A Hebridean Plough-type

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Material Culture Studies and Ethnology

Material culture studies build on primary sources, for example, in museum collections and fieldwork, and on historical data that may have been neglected in the dominant historical narrative; 'no documents, no history' might be said to have been a maxim of the academic teaching of history in the United Kingdom in the nineteenth and twentieth centuries. The growth of an academic interest in social and economic history in the second half of the twentieth century then widened the ambit of intellectual activity and encouraged the sharing of disciplines and methodologies. So historians have tapped into explanations and analyses of culture conventionally in the domain of the anthropologist and archaeologist. Material culture had not to the same extent earned itself the accolade of such academic labels but it can demonstrate its credentials in 'Ethnology' as a mix of social, economic and cultural history. Rooted in the work of European museums, it is a 'methodology' perhaps, rather than a discipline, while being interdisciplinary and cross-disciplinary in its competencies.

A shared and interdisciplinary approach has characterised European Ethnology with its strong impulses from Scandinavia and has supplied the intellectual working tools for museum studies, especially in late-twentieth century Scotland. This has been the basis on which social and technological collections have been amassed in the National Museums Scotland where the nature of the evidence and a dearth of conventional historical sources presupposed extending historical study beyond the boundaries of documentation to consideration of intrinsic form and function, cognate material, physical and social context, and language. Specialist knowledge and a critical framework evolved *sui generis* and, fully acclimatised to a dearth of conventional primary sources, blazed a remarkable trail in material culture studies as scholarly dimension to artefact collection and interpretation (see Mackay 2009).[1]

If museum collections and linked research procedures offer primary texts in material culture studies, what significance can we claim for them

1 Mackay identifies markers and achievements in this domain. This essay, which grew out of fieldwork initiated in 1979 and 1980 for the former National Museum of Antiquities of Scotland, is offered as a tribute to the methodology and markers laid down by Professor Sandy Fenton and a demonstration of a methodology on an international scale represented by the journal *Tools & Tillage* (1968-1995).

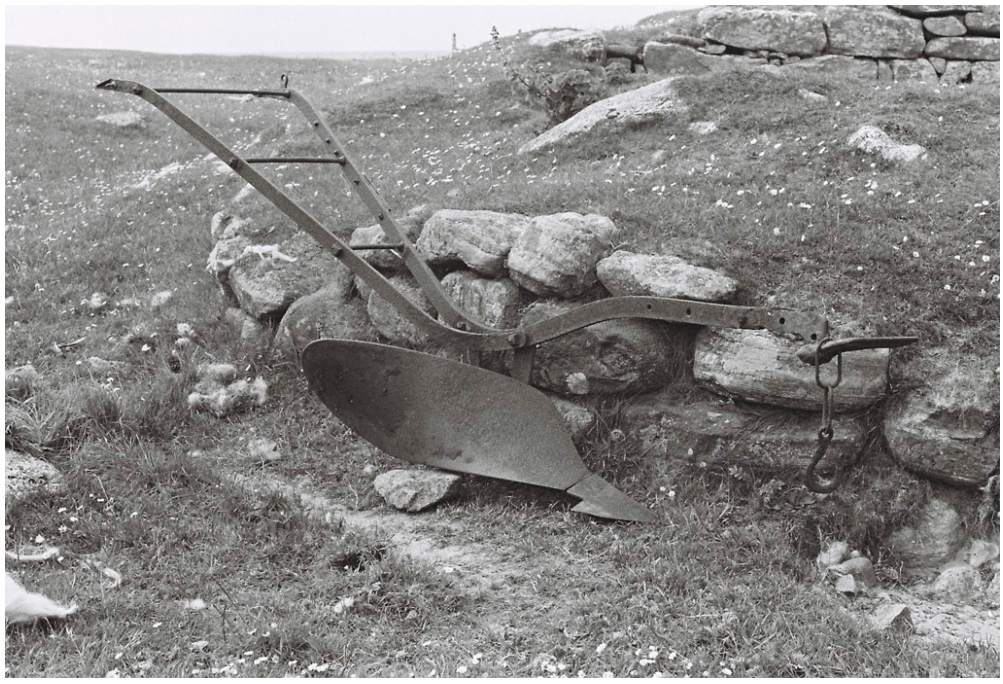

Figure 1: Horse plough of imported type in the Island of Boreray, Sound of Berneray, 1982.

in the wider historical discourse? With research into agricultural implements, for example, playing an important role in ethnological studies, can their description, classification and interpretation fulfil wider scholarly needs or expectations?

The central role of the plough in cultivation and land occupancy has made it a natural focus of European and Regional Ethnology. This has been extensively demonstrated in longstanding seminal studies such as Paul Leser's 'Origin and Distribution of the Plough' (Leser 1931). Scholarly treatment of the subject had to make sense of a diffuse mass of evidence emerging over space and time and has tended to explain technical variety, development, and distribution by systems of classification based on form, construction and function in widely differing natural contexts of topography, soil conditions and climate. Further refinement may then be offered by more localised studies (see Jirlow 1970; Dosedla 1984; Lerche 1994; Smerdel 2008). Typologies offer generalisations which may then serve as premises or guides for more localised empirical investigation. But conventional typologies may be inherently rigid for specific case studies or suggest predetermined conclusions; furthermore, they may prompt assumptions to answer a positivist need to reduce large and complex phenomena to manageable facts.

Generalisations may also encourage *a priori* assumptions which specific or narrowly-focused research and fieldwork may corroborate and reinforce, rather than refute and deny as investigation reveals contradictory evidence. They

may assume, for example, that historical development and geographical diffusion have followed even and stereotyped patterns, and that tools and tillage implements demonstrate an evolution from the simplicity of an ancient form to the relative sophistication of a modern form, and further into industrial mass-production. Also, due to the academic influence of anthropology and the behavioural sciences, there was a tendency for regional ethnology to stop at or side-step urban culture and industrial production. Thus, the influence of industrial technologies or diffusion of the products of industry into remote or isolated communities was not always taken into account or put in context. Detailed study *ad rem* may reveal that evolutionary patterns were never so even and that the parameters of a traditional material culture were more variable and diluted than situation or appearance might suggest. This study takes cognizance of these issues.

Figure 2: North and South Uist and their places in the Hebridean archipelago.

Material and documentary evidence, when aggregated, demonstrates a remarkable variety of plough-types in Scotland, both over historical time and geographical area. Many forms have been identified in communities occupying what is a relatively small landmass in which the potential for cultivation has been severely constrained due to adverse geological and topographical conditions. Material culture research in the field suggests that the historical record is not yet complete, that more classification and annotation of plough-types require to be carried out, and that the lexical record of technical terminology is manifestly deficient (see Fenton 1969; Fenton 1976).[2]

The compilation of the material culture inventory, that is, the analysis of objects and the

2 Such a premise underlies Sandy Fenton's first detailed study of plough-types which was prompted, as he told me, by the manifest shortcomings demonstrated in an earlier article by another scholar (see Fenton 1962 – 63).

collection-associated terminology, can be the task quintessentially of the ethnologist. The broad and cross-disciplinary approach of ethnology ensures that proper account is taken of the 'words' as well as the 'things', being an autonomous role for ethnology enhanced in the past by the *Wörter und Sachen* concept (see Steensberg 1993). The mapping of material culture together with language and dialect was a concept embedded in the European Linguistic Atlas movement. The Atlas of Swedish Folk Culture (1937-1939) instigated the compilation of such 'ethnological' atlases with a systematic and thorough widening of the research and fieldwork remit from 'words' to 'things'. The ethnologist knows that a tool or piece of equipment may have a dozen or more different names within the same relatively restricted language area. The ethnologist also recognises that language is never static and that inadequate account may have been taken in the wider scholarly context of the widening of the semantic field of language in material culture (see Fenton 1974). This study examines a Hebridean plough-type to realise value in material culture studies and to suggest how a 'words and things' approach may add value to conventional methodologies in historical studies.

The Uist wooden plough

Two wooden 'swing ploughs' from Uist were acquired for the collections of the National Museums Scotland in 1962 and in 1971 respectively. They are described in the islands using the Gaelic term *crann* i.e. 'plough' and *crann fiodha*, i.e. 'wooden plough.' The *crann fiodha* is recognised as a wheel-less swing plough with a strong curving beam. In proportions, it was a light wooden plough with relatively long stilts or handles lying at a shallow angle to the sole and the line of draught. These long stilts allowed better control of the plough. It was always 'economical' in ironwork, comparing in this respect with ploughs and other implements and tools of the pre-improvement period. Examples known are from Uist and Benbecula, and the majority are from South Uist, which is the source of much of the information on which this study is based.

Figure 3: Plough made in Grimsay and Benbecula, NMS Acc. No. W.PAA 66.

Figure 4: Plough made in Peninerine and Stoneybridge, NMS Acc. No. [PAA] W.1971.21.1.

The examples in the National Museums are approximately 3m in length and have strips of zinc on the mouldboard and landside to protect the wooden frame and plough body from wear. Two wrought iron rods or stays originally passed from the stilts to the beam, though only one has survived where the fixings are still evident. The coulters are made from lengths of cartwheel rim and the plough socks are made in a distinctive and possibly unique pattern.

The first example to be acquired[3] was made in 1919 by Charles Stewart, Joiner and Boatbuilder, Grimsay (*Griomasaigh*), North Uist, and was mounted up with 'iron strappings' by Lachlan MacRury (1886-1969), Blacksmith, Aird, Benbecula. The boatbuilder had a reputation for being able to turn his hand to anything and, besides boats, built carts and roofed houses (see Lawson 2001).[4] The second plough, for all its older features and materials, was also made in the twentieth century.[5] It was made in the mid-1930s by Neil MacDonald of the township of Peninerine (*Peighinn-an-Aoireann*) in South Uist and had been used by the donor on poor land lying on the boundaries of the adjacent crofting townships of Daliburgh and Kilpheder. It is argued that the interpretation of these two ploughs should not be separated from the economic and cultural context to which they belonged.

The Uist agricultural economy

The islands of Uist are part of the 'Long Island' chain which lies between the north-west mainland of the British Isles and the Atlantic. In detail, they comprise North Uist, Benbecula and South Uist, and a number of satellite islands. Virtually, they form one island from the Sound of Eriskay in the south to the Sound of Berneray in the north. The straits which separate the main islands are left almost dry by the running tide and were historically crossed by ferry-boat or horse and cart before the construction of causeways with metalled roads. The 'South Ford' causeway between Benbecula and South Uist was built in 1942 and 'North Ford' causeway between Benbecula and North Uist in 1963. Uist is fully exposed to the North Atlantic climate. Prevailing south-west winds bring sometimes abnormally mild winters and cool summers, maintaining a high atmospheric humidity which, in turn, has fostered the extensive development of wet, acidic peat. Cultivation is favoured neither by the climate nor by the soil (see Boyd 1979).

South Uist, with an area of 141 square miles, can be divided longitudinally into three zones: a mountainous eastern zone and seaboard rising in places to over 600m, a sparsely populated middle, low-lying, region, mainly covered by peat, unsuitable for cultivation because of its wetness, acidity and marked deficiency in mineral salts, and finally, a flat, sandy, western (Atlantic) zone where the population is today concentrated in crofting townships. Patterns of settlement are demonstrably influenced by the nature of the soil. All three zones offer a high proportion of rough grazing.

3 National Museums Scotland [NMS] Accession No. W.PAA 66. From Grimsay, North Uist, where it was used until 1955.

4 Information from Mary Norton, Grimsay, North Uist, 2017.

5 NMS Accession No. [PAA] W.1971.21.1. From Daliburgh, South Uist.

Figure 5: Angus Morrison, Aonghas Dhùghaill Bhàin, ploughing, West Kilbride.

South Uist has been an area of relatively intensive land-use in West Highland terms and therefore tillage implements have played a significant and continuous role in the island economy. Together with its neighbours to the north, Benbecula and North Uist, it contains the western *Machair*, an extensive coastal strip of light, easily cultivated, calcareous soil. Drainage was good but there was also a tendency for the soil to dry out too much; ploughing was therefore never deep. The poetic by-name, *Uibhist an Eòrna* ('Uist of the Barley'), serves as reflection of the perceived virtues of a cultivable and productive soil and this asset is celebrated in song where such fruitfulness was attributed to the rule of the just ruler of tradition (see Shaw 1999: 78-79). Barley stands as a metaphor for the extent of the shell-sand *machair* agriculture of South Uist, being a crop with a short growing season which preferred the calcareous soils of the west-coast *Machair*. By contrast, other Hebridean by-names describe landscapes of rock, water and inhospitable and unresponsive soils.

The basic resources of the island's economy drew on grazing and fishing, though fishing was never exploited as a source of income in Uist in spite of an abundance of fish in recent historical times. The islanders had customarily turned to cultivation, rather than to fishing which in Uist was considered a hazardous occupation involving great hardship. The dangerous conditions on the

stormy coasts, especially of the Outer Isles with notoriously strong tides, would not be faced by choice unless a man were descended from generations of fishermen. A natural antipathy to fishing is reflected in proverbial wisdom such as *Beatha an iasgair dhachaidh, rud aige no bhuaithe* ('the fisherman is welcome home, whether he has a catch or not').[6]

Typically and historically, resources and effort were concentrated on the cultivation of crops as a means of support though there was generally difficulty and uncertainty in achieving a good harvest. By the beginning of the twentieth century, the main grain crops were rye (predominating), 'bere' or barley, and 'small' or grey oats. Oats tended to be the crop of the peatland and higher east coast since they were more tolerant of acidity. Certainly at this time and subsequently, the crofter in South Uist was probably ploughing a much greater acreage than the average crofter elsewhere in the Highlands and Islands.

The Uist folk were criticised, especially in the nineteenth century, for allowing so much of their grazing to be given over to horses. There was always a strong tradition of horse-breeding in South Uist, and trading in horses, including their export, remained popular until the Second World War. The average croft wintered two horses – typically a mare and a gelding – and a foal, and the horse population still exceeded a thousand in the early-twentieth century. With mechanisation in the post-war period, the number of horses fell rapidly until the South Uist breed itself had virtually disappeared by the 1970s. The older generation then recalled how every boy had grown up with the technical vocabulary for every aspect of horses and working them and how great was the change in this respect when horses went out of use.[7]

There was now in the late-twentieth century a palpable difference in the Uist landscape; it was said that in earlier years the countryside all around appeared to be moving and full of people – men, women, children and horses going about their daily activities. Many horses meant that there were many blacksmiths. Some blacksmiths moved around the islands for some months and would put up a smithy (*ceàrdach*), especially to service the ploughing and spring work on the crofts. It was said that January and February were often the busiest times of the year when orders came in as preparation for the ploughing season.[8]

Methods of cultivation evolved in Uist under the influence of the varying qualities of soils and terrain, and of economic circumstances and estate and latterly government policies. Thus, the comment of one agricultural writer in 1794 to the newly formed Board of Agriculture about tillage in South Uist reflects a situation which had

6 Information from John MacInnes MBE (1907-1984), Daliburgh, South Uist, August 1982. See also *Report &c* (1905).

7 Information from Donald John MacDonald, *Dòmhnall Iain Dhonnchaidh* (1919-1986), Peninerine, South Uist, 1982-1983. The same informant made substantial donations of South Uist written material to the School of Scottish Studies. The pagination of the D J MacDonald Notebooks continues in sequence through all the notebooks to a total of 6,523 numbered pages (see MacDonald nd).

8 Information from John A Smith, Glasgow, 22.03.82; Donald John MacDonald makes the same point about the joiner: '*cha bhiodh fois mhionaid aig an t-saor*' ('the joiner wouldn't have a minute's rest from making and repairing ploughs') (see MacDonald nd: Notebook 52, No 2, 4846).

probably subsisted throughout the eighteenth century. He described the plough as being used on the coastal *machair* and the 'crooked spade' (*cas chrom*) or the ordinary spade (*cas dhìreach*) being used in the 'declivities and narrow summits' (see Heron 1794: 26).

An estate map of 1805 shows that the main cultivated area was then, as later, along the west coast, but that there was also settlement and cultivation inland and away from the *machair* areas (see Bald 1805). Given the high number of tenants on small areas of land in Uist, spade cultivation was likely to account for more of the tillage than plough cultivation at the turn of the century. Until drainage and enclosure were carried out to any extent, the opportunities to use ploughs, even on *machair* lands, was restricted. The employment of a large proportion of the population in the kelp industry on the coast and the consequent loss of the seaweed as an essential fertiliser for cropping also militated against a general use of ploughs.

Some reorganisation of joint-tenancy townships into crofting townships took place in the first quarter of the nineteenth century, giving some tenants larger and fixed strips of land to cultivate, which, together with the persistence of some larger farms directly controlled by tacksmen, must account for the comment that improved ploughs were generally in use in South Uist by the 1840s (see Maclean 1845: 191).[9] Without statistics to substantiate this, such a statement can only be considered as less than meticulous and any conclusion conjectural; at the least it could be accepted that contemporary improved tillage implements of the James Small swing plough-type were known and used in part of the Hebrides by this time.

Clearance and the re-organisation of the Uist economy

Most historical studies of the Highlands and Islands in recent times are dominated by the politicised and emotional subject of the 'Clearances', conventionally describing the creation of the sheep farms and introduction of commercial rents with a consequent large-scale displacement of people. Not surprisingly, historiography is characterised by strongly partisan and bitter accounts of social and economic movements and their chronology. The scale of human tragedy is still being explained and absorbed. An apparent viability in the late-eighteenth century for a rapidly increasing population was based on the temporary success of the kelp industry and high cattle prices which largely collapsed in the 1820s. The destruction of Hebridean society and its communities following the early-nineteenth century stay of execution was paralleled in its ravages and intensity only by the extreme case of Ireland in the same period.

The sale of South Uist in 1837 and 1838 by its longstanding traditional owners, the MacDonalds of Clanranald, instigated a process seen coldly in contemporary terms as the rationalisation of an agricultural estate. Such rationalisation included progressively the manipulation of the

9 The minister traded on a measure of unequivocal Enlightenment optimism with: 'The work formerly done by five men and five horses at the plough, is now performed by one man and two horses.'

island population and then enforced emigration in 1849 and 1851.[10] The human dilemma was exacerbated by widespread destitution in the 1840s which demonstrated the devastating effects of landlord pressure and attrition and extinction of the resources for subsistence. Crofters and cottars forming nine-tenths of the population were concentrated on less than one-third of the land, including the agriculturally marginal areas. A crofter delegate, Donald MacLellan, Garrynamonie, South Uist, giving evidence to the Royal (or 'Napier') Commission of 1883, expressed forcefully the agony of the situation: 'I wish the Royal Commissioners to understand that the whole people of the country have been blocked up like sheep in a fank, huddled together so that it is impossible for them to live' (see MacKinnon and McNeill 1884: 742).

The population of South Uist which had grown to 7,237 recorded in the census of 1841 from an estimated 2,200 in 1775, then lost nearly 2,000 in the ensuing two decades (see MacDhòmhnaill 1981: 16 – 17). A declining population, higher cattle prices and cash earnings from external sources such as the fisheries and seasonal work in South and East Scotland must have eased the situation slightly from the grim misery and congestion of the years preceding 1850. Government belatedly brought some relief in a settlement achieved in the Crofters Holding Act of 1886 which protected existing holdings but denied the demand for more land and excluded the cottar population from its provisions.

Witnesses before the Napier Commission in 1883 on the conditions of crofters and cottars in the Highlands and Islands described the vicious circle of landholding circumstances in the mid-nineteenth century. Sowing of crops tended to be late and tillage often continued well into June. The animals of the townships roamed over the tilled land because the ground was unfenced and the crops had no time to ripen. Most witnesses before the Commission commented on the severely restricted opportunities for tillage and crops as well as loss of pasture in Uist. Land was taken at will on a large scale by the proprietors to create sheep farms, and evicted tenantry were squeezed into smaller and smaller crofting townships or were forced to emigrate. Some were put onto marginal hill land which in some instances was added to larger tacks after they had been reclaimed (see MacLellan 1962; Campbell 1972).

By the late-nineteenth century most crofters used spade cultivation in Uist and Barra, and even those who knew the Hebrides well considered that there was more 'lazy-bed' cultivation in South Uist than elsewhere. In the 1880s, the main crops on the island were potatoes, bere and small oats and the reason given for the extent of spade cultivation was that potatoes had become a staple, in spite of the potato blight of 1846 (*Bliadhna na Gaise*). They were said to grow best by this method, although the people were not raising enough to live on and had to buy in meal in most

10 For example, the clearance of Bornish in South Uist was described by Neil MacDonald of Peninerine in 1953, including the tying up and removal of a man to an emigrant ship in Loch Eynort. *Seo nuair a bha lagh na maor ann, agus ni sam bith a chanadh am maor, b'e seo a lagh* ('This was when the law of the factors ruled, and anything the factor said, this was the law') (see MacDonald nd: Notebook 6, Item 2: 497-99).

Figure 6: Donald MacAskill and Ailig Iain MacDonald bringing out the plough, Kallin, Grimsay, 1982.

years, generally the notorious Indian meal (*aran innseanach*) of poor quality so vividly recalled in oral tradition.[11] The land was too wet to work with the plough on most of the inland areas of the island where the crofters were forced onto diminishing areas of hilly and boggy ground. In these circumstances, they were often too poor to purchase a plough or to keep it in working order.

The fortunes of the crofting population of South Uist did not change dramatically at this juncture following the Crofters Holding Act, nor were there significant changes in agricultural methods. Divisions of pre-existing crofts to accommodate those displaced from cleared farms meant that land available for arable was still restricted and tillage still largely a matter of spade cultivation. The attitude of the proprietors was deprecating and an opinion that the crofters were not able to manage land or stock was allowed to prevail. Crofters tended to be intimidated by the landlords and factors and remained passive until the period of the First World War. Attitudes within Hebridean communities changed sharply following the First World War and the unilateral and hitherto complete control of the land was challenged. In areas other than South Uist there

11 Information from John MacInnes MBE, Daliburgh, South Uist, August 1982.

were 'raids' to occupy and cultivate land that had been cleared.

Under pressure from the prevailing politics of land reform, a further Royal Commission of 1894 and the provisions of the Congested Districts Board created in 1897 led to land settlement schemes. The large farms which had been assembled in the 1840s were broken up into individual smallholdings (see Hunter 1976: 179 – 95). Almost all the land earlier cleared of sub-tenants and crofters in South Uist was re-settled by 1924. With the expansion of the crofting area on the newly settled townships mainly from 1906, cultivation and arable cropping began to increase. After 1912, the Board of Agriculture intervened to help the estate develop land settlement schemes and the crofts created from then on were larger holdings, though land-use continued as before. Though the opportunity to plough larger holdings led to more intensive land-use in some townships, statistical information makes it clear that cereal cropping declined by the 1960s to less than half its maximum acreage in 1909 (see Caird 1979). The amount of ground turned by spade cultivation, especially using the *cas chrom* on lazy beds, declined, and there was little or no technological change until the advent of tractor ploughing in the 1950s.

Documentary and oral evidence points to a relatively short period of dynamism between about 1906 and 1926 when crofting holdings were enlarged, homes built, and more money was available in terms of modest amounts of disposable income largely derived from 'working away' in the cities and in the merchant marine. Coincidentally this is also the period when the generation whose knowledge and reminiscences form the main element of this account were in their thirties and evidently active and innovative (see, for instance, MacDonald nd: Book 52, Item 5).

The making and use of the Uist ploughs

This archetypal wooden plough or *crann fiodha* belonged intimately to this Uist landscape, the recent pressures brought to bear on it and fundamental changes in the patterns of land tenure. The makers of such ploughs recorded here were people very well known in their communities, leaving their mark on the landscape and on community memory. They were, as has been mentioned, Charles Stewart, joiner and boat-builder, Grimsay, and Neil MacDonald of South Uist. Neil MacDonald (1884-1955) lived in the crofting township of *Peighinn-an-Aoireann* (Peninerine). He was known in Gaelic as *Niall mac Dhòmhnaill 'ic Dhonnchaidh* or less formally as *Niall Dhonnchaidh*, i.e. Neil son of Duncan. He was a brother of Duncan MacDonald (1882–1954), the stonemason, known familiarly in Gaelic as *Donnchadh Clachair*; the latter was the celebrated storyteller and *seanchaidh* or tradition-bearer whose traditional knowledge has been extensively recorded and published.[12] Duncan's son, Donald John, was to describe how his Uncle Neil had influenced him and his sister: *'S e Niall a thog sinne. Bhitheadh m' athair an còmhnaidh a' siubhal ri sgeulachdan agus togail thaighean .... bha a*

12 This outstanding contribution is summarized by William Matheson (Matheson 1977) with recordings available in *Tobar an Dualchais*.

cheart uibhir do sgeulachdan is beul-aithris aig Niall 's a bha aig Donnchadh, ach gun robh Niall car diùid dhe fhèin. [13]

It is not without significance in the present context of material culture that these two brothers were representatives of a family of tradition-bearers whose ancestry could be traced back to a distant past. They were related to the MacRurys who are on record in Skye in the early-sixteenth century, and were, in the one branch, a family of hereditary armourers and blacksmiths under the patronage of the MacDonalds of Clanranald and, in another branch as *Clann a' Bhàird*, hereditary bards and historians to the MacDonalds in Skye. As such, they belonged in the noble and privileged stratum of medieval society.[14] The interests of Celtic scholarship in the past rarely extended beyond the literary and the higher registers of language. But it is evident that Duncan and Neil MacDonald, with their great command of the Gaelic language, were ready and able to describe their crafts and trades and possessed an extensive vocabulary and glossary of technical terms associated with their work. Such terminology was not derived from published texts, since literacy in Gaelic was then rare. It is only recently that this species of knowledge has been tapped for the terminology of material culture.[15]

As a joiner, *Niall Dhonnchaidh* made ploughs in South Uist and they were used, as the National Museums' example demonstrates, all over the south end of the island. His reputation and skill were such that he was known beyond his own township as *Athair nan Crann* or *Athair Cruinn*, *i.e.* 'The Father of Ploughs'.[16] His ploughs were distinguished by the shape of the beam (*druim*) which was 'more arching' than other locally made ploughs and by a 'wedge' set in between the two stilts. Usually this fixing on a wooden plough was made with a nail or a large wooden dowel (*crann tarraing*), but Neil MacDonald regarded the wedge as stronger while the nail or dowel might work loose with use. The beam (*druim*) was sawn out of a slab of wood using a frame-saw (*sàbh-beairteadh*) and working the big saw in the saw-pit (*an t-sloc sàbhaidh*) (MacDonald nd: Notebook 52, Item 1, 4836).[17] The preferred timber was elm (*leamhan*) which was imported into the island from sawmills outside Glasgow in baulks about 4ft (122cm) wide by 9in (23cm) deep. They were sawn in such a way as to produce four plough beams from one baulk, each beam being about 2 ½ in (6.5cm) thick. The stilts or handles (*làmh mhòr* and *làmh bheag*) were cut from battens of timber which were approximately the same dimensions as the finished stilts; they were finished with a chamfer to round off the edge.

13 'It was Neil who raised us. My father would always be on the move for storytelling and building houses', and Neil's modesty was recalled: 'Neil had equally as much of stories and oral tradition as Duncan though he was somewhat shy'. Personal communication from Bill Innes, 10.01.19.

14 Information from Rev William Matheson, October 1982; see also Matheson (Matheson 1980 – 1982) and MacLean (MacLean 1994: 82, 207).

15 See, for example, Duncan MacDonald's recorded account of housebuilding (MacDonald 1957).

16 Information from John MacInnes MBE, Daliburgh, and Donald John MacDonald, Peninerine, 1982.

17 Here there is a detailed account of the joinery and blacksmith work in making ploughs.

The wooden frame of the plough was formed with the beam (*druim*), the sole (*bonn*) and sheath (*geadha*), to which the mouldboard (*bord uiridh*) was fixed; this was plated to reduce abrasion of the wood. A temporary modification would be made to the plough for earthing up potatoes in the drill; a block of wood described as the *cranc* was fixed on the landside of the frame. Where money was scarce and implements few, such as in the Hebrides, ordinary ploughs typically were converted for use as drill ploughs for potato work by fitting the *cranc* on the landside. Elsewhere, in Mainland Scotland, this was sometimes termed the 'false reest'. This block on the Uist ploughs was relatively small and did not match the dimensions or profile of the mouldboard. The plough itself was held tilted to one side when working in the drill, thus keeping the ridges symmetrical or even. Ridging up the earth for potatoes was described as *a' togail suas* ('lifting up' or 'raising up').

The plough was then taken to the blacksmith for mounting up with ironwork; in this case it went to the smithy (*ceàrdach*) at Stoneybridge (*Staoinibric*), little more than a mile and a half from Peninerine. The blacksmith was then Murdo MacRury, *Murchadh a' Ghobha*. Iron plates were bolted on each side of the muzzle or front end of the beam (*sròn a' chruinn*) to provide strength to the point of draught (*an smuiseal*). The plates were known locally as 'the cheeks' (*na teics*). A stay (or bar) from the stilts to the beam was fitted. The sole plate (*bonn*) was made from bar iron used for making cartwheel rims. Another term for the sole plate was *an t-sàileag*, being fitted to *sàil a' chruinn* or the 'heel of the plough'. When the blacksmith made 'cart rings' from the bar iron, lengths of 2–3 ft (60–90cm) might be left over and these were regarded as ideal for making the *bonn* or sole plate for a wooden plough. The sock and coulter (*coltar*) were also made from cartwheel iron.

Tinplate or strips of zinc sheeting were nailed over the wooden mouldboard. This sheeting was obtained from shipments into the islands of materials for roofing. Towards the middle years of the twentieth century, crofters in the Uists began to buy wrought iron or chilled steel mouldboards from Glasgow. When mounting the plough with these the joiners helped the blacksmith to fit the mouldboard onto the *geadha* or sheath.

A diagnostic and distinctive feature of the South Uist plough is the wrought iron share or sock. Made by the local blacksmiths such as Murdo MacRury, Stoneybridge, it demonstrates adaptation to local conditions and a modification to technical circumstances specific to the wooden Uist plough. It was an asymmetrical share, about 25–30cm in length, socketed to fit over the point of the sole. The wing is described as *sgiath an t-suic*, *sgiath* being the standard Gaelic word for a 'wing', but this specific meaning is not recorded in the standard dictionaries. The socket is locally described as *crò* or *còdha an t-suic*, a gloss also not recorded by the dictionaries. As Donald John has described: 'The sock is fitted onto the iron *bonn* of the plough by inserting the tapered end of the *bonn* into the *crò*; it is a push-fit, and the sock stays put by the pressure of the soil as the plough moves forward' (MacDonald 1957).

A short bar is riveted onto approximately the middle of the top surface of the sock using a bolt

Figure 7: Surviving sections of plough with imported iron mouldboard fixed onto the sheath or geadha, West Kilbride, South Uist.

that goes right through the sock to be clenched on the under surface. The bar is upstanding at an angle of about 45° to the *crò* or socket. Thus it bends away from the direction of forward movement. This is known as the *aparan* or *aparan an t-suic*, this meaning of 'apron' not otherwise being recorded. The *aparan* was usually made of the bar iron for cartwheels and rims, thus giving it a convex top surface. When the sock was pushed home onto the point of the plough, the *aparan* was designed to lie against the sheath of the frame or the *geadha*. This was not specifically to protect the wooden frame of the plough but rather to help to throw the furrow as it cleared the land. The experience of iron ploughs demonstrated the advantage of achieving a fine edge where the mouldboard and landside meet. The wooden frame could not be shaped to such a fine edge without weakening the sheath of the plough frame. The wooden sheath had to remain 'wedge-shaped' and the term *geadha*, not recorded in this sense in the standard sources, is locally glossed as 'wedge'.

A good example of a plough sock of this type from South Uist, probably of late-nineteenth century manufacture, is in Hamburg's 'Museum of Cultural History', in the collections of the *Hamburgisches Museum für Völkerkunde und*

Vorgeschichte.[18] The sock is 29cm long and 14cm across the wing. It is fitted with a riveted 'apron' of 23cm length. A further example was excavated from Drimore Machair in 1955 in advance of the Rocket Range construction; it came from the site known as *A' Cheàrdach Bheag* (or 'The Wee Smiddy') and in its unconserved state, was described as 'the earliest specimen of its type [of Romano-British ironwork] found north of the Forth'.[19] As a distinctive type of wrought-iron Uist plough sock, it is more likely to have been made by the MacRurys in the late-nineteenth or even early-twentieth centuries, although, arguably, may have been a pre-existing local adaptation which was carried forward in the 'modern' ploughs.[20]

Figure 8: Uist plough share with riveted 'apron' and (front) plough share recovered from A' Cheàrdach Bheag, NMS Acc. No. W.2012.19.

The sock needed re-laying frequently, especially while working on the *Machair* where the friction and abrasion of the sandy soil wore down the point and the wing. It was said that when working on the *geàrraidh* or croftland, the sock was two or three times as long-wearing. Although coal was normally used for the forge work, peat charcoal might also be used and the process was described by Murdo MacRury. A hollow or pit was dug and peat was put into it, lit and allowed to burn. The pit was then smothered with turfs, the fire dampened and allowed to burn out. The resulting charcoal formed from the peat might be used in the forge fire and was used for steel which, being brittle, could break more easily in the intense heat of a coal fire.

Words and things

The fieldwork to place the plough in context was predicated on an assumption that terminology should be collected and interpreted if possible (see *Appendix*). This purpose assumed that the terminology had not been recorded before and that, where it might be recorded in the dictionaries, its definition and interpretation might be incomplete or at fault. The term *crann fiodha* is a Gaelic compound noun meaning 'plough of wood', i.e. wooden plough, qualifying the common

18 Since 2018, *Das Museum am Rothenbaum – Kulturen und Künste der Welt (MARKK)*. Museum catalogue number 13.233.175.

19 NMS Accession No. W.2012.19; (Young and Richardson 1960).

20 See the *Stornoway Gazette* of 1985's correspondence on 'Plough Sock' where an alternative interpretation and chronology was offered for the ironwork (*Stornoway Gazette* 1985).

substantive *crann* which has a range of meanings besides 'plough', including 'beam', 'shaft', 'mast' and also a measure for fish. *Crann treabhaidh* is another colloquial term for the plough, in this case qualifying the noun by the verbal-noun form of *treabhadh* for 'ploughing'. *Crann fiodha* does not appear in the older (nineteenth-century) dictionaries and, significantly, is first noticed in the notable lexicon of Edward Dwelly, prepared and published in parts between 1902 and 1911 and still remarkable for its depth and range. The term is attributed to a correspondent, Alexander Henderson of Ardnamurchan. It probably represented a comparatively recent compound, used for convenience to distinguish the wooden plough from the iron plough of imported type while both wooden and metal ploughs were in use contemporaneously.

As Dwelly's word-lists show, *crann fiodha* was one of many compounds in Gaelic used to qualify or to describe different plough-types. His work represented at the time a significant expansion of published lexical explanations and included regional and local usages not previously noticed. His lists and glosses were in some respects expanded in later work on collecting words and meanings. These were gathered in manuscript and deposited in the National Library of Scotland and have been published (see Clyne and Thomson 1991 and Dwelly 1967: 260 – 64).[21] Some of the terminology under the headword *crann*, plough, attributed to the same Alexander Henderson is expanded in a later manuscript by Dwelly, MS 14958, although here no discrimination is made over sources or regional usages.

In spite of some significant advances in lexicography, material culture is still served remarkably unevenly and the Gaelic-speaking areas of Scotland are particularly poorly represented in this respect. A symptom of this is detectable in the number of contrived words introduced into Gaelic dictionaries, often ignoring detailed and diverse local vocabularies. The terminology of specific subjects or themes is generally well represented in traditional dialects, as the example of the Uist plough shows (see *Appendix*).

Little work has been achieved in the compilation of regional dialect glossaries which would tend to throw up technical and material culture terminology as well as throwing considerable light on the social, economic and cultural life of the people. There is one exception to this which has not been seriously challenged. Father Allan McDonald's *Gaelic Words and Expressions from South Uist and Eriskay* were collected by him as the parish priest between 1886 and 1905, preserved in manuscript in Edinburgh University, and edited and published in 1958 by Dr John Lorne Campbell.[22]

Dictionaries have drawn largely on literary sources and this has been very true in the case of the Gaelic language, where the literary language was adopted as the standard and dialects and dialect variation neglected. The dictionary makers were for the most part ministers, priests, schoolmasters and men of the learned and upper classes of Gaelic

21 NLS MSS 14957 and 14958.

22 There, the term *geadha* is included but misleadingly defined (Campbell 1991 137); see too Diesckhoff 1932.

society. Many were first and foremost theologians with philosophical interests. They rarely strayed from the texts and conventional sources and had little extended contact with the mediators of tradition. The point also has been made that lexicography has tended to ignore the Outer Hebrides where dialects have been demonstrably more vigorous than any contemporary literary language. Other areas previously denied notice have been *Bàrdachd Baile* or 'Village Poetry' where frequently songs of praise or satire were rich in idiom and terminology (see NicDhòmhnaill agus Chaimbeul 2015: 36). Besides dialect and idiomatic range, the dictionaries of Scottish Gaelic have been poor lexicons of material culture. Unfortunately, the practical could not often be reconciled with the literary. The dictionary makers consistently neglected to record technical and mundane vocabulary, or subtleties of meaning; this ignored the very obvious appropriation of ordinary words for specialist usage, the changes and expansion of terminology to meet changing circumstances, and the widening of semantic fields to accommodate new needs.

Conclusions

It is evident from information by word of mouth that the Uist *crann fiodha* is a modern rather than archaic or anachronistic plough-type, belonging to the period of the 1890s–1950s. Resettlement schemes following the Crofters Holding Act of 1886 provided some new enlarged holdings and coincided with the introduction of new plough-types into Scotland. The Oliver Plow Works of America's Mid-West let their agency contract to the Glasgow firm of John Wallace and Sons Ltd, Agricultural Engineers, in 1885. The first batch of their ploughs was imported in 1886 and their use spread rapidly over the whole country. The size and profile of the Uist *crann fiodha* is reminiscent of the Oliver 10A or 110A general purpose, lea and stubble plough; it had long handles and a beam with a more pronounced curve than the one-horse ploughs such as the Oliver 140. Imported plough types such as the Oliver and their local copies have been in common use in the Islands, and ploughs imported by P and R Fleming, Argyll Street, Glasgow, have been seen in different parts of the Hebrides. Other sought-after ploughs were the Gray of Uddingston swing plough, referred to occasionally (and fondly) as 'the old Gray plough'. There was clearly a long-standing trade in the provision of goods from Clyde to the Outer Isles.

The *crann fiodha* therefore seems to be a type of plough made from the mid-1880s in Uist, modelled on imported plough-types and made occasionally by the crofters themselves, or more usually by joiners, boatbuilders and cartwrights in the islands. Details of the plough's construction were worked out to suit local conditions. From information by word of mouth, it seems too that the ploughs were shod with their ironwork by local blacksmiths. Completing the historical record by means of fieldwork therefore, the *crann fiodha* represents a dynamic rather than a relict process and a ready and resourceful response to the particular exigencies of the time, and a time frequently represented as one of unremitting social, economic and cultural decline.

The Uist plough offers an example of material culture studies helping to complete the

historical record of cultivation and settlement and challenging assumptions of cultural and technological development. It can stand as an ethnological exemplar in its detailed description of an object as cultural and social signifier in a material culture past that is often difficult to 'read'. With the more recent (and welcome) material turn in historical and cultural studies, it fulfils a need for more detailed research into settlement and the tools of cultivation and adds to the lexical record of technical terminology which has been recognised as too often sparse for Scottish Gaelic.

Sabhal Mòr Ostaig
Am Foghar 2023.

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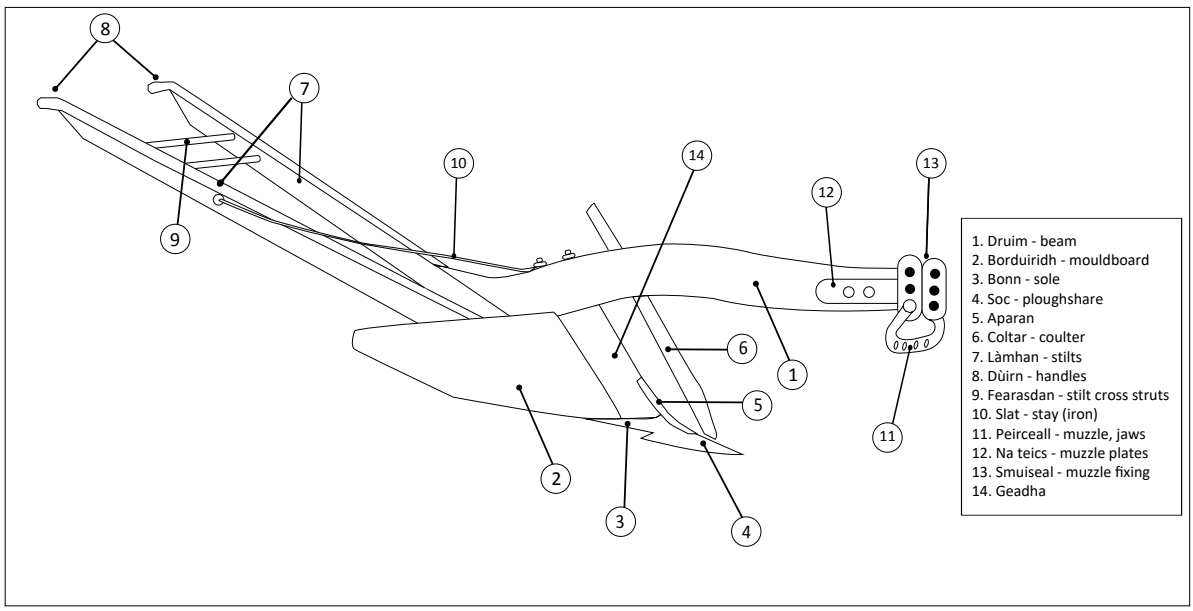

Figure 9: Diagram of a Uist plough with typical naming of parts.

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Appendix

Terminology of the wooden swing-plough (*crann fiodha*), gathered on fieldwork in Uist, 1979-1982, from Donald John MacDonald, Peninerine, Murdo MacRury, Stoneybridge, Alick Iain MacDonald, Kallin, Grimsay and Patrick Morrison, West Kilbride.

Crann fiodha – wooden plough
Crann-treabhaidh – plough
Druim – beam
Bòrd uiridh – mouldboard
An coltair – coulter
Cranc – landside block added for ridging (*a' togail suas*) for potatoes
Bonn – sole plate made from length of cartwheel rim
An t-sàileag – sole plate
Sàil a' chruinn – the heel of the plough
Geadha – 'sheath' of frame i.e. meeting of mouldboard and landside
Crann-tarruing – spacer/support where stilts meet plough frame
Làmhan – stilts
An làmh mhòr – stilt on the right-hand side
An làmh bheag – stilt on the left-hand side
Fearsadan – stilt cross struts
Dùirn – handles
Spàg, spàgan – handle, handles
Bàr – stay, from stilts to beam
Slat – stay (iron)
Peirceal – muzzle
Sròn a' chruinn, an t-sròn – the 'nose' of the plough or front point of the beam
Na teics – muzzle plates
Na busan – (literally) the lips, being the two iron plates fixed on the nose of the plough *Smuiseal* – muzzle fixing
Amal, an t-amal – swingletree
Grealag – swingletree or 'small tree'
An soc – ploughshare
Sgiath an t-suic – ploughshare 'wing'
Còdha an t-suic – ploughshare socket
Aparan an t-suic – Ploughshare bar or protective 'apron'

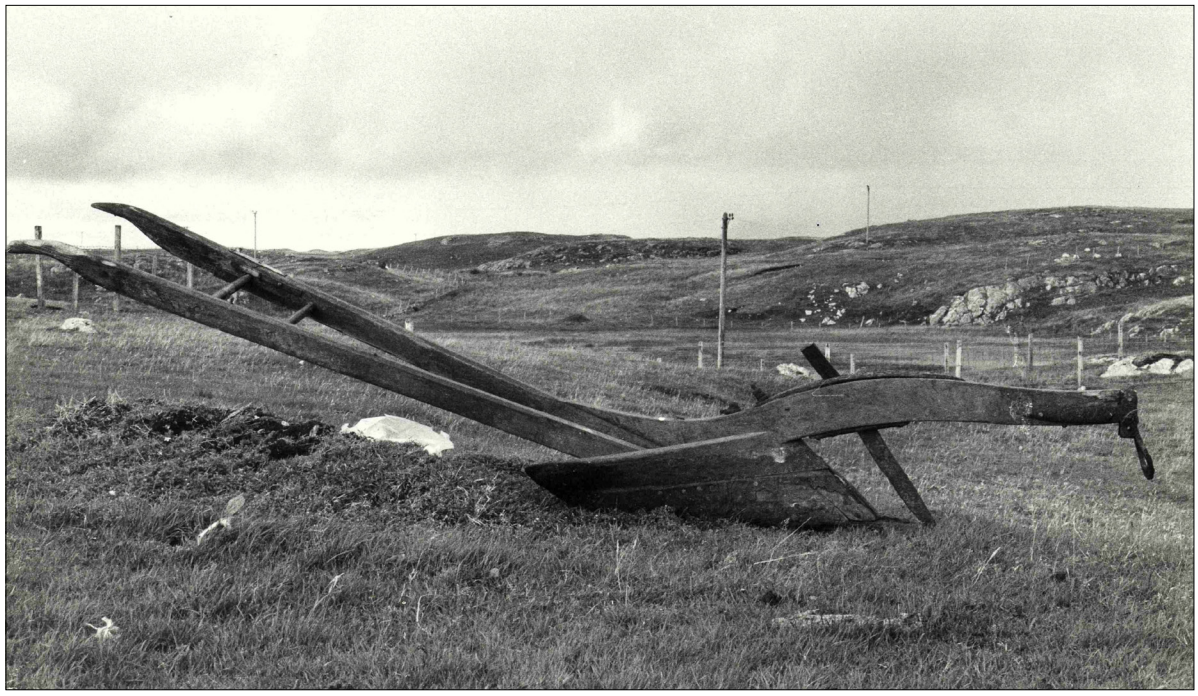

Figure 10: Wooden plough in the township of Kallin, probably made by Charles Stewart, Boatbuilder, Grimsay, with iron 'strappings' or mountings by Lachlan MacRury, Aird, Benbecula

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