material outside the kerb stone can be clearly seen to have slipped off the mound. The stratification of this slip is of particular interest because it is from this evidence that Professor O'Kelly deduced the original shape of the mound.

During the excavation the front part of the passage roof, including the roof-box, had to be removed in order to restore the passage orthostats to the vertical. An eight layer plan of the roof was drawn (right), on which the position of every roof-stone and corbel was plotted and as the roof was being dismantled, each stone was numbered in sequence and the same number affixed to the corresponding stone in the plan. When the work on the passage orthostats had been completed it was thus possible to restore the slabs to their former positions with complete accuracy.

Quartz wall

The excavation showed beyond doubt that in its original condition, a 3m high wall stood almost vertically on the kerb and acted as a retaining wall for the cairn material forming the edge of the mound. This wall was built in white quartz on the south-eastern third of the periphery and in selected boulders of sandstone in the other two thirds. When the wall failed, the edge of the cairn began to slide down until finally the kerb became completely hidden.

In the last years of the O'Kelly excavation the Office of Public Works undertook to restore the quartz wall base on the archaeological findings and interpretations.
This rare sequence of photographs from the excavation records the restoration of the passage roof and roof-box in 1967. All of the cairn from above the first third of the passage has been excavated (embrasure cutting) and removed and the orthostats of the passage have been straightened (see above left).

The sequence begins with the placing in position of the large stone RS1 by crane (2–6). An OPW crew manoeuvres it into position under the watchful eye of Professor O'Kelly (grey jacket), Claire O'Kelly (white and beige top) and senior members of staff at the Office of Public Works. Professor O'Kelly checks its exact position from within the passage (7,8) while Claire helps position it from above (9). Another stone Co.3/L5–6 has been removed earlier (1). The decorated surface was originally completely hidden as this stone acted as a corbel for the passage roof. It was removed to the National Museum.
Winter Solstice 1967

Great flocks of starlings are flying across the sky from their night-time roosts to their day-time feeding places. The effect is very dramatic as the direct light of the sun brightens and casts a glow of light all over the chamber. I can even see parts of the roof and a reflected light shines right back in to the back of the end chamber.

The recorded words of Prof O’Kelly spoken in the tomb of Newgrange on the 21st Dec 1969.

The carved lintel stone which forms part of the roof-box, photographed in 1950.

Antiquarians had commented on it from 1830 onwards, describing it as a false lintel.

Over the course of the early excavation, some of the many local visitors would often tell the O’Kelly’s of a tradition, that the rising sun, at some unspecified time, would light up the triple spiral stone in the end recess of the chamber at Newgrange. Unfortunately, ‘no one could be found who had witnessed this but it continued to be mentioned’, the O’Kelly’s at first assuming that there was a confusion with Stonehenge and the mid-summer sunrise alignment there.

A conversation between the O’Kellys on the persistence of this tradition, planted in the mind of the Professor that, ‘a south-east orientation would be correct at the mid-winter solstice’ and that perhaps this tradition was more than a figment of the local people’s confused imagination.

Abandoning the preparations for Christmas to Claire, Professor O’Kelly made the long journey up from Cork to Newgrange on the day before the winter solstice, the shortest day of the year, to test out his hunch.

Some minutes before sunrise on the 21 December 1967, Professor O’Kelly stood alone in the darkness of the chamber at Newgrange, wondering what, if anything, would happen. To his amazement, minute by minute, the chamber grew steadily lighter and a beam of sunlight began to enter the passage and to travel inwards, ‘lighting up everything as it came until the whole chamber – side recesses, floor and roof six metres above the floor – were all clearly illuminated’. O’Kelly stood rigid for a while, transfixed by the phenomenon and convinced and fearful in his own imagination that the Dagda, the sun god, who according to the ancient tradition had built the tomb, was about to hurl the roof upon him.

Fortunately the roof remained in place, the sun retreated and he walked from the tomb, the first person to have witnessed the light of the sun penetrate the darkness of the chamber at Newgrange since ancient times.

Subsequent work by Dr Jon Patrick, commissioned by O’Kelly, established that the orientation of Newgrange towards the rising sun of the winter solstice was deliberate.

He reported that, ‘It therefore seems that the sun [in theory] has shone into the chamber ever since the day of its construction and will probably continue to do so for ever.’

Further observation by O’Kelly established that the spectacle occurs for a number of days before and after the winter solstice. He himself would witness it at least once a year for the remainder of his life.

Since the discovery of the winter solstice phenomenon at Newgrange other archaeologists have gone on to discover solar alignments with other megalithic monuments in Ireland.

The triple spiral carving in the north recess of the chamber at Newgrange.

Professor O’Kelly examining the restored roof-box, c.1967.

Once excavation had cleared the cairn above the carved lintel it became clear that it was the roof-stone of a box-like structure. It became known as the ‘roof-box’. Because of its uniqueness within the passage tomb tradition its purpose remained a mystery.

A belief that it was an offering place to the spirits was discounted because not a single sherd of pottery was found in its vacinity.
Surveying and recording