

Ludovic McLellan Mann (1869–1955): ‘the eminent archaeologist’

J N Graham Ritchie*

ABSTRACT

Ludovic McLellan Mann was a controversial figure in the archaeological world of the 1920s and 1930s, particularly in Glasgow. An innovative accountant and insurance broker, his passion for archaeology and for the preservation of the artefacts of the past was inextricably linked with his compulsion to collect them. He used the press, radio and exhibitions to inform as wide a public as possible about the importance of reporting finds and was unstinting in recording chance discoveries in gravel digging or peat cutting. His interest in the use of exhibitions in engaging an involvement in what is now termed ‘public archaeology’ and in experimental work deserve to be better remembered. His extensive collection was bequeathed to Glasgow Art Gallery and Museum. He had an unquestioning belief in the capacities of prehistoric peoples in measurement and cosmology, which led to an estrangement with the archaeological establishment in Scotland. He is certainly the only person to have bequeathed a ‘Druid Temple’ to the Corporation of the City of Glasgow; the excavation of the site at Knappers, Clydebank, remains one of the most unusual tales of Scottish archaeology.

INTRODUCTION

Passages of Ludovic McLellan Mann’s will (of 20 August 1954) indicate rather tellingly how he wished his contribution to archaeological and historical studies to be remembered. (These have been much shortened here and personal bequests removed. Frequently Mann was inconsistent in the spelling of Mac, Mc or M’ in published form; Mc is preferred here.)

I Ludovic McLellan Mann, Insurance Broker, residing at Four Lyndoch Crescent, Glasgow, in order to settle the succession to my means and estate after my death, do hereby nominate [a series of Trustees to ensure]: (FIRST) For payment of all my just and lawful sickbed and funeral expenses . . . (SECOND) [a series of personal legacies]; (THIRD) I bequeath to the Corporation of the City of Glasgow such parts

of my collection of historical and prehistoric relics as may be in Kelvingrove Museum, Glasgow or otherwise in their custody at the time of my death; (FOURTH) I bequeath to the Scottish National Museum, Edinburgh, such parts of my collections as may be lent to it and in its custody at the time of my death; (FIFTH) I bequeath to the Corporation of the City of Glasgow: the site of the ground owned by me near Clydebank which contains the remains or part of the remains of a Druid Temple; (SIXTH) I bequeath to George Appleby . . . manuscripts, drawings and papers pertaining thereto; (SEVENTH) I bequeath the residue of my estate to my nephew the said Arthur Harrington Mann (NAS SC 36/51/402, 250–3).

The individual headings of his will help to set the contribution of this unusual antiquary in context, for although we may not always

* 50/1 Spylaw Road, Edinburgh EH10 5BL

agree with his interpretations, his unfailing belief in the importance of the past and the preservation of its vestiges has many resonances that we recognize today, even if his methods were personal and flamboyant. This paper sets in context his family and his life; his collections of artefacts; the archive of his personal papers; and the site of his excavations at Knappers, near Clydebank (the Druid Temple of his will). In the context of the lecture series we have to consider the contribution of an amateur antiquary within a changing environment. Mann may not always have been right, but he used what we would now think of as the communications media to engage as wide a discussion as possible about important issues. His bequest to the National Museum of Antiquities of Scotland is recorded in our *Proceedings* (91 (1957–8), 200).

A note on sources is perhaps appropriate to what should be seen as a personal essay. My own introduction to Ludovic Mann was by a message in a bottle. In 1966 I was exploring a cairn at Balnabraid in Kintyre to see whether by judiciously placed trenches I could make sense of the earlier excavation plan published in the *Proceedings* by Mrs T Lindsay Galloway (1920), when I found a reconstituted cist with a ginger-beer bottle in it. I ran down to the stream below the site to wash the bottle and to see if there was anything inside. I prized out the cork and sure enough there was a scrap of paper that said, 'This cairn has been excavated by Mrs T Lindsay Galloway, Mr Ludovic McL Mann, Mr A Henderson Bishop and Mr Mungo Buchanan' (see also Ritchie 1967a). Later, in following up the cave excavation at Keil, also in Kintyre (Ritchie 1967b), by our Fellow Mr J Harrison Maxwell, a retired lecturer in Adult Education, I got to know Mr and Mrs Maxwell and discovered that Mr Maxwell had worked closely with Mann. After Mr Maxwell's death his widow asked for advice about what to do with his extensive series of glass slides. Some had been copied from published volumes, but others illustrated

unpublished excavations and some were clearly made from a notebook showing the excavations at Dumbuck Crannog on the Clyde. The slides were added to the collections of the National Monuments Record of Scotland. One site for which there was extensive coverage was that of Knappers excavated by Ludovic Mann in 1937–8, but never published. I resolved to set out an account of this with Helen Adamson, then of Glasgow Art Gallery and Museum, and we made contact with George Applebey who, I understood from Jack Scott of Glasgow Art Gallery and Museum, might have additional papers from Mann. At this stage we did not know about Mann's Will, naming Mr Applebey (incorrectly spelled) as executor. Mr Applebey could not have been kinder, lent us additional material, and approved of the published account in our *Proceedings* (Ritchie & Adamson 1981). On Mr Applebey's death in 1990, Mrs Applebey and her son George sought advice about the archaeological archive that they held about Mann. For the first time the scale of the material became apparent. Mrs Applebey and her son were happy with the suggestion that the material be presented to the National Monuments Record of Scotland. I have stressed the way that the documentation has been preserved and augmented, for few such full personal records of archaeological endeavour survive. It is entirely due to George Applebey's careful custody that so much has been preserved. The documents show a populist approach that might be contrasted with more traditional attitudes of the time, an awareness that, if you get the rambler and the quarry-foreman interested, or contribute to a works magazine (for example Mann 1930b), archaeological information might be saved. Also a firm belief that the mental capacities of prehistoric people should not be underestimated, and nothing was more guaranteed to get Ludovic writing to the press than his rebuttal of the idea that prehistoric man was a savage.

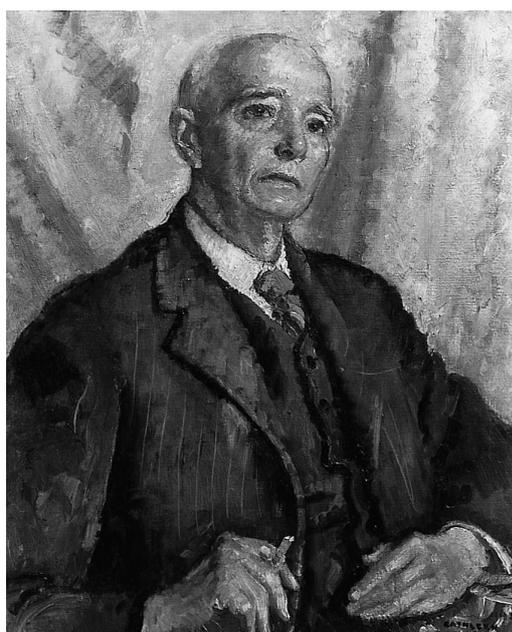
Mann died on 30 September 1955, aged 86. The impression of his later years is of someone disappointed, lonely and ill. Several people involved in archaeology at the time remember visiting him in his bedroom in his house at 4 Lyndoch Crescent, Glasgow, looked after by his housekeeper, Mrs Helen Faulds. His will is revealing in showing how he wished his contribution to archaeology to be remembered with his collection of artefacts to remain in the public domain and the site of Knappers to be in public ownership. In fact I have been unable to discover whether the Corporation of the City of Glasgow accepted the parcel of land, and the plot is now a landscaped area between two high-rise flats.

FAMILY

Ludovic Mann was born in Langside, Glasgow, in 1869. His father, John Mann, was a well-known Glasgow accountant who was said to have lost a fortune in the collapse of the City of Glasgow Bank, and was apparently a pioneer in the use of shorthand; his mother, Mary Newton Harrington, is credited with the writing of two novels. His eldest brother, John, was Director of Contracts in the Ministry of Munitions and was said to have saved the country large amounts of money by applying improved costing methods in the production of munitions (he was later knighted). Harrington Mann became a distinguished portrait painter, including a chalk drawing of Ludovic himself in 1905 (illus 1), and was the father of Cathleen Mann who married the Marquis of Queensberry and was a noted dress designer, painter of portraits, still-life and flowers. Cathleen Mann painted Ludovic in later life (illus 2). The third brother, Arthur, emigrated to the Argentine and became owner of an *estancia*; he died in 1933 and Ludovic maintained business interests there which involved several visits to South America. Ludovic was the fourth and youngest brother. His sister, Hilda, also had artistic leanings. The artistic aspects of the family are traced back to his paternal



ILLUS 1 Ludovic McLellan Mann by Harrington Mann, a chalk drawing of 1905. (Photo: Glasgow Art Gallery and Museum)



ILLUS 2 Ludovic McLellan Mann by Cathleen Mann. (Photo: Scottish National Portrait Gallery)

grandfather, a skilled portrait painter, and maternal grand uncle, an animal painter (*The Bailie*, March 1923, 4) and can be explored through the entries in McEwan (1994).

Claims Paid, £10,000,000

To INSURANCE AGENTS—

Describe briefly your Client's Business, when a draft of a simple, scientific, moderately-rated Policy (embodying the latest improvements) for

PROFITS INSURANCE

will be sent you by the

WESTERN Assurance Company, A.D. 1851

the Pioneer Company, following Mr. LUDOVIC McL. MANN'S Copyrights.

Head Office Dept.: 144 St. Vincent St., GLASGOW.

ILLUS 3 Newspaper advertisement of 1908 for Western Assurance Company, 'the Pioneer Company, following Mr Ludovic McL Mann's Copyrights'. (*Royal Commission on the Ancient and Historical Monuments of Scotland*)

He described his education as 'in Scotland and on the continent', but there seem to be no further details. In a paper in 1938 he stated that he had attended the University of Glasgow in his teens (Mann 1938a, 16). By 1923 the profile in *The Bailie* notes that he knew from a business point of view most of the European and American cities as well as such out-of-the-way places as the Turkish plateau of Angora in the east and the mammoth caves of Kentucky in the west.

MANN THE INSURANCE BROKER

He became, by examination, an Associate of the Institute of Chartered Accountants and Actuaries in 1898, and he was for a period a Councillor of the Corporation of Insurance Brokers, London. In 1899 he invented the system of consequential fire loss indemnity which he copyrighted on 26 January 1900. The system, later universally adopted, was described as Consequential Loss Insurance. He spent some time with Western Assurance Company, a Canadian company, and in December 1907 was appointed manager in Glasgow of that company's department for the insurance of profits and standing charges (illus 3). To complete this aspect of his career,

he was later to become Senior Partner and Managing Director in the firm of Mann, Ballantyne & Co, Insurance Brokers and Independent Neutral Advisors, with offices in Glasgow and London.

MANN THE ARCHAEOLOGIST

His interest in archaeology was of long standing for he became a Fellow of our Society in 1901 and was a member of Council between 1906 and 1909. He was active in the Glasgow Archaeological Society in leading and lecturing to excursions and served as President in 1931–3. He was President of Provand's Lordship Club in Glasgow, in 1934–7.

EARLY PAPERS

Mann's early papers in our Society's *Proceedings* are models of the presentation of archaeological material (1902). His report on the excavation of pits (which contained the remains of wooden posts) within Mye Plantation, near Stoneykirk, Wigtownshire (1903) is laid out with a contents page that explains the organization of the report (unusual even today). They are interpreted today as pit-falls for trapping game and appear to be of late Neolithic date. The careful observations are systematically set out. Casts were made of the post ends and casts were also made of bars of soap that had been trimmed, in one case with a stone axe and in the other a bronze axe to demonstrate the difference. He lists the examples of axe markings on wood known to him from Britain and Europe. The excavations were visited by J Graham Callander, and Mann acknowledges the assistance of Fred Coles in turning his site-sketches into plans. His use of what would now be thought of as experimental archaeology to try to understand the posts was a considerable innovation. He also described the work in the *Transactions of the Dumfriesshire and Galloway Natural History and Antiquarian Society* (1908b).

In a preface to the privately printed offprint of Stoneykirk, Mann raises an issue that was

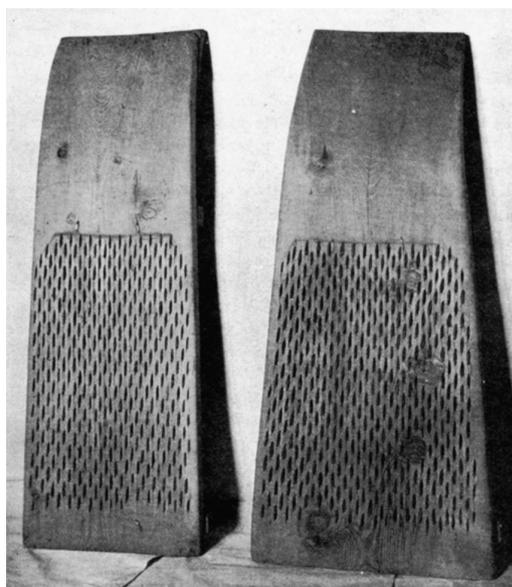
to be important to him throughout his life: an issue that we would now describe as rescue archaeology. He bemoans the slow extension of archaeological knowledge in Scotland:

The reason for this is plain. It is not that in Scotland opportunities for securing information are rare, the disclosure of prehistoric sites being frequent. It is that such remains are, as a rule, thoughtlessly wrecked and obliterated on their coming to light, and that very rarely indeed is an attempt made to record fully and accurately the facts revealed.

He also writes that he hopes that he may be favoured by a communication from any reader who may hear of the discovery of ancient remains or relics.

Something of the breadth of his interests may be gauged by the topic of his next paper in the *Proceedings*, 'Notes (1) on two Tribula, or Threshing-sledges, having their under surfaces studded with rows of chipped flints, for threshing corn on a threshing-floor, from Cavalla, in European Turkey, now presented to the National Museum: and (2) on primitive implements and weapons made of flakes of flint or other stone set in wood or other substances' (1904). It is not many a paper that can begin, 'Before I left last summer for a journey through European and Asiatic Turkey, Dr Joseph Anderson suggested that I might endeavour to secure a specimen of the flint-toothed threshing-sledge, one of the most interesting of the surviving implements in the construction of which flint is used (1904, 506)'. His account is a well-observed piece of modern ethnography with discussion of other artefacts where flints might be set into wood, such as sickles (illus 4). He returned to the subject of flint-toothed sledges in a short letter to *Man* in May 1931 (Letter 108), where he mentions the problem of the accidental importation of detached flints as a caution to collectors.

In 1905 rescue excavation at Newlands, Langside, Renfrewshire, revealed several burials in Cinerary Urns, which were carefully excavated and recorded (Mann 1905).



ILLUS 4 Threshing-sledges from Cavalla, Turkey, collected by Mann for the Society's collections

Enlarged photographs were employed to illustrate the techniques used by the prehistoric potter, and experiments were carried out to throw light on the nature of the four-plaited cord employed, by impressing on soft clay similarly plaited vegetable and animal fibres. The presentation was well-ahead of its time.

Two other early papers may illustrate his range of interest and his willingness to set off to the site of a discovery to record what he could about the circumstances of the findings. In one paper with a portmanteau title, Mann discussed in 1906, 'Notes on – (1) A drinking-cup urn found at Bathgate; (2) a prehistoric hut in Tiree; (3) a cairn containing sixteen cinerary urns, with objects of vitreous paste and gold, at Stevenston, Ayrshire; and (4) prehistoric beads of coarse vitreous paste'. He followed up the discoveries at Bathgate and Stevenston with personal visits and found the Tiree site himself on a visit to the island (the material was later illustrated in Euan MacKie's discussion of Iron Age material on Tiree in 1964). A later paper shows his interest in

craggan pottery from Coll (1908a). In February 1921, after the finding of Bronze Age goldwork at Whitefarland, Arran, he set off to Arran to see what more could be discovered at the site, and a further gold object was indeed recovered (1923a). An Arran farmer did some digging into a small and unusual passage-grave and then invited Mann's co-operation to complete the work (1925a). The second half of this short paper relates to flanged axes from Pirnmill, Arran, and is interesting in the chain of communication that it reveals; the finder sent the fragments to the editor of the *Daily Record*, who asked Mann to investigate. Many of the items in Mann's collection come from Wigtownshire, and he had a particular contact there. Thus in spring 1922 he was invited to visit Lower Glengyre, Wigtownshire, to investigate the discovery of a Cinerary Urn (1923b). How different to today's likely chain of events and how key Mann's profile was to the material being preserved. For example when Bronze Age flanged axes from Pirnmill, Arran, were sent to the *Daily Record* office the editor got in touch with Mann, who set off to examine the site of the discovery (1925a, 254–5).

His interest in measurement will be discussed later, but a paper on carved stone balls came to the conclusion that they were part of a system of weights which underlay commercial activity in early Scotland (1914). His paper on perforated stones of unknown use is illustrated with carefully composed and well-lit photographs by A Henderson Bishop, and many of the artefacts are from Bishop's own collection (1917). Mann's work on pitchstone, outstanding for 1918 (1918a), was favourably commented on by later researchers including Roy Ritchie (1968); it shows a wide-ranging interest and an awareness of the importance of the involvement of scientific expertise.

Mann had a long interest in the pre-Neolithic era, what is now known as the Mesolithic period, contributing a letter to the *Glasgow Herald* on 30 August 1902 where he drew attention to the interesting results that

excavation of the shell-mounds on Oronsay had produced. In 1913 he acted as assistant to A Henderson Bishop on excavations on Oronsay (Bishop 1914, 56). The practical work of survey was undertaken by Mungo Buchanan. Bishop proposed the term Oronsay culture for these pre-Neolithic remains (1914, 102; see also Mellars 1987, 126–9). In 1920 he did some excavation on his own behalf on Risga in Loch Sunart. 'Obeying a summons to visit the island, and tempted to do so by some humanly-worked bones that had been submitted to me', he began and recovered material that could be linked to that from Oronsay. His account in the *Glasgow Herald* of 21 August 1920 has been reprinted by Pollard et al (1996, 178–80) in a report on more recent work on the island. One must respect his energy in making the journey from Glasgow and the subsequent need to engage a boatman and find somewhere to stay. He was an indefatigable investigator of the past, though sometimes he lost steam and the Risga material was not published until 1954 by Lacaille, who acknowledges Mann's co-operation (xx, 229–39).

Thus we have the picture of a much travelled and active antiquary of wide reading and interests and inventive spirit.

DUMBUCK CRANNOG

But archaeology may also be a matter of passions and extremes, nowhere more than on the question of forgery. Excavation of a timber structure in the mudflats of the river Clyde at Dumbuck, Dumbartonshire, by W A Donnelly and John Bruce produced material that was doubtful to say the best of it. Andrew Lang wrote to the *Glasgow Herald* expressing his doubt about the Roman origin attributed to some of the finds (27 November 1902). Mann contributed to the debate in the *Glasgow Herald* in 12 December 1902 and Graham Callander was complimentary of his approach on 22 December 1902. From an archaeological point of view, the glass slides mentioned at the beginning of this lecture from the collection of



ILLUS 5 Kelvingrove Museum, Glasgow, with the new displays of the Mann Collection. Photograph from the *Glasgow Herald*, 16 September 1929. (*Royal Commission on the Ancient and Historical Monuments of Scotland*)

Mann's associate Harrison Maxwell, which must have been made from Donnelly's notebooks, confirm that there is no doubt as to the basic authenticity of the site and that Robert Munro's assertion that it was a medieval fishing station (*Athenaeum*, 18 April 1903) is not correct. It would be hard to fake the illustrations of the timber structure so convincingly. Andrew Lang took up his pen on Donnelly and Bruce's behalf, both in the newspaper columns and in an exposition on the *Clyde Mystery* (1905).

EXHIBITIONS

Mann had an overwhelming interest in extending public awareness of archaeology by many means, through writing, lectures, but particularly through exhibitions. He organized the Prehistoric Section of the Scottish Exhibition of Natural History, Art and Industry in 1911 including many objects from his own

collections. Set in the Palace of History, a building based on Falkland and Holyrood Palaces, packed cases held a multitude of objects and explanatory banners lined the wall. Mann gave several lectures on 'Glimpses of Scottish Pre-History'. A sculpture of a prehistoric man by Alexander Proudfoot, later head of Sculpture in Glasgow School of Art, was the centrepiece. Details of the anatomy were provided by Professor T H Bryce. A very large number of people visited the exhibition, one of the most popular exhibits being the recreation of a Highland village, the Clachan (Kinchin & Kinchin nd, 94–125). The Introduction to the catalogue allowed Mann to return to the question of the underfunding of Scottish archaeology and the wanton destruction of sites (*Palace of History* 1911, 809–10), 'If the Prehistoric Gallery assists in substituting for a merely idle and antiquarian curiosity a strong, intelligent scientific interest, the labours of



ILLUS 6 Ludovic McLellan Mann as Archaeological Observer, Scottish Empire Exhibition in Bellahouston Park, Glasgow, 1938, a cartoon from *The Bulletin*. (Royal Commission on the Ancient and Historical Monuments of Scotland)

those who have devoted two years to the preparation of the Gallery, and a much longer time to the collections of its contents, will be amply repaid'.

In 1918 Mann organized an exhibition at Langside Public Library of objects connected with the Battle of Langside (1568) and Mary, Queen of Scots. The objects came from the Pollock and Hamilton Palace collections along with many other private and institutional lenders, including the City of Glasgow. Local artefacts too were displayed, including the prehistoric vessels from Newlands and the cup-and-ring marked stone from Langside. Mann wrote a book to accompany the exhibition and the proceeds of the sale of the volume were donated to the war relief funds (1918b). Exhibitions gave him a particular interest in the question of how best to display archaeological material. In 1911 Cinerary Urns were laid

out in a reconstructed mound (*Palace of History*, facing 840). Much of his collection was displayed in Kelvingrove in a newly appointed Prehistoric Room in 1928 (illus 5). The cists excavated at Mount Vernon and the vessels in them were shown in a reconstructed setting and the newspapers were complimentary about the modern methods of display. At the Daily Mail Scottish Ideal Home Exhibition in 1932 Mann created an exhibit of pottery from his collection to show the range of styles through the ages, from prehistoric pottery to craggan ware.

He was involved in the Scottish Empire Exhibition in Bellahouston Park, Glasgow, in 1938, with a contemporary cartoon offering some gentle mocking of his role as an antiquary carefully labelling broken wooden golf-clubs (illus 6). He was also much involved in the setting up of Scotland's contribution to the



ILLUS 7 The cup-and ring markings at Cochno, Dunbartonshire, painted in for a visit of the Glasgow Archaeological Society, October 1937. (*Royal Commission on the Ancient and Historical Monuments of Scotland: Crown copyright*)

Golden Gate International Exhibition in San Francisco in 1939 and with The Scottish Village Exhibition Enterprises Ltd. The account in the *San Francisco Chronicle* (7 June 1939) might not be the Scotland that one might wish to export, but a genuine, though to our eyes misguided, attempt is made to interest visitors with regular lectures about the site at Knappers, 'There's an exact replica of Robert Burns' cottage at Alloway . . . a copy of the Tam O'Shanter Inn . . . A replica of the Druid temple, discovered only a year or so ago, is another interesting sight . . . Lectures on the Druids are given several times daily'. The Exhibition was not, however, a financial success, and Mann's guarantee of the Scottish Village Company was called in by the Clydesdale Bank in September 1939.

CUP-MARKS, CROSSES AND COLLECTING

In 1915 he published an article on *The Archaic Sculpturings of Dumfries and Galloway; being chiefly Interpretations of the local Cup and ring Markings, and of the Designs on the Early Christian Monuments* (1915a). The beginnings of his interest, indeed obsession, with cup-marks, measurements and astronomy come together. There are too many news-cuttings that record some new observation about cup-marks or their interpretation to mention in this short account; his findings, such as those on Tiree (1922) have not always found favour with later researchers. The sheet of cup-and-ring markings at Cochno, Dunbartonshire had a particular interest and there are drawings and photographs with the symbols painted in (illus 7). The Cochno symbols were linked to

the interpretation of Knappers (Mann 1937a; 1937b). In the Preface to the reprint of this article under the title *Archaic Sculpturings: notes on the art, philosophy, and religion in Britain 200 BC to 900 AD* he says that the volume is concerned with the art of western Scotland, but that ‘many other areas of the British Isles possess quite as rich and interesting collections, which I hope to touch on similarly in the near future’ (1915b).

After the 1914–18 war he was active in trying to ensure that Celtic motifs were woven into the designs for war memorials and his pamphlet on war memorials and the Barochan Cross was published in 1919. It is recorded that he suggested that motifs on existing Early Christian monuments from the locality be incorporated into the design of the proposed memorials (*The Bailie*, March 1923, 3), but this aspect of Mann’s contribution remains to be researched. One of his more inventive suggestions was the Memorial Way between Balloch and Glasgow and on to Hamilton Palace (*Glasgow Herald*, 4 July 1919).

Mann may not always have been straightforward in his dealings as a collector. There is a fascinating account in A O Curle’s *Journal* of an event in the spring of 1914:

Some weeks ago a bronze age cist was discovered by a man ploughing near Arbroath and an urn was found within it described in the local press as inlaid with gold!! Learning that it had been taken possession by the local police I made application to the King’s Remembrancer to secure it for the Museum. In reply I was sent for perusal a correspondence which included letters passing between Mr L McL Mann, and the policeman in which the former stated that he was acting on behalf of certain professors of the University of Glasgow, tried to induce the policeman to cede the urn to him. I chuckled as I read the letters for I well knew I was the last person in the world the writer would have wished to see them. Sharp practice seldom pays in the long run! I laid the case before the authorities with the result that a circular letter was dispatched to all procurator fiscals in

Scotland drawing attention to Treasury requirements in regards to finds! I got the remains of the urn in hundreds of pieces but I have reconstructed enough to show the shape and ornament.

It is interesting to reflect on the background to a simple entry in the Society’s *Proceedings* (49 (1914–15), 15–16).

MANN AND THE PRESS

But it is as an inveterate contributor to newspapers either in the form of articles on new discoveries or to the correspondence columns that Mann made his greatest impression. He also subscribed to a news-cuttings agency and for certain periods one can keep track of the stories through the cuttings books that he assembled. Many of the stories begin with the line ‘Ludovic Mann, the eminent archaeologist’, the phrase used as the subtitle of this paper, and go on to describe features that have been rescued from destruction. George Applebey recalled that Mann’s technique was to dispatch a lad with a letter to the editor of a newspaper with instructions to wait until its publication was confirmed; if it was not to be in the next edition the copy was to be taken to another editor.

In 1923 the excavation of the cist cemetery at Glenboig is tantalizingly presented in the newspapers little by little without divulging the location of the discoveries. The excavation of cists at Mount Vernon resulted in talks on the BBC. Unfortunately by this stage Mann seems to have lost the ability to prepare coherent excavation reports, perhaps because some of the discoveries were piecemeal and because site survey was not his strong point. In the case of excavations at Greenoakhill, Mount Vernon, in 1928 (illus 8), Dalton School, Cambuslang, in 1930, and at Ferniegair in 1936 and 1939, the modern accounts have had to be drawn together from newspaper accounts and site notes (RCAHMS 1978, 69–70, no 122; 73–4, no 145; 70, no 126; 72–3, no 143; Welfare 1975). The finds were salvaged



ILLUS 8 Salvage excavation at Mount Vernon. Photograph from the *Daily Record*, 18 April 1928. (Royal Commission on the Ancient and Historical Monuments of Scotland)

and are now in Glasgow Art Gallery and Museum and Hamilton Museum, but the detailed reports were never produced by Mann. The willingness to down sticks on the receipt of a wire or a telephone call is laudable; the realization that the press is vital if further finds are to be reported promptly is eminently sensible; but without proper assistance adequate publication was impossible. This was also the case with his work at Dunagoil on Bute, where excavation was encouraged by Dr J N Marshall, the resident doctor, and a 'Mr Beckett, a man skilled in excavating under the direction of Mr Mann' was engaged (Marshall 1915). Preliminary reports were published (Mann 1915c), but reports on later work were slow in coming, and the late Miss Dorothy Marshall used to recall her father's frustration in Mann's unwillingness to prepare a detailed account of the work, and the eventual paper is very brief and general, though accompanied by photographic illustrations of the finds prepared under Marshall's direction (Mann 1925b; *Glasgow Herald*, 16 December 1926). There is a stark contrast between the carefully prepared early reports and such later work.

Mann, as quoted in the *Daily Record* of 13 March 1931, in *Where the Press Scores*, says

that the greater awareness of the importance of recording archaeological discoveries has greatly increased as a result of press coverage of new finds. Workmen are made fully aware of the value of strange relics to experts and he contrasted the situation with that in the 19th century.

'THE UPPER PALAEOLITHIC'

In May 1930 while walking at Stanstead, near Upper Caterham, Surrey, Mann came across contractors digging and this resulted in the discovery of lithic 'implements' that he claimed to be associated with the oldest workshop in the world (*Daily Telegraph*, 23 January 1931) and the discovery is noted in the *Proceedings of the Prehistoric Society of East Anglia* (6 (1929–32), 250) in the account of their meeting of 25 June 1930 when he exhibited implements, 'mainly cores and flakes, which he submitted were humanly worked'. The fact that he was not asked to submit a paper for publication may suggest that those present were doubtful as to the nature of the material. He also talked about standard units of measurement and exhibited a time chart. But his lecture to the Société Préhistorique Française is published in their *Bulletin* (1931). One of the fascinations of Mann's news-cuttings books is to discover the ramifications of a statement in the press. This work was picked up by the *North-China Daily News* of 23 February 1931 with the headings 'Oldest ever discovered' and 'Flints shown at the Sorbonne' and a note in *Nature* (25 July 1931). In 1931 Mann spent three months in South America, returning with a large collection of stone 'implements'. Here his discovery of the Antofagsata 'flint industry' was described in his contribution 'Ancient Man in South America' in the *South Pacific Mail*, a Chilean newspaper in the English language, described as the 'Official Organ of the British and American Colonies', Valparaiso, 16 July 1931. This was for example picked up by the *Christian Science Monitor* of Boston, 10 September 1931. These

discoveries are quietly forgotten today, as are those from the west Mediterranean and Italy, and show how ephemeral this sort of dissemination of information is, but also show that the views of someone in tune with the press could at that time make a ready splash across the world. Even in Shetland in 1936 Mann could claim to discover very early finds (1936). Almost certainly all of these represent naturally fractured lithics.

LATER WORK

In 1933 Mann was active in the campaign to save the Monymusk Reliquary for the nation after it had been put up for sale by its hereditary Keeper, writing particularly in the *Daily Record*. Doubtless many more discreet meetings were being held behind the scenes to raise the money and to make approaches to the National Art Collections Fund, but the newspaper campaign would have added to the public awareness of the importance of the object.

Mann's Presidential Address to the Glasgow Archaeological Society on 19 March 1931 is a valuable account of rescue archaeology in the 1930s. Mann sets out his approaches. He emphasizes the need for a speedy response, the need for 'an exhaustive and proper report'. The need to leave monuments unexcavated until techniques have improved is stressed:

The Press in recent years has done good work, and in no inefficient manner, in educating the public as to the desirability of reporting and preserving stray relics found in the soil: and our Society will, I hope, long continue to place these matters on record in a more permanent manner, and perhaps with more elaborate technical details (1934, 139).

You may feel that he knew in theory what should be done, but did not always follow this in practice. But I suspect that the area immediately around Glasgow does indeed have an unusually large number of accidentally recovered finds recorded at this period. Mann then

describes a logboat from Kilbirnie Loch (also 1930a); a stone basin found at Inchinnan; and a Celtic bell from near Stirling. He also discussed the rescue excavation of a very unusual Roman burial from High Torrs, Wigtownshire, discovered in 1931 (later re-examined by Breeze & Ritchie 1980). This collection of artefacts, including an onyx intaglio set in an iron finger-ring, might well have been lost but for Mann's intervention.

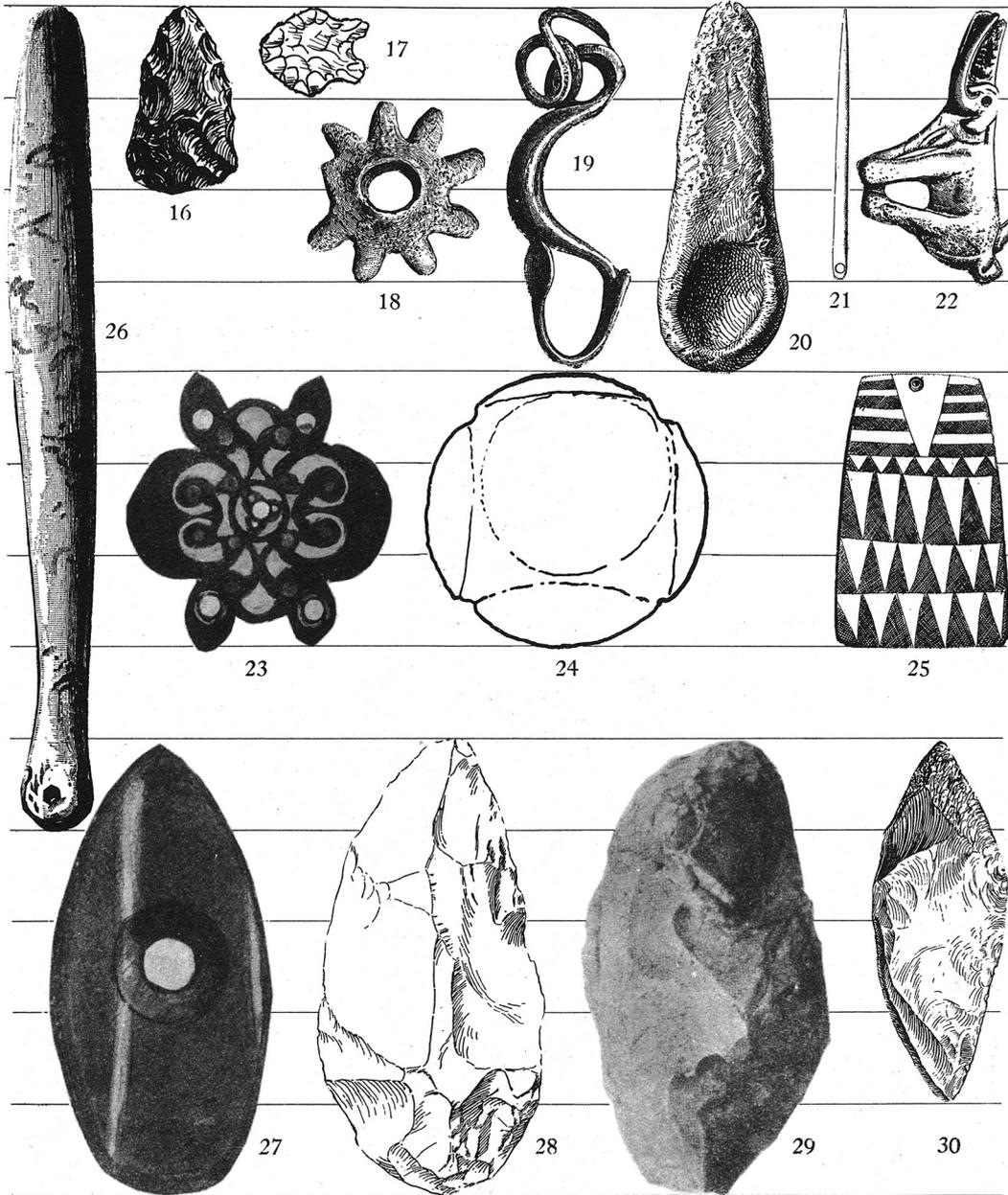
A more dramatic example of Mann's involvement in rescue archaeology is encountered in his account of the finding of a body in the bog at Cambusnethan, Lanarkshire in 1932. The discovery by a workman of the Benhar Moss Litter Company was reported to the police, and the clothing was removed to Newmains Police Station. The Procurator Fiscal reported the matter to Mann, and he visited the site the following day, carefully recording the shallow grave. His report on the discovery is detailed and filled with careful observation, and he had a replica shoe made by the Albion Leather Works, Glasgow. In many ways this is Mann at his best, dealing with a discrete find with artefacts, which allows an inventive approach in terms of the preparation of the replica footwear to create 'an interesting exhibit' (paper read Thursday, 16 February 1933; 1940, 54).

MEASUREMENT

Mann may have been finding conventional outlets for his papers difficult to find and he created his own publishing venture, Mann Publishing Co Ltd, with addresses at 183 West George Street, Glasgow and 18 Walbrook, London EC4. Many of his more idiosyncratic works are thus privately published. In this way he produced a small volume *Craftsmen's Measures in Prehistoric Times* in 1930 (1930b) (illus 9). This was followed in March 1933 by a lecture to the Glasgow University Geological Society in which Mann described the method of measurements that prehistoric man throughout the world had employed, which he

Examples of Craftsmen's Measures (Beta Unit.)

Palæolithic : Neolithic : Metal Ages : Early Christian .



(12)

ILLUS 9 A page from *Craftsman's Measures in Ancient Times*, 1930

described as the Alpha and Beta units. He published drawings to show how well a range of objects fitted into the measurements and also gridded paper in the units individually and with the two units combined. He approached the law of probability in the spirit that might have been used in insurance, and a greater faith in figures alone than was then and now considered wise. The publication of *Craftsman's Measures* rekindled the debate over the veracity or not of the artefacts from the excavation of the crannog at Dumbuck, and there was furious correspondence in the press in 1932. The fact that some of the artefacts that are now considered as fake apparently fitted the grid very precisely does little to encourage one's faith in the proposed system (*Glasgow Herald* and *Glasgow Evening Times*, 22 April 1932).

His method was challenged in the correspondence columns of the *Glasgow Herald*. And a public meeting was held at the University in June at which the protagonists set out their views. The Chairman of that meeting, Professor E B Bailey, suggested that the matter be held *sub judice* pending the appointment of a joint committee of enquiry. In October 1933 the Council of the Glasgow Archaeological Society considered a proposal from the Geological Society of Glasgow that a joint committee be set up. Meetings were held intermittently between November 1933 and March 1937. Many objects were measured in Edinburgh and Glasgow collections and the results computed. In the end the majority report concluded that there was no first class evidence either for or against Mann's theory and recommended that the task be abandoned (Bailey & Davidson 1937; *Glasgow Herald*, 9 October 1937). The minority report by J M Davidson, J Harrison Maxwell and J J Waddell outlined various reasons why the enquiry should have continued. In the course of the enquiry Mann himself had been seriously ill on a number of occasions and one cannot but wonder whether this lengthy questioning of his judgement did not take its toll. In 1938 he produced a rebuttal

to the findings of the Committee (1938a). It is a sad reflection of the entrenched attitudes of the time, but I suspect that a great deal of effort in measuring a multitude of objects had been largely unnecessary. It is not an approach that has since been followed in artefactual studies to any extent, though the study of units of measurement for stone circles shows the enduring interest in this aspect of early peoples. Measurement of objects was undoubtedly an obsession of Mann's, and Mrs G Applebey, the wife of his archaeological executor, remembered her husband returning from an evening's measuring of stone tools with Mann with her husband 'covered with a miner's grime' from the dusty artefacts. It is likely that the rejection of his system of measurements affected Mann's approach to other archaeologists in ways that are impossible to document.

There was a furious exchange with Gordon Childe over Childe's portrayal of the people of Skara Brae as savages in *SMT Magazine* in November 1930. 'Savages', wrote Childe, '— and our Stone Age forerunners were no better — are by no means squeamish'. Mann would have none of this and a correspondence ensued including a memorable letter in *The Scotsman* of 9 May 1931:

We see the Skara savage, dog-like, stealing off to his matted couch or kennel (which was full of filth and treasures) with what do you think? — 'a joint of meat'. There he crouched and 'gnawed the joint for supper' — and so to bed! Moreover, the barbarian threw down the bones on his bed and then lay down on the bed ... It may be that Professor Childe, to strengthen his Stone Age hypothesis, is still determined to present a weird, unwarranted, and disgusting picture of the supposed extreme primitiveness of the Skara inhabitants and incidentally of the people of Iron Age Scotland.

KNAPPERS

And of course he went over the top at Knappers. Excavations in the sand quarry at Knappers, Kilbowie, near Clydebank on the eastern

side of the Great Western Road in 1933 were supervised by J M Davidson, advised by Ludovic Mann even though Mann was ill. An unusual and interesting series of finds was made dating from the later Neolithic and Early Bronze Age, including a flint adze blade, bronze dagger, early Neolithic ceramics, Grooved Ware and Food Vessel pottery (Davidson 1935; Mackay 1948; 1950). There is no doubt about the authenticity of these discoveries and their spatial relationships. The problem came with the later finds.

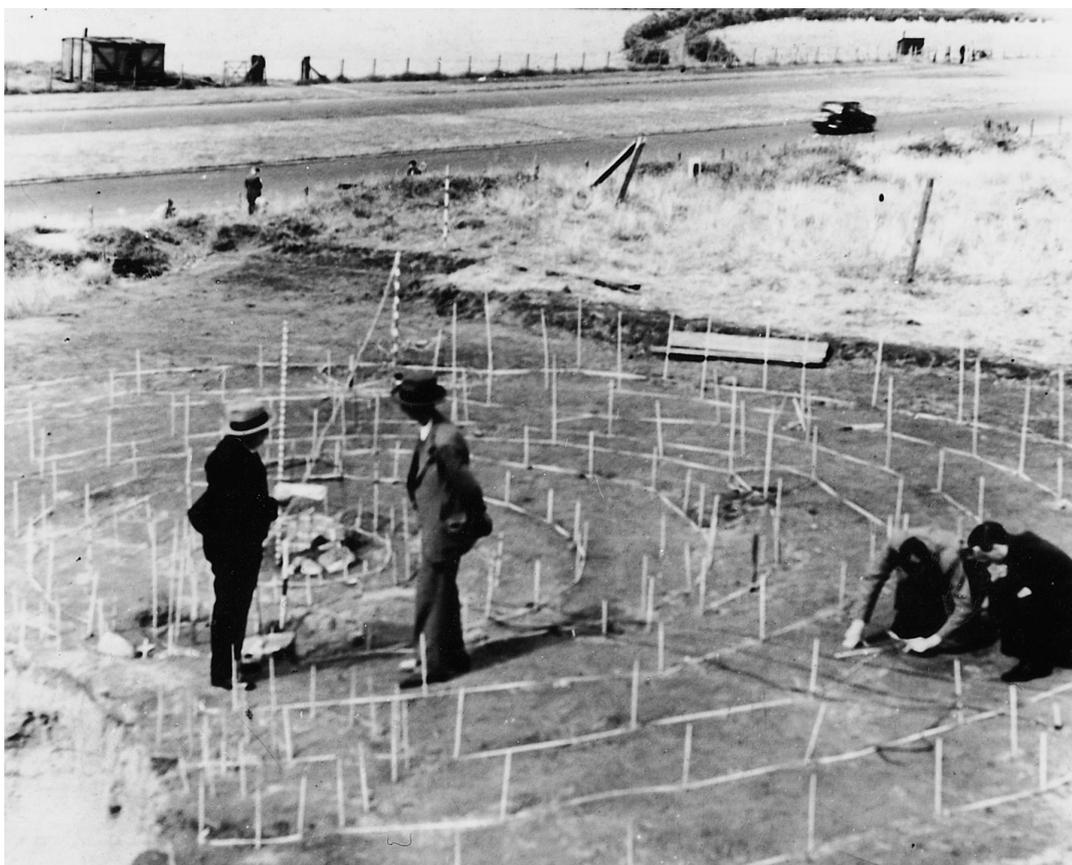
In 1937 gravel digging on the western side of the road revealed a pit 1.5m in depth with carbonized wood and a quartz artefact. A second pit 2.7m deep contained small quartz tools, a pannier-like basket and within it the carbonized remains of a wooden bowl. Neither the basket nor the bowl now survives, but

there are contemporary drawings and photographs (Ritchie & Adamson 1981, 177). Then the discovery of remains of stakes set into the gravel starts to be made. At about this point the character of the newspaper reports issued by Mann changes. A new excitement enters the account – ‘a miniature Scottish Stonehenge in wood’, ‘a site frequented by Druid astronomer priests’ – and it becomes difficult to separate archaeological information from reports designed to create national interest to save the site (Mann 1937a; 1937b). The *Glasgow Herald* (2 August 1937) describes:

a group of oval settings marked by equidistantly placed vertical timber stakes, the socket holes of which are from two and half to three inches in diameter. The wooden stakes are almost entirely carbonised and the socket holes



ILLUS 10 Ludovic McLellan Mann at Knappers, 1938. (*Royal Commission on the Ancient and Historical Monuments of Scotland: Crown copyright*)



ILLUS 11 Knappers, Dunbartonshire, under excavation. (*Royal Commission on the Ancient and Historical Monuments of Scotland: Crown copyright*)

remain full of darkened material in distinct contrast to the light coloured sand in which they have been placed. Towards the centre of the group of elliptical settings a few stones with oval cavities cut upon them were found. The socket holes of the original stakes have been replaced by Mr Mann and his assistants by little white stakes which show the exact position of the shrine or altar, which was at the centre of the scheme.

The overall diameter of the arrangement of stakes is about 13m and contemporary photographs give a good impression of the comparatively small scale of the area involved. The reconstruction was laid out by Mann with low banks and with larger posts at the central setting with cross-pieces along the tops of the

posts. The discovery and the reconstruction generated considerable public interest. Charabanc-loads of visitors made their way along Great Western Road and there were on-site presentations (illus 10). Newspaper accounts call the site the Westminster Abbey of Scottish Druid times. The *Glasgow Herald* of 20 September 1937 records the visit of the Glasgow Archaeological Society, who along 'with hundreds of other visitors, viewed the prehistoric temple at Knappers, Kilbowie . . . The developments of the digging work during last week were examined with the help of large-scale ground plans'. To what extent the public believed the astronomical and mythological interpretations that Mann expounded cannot be gauged, but official reaction was very

negative. Alexander Keiller drew the attention of the Office of Works to the site in 1937 and James Richardson visited Knappers on 18 November of the same year. He reported that:

To schedule this ground would only bring ridicule on the Department and give an official stamp of authenticity to the fantastic diagrammatic 'restoration' of a 'wooden temple'. Brightly coloured stobs in red, blue, yellow, orange, green, black and white delineate the Serpent attacking the Sun and the planets rushing in to save Phoebus from extinction. The area forms part of a prehistoric urn field of late neolithic and bronze age date. . . (NAS MW/1/1264) (illus 11).

The subsequent discussions about preservation have been fully outlined in Ritchie and Adamson (1981, 180–2). The Druid Temple Limited Company was set up to assist in the work. In an attempt to preserve the site Mann bought the central part of it. In 1945 attempts by members of Glasgow Archaeological Society to preserve a greater area around it were again rebuffed, on the advice of Professor V G Childe. Mann issued a stinging broadsheet entitled *Moles or Men*. The site remained visible on air photographs in 1949, and it is this parcel of land that Mann subsequently bequeathed to the City of Glasgow.

As part of the preparations for the Knappers publication my colleague Ian Parker plotted out all the positions of possible posts from many pieces of tracing paper in the archive, rather than use any of the already published versions, and came up with a pattern and a size that can readily be compared with other stake circles under barrows (Ritchie & Adamson 1981, 182–3). The many photographs of the site confirm its existence as a feature, but its interpretation will never be known for certain. In personal terms the episode shows how persuasive Mann could be and how loyal were those round him in rallying attempts to preserve the site with the creation of Druid Temple Ltd (Mann 1937a; 1937b; 1938b).

ASSESSMENT

I have presented here the life of an archaeologist who was not always in agreement with the Establishment. But was the Establishment always right? Perhaps not. Few people at that time in Scotland had experience of excavating sand or gravel sites. Most archaeologists had dug within the stone-walled structures in the far north. Timber sites were something new and perhaps Mann was not altogether wrong. The photographs do indeed show pits dug into the gravel and they certainly show concentric settings.

A very measured assessment of Mann's achievements is to be found in the newsletter of the Glasgow and Art Gallery Museums Association, November–December 1955, probably written by J G Scott, Curator of Archaeology and Ethnography:

It would not be fitting to allow the passing of that noted Glasgow archaeologist, Mr Ludovic Mann, who died on 30th September, to be unrecorded in the Bulletin, for his association with Glasgow Art Gallery and Museum goes back almost fifty years, whilst for about half of that period we have been permitted to house part of his famous collection of Scottish archaeological antiquities.

Scott goes on to mention Mann's interest in the display of antiquities and exhibitions as well as his identification of the importance of the Mesolithic period in Scotland, 'He was also intensely interested in the human aspect of archaeology: he was concerned to use the specimens he found to illustrate the way in which their makers lived'. Scott emphasizes what a modern approach this was for the time:

It was, in fact, Mr Mann's intense interest in the human background to archaeology which, in his later years, led to his estrangement from the mass of his fellow archaeologists, for he pursued his investigations into the thought and religion of prehistoric man beyond the limits which the evidence, in the opinion of most archaeologists, would justify. There would nevertheless be few,

if any, who would deny the lasting value of his contribution to archaeological research, and it will be a matter of great satisfaction to the citizens of Glasgow to learn that part at least of his great collection is to remain in the Art Gallery and Museum as a permanent memorial to his genius.

It was Mann's obsession with measurements and alignments (terrestrial and astronomical) which was to lead to the estrangement to which Scott refers. I am grateful to Aubrey Burl for drawing to my attention the Institute of Geomantic Research Occasional Paper no 7 of 1977, *A Forgotten Researcher: Ludovic McLellan Mann*. In it Michael Behrend underlines that essential dichotomy of Mann as, on the one hand, the producer of sensible archaeological papers, President of the Glasgow Archaeological Society in 1931–3 and, on the other, the proponent of many controversial theories, for example as set out in the typescript of his work on 'Salisbury Plain – An Astronomical Blackboard' as well as fragments of *A Lost Civilization: its Vestiges and Problems*. The best known in terms of alignments on the ground is *Earliest Glasgow*, in which he sought to explain the relationships of several sacred areas in terms of a complex series of radii set out in a 19-divisional system (1938b, 10–11). Perhaps I need go no further. But measurements and interrelationships catch the imagination of a public that is interested in probing the unknowable. At Knappers, Mann invoked the sun and the planetary deities as explanation of the layout of the stakes. A confidence in his interpretation is implicit in his stance as he lectures to visitors. Such flights of fancy may be characteristic of a solitary researcher of financial means, able to subsidize his own publications, but without the circle of critical friends with whom he could discuss ideas. *Ex cathedra* statements are made and published. It is difficult to comment helpfully on this aspect of Mann. In more modern times, and with an infinitely greater scientific knowledge,

Archibald Thom measured and interpreted stone circles initially in very elaborate astronomical terms, which were initially greeted with dismissal, then a degree of acceptance; now the spirit of his research is taken seriously and the extent of early people's awareness of astronomical events is still the object of research (Ruggles 1999). Perhaps at the time this aspect of Mann's approach was tolerated with amusement, as the 'Day in the Lives of the Great' implies. Mann was entirely sincere in his belief in his 'findings' however unlikely we may find them today. Mann's insistence that the awareness of prehistoric people was so very much greater than credited by contemporary writers in the 1930s is one that strikes a chord with aspects of writing today on archaeology, and sometimes the basis for current assertions or theories is no greater than Mann's. One of the most positive aspects of this sort of approach is that it reasserts the importance of topography and an interest in the historic landscape, however one may conceive it, and for Glasgow this is most recently expressed in Harry Bell's *Glasgow's Secret Geometry*, which acknowledges Mann's interest in the field (1993, 65–8), and for which there is also a web site; how Ludovic Mann would have approved! It is hard for us today to comprehend how a realization of the importance of the preservation of the chance discoveries of the past depended on the newspapers. A scrapbook of news-cuttings over the past ten years, say, would not produce the same range of interest in the Scottish press as do Mann's. Controversial exchanges of views on archaeological matters have long left the correspondence pages of the *Glasgow Herald*. Perhaps Mann's cuttings are exceptional in that so many must have an origin in Mann himself. Interim accounts today are produced in different ways. But I think Mann was able to excite an interest in the past in the perception of the widest possible Scottish public. I have not listed the various discoveries of objects for which extravagant interpretations or assessments of great antiquity were offered.

It is not clear whether any of these artefacts survive, but I suspect that few would be accepted today. The dichotomy in Mann's output identified by Behrend is perhaps one of the most interesting features of our subject, but the way that statements about archaeology that we would now consider outlandish found their way into the newspapers of the time is also fascinating. Public opinion was being formed. But it is almost certainly fortunate that his work on *A Lost Civilization* was never completed. The synopsis printed in *Craftsmen's Measures* has all those headings that send shivers down the spines of archaeologists today, there is space to list only a few:

How Old is Civilization?

The Lost Language of Measures: The Linking of Time and Space

How to Read Cup-and-Ring Markings

Calendars of the World

The Essence of World Folklore

Geo-Physical changes and their Chronology

Tables and Diagrams for the use of Students

Jack Scott at Glasgow Art Gallery and Museum set to and catalogued the collection that had been bequeathed in Mann's will. It was a massive task, which the computerized printout of the basic catalogue amply demonstrates. Many of the objects were without provenance or only loosely attributed to places in Aberdeenshire or Wigtownshire. Many of the locations are obscure; Mann was a collector by quantity rather than by geographical precision. There is also material from Egypt and Denmark, as well as a large number of day-to-day Scottish artefacts and tools. It is clear that a wide range of material in terms of chronology and geographical distribution was accessed, objects for primary display as well as those more suitable for teaching collections, and Mann would undoubtedly have approved of their use in this way. The material from the excavation of a Bronze Age cemetery at Doonfoot, Ayr, in 1936, was published (Davidson

1967). The question of Mann's South American collection remains unresolved. It clearly existed, and Jack Scott thought that it was probably in an American institution. In following up this aspect, however, a small collection of material in The Field Museum, Chicago was indeed identified as coming from Mann: 'Azilian' bones and stone tools from Oronsay; lignite armlet fragments from Portpatrick; and flints from Stanstead in Surrey, numbering 26 in all. These were in fact obtained by exchange during a visit by Mann to Chicago in 1933.

The *Glasgow Herald* for 1 October 1955 recorded the loss to Scottish archaeology of 'one of its most colourful personalities; for however greatly anyone may have differed from him in opinion, all were alike in conceding to him an enthusiasm for antiquities beyond the ordinary and a passionate adherence to his tenets'. But it is critical too:

It is to be regretted that the powers of mind which he brought to bear on the problems of the bronze age should have been less factually evident in his later work; [his unpublished excavations are listed]. Rather were his energies directed to mythology, and he devoted much time to propounding a system of 'Craftsmen's Measures in Prehistoric Times'. The explanation lay in the realms of geodesy and astronomy. He was a man of magnetic personality, of amazing and prolonged vigour, and of marked originality of thought.

I have tried to set out a balance between the different aspects of Mann's life, the rescue of material, the use of the press in highlighting the importance of archaeology and history to the public at large, without belittling his idiosyncratic ideas. Archaeology in Scotland was coming of age, and Mann had a part to play with his early experimental approaches, as well as taking the subject to a wider public than before. His 'magnetic personality' made it possible for him to address an audience and carry them with him, however unlikely we may find some of these ideas today. The heady mixture of science, mythology, measurement

and certainty seems to have carried the day. He may have become obsessed with notions that involved a great deal of self-delusion, particularly after a period of illness in the 1930s. But we should admire his innovative approaches early in his archaeological career, at a time when he was making his way as an accountant, despite the more pervasive hold of odd ideas that came later.

ACKNOWLEDGEMENTS

Mann's will explains why so much material has been preserved. George Applebey's dedication to the spirit of the responsibility that he had been left with ensured that a mass of material (drafts, typescripts, correspondence) that might otherwise have been disposed of has survived to provide a picture of one aspect of the archaeological world in Glasgow that could otherwise only be pieced together from newspapers. The slides preserved by Harrison Maxwell provide the illustrations to this world. The catalogue of the Mann material in the National Monuments Record of Scotland has been prepared by Dr Iain Fraser and the present account is much in his debt. The news-cuttings books contain a fascinating range of archaeological material with the occasional cutting about a fire or an insurance matter as well as cuttings that caught Mann's eye on archaeological topics in general, earthquakes, the origin of chess, nutrition, primitive currency, to name but a few. There are many drawings and maps with pencil annotations. A copy of Mann's Time Chart survives and many sheets with the *alpha beta* grid.

This paper has its origin in the kindness to the author of Mr and Mrs George Applebey who acted as guardians of the Mann archive for so long. George Applebey's faith that the archive would demonstrate the importance of his mentor as a figure of influence, even if you did not have to believe his theories (and Mr Applebey was very pragmatic) has I hope been justified. I was thought of as 'a generous biographer of Mann' following the lecture

series, and I plead guilty to the charge. I am not a defender of 'Alternative Archaeology', but it would be wrong to think that present approaches are the result of any linear progression of ideas, sometimes people with controversial views will help to draw attention to the importance of preserving the remains of the past and to think in an expansive way. Mann would not, I think, be surprised to be counted in that number. Many people have answered enquiries and provided details of documents in public institutions, or offered information on Mann: Aubrey Burl; Colleen Batey, Glasgow Art Gallery and Museums; Neil Curtis, Marischal Museum, Aberdeen; Lesley Ferguson, Iain Fraser and Miriam McDonald, National Monuments Record of Scotland, Royal Commission on the Ancient and Historical Monuments of Scotland; Derek Roe, Donald Baden-Powell Quaternary Research Centre, Oxford; Beverley Emery, Royal Anthropological Institute; Bennet Bronson, The Field Museum, Chicago. I am particularly grateful to Reay Robertson-Mackay, as one who knew Mann, for many helpful comments and suggestions. George Applebey, E W MacKie, Anna Ritchie and Matthew Ritchie advised on the final text. The Photographic Department of the Commission patiently prepared the illustrations and the slides that accompanied the lecture.

REFERENCES

- Bailey, E B & Davidson, J M 1937 *Reports on the joint Committees on Ancient Measures*. Presented to the Glasgow Archaeological Society and the Geological Society of Glasgow. Glasgow.
- Behrend, M 1977 *A forgotten researcher: Ludovic McLellan Mann*. Cambridge (=Inst Geomantic Res Occas Pap, 7).
- Bell, H 1993 *Glasgow's Secret Geometry*, 3rd edn revised. East Kilbride.
- Bishop, A H 1914 'An Oransay shell-mound – a Scottish pre-neolithic site', *Proc Soc Antiq Scot*, 48 (1913–14), 52–108.

- Breeze, D J & Ritchie, J N G 1980 'A Roman burial at High Torrs, Luce Sands, Wigtownshire', *Trans Dumfries Galloway Natur Hist Antiq Soc*, (3rd ser) 55, 77–85.
- Davidson, J M 1935 'A bronze age cemetery at Knappers, Kilbowie, Dumbartonshire', *Proc Soc Antiq Scot*, 69 (1934–5), 352–82.
- Davidson, J M 1967 'A Bronze Age cemetery at Doonfoot, Ayr', *Trans Glasgow Archaeol Soc*, 15 (1960–7), 159–70.
- Kinchin, P & Kinchin, J nd *Glasgow's Great Exhibitions*. Bicester.
- Lacaille, A D 1954 *The Stone Age in Scotland*. Oxford.
- Lang, A 1905 *The Clyde Mystery. A study in forgeries and folklore*. Glasgow.
- Lindsay Galloway, T 1920 'Prehistoric Argyll – Report on the exploration of a burial cairn at Balnabraid, Kintyre', *Proc Soc Antiq Scot*, 54 (1919–20), 172–91.
- McEwan, P J M 1994 *Dictionary of Scottish Art and Architecture*. Woodbridge.
- Mackay, R R 1948 'Neolithic pottery from Knappers Farm, near Glasgow', *Proc Soc Antiq Scot*, 82 (1947–8), 234–7.
- Mackay, R R 1950 'Grooved ware from Knappers Farm, near Glasgow, and from Townhead, Rothesay', *Proc Soc Antiq Scot*, 84 (1949–50), 180–4.
- MacKie, E W 1964 'A dwelling site of the earlier iron age at Balevullin, Tiree, excavated in 1912 by A Henderson Bishop', *Proc Soc Antiq Scot*, 96 (1963–4), 155–83.
- Mann, L McL 1902 'Note on the finding of an urn, jet necklace, stone axe, and other associated objects, in Wigtownshire', *Proc Soc Antiq Scot*, 36 (1901–2), 584–9.
- Mann, L McL 1903 'Report on the excavation of prehistoric pile structures in pits in Wigtownshire', *Proc Soc Antiq Scot*, 37 (1902–3), 370–415.
- Mann, L McL 1904 'Notes (1) on two Tribula, or Threshing-sledges, having their under surfaces studded with rows of chipped flints, for threshing corn on a threshing-floor, from Cavalla, in European Turkey, now presented to the National Museum; and (2) on primitive implements and weapons made of flakes of flint or other stone set in wood or other substances', *Proc Soc Antiq Scot*, 38 (1903–4), 506–19.
- Mann L McL 1905 'Note on the discovery of a bronze age cemetery containing burials with urns at Newlands, Langside, Glasgow', *Proc Soc Antiq Scot*, 39 (1904–5), 528–52.
- Mann, L McL 1906 'Notes on (1) A drinking-cup urn found at Bathgate; (2) a prehistoric hut in Tiree; (3) a cairn containing sixteen cinerary urns, with objects of vitreous paste and gold, at Stevenston, Ayrshire; and (4) prehistoric beads of coarse vitreous paste', *Proc Soc Antiq Scot*, 40 (1905–6), 369–402.
- Mann, L McL 1908a 'Notices (1) of a pottery churn from the island of Coll, with remarks on Hebridean pottery; and (2) of a workshop for flint implements in Wigtownshire', *Proc Soc Antiq Scot*, 42 (1907–8), 326–9.
- Mann, L McL 1908b 'A Galloway Stone-Age village', *Trans Dumfries Galloway Natur Hist Antiq Soc*, (2nd ser) 20 (1907–8), 74–95.
- Mann, L McL 1914 'The carved stone balls of Scotland: a new theory as to their use', *Proc Soc Antiq Scot*, 48 (1913–14), 407–20.
- Mann, L McL 1915a 'The archaic sculpturing of Dumfries and Galloway; being chiefly interpretations of the local cup and ring markings, and of the designs on Early Christian monuments', *Trans Dumfries Galloway Natur Hist Antiq Soc*, (3rd ser) 3 (1914–15), 121–66.
- Mann, L McL 1915b *Archaic sculpturings: notes on art, philosophy and religion in Britain 2000 BC to 900 AD*. Edinburgh & London.
- Mann, L McL 1915c 'Report on the relics discovered during excavations in 1913 at [the] cave at Dunagoil, Bute, and in 1914 at the fort at Dunagoil, Bute (with suggestions as to the probable history and chronology of the site)', *Trans Buteshire Natur Hist Soc*, 8 (1914–15), 61–84.
- Mann, L McL 1917, 'Perforated stones of unknown use', *Trans Glasgow Archaeol Soc*, (new ser) 6 (1916–17), 289–97.
- Mann, L McL 1918a, 'The prehistoric and early use of pitchstone and obsidian', *Proc Soc Antiq Scot*, 52 (1917–18), 140–9.
- Mann, L McL 1918b *Mary Queen of Scots at Langside, 1568*. Glasgow.
- Mann, L McL 1919 *War Memorials and the Barochan Cross, Renfrewshire*. Edinburgh & London.
- Mann, L McL 1922, 'Ancient sculpturings in Tiree', *Proc Soc Antiq Scot*, 56 (1921–2), 118–26.

- Mann, L McL 1923a 'Bronze age gold ornaments found in Arran and Wigtownshire, with suggestions as to their method of use', *Proc Soc Antiq Scot*, 57 (1922–3), 314–20.
- Mann, L McL 1923b 'Discoveries in north-western Wigtownshire: cinerary urn and incense-cup and perforated axe-hammer; mould for bronze-winged chisel; whetstone for stone axes; cup-marked rocks and boulder; apron of moss fibres', *Proc Soc Antiq Scot*, 57 (1922–3), 98–107.
- Mann, L McL 1925a 'Recent discoveries in Arran', *Proc Soc Antiq Scot*, 59 (1924–5), 252–6.
- Mann, L McL 1925b 'Note on the results of the exploration of the fort at Dunagoil', *Trans Buteshire Natur Hist Soc*, 9, 56–60 [with an additional 47 plates].
- Mann, L McL 1930a 'Glengarnock in ancient days', *Colville's Magazine*, May 1930.
- Mann, L McL 1930b *Craftsman's Measures in Ancient Times*. Glasgow & London.
- Mann, L McL 1931 'L'Industrie Pré-Chelléenne en Grande Bretagne', *Bull Soc Préhist Française*, 38, 210–20.
- Mann, L McL 1934, 'Some recent discoveries', Presidential Address 19 March 1931, *Trans Glasgow Archaeol Soc*, (new ser) 8 (1927–34), 138–51.
- Mann, L McL 1936 'Antiquities in Shetland', *Nature*, 138, 512.
- Mann, L McL 1937a *An appeal to the nation: the 'Druids' temple near Glasgow: a magnificent, unique and very ancient shrine in imminent danger of destruction*. London & Glasgow.
- Mann, L McL 1937b *The Druid Temple Explained*. London & Glasgow. [4th edn, enlarged & illustrated, 1939.]
- Mann, L McL 1938a *Measures: their origin and meaning*. Glasgow & London.
- Mann, L McL 1938b *Earliest Glasgow. A Temple of the Moon*. Glasgow & London.
- Mann, L McL 1940, 'Notes on the discovery of a body in a peat moss at Cambusnethan', *Trans Glasgow Archaeol Soc*, (new ser) 9 (1937–40), 44–55.
- Marshall, J N 1915 'Preliminary note on some excavation at Dunagoil fort and cave', *Trans Buteshire Natur Hist Soc*, 8 (1914–15), 42–60.
- Mellars, P 1987 *Excavations on Oronsay: Prehistoric human ecology on a small island*. Edinburgh.
- NAS National Archives of Scotland
Palace of History, 1911 *Scottish Exhibition of National History, Art and Industry Glasgow (1911)*. Glasgow.
- Pollard, T, Atkinson, J & Banks, I 1996 'It is the technical side of the work which is my stumbling block: a shell midden site on Risga reconsidered', in Pollard, T & Morrison, A (eds) *The Early Prehistory of Scotland*, 165–82. Edinburgh.
- RCAHMS 1978 Royal Commission on the Ancient and Historical Monuments of Scotland *Lanarkshire: An Inventory of the Prehistoric and Roman Monuments*. Edinburgh.
- Ritchie, J N G 1967a 'Balnabraid Cairn, Kintyre, Argyll', *Trans Dumfries Galloway Natur Hist Antiq Soc*, (3rd ser) 44, 81–98.
- Ritchie, J N G 1967b 'Keil Cave, Southend, Argyll: a late iron age cave occupation in Kintyre', *Proc Soc Antiq Scot*, 99 (1966–7), 104–10.
- Ritchie, J N G & Adamson, H C 1981 'Knappers, Dunbartonshire: a reassessment', *Proc Soc Antiq Scot*, 111, 172–204.
- Ritchie, P R 1968 'The stone implement trade in third-millennium Scotland', in Coles, J M & Simpson, D D A (eds) *Studies in Ancient Europe*, 117–36. Leicester.
- Ruggles, C L N 1999 *Astronomy in Prehistoric Britain and Ireland*. New Haven & London.
- Welfare, H G 1975 'A bronze-age cemetery at Ferniegair, Lanarkshire', *Proc Soc Antiq Scot*, 106 (1974–5), 1–14.