The 2023 AGM will take place at the National Library of Wales (NLW), Aberystwyth, on Saturday 13 May. Formal business begins at 12 noon, following a talk by Keith Lilley of Queens University, Belfast, on commemorating two hundred years of the OS in Ireland, (1824-2024). Tea and coffee will be served from 10.30, with the talk starting at 11.00.

AGM Agenda

1. Apologies for absence
2. Minutes of 2022 AGM
3. Matters arising
4. Officers' Reports:
   a. Chairman
   b. Secretary
   c. Treasurer
   d. Membership secretary
5. Reports from subcommittees:
   a. Publications
   b. Archives
7. Appointment of independent examiner.
8. Proposal to elect Chris Higley to Honorary Membership.
9. Any other business.
10. Presentation.

The customary map market will take place from 14.15 to 16.00

It would greatly assist if those planning to attend would inform Anne Taylor at aemt2@cam.ac.uk (or the Hon Sec for those without email connectivity), preferably by 29 April. For access to NLW, see https://www.library.wales/visit/before-your-visit/how-to-get-to-nlw

Those who would like space at the map market are asked to indicate to John King (all3kings75@btinternet.com) by 29 April the amount of table space they would like (in linear feet). Because of the nature of most of the tables used, those bringing large boxes (anything above shoe-box size) are asked to bring a blanket or blankets to protect the tables. There is a lift giving access to the map market area.

The Caffi Pen Dinas will be open at lunchtime. Hot options - jacket potatoes, soup, hot pastries - will be available if sufficient people give advance notice, so please let Anne Taylor know if that is your intention.

Some members may wish to note that the Vale of Rheidol morning train returns to Aberystwyth at 1330 and the afternoon one departs at 1400.

Rob Wheeler, Honorary Secretary
**Gerry Zierler writes:** Some photos of and about my predecessor CCS chairman Chris Board’s 90th/91st birthday lunch in the Athenaeum Club, London on 7 February, hosted by Yo Hodson (so - CCS members nos 1 and 2), and attended by twenty-five of his friends from the worlds of maps, cartography, and philately.

Clockwise from top left: Chris with his birthday card and BCS President Seppe Cassetari; the birthday cake; GZ in a silly (sorry, Scilly) tie; and Chris in fine form.

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**Albert John Coombes 01.12.33 – 12.02.23**

We have received this email from John’s widow Hazel and children Caroline, Rosalind and Lisa: Hello CCS. We wanted to let you know that sadly John, aged 89, passed away peacefully with the whole family around him on Sunday the 12th of February. After having had a very pleasant Christmas with us all he unfortunately fell ill on Boxing Day and was admitted to East Surrey Hospital. We know the Society was a big part of his life through his love of maps so if appropriate we would be happy for you to note his passing in your newsletter to let other members know of his passing.

A full obituary will be published in the next edition of Sheetlines.
25-inch Revision

Rob Wheeler

With the completion of the Replot programme in 1896, the whole of Great Britain (other than mountain and moorland) had been mapped at 25 inches-to-the-mile. It had taken a little over fifty years if one includes the six-inch work that was replotted, and it cost something in the region of £3 million. The resulting topographical database (to use a modern term) was a major capital asset that would henceforth be maintained by cyclic revision.

Winterbotham describes the method used for revision as the ‘graphic style’. It depended heavily on using existing detail and the straight lines joining such features to fix new work, although revisers did carry a tape and a chain for use when necessary. It is worth quoting Winterbotham’s exact words:

Bearings come from “straights”, “prolongations”, and “shots” in directions established by former work. The astonishment and frequent unbelief on the part of all those who have not seen it done is readily understandable. The soundness of the method does in fact rest on five factors:-

(a) There must be enough detail of houses, trees, fences and the like to allow of such alignment.
(b) The work to be revised must be of the highest standard, or else doubt and delay lead inevitably to mistakes.
(c) The amount of new detail to add must not be more than can be hung on previously surveyed, and still visible, objects.
(d) The revision must itself be checked and “finally revised” by a second man.
(e) Revision must be carried out on good originals or traces which do not introduce any distortion into the original survey, or the previous edition.

‘Prolongation’ means in effect extrapolation. A point fixed by such means will inevitably be less accurate than the existing detail. Note also the use of isolated trees to define a line. The plotting of isolated trees always seems to have been less exact than the junctions of fences which the Survey regarded as the ideal. But even here it is worth remembering that what appears on a map or on an air photo as a junction of fences may be seen on the ground merely as the corner of a field. Ramblers will be aware just how vague such a corner can look from a hundred yards away. Thus, the revised work would inevitably be less accurate; yet the method depended on existing detail being ‘of the highest standard’. For how many cycles of revision would this method be viable?

It is not the purpose of this paper to chart the decline of accuracy and the way that revisers somehow managed to keep it going for fifty years - and longer in rural areas. However, for successive Directors-General it was the skeleton in the cupboard; and the need to limit, so far as possible, the progressive deterioration in accuracy lay behind many of the procedures followed in revision.

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1 Estimated on the basis of figures in R Oliver, *The Ordnance Survey in the Nineteenth Century*, 2014, Appendix 1.
3 John Cole’s papers in *Sheetlines* on bypassed plans and overhauling are instructive.
**Card Revision**

On initial survey, field examination (which might incorporate revision to include, for example, new railways) had used a tracing. The re-plot had also involved revision, and this must have been done on a tracing of the replotted map.

Now, for the First Revision, copies of the existing published plans, printed on stout paper and divided into six portions, each of about a foot square, were issued to the revisers as a basis for the new map. The idea was that two of these ‘cards’ would butt up against one another on the reviser’s board; and thus continuity could be obtained across edges, both within a sheet and across sheet boundaries. The reviser would add new detail in black and would physically delete old detail no longer applicable.

This must have been significantly cheaper than taking tracings. There was however a problem: the first edition of the published map was derived from a tracing of the fair drawing. The second edition was now derived from a tracing of these cards. So the new map was a tracing of a tracing insofar as originally-surveyed detail was concerned.

There is one point not covered in the published accounts: for most first edition sheets, the zinc plate was no longer in existence, so how can copies on especially thick paper have been obtained? Perhaps ordinary (uncoloured) sales copies were mounted on card; or perhaps they were simply used as they were.

Winterbotham observes that the only records left from this process were the corrected cards. There was no MS drawing for the new map - or rather the only drawing was a litho-tracing which could only be used once, for a single transfer to zinc.

Card Revision was also used for the Land Valuation revision of 1911-12. This was limited to buildings and roads; features like railway tracks were not revised. As many staff as possible were switched to this task and standards sometimes fell below those normally expected. The resulting maps were not subject to copyright deposit; indeed, many remained in manuscript.

**Introduction of ‘Blues’**

Winterbotham: “‘Vandyke’ came in as a process in 1900. The direct impression passed, by vandyking, from the original drawing (not from the published plan) to the zinc plate, cutting out litho tracing, and when printed from that plate served as the original of the reviser’s trace and, in blue, as a direct key for fairdrawing when that was necessary. It did not help correction, of course, for that must be traced, but fair drawing was now so much simpler that the correction of the existing zinc plate ceased to have its original importance.”

Ferroprussiate blue was used because it would not photograph. The draughtsman added everything that was to appear in black ink (except that cadmium orange - which would photograph - was used for streams where they might be confused with fences). He might also use cobalt blue for things like parcel numbers on foreshore which the OS wanted for completeness but which were omitted from the published map. These drawings eventually found their way to NLS (in the case of Scotland) and Aberystwyth (in the case of England & Wales). NLS has recently scanned a selection of their drawings, and this has made this present article possible.

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The main question this article addresses is the nature of the original of which we now see an impression in blue. Winterbotham says it is “the original drawing”, which in the case of a first revision would seem to mean the original fair drawing. Since these have (almost) all perished, I had looked forward eagerly to seeing some - if only in blue rather than full colour. It that respect I have been disappointed. So what were the originals? There are four main categories:

1. Those derived from a First Edition drawing, with parcel numbers but no names.
2. Those derived from the cards used for the first revisions.
3. Those derived from a reduced 1:500 survey.
4. Those derived from a printed sheet or a master drawing for such a sheet.

This fourth category was always used after 1920. These are the only blues that have names and other lettering. They are straightforward and need no further comment.

**Category 1: Blues from First Edition**

As already observed, the blues derived from a First Edition drawing have parcel numbers. These are First Edition parcel numbers and were of no use to the revisers. That confirms - if there was any doubt - that these are an integral product of the First Edition. Indeed, Winterbotham is willing to describe them as the original drawing, which seems to imply they are not a tracing of any sort. We have a name for them, from marginal annotations on a couple of sheets: *Parish Impressions.*\(^5\) The word ‘Parish’ was used quite loosely for anything associated with the 25-inch, but *Impressions* is more surprising. I believe the explanation is that they were ‘pressed copies’ taken from the original drawing prior to stamping with names etc. Pressed copies were quite a common technique used for business letters towards the end of the century.\(^6\) Copying a full 25-inch sheet will almost certainly have required a roller copier, and maintaining uniform pressure with a roller of that width required careful engineering, but the requirement was exactly the same as that for printing from a copper plate and it is possible that such a printing press was modified for this purpose. The biggest challenge is that the technology normally required that the ink be less than a couple of days old. The interval between drawing the linework and stamping parcel numbers was surely much greater, given that parcel numbers could not usually be assigned until all the sheets of a parish had been drawn. One possible answer is that the copying may have been done prior to defining parcels, with parcel numbers and braces being stamped on the Parish Impression and subsequently on the fair drawing. Since we have no surviving fair drawings, we cannot check on this point.

This of course poses the question of why these impressions should have parcel numbers on them anyway. I suggest they were for use by the area computation branch in computing areas. Doing this in parallel with the stamping of names would reduce delays in the publication of sheets. Incidentally, it was less demanding to produce a copy in mirror-image: for area-computation this would not matter in the slightest.

When did this practice start? The earliest Parish Impression I have noted used as a blue was of 1867. That is largely because the earliest First Edition sheets were first in line for revision so were revised before 1900. But if this form of copying had been in use as early as

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\(^{5}\) Nairn 6.4, 7.1; Inverness (Mainland) 1.14.

\(^{6}\) See [https://www.officemuseum.com/copy_machines.htm](https://www.officemuseum.com/copy_machines.htm) for a US review.
the 1850s, one might expect more to have been heard of it.

Figure 1: Nairn 4.3: Trees reproducing partially on the blue, compared to the published first edition.

Figure 1 shows some corroborative evidence for the use of pressed copies. On the left we have a couple of isolated trees from the blue for Nairn 4.3. They look odd because the upper-right part of the stamp has not reproduced. Perhaps the manner in which they were stamped left insufficient ink in that portion, which had fully dried by the time the copy was made. The problem is widespread on this sheet. On the right we have the same trees on the published map. That they use a different tree-stamp is unremarkable: remember that the published sheet was produced by litho-tracing from the master-drawing with all the stamping being re-done. It is quite possible that the tree stamps in use for the two purposes were deliberately made different, each having different sorts of user.

If then we are able to view, albeit imperfectly, an incomplete version of the fair drawing, what does it tell us about these fair drawings - at least those of the late 1860s and early 1870s? One feature that emerges is a surprisingly relaxed attitude towards uniformity. Whilst the titles of the published Nairnshire sheets have the parish name top-left and NAIRNSHIRE with the sheet number top-right, the blues lack the parish name and can describe the county as NAIRN, as Co NAIRN, or as NAIRNSHIRE, and it often appears top-left. Omitting the parish name is unsurprising, as fair-drawing was done on rectangular sheet lines with restriction to a single parish only coming at the stage of litho-tracing. Yet even this is not uniform: occasional sheets are found, lying wholly within a single parish, which do give the parish name top-left.

The fair drawings will have stopped at the county boundary, but draughtsmen did not always ignore what was happening on the other side. Figure 2 shows an example where a dagger has been used to show where an Elginshire parish boundary meets Nairnshire. The use of a dagger here does not really accord with its use on Parish Parts where parishes within an adjoining county were completely ignored; but the draughtsman seems to have

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Winterbotham states on p36: "the unit of plotting was firstly the parish". But Seymour, 169-171, states that chain survey was based on the tertiary triangles and implies that plotting was done on the same basis. This is confirmed by the blues: when an area needed to be replotted, a whole tertiary triangle was redone - see later when blues from card revision are discussed. And undertaking plan examination on a tiny portion of a parish surrounded by blank space would have been impossible.
considered it as useful information and the dagger was a standard way of indicating it. Being comprehensible was what mattered rather than uniformity.

Figure 2: Nairn 5.12 filled with Elginshire. Note the dagger on the Nairn blue where a parish boundary joins. Note that ornament on the blue is limited to Nairn. The line in cadmium orange is a stream.

One variation from the printed maps that can cause confusion is shown in Figure 3, where the NW edge of parcel Dornoch 1268 is marked with closely-spaced horizontal lines.

Figure 3: Sutherland 113.6 with rough pasture ornament.
These are somewhat reminiscent of the horizontal blue lines used to indicate waterlogged ground. However, they are merely the manuscript form of the ‘flat-tussock’ type of rough pasture symbol, drawn with strong emphasis on the edge of the rough pasture and exceedingly sparse lines in the interior. Their reproduction on the blue is somewhat variable, so when they are clearly visible they have potential to be misinterpreted.

A certain number of blues derived from completely redrawn Second Edition sheets are similar in character to these Parish Impressions. They usually have diagonal hatching for building fill but other ornament may be lacking. However, isolated trees (especially deciduous ones) do tend to be present. The explanation I would put forward for this is that it was necessary for these to be stamped in their correct places before parcel numbers were stamped, so that the two should not conflict. Sometimes one finds that this priority has not been extended to isolated trees that impinge on fences: this might be explained from a desire by the area computation branch to keep the lines to which they were measuring as clean as possible; and trees like this at the very edge of a parcel were unlikely to clash with a parcel number. It is worth noting that isolated trees in this era tend to be drawn predominantly in parkland or adjacent to country villas; hedgerow trees, if present, tend to form a continuous belt and to be treated as a thin, elongated wood. Hence quite a few sheets do not have any isolated trees at all.

**Category 2: Blues from Second Editions**

In this case there is no doubt about the source of the blue: Winterbotham tells us that the only records left by the revision were the ‘cards’ as corrected by the reviser. What is in doubt is the process by which the blue was derived.

The OS was seriously concerned about the inaccuracies introduced by card revision and it carried out initial checks in the office. The commonest of these was to see whether features continued smoothly across sheet edges: even though the card concept was intended to address this, frequent discrepancies were found. This leads to marginal notes to the reviser for the new edition to thoroughly test detail in the suspect areas. The cards were also tested to see whether detail that was unchanged was in the same position as in the original fair drawings. When it failed this test - presumably either because the First Edition litho-tracing had slipped, or because of cumulative paper distortion - the blue was traced from the fair drawing, updated by new detail from the cards. In a couple of cases, trigs were found to have been mis-plotted on the fair drawing itself. In such cases, the blue was replotted from the original surveyors’ notebooks, updated where necessary by tracings taken from the cards. Such reploting is often confined to one of the tertiary triangles, which had been the basic unit for chain-survey. It is clear that the Survey were prepared to put significant effort into making the blue as accurate as possible. Indeed, for much of the period, fence junctions and buildings that remained unchanged from the original survey might be annotated in the office by a ‘J’ or ‘OLD’ respectively to indicate to the reviser that they should be more reliable.

By paying careful attention to the marginal notes, one can often deduce that a particular blue is derived from a tracing; but what about the great majority, where the notes at most direct the reviser to test detail in a specific area? Here the crucial evidence is the absence of names and of almost all ornament (rock-drawing and sloping masonry being the exceptions) from the blues. Hachures are normally replaced by broken lines delineating the top and/or
bottom of the slope. This is incompatible with any part being a printing of the published map. It seems to follow that in these cases too the detail has been traced from the cards. That would supply a mechanism for correcting for paper-shrinkage, etc; and certainly the junctions of cards within a sheet seem usually to be handled remarkably smoothly. If the detail has indeed been traced, it seems to have been done with rather more care than had been exercised in the litho-tracing for the Second Edition.

One type of card-derived blue that needs to be watched for is that incorporating Land Valuation (LV) revision. It is liable to affect most urban and semi-urban areas. For any Third Edition sheet surveyed before 1920, the interval since the LV revision is fairly short and the restrictions on most building that were in place during WW1 mean that changes since that revision were small. Thus most of the blue detail from the LV revision will have been overdrawn in black and will not be visible. Often it is the absence from the blue of detail from the Second Edition that alerts one to the presence of LV material. Figure 4 provides an exception: in 1895 Philpingstone Road had no houses west of the crossroads with The Run, so what one sees on the blue must be from the LV revision, visible here because of a displacement error.

Figure 4: Linlithgow n1.16 showing LV revision.

**Category 3: 1:500 photos**

Certain towns had new editions of their town scales produced at the same time as 25-inch revision or re-survey was being undertaken in the 1890s. The 1:500 mapping was produced as a first stage and was photographed when the linework only (or very little more) had been drawn. This was presumably so that the detail could be photo-reduced and used to draw the 1:2500.

These photoreductions were available for use as a blue for the next edition. Alternatively, the Parish Impression (or its equivalent) from the 25-inch might be used. It is difficult to perceive any logic in the choice. For example, the 1:500 covering Edinburgh
Waverley station was surveyed before major changes to the station which were incorporated on the 25-inch; yet the blues for this area were derived from the 1:500. Possibly the decision was driven by the dimensional stability of the different alternatives.

**Figure 5: Ayr 33.6 on a blue from the 1:500 survey of 1905. The northern gasometer was not present in 1895. The 1895 25-inch does not show the supporting pillars nor the earthworks around the middle gasometer.**

At Ayr (Figure 5) there had been a 1905 1:500 survey, independent of any other revision and not deposited in the copyright libraries. Reduced to 1:2500 it was used directly as a blue. Perhaps because it was on local sheet lines, the area reproduced extended a little beyond the 1:2500 sheet lines. The 1:500 material had not reproduced well and the figure has been enhanced to make the blue clearer

**Cross-border fill**

Policy on which sheets were to be filled to the neatlines with material from a county on another meridian and which were to have such areas left blank is surprisingly opaque. Perhaps there was confusion within the Survey, because one finds sheets where the blue has been filled to the neatlines but where the drawing stops at the county boundary. Or perhaps this was done because the reviser might need to take bearings from features across the border.

Often two adjacent counties were revised in a single operation, and there was up-to-date material available. In such cases, the blue is scarcely visible, having been entirely overdrawn. Indeed, one might suppose that a portion of the foreign county had been transferred to the plate, were it not that the blue is visible in the gaps of broken lines. One may also observe that the drawing of the ‘home’ and ‘foreign’ versions of the same terrain is not absolutely identical.
The material used for these ‘foreign’ blues often has linework only, even when it is derived from a First Edition. One might wonder why, if a linework-only copy was available, it was not used more generally. It is pertinent to note that this linework-only version is only ever used on ‘foreign’ portions, never within the ‘home’ county. I suspect it is actually a tracing from the fair drawing - possibly prepared in connection with the six-inch maps - and was not thought to be accurate enough for use by revisers.

Figure 6: Renfrew 8.12 of 1913 (left); Lanark 5.8 of 1913 (right).

Figure 6 gives an instructive example. ‘Braehead’ was a villa standing in its grounds a little south of the Clyde; it is just in Lanarkshire. It appears on Lanarkshire 5.8 of 1913, and also on Renfrewshire 8.12 of 1913. The former was drawn on material from card revision, complete with all trees. The latter was drawn on one of these linework-only blues. (Ignore the pencilled parcel number: the addition of parcel numbers in this way is something regularly encountered, but these do not form part of the blues proper.) The former includes a small building west of the villa, which had gone by the time of the Second revision. The latter lacks it. Note also the difference in the broken line marking the edge of the driveway where it differs from the 1913 over-drawing. The card-derived version (right) agrees tolerably well with the published Second Edition; the version on the left appears to be sloppy tracing. A single example does not establish an absolute rule but on the basis of this and a few other examples, I would warn against placing much reliance on cross-border detail. Differences between sheets of different counties are likely to reflect drawing errors rather than anything real; and those drawing errors are more likely to have occurred on ‘foreign’ work.

This somewhat casual attitude to the quality of cross-boundary drawing might have formed a coherent policy if county boundaries had been stable but fell foul of the numerous changes that took place. Use of linework-only tracings was evidently permissible
in areas that had been foreign but which were now part of the home county. The consequent deterioration in accuracy may explain why in the 1890s so many of the sheets around Glasgow where counties met were redone. Exactly what this meant in survey terms is not known, but the blues that resulted are akin to those from a First Edition sheet rather than from card revision. Life was no easier for the OS when they left foreign areas blank; this policy could result in odd sheets like Renfrew 12.12 of 1947, which consists of a small portion of Renfrewshire; a larger area that used to be Renfrewshire and had been transferred to Lanarkshire, but too late to be included on Lanark 10A.8 of 1936; and an even larger blank area, again now Lanarkshire, which had been shown on Lanark 10.8. Before the days of the NLS Sheetfinder, how on earth did anyone who wanted that second area discover that they needed to look on a Renfrewshire sheet?

**Utility of the Blues**

What use are the blues to a modern user? What can he or she learn from them about past topography that is not available from other sources? There would seem to be three benefits: greater accuracy, extra detail, and (occasionally) unpublished material.

‘Accuracy’ means different things to different people. The OS’s prime concern was that features should appear on the map in their correct position. In contrast the modern user who is (say) tracing the history of a house will not notice a displacement of a few metres, as long as nearby detail is similarly displaced. What such a user **will** notice is changes to the dimensions of a building, particularly changes to the dimensions of small projections. Perhaps the point at issue is whether the projection shown is the same as a surviving piece of structure. Or perhaps the dimensions help to identify the purpose of a vanished structure. For example, an outside lavatory is likely to be about 1 metre x 2 metres; if a projection is 1 metre square or 2 metres square, then it probably had some other function.

Published maps up to 1900 were produced by litho-tracing; and tracing was liable to introduce distortions in individual buildings. Much depended on the way the tracer worked. If he traced a small projection as a single operation, he may well have ensured that he retained its proper proportions; but if different sides were done as part of different operations, the errors can be independent and this can lead to dimensional changes of at least half a metre. Tracers might also completely omit a small building, or they might omit internal divisions. Blues from the Parish Impressions have the advantage that no tracing has taken place: they are the nearest we can get to the lost fair drawings. Figure 7 shows an example from Auldearn, just east of Nairn. A building stands on the edge of a quarry to which the name ‘Chimney’ has been applied. This might be taken to mean that the projection at the north corner of the building is a tall chimney; but chimneys are normally square or round, and this projection is rectangular. On the left is the blue, unobscured by later drawing, because by 1905 the building had been demolished. The blue may be ambiguous as to whether the chimney is square or round but it is at least consistent with it being one or the other. The blue is by no means easy to read: there is rock-drawing to the east of the building and a rather large parcel brace running across it that might at first be

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8. One reason for this may be that the tertiary triangulation was computed on a county basis and no attempt was made to ensure agreement across county boundaries - see Winterbotham, p36.
9. For examples, see my articles in *Sheetlines* 119 and 121.
taken to show a westerly projection. That, I am afraid, is typical of parish impressions from around 1870. But a blurred view of the fair drawing is better than nothing.

Figure 7: Nairn 2-9 (Auldearn) showing building at Kingsteps Quarry

The position when using blues derived from card revision is somewhat different. The image quality is better; what we see is probably a tracing, but it often seems to have been done with more care than the litho-tracing for the published map. At the very least it offers an alternative view, with a different set of errors.

With blues of both these sorts, one should not place too much importance on the absence of a line. Reproduction could be patchy: not every line comes out. The absence of an entire feature is a different matter, but with blues from card revision the user should look for notes that features in a particular area have been omitted because of inconsistencies in positioning.

‘Extra detail’ is something one obtains from blues derived from card revision. It comes about in three ways. The first was the use by the revisers of an ‘X’ - seemingly to indicate a ruin. This was not yet regarded as a proper symbol for published maps, being used for a building with an open passage at ground-floor level, so was simply ignored by the draughtsman. Buildings with this symbol are usually unroofed but occasionally roofed; in the former case the map might imply a ruin or might indicate that what had been a building was now simply an enclosure. The second way was from the reviser including detail like garden paths that the printed instructions now said should be omitted. Often this seems to have been done for a reason. For example, the paths in a kitchen garden or a nursery indicate its function; a bare rectangular enclosure could be anything. At an institution, like Bangour Village (on Linlithgowshire 7.12), a path to a front door may indicate the superintendent’s house.

The third way, generalisation by the draughtsman, was fairly rare: revisers knew what the finished map was to look like and rarely drew more detail than the map could accommodate. One exception concerns tramways at mines. Narrow-gauge tramways from pit-head to spoil heaps are often drawn by the reviser with double track and then simplified by the draughtsman to show just outer bounding lines. The Shale Oil Works at Figure 8 provides a more extensive example which is easy to read because the old installation had been demolished by 1914, leaving an unusually clear blue. The published 1897 map to the right shows four long rectangular blocks linked in some way at the ends. The blue shows that these blocks are divided into cells. It also shows at the north end what may be a
tramway - or is it a pipe? - curving into the ends of the northern block. To the NW of this block one sees an example of a double-track tramway replaced on the published map by just its outer bounding lines.

Unpublished material’ sounds exciting, but it can be difficult to exploit. The commonest case is the Land Valuation revision. As noted earlier, one sees it on sheets that were revised properly only a few years later, so there aren’t many differences. It is difficult to use the blue to assert that a building was present in 1911/12 because such buildings are normally overdrawn on black. One can, with caution, assert that buildings present on the previous revision had vanished by 1912 when there is no sign of them on the blue. If the deduction is at all important, it ought to be confirmed by inspecting the LV revisions themselves, which are generally available, albeit not online.

Only a single example - Ayr - has been encountered of a 1:500 town survey used as a blue which was not subject to copyright deposit. It seemed not to have much detail beyond that shown on the 25-inch: figure 5 was something of an exception. Once again there is scope here for arguing that a feature shown on the 1895 25-inch had vanished by 1905 because it cannot be seen on the blue. Again, important deductions are best confirmed by searching out a printed copy of the 1905 survey.

A previously unknown (and presumably unpublished) ‘Incomplete Advance Edition’ of 1938, covering Stirlingshire 17.3 and 17.7 was discovered to have been used as the blue for a 1942 revision of these sheets published 1947. There had been few changes between 1938 and 1942 but one of these (Figure 9) involved the demolition of what is thought to have been the southern stand at the football ground used by what was then Stirling’s main football club. This is understood to have been occasioned by one of the two German bombs to fall on Stirling during the War. What is not in doubt is that the stand in 1938 had been enlarged since its previous depiction in 1913, an enlargement that seems not to have been recorded in any of the histories of the club accessible online. In this case, using the

Figure 8: Linlithgow n8.3 showing Albyn Oil Wks with 1897 depiction on Linlithgow 6.11 to right.
absence of a structure on the blue to deduce that it was present in 1938 is complicated by the uncertainty of exactly what an ‘Incomplete Advance Edition’ was - ie the nature of the incompleteness.

**Figure 9: Stirling n17.3 of 1947. The blue, from a 1938 edition, shows a football stand that had been demolished by 1942.**

The last category of unpublished material concerns the “final revision” mentioned by Winterbotham as part of the card revision process. It appears to have been done - sometimes at least - using a proof of the printed map; in such cases, any changes required must have been made directly on the plates. Where those changes reflected changes on the ground since the normal revision process, the cards (and blues derived from them) provide the only record of what had been there earlier. Such changes do not seem to have been common, but they are worth looking out for.

**Gross positional errors**

I started this account by explaining how the graphic style of revision practised by OS depended on the work to be revised being of the highest standard, yet successive revisions inevitably resulted in a weakening of that standard. There was a tendency on the part of Directors-General - apparent in Winterbotham’s writing - to attribute blame to bad decisions in the past which had now been rectified. Thus the re-plot exercise was a grievous short-cut but that was now past; card revision was a bad technique and that too was something the OS had (largely) put behind it. By implication, current practice was much more satisfactory and there was no cause for alarm.

One thing that emerges from inspecting a lot of these master drawings is that revisers working with card-derived material often found it necessary to correct general shifts in the blues they were presented with, even though attempts had been made in the office to
correct such shifts by reference back to the original fair drawings. One wonders how a reviser proceeded when doubt had been cast in this way on the features he would normally have used in graphic revision. Did he run numerous chain-lines? Or did he recognise a general shift and compensate for it over an area without testing every feature within that area?

In addition to such general shifts, one finds occasional large displacements that can only be attributed to gross error on the part of the first revisers. *Figure 10* provides an example.

![Figure 10. Linlithgow n10.3 of 1916 with a terrace at Blackridge displaced by 5m.](image)

We know about these errors because they were spotted in the second revision and corrected. But how many errors of this nature were not spotted? And were the revisers on that second revision just as prone to making errors of this nature themselves? These are topics I cannot address here. They were actually reviewed under Close in 1911\(^1\) and recommendations were made, notably the use of electricity pylons as tertiary trigs\(^2\) so that there was a density of at least six trigs per sheet. I am not aware that any of these recommendations were implemented.

The problem was in the end solved by the Davidson Committee, which offered an opportunity for the Survey to confess its problem and came up with the reassuring recommendation that a new survey was needed for the new generation plans on National Grid sheet lines. That the resources were not available for a full re-survey was, in a sense, not a problem. Once the need had been recognised it was possible to proceed on the basis that those areas that had not been resurveyed would be managed in a way that did at least minimise the rate of deterioration. It was a healthier situation than the 1930s’ pretence that all was well when it clearly wasn’t.

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10 Results were summarised in Winterbotham, *The National Plans*, 31-33.
11 As up-stations (intersection points). Although the view from the top of a pylon would be outstanding, it never seems to have been suggested that surveyors should be expected to climb them! And electricity pylons in 1911 were perhaps no more than single poles - ‘standards’ is the term used.
Surveying and mapping the Highlands and Islands

The daunting task which sometimes created difficulties for English-speaking surveyors and map-makers when confronted with non-English place-names was described in two articles in Sheetlines 125.¹

In the following pages, CCS member Nevis Hulme, a scholar of the Gaelic language and of Gaelic place-names, considers ‘The representation of a place-name term on OS maps’, and ‘The Isle of Skye and the Principal Triangulation of Scotland’.

¹ ‘The Isle of Lewis Survey Reconsidered,’ John Moore, Sheetlines 125, 14 - 19; and ‘Gaelic on OS mapping’, 20 – 22.
The representation of a place-name term on OS maps

Nevis Hulme

Previous studies of the representation of place-names on OS maps have drawn my attention to a number of points about searching for place-names and their presence on or absence from maps.¹

Following on from a study of murders that occurred in the Gairloch area, c.1480, it was thought worthwhile to examine ‘mi-chomhhairle’ place-names. This is not a common term in Highland place-names but it seemed to be sufficiently widespread to allow study of their representation. A search was made of the OS name-books (OSNBs) and a query was posted on Facebook to uncover any others known by participants of the Scottish Place-names forum.²

The OS maps reproduced here are reduced extracts, each at approximately the same scale, from the relevant 1:10,560 First Edition. Argyllshire, Inverness-shire maps (Mainland and Hebrides) and Ross and Cromarty (Mainland) are numbered using Roman numerals while those of Ross and Cromarty (Isle of Lewis) use Arabic for the First Edition but do change to Roman for the Second Edition. The Isle of Lewis was surveyed 1849-53 before the system using Roman numerals for 1:10,560 map sheets was adopted.³

![Key Table]

<table>
<thead>
<tr>
<th>Key</th>
<th>Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Cnoc(an) na Mi-chomhairle</td>
<td>Ciarcabost, Bearnaraigh, Lewis</td>
</tr>
<tr>
<td>2</td>
<td>Cnocan na Mi-chomhairle</td>
<td>Lacasaigh, Lewis</td>
</tr>
<tr>
<td>3</td>
<td>Eilean na Mi-chomhairle</td>
<td>Loch an Sticir, N. Uist</td>
</tr>
<tr>
<td>4</td>
<td>Creagan na Mi-chomhairle</td>
<td>Opinan (South Erradale), Wester Ross</td>
</tr>
<tr>
<td>5</td>
<td>Cnoc na Mi-chomhhairle</td>
<td>Poolewe, Wester Ross</td>
</tr>
<tr>
<td>6</td>
<td>Cnoc na Mi-chomhairle</td>
<td>Kilmaronag, nr Connel, Argyll</td>
</tr>
<tr>
<td>7</td>
<td>Cnoc(an) na Mi-chomhairle</td>
<td>Glen Nevis, nr Fort William, Inverness-shire</td>
</tr>
</tbody>
</table>

**Figure 1: Location of mi-chomhhairle place-names arranged in grid reference order.**

The first name encountered with this element, and the reason that this study came about, was that of Cnoc na Mi-chomhairle⁴ near Poolewe in Wester Ross (figure 1, no. 5). It

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¹ Nevis Hulme, *Sheetlines* 122, 6-14
² Scottish Place-names Facebook forum.
³ Ordnancemaps forum, topic: Sub-divisions of 1st edition OS 1:10560 maps (Scotland) and 1:10,560 numbering systems. Isle of Lewis 1:2,500 sub-sheets were numbered with Arabic numerals, eg XL.13 being the southwest 25-inch sheet within 6 inch sheet XL, the 25 inch sheets being numbered on a four by four grid on the 6-inch sheet.
⁴ Names are given in the standard form *Mi-chomhhairle* unless quoting from a source in which case the form given is used.
is mentioned in the account in Dixon, of the c.1480 murders and is the only source from which we are able to identify its location other than it being adjacent to the River Ewe. Dixon states that “he [Allan Macleod, then chief of Gairloch] lay down on the green hill at Croft, where the house of Kenneth Urquhart (called Kennie Rob) now stands. The hill is named to this day Cnoc na mì-Chomhairle, or the ‘Hill of evil counsel’.” Campbell Smith’s survey of Gairloch Estate of 1844 includes the proposed croft boundaries and the intended tenants; number 9 of the Poolewe crofts was to be allocated to a Kenneth Urquhart. Its location is shown in figure 2. Today, the hill has a number of houses built on it and is most easily identified as a hill from the south adjacent to where there is a short incline on the road.

Dixon’s book was published in 1886 and so it would be expected that the name Cnoc na Mi-chomhairle would have been known to the authorities who gave names to the OS in the surrounding area. Its omission may have been because it was not in fact known to these people, it was not a place asked for or offered, or it was not deemed suitable for inclusion on maps. It has been found that few place-names, other than of water-courses, are entered on maps within crofting townships despite there being a profusion of names within such areas.

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5 Dixon, 25-27.
6 This may have been the case in Dixon’s time but it does not appear in Mackenzie, KC.
7 Hulme. Given that another translation of mì-Chomhairle is bad advice, it was perhaps unfortunate that, at the time this finding was published in the local paper, one of the Gairloch doctors, Dr Marshall, lived here.
Another mì-chomhairle name in Gairloch parish, Wester Ross, is that of Creagan na Mì-chomhairle (figure 1. no. 4). This is a rock outcrop c80 metres north of the old school in Opinan. The outcrop is c3 metres in height, at its highest, and around 30 metres long. This name appears on the both the First (figure 3) and Second Edition OS maps, reasonably well placed, just to the north of its actual location. Its OSNB entry 8 gives this as meaning ‘Rock of the bad [sic] Advice’. The name is not on the 1:10,560 NG77SW survey of 1965, probably because of the presence of houses making its labelling difficult. It does, however, appear on the latest digital map, albeit only on the maximum zoom setting, somewhat north of its actual location and misspelt as Creagan na M-chomhairle. 9 Displacement and misspelling of names are not uncommon on maps, especially after the First Edition.

A tale recorded in 1988 from long-standing residents 10 says that this outcrop acquired its name because there used to be a school nearby and that the children were ‘mì-chomhairleach’ (ie unable to be advised or unwilling to listen to advice). Watson 11 gives a different explanation, viz. “Two men quarrelled and fought here. One wished to stop fighting, but the other would not, and both were killed.” Another name recorded for this crag is Creagan na Pàirc, the crag of the park, so called because it was on or near Pàirc an Taigh-sgoil, ‘the park of the school-house’.

![Figure 3: Actual location of Creagan na Mi-chomhairle, Opinan (S. Erradale) indicated by the dot. NG745728, no. 4. OS First Edition map, surveyed 1875 (Ross and Cromarty (Mainland), sheet LVI).](image)

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8 OSNB: Ross and Cromarty Mainland, volume 39, 81 (OS1/28/39/83 [sic]).
9 Reference to digital maps is difficult because there appear to be a number of versions. The name given here comes from https://pastmap.org.uk/map as accessed in November, 2022.
10 Wentworth, place-name no. 7472/38.
11 Watson, 222.
Three mi-chomhairle names have been identified in the Outer Hebrides. The most northerly one is found in Ciarcabost on the island of Beàrnaraigh, or Great Bernera in English (figure 4). This was only found from a response on Facebook although it was later found in the OSNBs. It would appear that this name, Cnocan na mi-Chomhairle, is also associated with murder. It is said that this “is supposedly where Donald Macaulay [Chief of the clan, c.1560-c.1640] ‘Domhnall Cam’ killed John Roy Mackay/Macphail from Bragar.” Respondents on the Hebridean Connections and Facebook also wrote that a sheep stealer had been hanged on this hillock or that ‘An Mòr MacAoidh (Big John Mackay) was beheaded here. These three versions of the murder may all be the same person and event. The hill, which cannot be more than 10 metres in height, lies on croft no. 9 of the township of Ciarcabost and is named cnoc in sources other than the OS.

![Figure 4: Cnocan na mi-Chomhairle](image)

The OSNB entry for this name originally shows the spelling Cnoceana Meechol but the subsequent entries fortunately display the more meaningful Cnoc na mi-Chomhairle which is entered on the map. The spelling here, without a final e could be explained by the dropping this final schwa sound in everyday speech; this is a common occurrence. The First Edition of the 1:2,500 map (Ross and Cromarty (Isle of Lewis), sheet XXV.1, resurveyed 1895 and dated 1897) has the same spelling for the name, i.e Cnocan na Mi-Chomhairle, as the Second Edition of the six-inch map using the same survey and dated 1898. Despite the name lacking a grave on the i, this is an example of the spelling of a name being amended correctly on the Second Edition.

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12 This township can also be found as Circabost, Circbost and Kiribost. It is described in the OSNB, in 1850 (probably), as the decayed village of Circabost.
13 OSNB: Ross and Cromarty (insular), volume 46, 103 (OS1/27/46/103).
15 [Scottish Place-names Facebook forum.](https://www.facebook.com)
16 ‘An is short for Iain and used in everyday speech in Gaelic. ‘An Mòr is possibly the same person as John Roy (‘An Ruadh) but misidentified by one of the sources.
No story has been found connected with the other name in Lewis. Cnocan na Mì-chomhairle is in the village of Lacasaigh, Lewis (figure 5). It is a low knoll next to the main road. The name is given in the OSNB 17 with various spellings but the form appearing on the maps from the First Edition is basically correct. On the First Edition, as in the OSNB, the i appears with a tittle (dot) and a grave and the name lacks a hyphen on the map. By the Second Edition, the name has its hyphen but only a tittle on the i. The name is printed in the same way on the current 1:25,000 map but with the name beginning some distance to the west, the result is that the name on the digital map has been displaced c200 metres to the west.

The last example found in the Western Isles is Eilean na Mì-chomhairle in Loch an Sticir, N Uist (figure 6). This is the more southwesterly island on the loch according to the OS. It is clearly so indicated on the 1:2,500 map published in 1879 18 as well as the 1:10,560 First and Second Editions maps. OS maps since the resurvey in 1967 19 show the island to be that to the northeast on which Dùn an Sticir (or Sticer, as the OS now prefer) is found.

Alexander Mackenzie 20 gives a detailed account of how Hugh Macdonald (Uisdean ’ic Ghilleasbaig Chlèirich) set out to deceive his uncle, the seventh chief of Sleat (in Skye). The chief discovered this and sent a “strong retinue” to this location where Hugh resided. He attempted to avoid capture by dressing in women’s clothing and working with a quern (or

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17 OSNB: Ross and Cromarty (insular), volume 91, 24 (OS1/27/91/24).
18 OS First Edition map, 1:2,500, surveyed 1878 (Inverness-shire – Hebrides, sheet XXXI.3).
19 OS 1:10,560, NF87NE, revised in 1970 and published 1971.
20 Mackenzie A., 190-192.
hand-mill). “The size and masculine appearance of the grinder soon attracted the notice of the party when they entered the house.” After a struggle, he was bound and taken to Skye where he died of thirst in the dungeon of Duntulm Castle. The OSNB gives a different account. Hugh had “fled Skye to escape capture from his chief (against whom he had conspired) to this Dun – He was here captured by the treachery of the woman who brought him food…”. The unfortunate outcome for Hugh, however, was the same.

Figure 6: Eilean na Mi-chombhairle, near Port nan Long (N. Uist). NF896776, no. 3. OS First Edition map, surveyed 1878 (Inverness-shire (Hebrides), sheet XXXI).

21 OSNB: Inverness-shire Outer Hebrides, volume 6, 78 (OS1/18/6/78).
The Cnoc na Mi-chomhairle, near Kilmaronag, Connel, (figure 7) is a wee tree-covered knoll beside the A85. It has yet another conflict associated with it. It was said that two chieftains met with their supporting forces to sort out a dispute. The men were instructed that they were only to fight if one of the chiefs drew his weapon. As the two men climbed the mound to discuss matters, an adder appeared from a rock. One chief drew his dagger to behead the reptile upon which savage and mortal combat broke out among the armed men below. It took some time for order to be restored by which time many men on both sides had been killed. The story follows the same pattern as a version of the Battle of Camlann, between King Arthur and his relative, Mordred.

Figure 7a: Cnoc na Mi-chomhairle, near Kilmaronag, Connel (Argyll). NM942342, no. 6. OS First Edition map, surveyed 1871 (Argyllshire, sheet LXXXVII).

22 Spelt more recently Kilmaronaig.
23 Macfarlane, J. from oral tradition. Personal communication.
The location of this knoll is not shown on any OS map and its location is little known. It was recorded orally as Cnoc a’ Mhi-comhairle but, for consistency, is referred to here in the standard form.

The most easterly of the names is in Glen Nevis near Fort William (figure 8). There is a reference to it, as Cnoc na Mi-chomhairle, on the Clan Cameron website. It is stated that a body of men from Clan Chattan (a sept (or branch) of Mackintosh), having visited MacSorlie (a sept of Cameron), were insulted by the playing of a Cameron song (Sons of the Hound 25) on the pipes as they departed Dùn Dige, the Cameron residence in Glen Nevis (NN125719). The Chattans stopped at this hillock and made the decision to return and ambush the MacSorlies. This they did and murdered or wounded all but the infant heir to the chief who was saved.

A similar, more detailed account is given by Drummond-Norie putting the date of the incident “Sometime after the great fight at Invernahavon in 1386.” 26 He gives the location of the hillock, which he calls Cnocan-na-mi-chomhairle, as being the hill immediately at the rear of ‘Clach-an-turramain or rocking stone’. The stone is marked on OS maps at NN124715 placing the hillock around NN124714.

25 It is no surprise that this was taken as an insult being the war cry of the Camerons.
26 Drummond-Norie, 221 onward.
Translation of the term

It is intriguing that the same term appears for these murderous activities. Could it be that the tales of what had taken place were passed on at fireside recitations and encouraged the term to be copied for other locations connected with such deeds?

The term mi-chomhairle has generally been translated as ‘evil counsel, bad advice’ or a variant of these words. This, I would suggest, is misleading to those interpreting it nowadays. The meanings of ‘counsel’ that first come to mind are those given first in the Oxford English Dictionary (OED),\textsuperscript{27} i.e. consultation, advice and deliberation. Examination of the events associated with locations incorporating this term, informs us that, in most cases, a physical action was performed at these locations or, in the remaining example where there is an associated event, a decision was taken. The OED offers a number of preferable definitions for the term: ‘purpose’ or ‘intention’, in particular, are appropriate for both the actions carried out at these places and the decision-making. This is supported in Irish\textsuperscript{28} where the definition of comhairle includes ‘intent’.

There are many possibilities for the prefix ‘mì’ which Dwelly\textsuperscript{29} defines as “indicating the opposite of, or the want of, the quality expressed by the word to which it is prefixed, equivalent to the English, in-, un- … Sometimes it signifies Evil, the worst.” In consideration of what took place at the mì-chomhairle locations, ‘evil’ is entirely suitable.

A clearer translation of mì-chomhairle, then, would be ‘evil intention’ with the place-name Cnoc na mì-chomhairle being translated as ‘the knoll of the evil intention’. It could be argued that this is not entirely satisfactory given that, in at least five cases, a physical action was carried out at the place making it more than an intention.

\textsuperscript{27} https://www.oed.com/view/Entry/42604?rskey=DWWOfV&result=1#eid (requires account access).
\textsuperscript{28} Dictionary of the Irish Language.
\textsuperscript{29} Dwelly, 649.
**Pronunciation**

The only precise indication of a pronunciation for our term comes from Roy Wentworth and the name Creagan na Mi-chomhairle that he collected, probably, from two residents who had been brought up in Opinan.

It is given as \[\text{kʰrekan na 'mi: 'x̱ɔ̃m̩]̃}\] in which it should be noted that both mì and chomhairle have primary stress. The fact that mì [miː] was noted as pronounced with a lengthened vowel (cf. [mil]) suggests that it was indeed stressed. It can only be supposed that this pronunciation would be the case for the other mì-chomhairle place-names.

**Analysis of the mì-chomhairle names**

The table (figure 9, below) shows all the names, their general location, the associated outcome and whether it was recorded by the OS. The distribution of these names is widespread although restricted to the west of the Highlands and the Outer Hebrides.

It can be seen that the majority were connected with a fight that led to the death of at least one person and, in some cases, many more. The place in N Uist is not recorded as being a place where a death occurred but we do know that the captive died from having water withheld while imprisoned. The knoll in Lochaber certainly led to murder although it was not perpetrated at the location named mì-chomhairle. While nothing is known about the event at the remaining location, it would be surprising if there was no death associated with it.

Four of the seven names appear on OS maps (figure 9, last column) although this does vary over time and scale of map. Some have been removed from the latest maps and some have been displaced to the extent that their precise location is not clear. Where OSNBs have been transcribed, a search will reveal the name but this is not necessarily reliable because of the variable quality of recording names, especially related to spelling, by the OS in the 19th century. The example from W. Lewis (no. 1) is pertinent here with chomhairle losing its final e. The search facility on the website containing the OSNBs, at the time of writing, only allows whole words to be searched. Three of the names have not appeared on any map; this may be because of the lack of space, especially in more populated areas; because the names were not known to those passing them on or because a decision was made to exclude the name. These findings of variable representation on maps match those for other place-names in the Highlands.  

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<tr>
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<td>NB328220</td>
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<td>Lochaber</td>
<td>NN124714</td>
<td>decision leading to violent murder</td>
<td>no</td>
</tr>
</tbody>
</table>

*Figure 9 Summary of mì-chomhairle names*

30 Scottish Place-name News, no. 51 Autumn 2021, 2-4
It is noteworthy that all but one of these names are related to an elevated location. In some cases, they may have been examples of Cnoc a’ Mhòid, ‘the knoll of the court’, where local issues were discussed and subsequently gained the names we have today from the notable events that occurred there and described above.

This analysis of one place-name term has hopefully served three purposes. It has analysed how mi-chomhairle place-names have a place in the historical record; how they are distributed in northern Scotland and what their varied recording and appearance or otherwise on maps shows us of the reliability of OS maps as a source for place-names. It is probable that many other terms could be analysed similarly to useful effect.

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I would like to thank Jake King, Janet Maclellan, Donnie Macleod, Gilbert Markus, Peadar Morgan, Richard Oliver and Maggie Smith for their assistance with this work. Special thanks to John Macfarlane for his efforts to help me identify and tell the story of name six, and who gave permission to reproduce his photograph. The maps and reference books available on the website of the National Library of Scotland (NLS) have been invaluable. The reproduction of OS maps here is with the permission of the NLS.

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31 https://en.wikipedia.org/wiki/Moot_hill
The Isle of Skye and the Principal Triangulation of Scotland
Nevis Hulme

This article has come about from a chance remark about my interest in Gaelic place-names when corresponding with Dave Watt following his talk to the Society in March 2022. He had initially been unable to pinpoint the location of Elms Hill, one of the survey stations in the Principal Triangulation of Scotland in the 19th century. David L Walker had suggested to him that the location may be Sgurr nan Caorach, near Armadale on the southern extremity of Skye, although the sightline to Eaval was agreed to be doubtful. Dave Watt asked me whether Sgurr nan Caorach might mean hill of the elms. The following is the response to this query.

One Gaelic term for elm is leamhan. If a name for Elms Hill was recorded by the OS when surveying this area in 1876 then it would most likely appear in the OS name-books (OSNBs) in its genitive (or possessive) form leamhain. A search of the OSNBs revealed two Inverness-shire results with one on the Isle of Skye. This was an incredibly lucky find because the name had been subsequently altered for addition to maps yet, unusually, the original record had not been altered. Had it been amended, the search facility on Scotland’s Places website would most likely have failed to find the name. Search on this site depends on transcription of the relevant page having been conducted and these transcriptions tend not to include amendments; this is a good reason to always refer to the image of the original page where useful information may be found.

Figure 1: Extract from OSNB OS1/16/11/190 Inverness-shire (Skye), volume 11, page 190 (1876)

The hill was initially recorded in OSNB 1/16/11/190 as Sgòr an Leamhainn (the peak of the elm) but this was changed to Sgùrr an Leth-bheinn (‘the peak of the half-hill’); see Figure 1. It was this latter form that appeared on the OS First edition map (surveyed 1876) as shown in Figure 2. Inspection of Figure 1 will reveal a further change to the original name, that of sgòr to sgòrr. The comment below the name in column two, possibly only referring

1 A common structure for Gaelic place-names is found in most of the names in this article. Meall a’ Ghiubhais, the hill of the pine, for example, has meall in the nominative (naming) case followed by a’ ghìubhais in the genitive case of the definite article and noun.
to this change rather than the more substantial one, has been difficult to track down; searches in OSNBs are often not straightforward. The name of the hill remained Sgùrr an Leth-bheinn on the later printing of the First edition (c 1890).

Figure 2: Inverness-shire (Isle of Skye), Sheet LXIII, surveyed: 1876, published: 1881. NG5700

Figure 3: Extract from OSNB OS1/16/11/190 Inverness-shire (Skye), volume 11, page 190

Figure 3 shows the description of the hill with the change in meaning that came about because of the change in name. The names Sgòrr an Leamhainn and Sgùrr an Leth-bheinn are similar in pronunciation. Leamhainn is pronounced \[\text{̓lɛvangan}\] while leth-bheinn is \[\text{̓lɛðvænn}\] (this Gairloch pronunciation may be a little different in Skye). Both names raise questions: the first because, although the Slèit peninsula of Skye, on which the hill is found,
is known for its relatively lush vegetation, this part is not and elms seem unlikely; the second, because, in this use, the hill would be expected to have a very steep side opposite a rounded side (like a somewhat less spectacular Half Dome in Yosemite). Figure 4 shows the hill from the south-southwest (Google Earth vertical exaggeration 1.5). It may be that, when viewed from a particular angle, this hill has the necessary characteristic.

Those working on the OSNBs did review the names collected and altered them to suit what was believed either to a correct form or to fit what was thought to be represented by the name. In this case, the unsuitability for elms in the area may have led to the adoption of a name thought to be more fitting.

Were it not for the OS recording the name of this hill as Sgùrr an Leamhainn, the explanation for Elms Hill would probably have been lost forever. Forbes, in his book ‘Place-names of Skye’ (1923), names the hill Sgurr an Leth-Bheinn with no mention of the other name. Elms Hill does, however, appear on Admiralty Charts for the Sound of Sleat from 1856 until 1943, the latest revision available on the National Library of Scotland website. The earliest example, and possibly the earliest record of this name 2, is shown in Figure 5.

The name Sgùrr an Leth-bheinn was replaced by Sgurran Seilich (probably, A’ Sgùrr an Seilich, ‘the wee peak of willow’ or ‘the wee willow-peak’) for the Second edition (Figure 6) and remains to this day as the name of the hill. Name changes such as this occurred between the First and Second editions but, having not seen the equivalent OSNBs for the Second edition, the reasons for these changes are unknown. Landowners or other worthies sometimes intervened on seeing the First edition and changes were adopted for even later printings of that edition.

Figure 4: ‘Elms Hill’, right of the loch and beyond the road, viewed from the SSW (from Google Earth).

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2 Neither Timothy Pont nor General Roy mapped the island and Murdoch Mackenzie did not include hill names on his nautical chart of 1776 showing the south part of Sky [sic] Island

3 This exhibits another structure common in some areas where the second term, seilich, in this case, is in the indefinite genitive. The OS often objected to this form and may have converted this example to *Sgùrr an t-Seilich, ‘the wee peak of the willow’.
Figure 5: Admiralty Chart - Sound of Sleat, surveyed: 1852, published 1856

Figure 6: Inverness-shire - Isle of Skye LXIII, surveyed: 1901, published: 1903
Figure 7: Extract from Clarke’s Principal Triangulation, p. 108 for Elms Hill

<table>
<thead>
<tr>
<th>Objects</th>
<th>Bearings</th>
<th>No. of Obs</th>
<th>Range</th>
<th>Relp. of Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ben More in Mull</td>
<td>0° 54' 10.27&quot;</td>
<td>27</td>
<td>10.47</td>
<td>0.30</td>
</tr>
<tr>
<td>Ben More, South</td>
<td>108 21 55:30</td>
<td>28</td>
<td>6.30</td>
<td>0.21</td>
</tr>
<tr>
<td>Ulst</td>
<td>128 10 54:89</td>
<td>31</td>
<td>3.12</td>
<td>2.43</td>
</tr>
</tbody>
</table>

Examination of these bearings suggests that they indicate observations to Elms Hill but, when it is realised that they are measured from south (rather than north)\(^4\), the figures make sense.

Figure 8 is an image from Google Earth (GE) of the sightlines from Elms Hill.

\(^4\) It is not clear to me why this was done being the opposite of today’s convention.
When the Elevation Profile feature of GE was used for each of these lines, it was found that Elms Hill was visible from all of the stations. In contrast, when these were viewed to Sgùrr nan Caorach (NG5802, ‘the peak of the sheep’ (plural)), the site of the nearest trig. point today, the sightlines were good for all but Eaval in North Uist. The west shoulder of Beinn an Eòin (summit NG3820, ‘the hill of the bird’) blocks the view as shown in Figure 9. The arrows on the sightline and profile show the obstruction. This may be why the more southerly location of Elms Hill was chosen.

Figure 9: Sightlines between Eaval and Sgùrr nan Caorach with elevation profile of the line.

Further use was made of GE to see how accurately the location of Elms Hill could be plotted from the data in Clarke (see Figure 7). An initial attempt was crude using Google’s location of hill tops and bearings drawn to an accuracy of ±0.1 degree. Figure 10 (opposite) shows how this would have failed to locate Elms Hill. When this was redone at maximum zoom (on my screen, a scale of c 1:10), plotting the ruler-drawn line between two stations located from Clarke’s data, it was found that the resulting lines were surprisingly accurate. For this purpose, then, Google Earth is an accurate tool.

There are two further triangulation stations on the mainland of Skye on the map. These are shown in Figure 11. Storr Hill is easily identified and is located in NG4954. Eagle Hill, on the other hand, proved elusive until it was appreciated that the base map, probably that

5 The Elevation Profile does not take the curvature of the earth into account but it is possible to factor it in. While in marginal cases there will be doubt, an allowance of the 13 metre ‘depression’ over 100km. can be estimated.

6 To check this, the bearing between The Storr, on Skye, and Cnoc a’ Ghiubhais (Cnoc Ghiubhais in Clarke), N.W. Sutherland, a distance of some 87 miles, was calculated on GE. This came out at 209.99 degrees cf. 210.0433 in Clarke. No account has been made of any corrections, if required, to the data given in the table on page 155 from which the bearing was taken.
of Aaron Arrowsmith from 1807, contained inaccuracies. Once its mislocation on Skye was realised, a suitable candidate, Sgùrr na h-Iolaire (NG6109), ‘the peak of the eagle’, was found in the northern part of the Slèit peninsula. The sightlines, following a similar analysis as that for Elms Hill, are suitable for the rays indicated on Figure 11. The sightline to the The Storr benefits from a fortunate a gap through the Red Cuillín.

![Figure 10: (left) First, coarse attempts at drawing sightlines to Elms Hill recorded by OS in 1848. Figure 11: (right) Extract from Diagram shewing [sic] the principal triangulation on the NLS website.](image)

**Note**

I normally prefer to refer to landscape features by their correct names but, in the case of Elms Hill, it is not clear which is correct and for the sake of this article Elms Hill seems appropriate.

**Acknowledgements**

Figures 2, 5, 6, 7 and 11 are reproduced with the permission of the National Library of Scotland; figures 1 and 3 with the permission of National Records of Scotland and figures 4, 8, 9 and 10 are reproduced from Google Earth. Thanks also to Dave Watt and David L Walker for commenting on drafts of this article.

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7 The date 1856 is given on the website but it is probably from 1852-54 and is not the same as diagrams in Clarke’s *Principal Triangulation* (1858).
Postscript to Gaelic on mapping

Michael Spencer

The fluctuations between English and Gaelic forms on the map seem to be less straightforward than described in Sheetlines 125, pp. 20 – 22. Look at the extract on the cover: this is taken from Landranger Sheet 8, and unfortunately no date or edition number is given. All names on the extract are in Gaelic form, apart from the village name Linshader (starting at grid ref. 205319), printed with some emphasis. My copy of this sheet is Edition C1, dated 2002, so it well pre-dates the Gaelic Policy of the Western Isles Council. All names on it are in Gaelic form, including the village name Linskiadar, printed in the same weight as all the names around it. Whatever the reason for the OS going all-Gaelic, it does not seem to be the Policy.
I have found only two English names on this map [Landranger Sheet 8] that are not accompanied by a Gaelic equivalent. These are Newmarket, a hamlet north of Stornoway, and Morven, a farmhouse close to Barabhas on the road along the north-west coast. Morven is in fact a Gaelic word, but here spelt with a “v” which does not form part of the Gaelic alphabet.

I would take more strict exception to Nevis Hulme’s suggestion that Gaelic is consistent in its spelling, which is true only up to a point, and far less so than the other great Celtic language, Welsh. He entirely omits to mention the most outrageous wobbly thrown by the orthographical system, a procedure with perhaps no counterpart in any language in the world. The word Gaelic is a case in point. This word is pronounced <gal-ick>: short a, short i, stress on the a. It is not pronounced <gay-lick>, or indeed any locution that suggests the existence of an e somewhere in there. The e is entirely extraneous, and comes about because of the machinations of the wobbly.

Gaelic recognises a distinction between two classes of vowels, “broad” (a, o, u) and “slender” (e, i). In any polysyllabic word, if any syllable contains a vowel not in the same class as the stressed vowel, then a vowel of that other class must be placed alongside the stressed vowel: before it or after it, according as the generating syllable is before or after the stressed syllable. This is entirely an orthographic convention: the inserted vowel is not pronounced, and in fact does not affect the pronunciation of the word in any way. I have not been able to find any reason or value in this procedure, except in so far as it confuses foreigners and makes their incorrect pronunciation more likely than not.

So when you want to write the sound <gal-ick> you find a stressed broad vowel followed by an unstressed slender one. You must therefore put a silent slender vowel immediately after the stressed broad vowel. I can find no mechanism for choosing between e and i; but here we are, with Gaelic, with its silent e.

It is perhaps surprising that this system works with the word Gaelic, because this is not a Gaelic word: it’s English. The Gaelic for “Gaelic” is Gàidhlig, pronounced <gaa-lic>, with a long a as marked by the grave accent, and again with the stress on that à. You can see the system working here on its home ground, with the intrusive slender i snuggling up to the stressed broad long a, and not affecting the pronunciation at all.

So (as Nevis Hulme says), if you can learn the sound-values of all the Gaelic letters and letter-combinations, and how they are modified by adjacent vowels or position in the word; and (as he doesn’t say) if you can learn that some of the vowels you can plainly see are not really there at all, and learn to recognise them so you can ignore them in speech; then you are ready for a foray into the Western Isles, perhaps as far as Tir nan Og, and confidently read out loud anything you find. And fortan leat (Gaelic: good luck) with that. At least you won’t be finding Czech or Mandarin.
‘Sheet 144’ and the one-inch ‘third national revision’

Richard Oliver

In Sheetlines 125 Geoff Kent drew attention to sheet 144 Plymouth of 1914, and questions whether it is as rare as David Archer suggests in Sheetlines 123.¹ I hope that the present note will remove some perplexities.

Colonel Charles Close became Director-General of the Ordnance Survey in August 1911 and, inspired by recent French 1:50,000 mapping, set about redesigning the one-inch mapping of the United Kingdom. This process has been described by Yolande Hodson in her study Popular Maps, published shortly before the first copy of ‘the Plymouth sheet’ came to light.² The redesign process included both relief treatment and road classification: the latter was fundamentally one recommended by a War Office committee, chaired by Colonel Aylmer Hunter-Weston, that sat in February 1912. (Figure 1; all figures appear together, at the end of this paper). (It may be noted that, whilst the existence of this committee was public knowledge from 1913, its report only became available to researchers after Popular Maps had been published.)³ At that time the one-inch cover of England and Wales was by a mixture of New Series ‘small’ sheets, available variously in outline, or overprinted with hachures (both styles printed from copper, and the ‘hill style’ hardly selling at all), or in colour (mostly unrevised, and a means of selling off superseded stock), and of ‘large’ sheets in colour. This was the ‘Third Edition (Large Sheet Series)’, covered England and Wales in 152 sheets, and was printed in six colours, with relief shown by hachures. It was based on the second national revision of the parent New Series ‘small’ copper plates.

Close was one of the great Ordnance Survey rationalisers, and his object in 1912 was to reduce the available styles of the one-inch to two: a ‘fully coloured’ large sheet series, in eleven or twelve colours, and a three-colour ‘outline’ edition.⁴ The sheet lines were rearranged, in order that they would ‘nest’ more readily with those of the half-inch, to facilitate maintenance of the latter, and were reduced in number from 152 to 146, a process most apparent in the cover of Devon and Cornwall. This ‘generation’ of the one-inch was referred to internally as the ‘3rd revision’, and in due course these words appeared in the

³ ‘Report of a Committee … to consider … the half-inch Ordnance Maps …’, The National Archives (UK) [TNA] WO 33/3265; I am grateful to Alan and Rosemary Kimball for drawing it to my attention. It is discussed further in Roger Hellyer and Richard Oliver, Ordnance Survey Small Scale Maps, London: Charles Close Society, 2023, 53-4.
⁴ The term ‘fully coloured’ appears in quotation marks in JH Andrews, A paper landscape, Oxford: Clarendon Press, 1975, 293: its being in quotes indicates that it is taken from one of the sources cited in note 1, rather than being a term devised by the author. Winterbotham, A key to maps, 74 writes of ‘The fully coloured series (as it was often called)’ in the context of the early coloured one-inch, though with evident confusion of that based on the first revision of 1893-8 and that based on the further revision begun in 1901.
publication notes of maps based on this revision. Such maps have become known to posterity as the ‘Popular Edition’ or occasionally as ‘fourth edition’, but it is important to note two points. First, a Fourth Edition of the one-inch, based on the ‘small’ plates, was begun in 1908 or 1909, but abandoned in 1911-12 after only a few sheets were published. Second, in his report for 1913-14, signed on 28 April 1914, Close refers merely to ‘the new type of 1-inch map’, and the accompanying index showing the new 146-sheet layout simply calls it ‘Large Sheet Series’: there is no reference there to any numbered ‘revision’ or ‘edition’. He goes on to say that the Killarney special sheet published in 1913 was ‘in a style somewhat similar to that of the new series’, that ‘many’ ‘new type’ sheets were in preparation, and that it was expected that ‘some will be available during the course of the summer’. ‘New type’ may or may not have embraced some district sheets based on second revision material published at this time, of which Dorking & Leith Hill, issued in June 1914, is perhaps the best known, but it certainly did apply to two numbered sheets, 144 Plymouth and 145 Torquay, and two Aldershot district sheets. These four are characterised by the ‘Hunter-Weston’ road classification, and a style of relief depiction that combines hachures, hill-shading, layer-tints and contours: the latter are in black and dotted. The legend is more comprehensive than that for the Third Edition (Large Sheet Series) but, unlike that earlier mapping, does not include the sign for contours. It may be that the expectation was that the hachures and the general impression provided by discreet layers would give an idea of the general shape of the ground, and that the contours could effectively function as spot-heights, providing, on close inspection, an idea of altitude rather than indicating the form of the ground, as they have to do on the Popular Edition.

In June 1914 a committee sat, under the Chairmanship of Sir Sidney Olivier, to consider the Survey’s small-scale map selling arrangements: its report was not published, possibly because it was only signed a few weeks after the outbreak of war on 4 August. However, sheet 145 was shown to witnesses, and a single copy survives in the Royal Geographical Society’s collection. There are two possibilities: either the Society’s copy is from a very limited proof-run, or it is from a bulk stock, prepared in anticipation of being placed on sale. Arthur Hinks, secretary of the Society, briefly analysed sheet 145 in the second edition of his Maps and Survey, calling it ‘Experimental Sheet’, with the comment ‘specimens should be secured for collections’, which rather suggests that some stock was still available in the

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6 For the Fourth Edition see Roger Hellyer & Richard Oliver, One-inch engraved maps of the Ordnance Survey from 1847, London: Charles Close Society, 2009, 68-71: no new evidence affecting the story has since emerged. This was referred to as the ‘third revision’ in contemporary annual reports: ‘third revision’ in the present essay refers to that begun under Close in 1912.
7 Report of the progress of the Ordnance Survey to the 31st March 1914, London: HMSO, 1914 ([Cd. 7424]: the print code (p.[3]) includes ‘6.14’), 9-10, and ‘No. 3 Index’ at back.
8 Departmental Committee on the sale of small scale maps: report and evidence at TNA OS 1/6/5. Olivier was the permanent secretary of the Board of Agriculture and Fisheries, responsible for the Survey.
9 The Royal Geographical Society (with the Institute of British Geographers): up to 2001 sheet 145 was in the ‘OS Specimen Drawer’ in the Map Room (to the right of the window as one looked into the garden), but the writer does not know its current location. It is illustrated in Hodson, Popular Maps, Plate 3.
early 1920s. This might support the idea of only a limited run having been printed in the first place – or it might indicate that a few copies remained of a bulk printing. The bulk-print idea would have been fanciful in 1999, but the appearance of sheet 144 Plymouth, folded with a direct-print cover and with ‘For official use only’ overprinted, suggests an alternative explanation: that sheet 145 was indeed bulk-printed, but that most of the stock was consumed in military training.

Even if sheet 145 was indeed only printed in a limited run, sheet 144, headed ‘For official use only’ and evidently from a bulk run, still has to be explained. The cover is most easily disposed of: ‘Large Sheet Series’ would be necessary in 1914 to distinguish it from the residual engraved monochrome small sheets, at any rate for so long as these continued on sale pending replacement by the three-colour large-sheet ‘outline’ edition. This leads to another consideration: why, assuming that sheet 144 was initially printed for public sale, was it apparently withheld? One explanation is that it was embargoed because of the outbreak of war, but the map is dated 1914, and the publication of further mapping embodying hitherto unpublished revision was only forbidden from May 1915. Up to the summer of 1914 a common stock sufficed of series such as the Third Edition (Large Sheet Series) and the half-inch which were for both civil and military use: both sheet 144 and the two Aldershot sheets carry ‘For official use only’ headings, but some of these at least may have been overprinted on existing stock. It is also worth noting that sheet 144 distinguishes roads with slopes greater than 1 in 10 and 1 in 7, whereas some time later it was decided to show only those greater than 1 in 7. (See Figures 1, 2 and 3.)

I suggest that what may have happened was that the intention up to early August 1914 was to publish a block of ‘third revision’ sheets to cover the south-west of England, to enable complete replacement of the Third Edition (Large Sheet Series) cover. One-for-one replacement as sheets were revised would be messy, in view of the radical changes in sheet layout. If that reasoning is accepted, then sheet 144 was printed and stored to this end in view, and so perhaps was sheet 145. Then the outbreak of war caused printing to be suspended, in order to free capacity to produce maps for immediate mobilisation and training purposes. Symptomatic of this is the printing of the 1:25,344 mapping of eastern England (later GSGS 3036) in August and September 1914, and the printing by outside

10 Arthur R. Hinks, Maps and Survey, second edition, Cambridge University Press, 1923, 223: the preface (p.[x]) is dated July 1922, which perhaps provides a terminal date for currency of information.
11 Meeres to Burrow, 7 and 14 July 1918, in TNA OS 1/753.
12 On sheet 144 and on some Aldershot sheets ‘For official use only’ is in black, but on other Aldershot sheets seen it has been printed in other colours, implying either overprinting after the original printing was completed, or an addition to one of the infill plates part-way through the run. It is unclear from when ‘For official use only’ was required, but it may have been only from about May 1915, as these ‘third revision’ maps embodied hitherto unpublished revision which had not yet been offered for sale. It is worth noting that no military-issue Third Edition (Large Sheet Series) or half-inch map seems to be known with a ‘For official use only’ heading, which implies that its presence on the ‘3rd’ revision’ sheets was because of the content rather than the intended user.
13 Hodson, Popular Maps, 141-3, where it is suggested that the date of change is 1914; given the lack of explicit reprint data on the Aldershot sheets, it could have been well into 1915 – or even later, if the price notes were not changed to reflect the increase in 1915-16 of the sectioned style from 2s.6d to 3s.0d. It is perhaps worth noting that the experimental half-inch sheet 36, printed in 1919, includes Close’s knighthood, conferred in 1918, in the imprint, but retains a sectioned price of 2s.6d.
firms of quarter-inch mapping (with one of the water-enhancement plates omitted, suggesting a pressing requirement) and of some three-colour half-inch ‘Training Maps’. In these circumstances it would make sense to divert the stock of sheet 144, and indeed of any others that had been printed but were awaiting completion of the putative block, to military training. Whilst it may be true that in August 1914 work on the new one-inch was suspended, this could have been on preparation of reproduction materials: the reprinting, if not the initial printing, of the Aldershot sheets seems to argue that printing continued. Revision certainly continued during the war, and the simultaneous publication of 31 ‘third revision’ sheets in June 1919 seems to reflect continuing work at any rate on the basic outline, water and contour plates. When the ‘third revision’ materials came to be prepared for publication in Popular Edition form small changes in marginalia were made, including centring the remaining reference to the slope-arrow on the left of the legend, and adding a ‘Contour’ reference on the right of the legend, and a contour-interval note below the scale-bar. However, on sheets 118 and 119 the 1 in 10 slope arrow was deleted but the 1 in 7 slope arrow was not repositioned, and on sheets 119 and 120 there is no reference to contours, which together suggest that work on sheets 118 and 119 may have been completed well before 1918, as sheet 120 certainly was. (Figures 1, 2, 3) Outline, water, road and wood infill plates prepared for the ‘fully coloured’ could be reused as they stood; the contour plates would have needed work to convert the lines from dotted to continuous, though this had been done for sheet 120 by 1916.

How do the Aldershot sheets fit into the overall scheme? It is worth noting that whilst it is clear that the ‘third revision’, in contrast to earlier one-inch revisions, was intended to progress in an orderly manner from south to north, work started in 1912 in two areas: around Plymouth, and around Aldershot, the latter reflecting military interest. Two coloured one-inch Aldershot district sheets had been published in 1905, and were reprinted in 1911 (north) and 1912 (south): no subsequent printings have been recorded, which is perhaps unsurprising in view of the production of the two more elaborately-coloured sheets in 1914, which were obvious replacements. Probably these sheets were intended, like their predecessors, both for official issue and for public sale, but, as with sheet 144, all stock was taken for military use. The first printings of these two sheets retained the distinction of road-slopes greater than 1 in 10 and 1 in 7; reprints are readily identifiable by their indicating only slopes greater than 1 in 7. These Aldershot sheets were then the basis for variations. One, so far recorded only in a single copy of the south sheet, has hachures and the black contours, but no layers or hill-shading; it retains the earlier two-fold indication of road slopes. Another omits hachures, layers and shading, and has contours in brownish-red: stylistically it is identical to the Popular Edition, the only significant difference being

14 On sheet 144 the magnetic variation diagram was repositioned, and on sheet 120 it was assimilated to the standard style, with a black-tipped north point, whereas on the 1916 printing a style of diagram more akin to that on Third Edition coloured sheets had been used.
15 This is particularly evident on sheet 119: in the magnetic variation data ‘25°’ does not match ‘16°’, and the final digit in ‘1918’ looks almost as much like a ‘5’.
16 A copy of Aldershot (N) in direct-print cover, but with a Forster Groom label on the back, formerly in the collection of the late John Beer, is now in the Cambridge University Library collection: it remains to be ‘explained’.
17 This map is now in Cambridge University Library.
that (as on the other ‘1914’ Aldershot sheets) there is no two-inch squaring on the map face. This style was described as ‘coloured outline’ in the publicity material printed inside the bookfold covers of 1919 issues of both the Third Edition (Large Sheet Series) and the Popular Edition. (Figures 1, 4 and 5)

One has now to explain the emergence of the ‘coloured outline’ ‘Popular Edition’. The Olivier Committee evidence indicates that in 1914 it was intended to produce one-inch district maps in a much simpler style than the ‘fully coloured’ intended for the national series, and a version of sheet 145 apparently in this style was displayed during the Committee’s proceedings. The ‘coloured outline’ versions of the Aldershot sheets embodied this concept. As with the production of the ‘fully-coloured’ Aldershot sheets in 1914, this was a logical development, as from 1899 two-colour one-inch and quarter-inch district sheets had been produced, with roads coloured. Whilst in 1914 ‘coloured outline’ was a novelty for the one-inch, the style was established for some colonial and military series, for example the 1:125,000 of the Orange Free State (GSGS 2230) and the 1:100,000 of Belgium (GSGS 2364), and whereas GSGS 2364 was later produced in hill-shaded form, the next larger scale on the Western Front, the 1:40,000, GSGS 2743, was very much a ‘coloured outline’ map in the spirit of the later ‘Popular Edition’.

That the ‘coloured outline’ style was still not intended for the national map in 1916 seems indicated by the printing of Sheet 120, Bridgwater, with a yellow ground-tint and hachures and contours in grey. A single copy is known, and it is unclear if this is the ‘King Alfred’ map referred to by Winterbotham, or some variation on it.\(^{18}\) Presumably there was still the desire to produce a better-looking map than the Third Edition (Large Sheet Series), but with much less preparation cost. What happened next is unclear, but in June-July 1918 two sheets – 119 and 120 – were printed in ‘coloured outline’, with the heading ‘POPULAR EDITION ONE-INCH MAP’, two more such sheets are dated 1918, and another 27 sheets were printed in the first half of 1919, enabling 31 ‘Popular Edition’ sheets to be published simultaneously in June.\(^{19}\) Whilst this enabled large numbers of ‘fully coloured’ Third Edition (Large Sheet Series) sheets to be superseded, in practice these continued on sale, with stocks of some sheets still available in the late 1920s. The Popular Edition was characterised by relief being shown only by contours, and by the ‘Hunter-Weston’ road classification.

Why was the Popular Edition introduced? The conventional explanation is that the economic situation in 1919 did not allow the necessary expenditure on the relief plates.\(^{20}\) Whilst this is not disputed, three points are worth making. First, a considerable amount of ‘third revision’ material was available, with four sheets printed in 1918. Second, even if cost is discounted, production of these sheets would have been delayed by the preparation of the


\(^{19}\) Hodson, *Popular Maps*, 32-3. It is worth noting that sheets 128 and 143 carry a printing date of 1918, but magnetic variation dated 1919. A possible further ‘evolutionary stage’ would be to print with hachures and the Hunter-Weston road classification, but without ground tint: this is the style of the special printing of Popular Edition sheet 112 in 1931 for Marlborough School, but evidently more widely circulated.

extra relief plates, and printing in the eleven or twelve colours of the ‘fully coloured’ rather than the six colours of the standard ‘coloured outline’ would have consumed proportionately more press-time. Third, the longer the delay in publishing the ‘Third Revision’ mapping, the greater the backlog of unpublished revision: as it was, the first tranche of sheets published in June 1919 bore revision dates of 1912-14. Apart from some changes to marginalia, preparation of the new edition involved one operation that had not been contemplated, on the evidence of surviving mapping, until after 1916, and that is the addition of two-inch squaring across the map face, which is assumed to have been at military behest.\footnote{The squaring is discussed in Hodson, \textit{Popular Maps}, 74-8.} This raises the question of whether production of the Popular Edition from 1918 was pushed on in the expectation of military use, though, unlike for the Third Edition (Large Sheet Series) and for the half-inch map, there is no evidence for this in the form of direct-print covers on the backing, though such covers do seem to disappear after 1918, so this is not conclusive.\footnote{Such ‘covers’ were concealed on civil folded issues by having separate cloth, paper or card ‘covers’, displaying the retail price, pasted on top. None have been found on post-1918 issues of the 1:20,000 map, GSGS 2748.}

The retention in print of the Third Edition (Large Sheet Series) supports the view that the production of the ‘Popular Edition’ was an interim measure, pending the production of the ‘Third Revision’ mapping in a higher-priced, ‘fully coloured’ form, as intended up to at least August 1914. It may be that the relative sales of the Popular Edition and the Third Edition (Large Sheet Series) stock, which was priced at the higher ‘fully-coloured’ level, suggested that the cost and delay of preparing the additional plates for a ‘definitive fully-coloured’ was not the best use of reduced resources. In 1919-21 a number of ‘Tourist’ maps were produced, that are akin to the ‘lost’ fully coloured style, though with cost-cutting evident in none having extra hill-shading, and further cost-cutting is implied in subsequent tourist maps omitting the hachuring.\footnote{Popular Edition sheets 119 and 120, both dated 1918, differ from all their fellows in that they have hypsometric tenting of the sea, whereas sheet 120 of 1916 (like sheets 144 and 145 of 1914) has a single sea tint. Such treatment on sheets 119 and 120 seems more consistent with the hypsometric tinting, however discreet, on land characteristic of the intended ‘fully coloured’ style, than of a ‘coloured outline’ using only contours.} At any rate, the decision to produce the national one-inch only in ‘Popular’ style may have been made in 1919, or even 1920, rather than 1918.\footnote{It may be objected that this would have created a problem when the one-inch underwent a further revision, but this would only apply were sheet lines to be changed – as indeed happened with the ‘third revision’s’ successor, the Fifth Edition.}

It is worth noting that though the coloured form of the ‘Popular’ was headed thus from the start, the earlier issues of the outline edition were headed ‘OUTLINE EDITION ONE-INCH MAP’; only from 1923-4 was the ‘Popular’ heading retained, with ‘(OUTLINE)’ added on the contour plate.\footnote{Hodson, \textit{Popular Maps}, 28.} The implication is clear: ‘popular’ was a style, rather than denoting an edition or ‘generation’.

A final point: why is the Plymouth map ‘rare’? Were very few copies produced in the first place? Data on pre-1923 print-runs for Ordnance Survey small-scale maps is, at best,
fragmentary. Colonel Brooker gave to the Olivier Committee figures of 2,500 for three years’ consumption of the layered half-inch, which was the form favoured by the military, against 650 for the hill-shaded version, and 1,000 for the large-sheet coloured one-inch. These would be averages, with considerable regional variations. At the same time the possibility was being considered of adjusting runs so as to print for five years’ consumption instead of for three years. What is more certain is that military-issue mapping, at any rate up to about 1940, survives in small quantities, if it survives at all. The lack of surviving copies precluded any attempt at a comprehensive cartobibliography of the 1:20,000 Artillery Training Maps, GSGS 2748, produced between 1914 and 1918; some sheets listed in War Office catalogues have not been found at all, and for others only a ‘late’ version is known. There is a similar problem with the inter-war military one-inch mapping, where most of Britain was covered by sheets with the British System grid, and all of it by sheets with the Modified British System grid, initially without wood infill; by no means all the sheets in these two categories, which were certainly produced, have as yet been found, and many of those that have been recorded are only known in a single copy. This applies also to earlier editions of the military one-inch of Ireland, GSGS 4136, produced in 1940-1. There was a definite military policy of only replacing maps that wore out or were obsolete: the vast majority of military maps that were produced have been lost, either to use, or to destruction following supersession. Thus the ‘rarity’ of the Plymouth map reflects its military use, rather than necessarily the initial print-run.

Let us not abandon hope that more ‘fully coloured’ versions of ‘third revision’ mapping of south-west England may yet be found!

Figure 1: The bottom left-hand corner of ‘Popular Edition’ sheet 119, dated 1918, showing the Hunter-Weston road classification, and also the minimal adjustment to the road slope information: cf Figure 2.

Figure 2: The bottom left-hand corner of Aldershot (S.), dated 1914, with hachures but no layers, and showing part of the legend with the twofold distinction of road slopes.

Figure 3: The bottom left-hand corner of ‘Popular Edition’ sheet 138, 1919, showing the standard (centred) position in the legend for the road-slope arrow.

Figure 4: The front of the bookfold cover introduced in 1919 for the one-inch ‘Popular Edition’. These were quickly found to be flimsy, and unused stocks were cut and pasted onto the map backing, obscuring this descriptive material.

Figure 5: The upper part of the summary information inside the bookfold covers illustrated in Figure 4, referring to a ‘popular edition in coloured outline’.

27 Departmental Committee, 1914, evidence, qq 688 ff.
30 Hellyer & Oliver, Ordnance Survey Intermediate Scale Maps, 32; Hellyer & Oliver, Ordnance Survey Small Scale Maps, 78.
How high the dunes?

John Winterbottom

We arrive in Ravenglass; it is getting late in the evening, we need a drink and a meal in the pub, but first we must unfold the map to see what we can see. The view across the estuary to Drigg Point is stunning, but what are those hills over there?

Our 1998 copy of the map (above), shows sand with bracken, heath or rough grassland with some areas of blank undefined surface that would indicate solid ground. Some very
small pools are shown. The text ‘Dunes’ appears in tiny letters but there is nothing to show their height. Surely those dunes must be as high as a house.

In the bar, an app¹ with an up-to-date map is consulted (Figure 1). The previously undefined areas have changed shape and position and now show loose rock and marsh, reed and saltings with a pink background (indicating ‘Coastal Margin’). The larger text referring to ‘Dunes and Gullery’ is noted.

Figure 1: From OS MAPS app, October 2022

Google Maps provides an aerial view, but no height information. For this we must install Google Earth Pro which shows the dune heights to be up to 11m above sea level (Figure 2, below).

We notice that the elevations shown in Google Earth are slightly different from those on the map by up to +3m at the coast and -11m at some hill tops. The central area is clearly well established with grass and some small shrubs; several well-established footpaths can be seen on the higher ground.

¹ The OS MAPS app on our Android phone does not display height information at a dropped pin. The Windows PC version does have this feature, where the heights shown are close, but not identical, to those from Google Earth Pro.
The next day it is possible to see the dunes in good light...

Surely the current map does not adequately represent this grass covered, and in parts relatively stable, landscape, and we wonder if earlier maps do any better. Back home we look at old paper maps and and then online for more examples. Our tattered 40 year-old copy of the English Lakes, Wast Water and Coniston is based on, but not identical to, the 1:25,000 Provisional Edition (Figure 3).

There is a spot height (69ft) with contours at 25ft and 50ft in a large area of ‘rough pasture heath and moor’ surrounded by sand. On our Outdoor Leisure version the helpful words ‘Sand Hills’ appear towards the end of Drigg Point. A 1950 7th Series edition (Figure 4) shows two spot heights and a 50ft contour, along with the symbol for Sand Hills.
The earlier New Popular Edition (Figure 5) has the same spot heights but no contours. The ‘Sand Hills’ symbol is less convincing.

It would appear that various ways of showing the topography of the dunes were used in the past but have now been abandoned for current mapping, and that surveying on the ground no longer takes place in this area. This is entirely reasonable given that some parts of the land are unstable and often inaccessible. However, information is available that could be used to indicate the composition and height of such substantial dunes. The designation of the higher land could be revised to show what can clearly be seen from the air and the existing, up to date, contours included above Mean High Water. On the current map (Figure 7), contours at 10m and 20m can be seen to disappear into the sand.

In the absence of information on our map to show the height of the dunes, it is fortunate that a means of an earth-based survey is available from the first-floor bedroom at the inn at Ravenglass. From here the view of the skyline at sunset includes a phantom ‘reference dune’ provided by Snaefell (621m) on the Isle of Man about 70km to the west (Figure 6).
Figure 6: The ‘phantom’ dune of Snaefell

Figure 7: From OS MAPS app, October 2022.
For a dune in a known position, in alignment with a mountain on the Isle of Man, we can calculate the height difference between the dune and the camera to be +4.2m, at an estimated camera height of 10m. So, these 14m high ‘dunes’ are as high as a house, or a pub, and arguably deserve better representation on the Ordnance Survey map.

**Postscript**

Having written – and pondered upon – the above observations, I subsequently decided to try to discover from which source would the necessary elevation data come? From the same source as is used for the current map? I put a number of questions to OS cartography departments via the very helpful OS Customer Service team.

**Q** What is the source of the elevation data displayed at a dropped pin and for contours?

**A** OS Terrain 5 and OS Terrain 50

In fact, this is not the case. Copies of the contours were obtained, for OS Terrain-5 and OS Terrain-50, for the Drigg Point area in SD09 (Figures 8 and 9), and neither was found to match the contours when compared with the current map. They do, however, show contours for the areas of “sand” where the current maps do not.

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2 The dune ridge at the dropped pin shown in figure 2 lies on a bearing of 260o from Ravenglass towards Beinn-y-Phott (544m) and is 1.92 km from the pub.

3 Calculation details: Two adjacent triangles. Four sides: Core to Beinn-y-Phott, Core to Dune, Core to Pub, Line of sight from Beinn-y-Phott to Dune to Pub. Intersecting arc at Mean Sea Level. Cosine rule. Camera height 10m. Errors due to: Camera height 0.027m per 1m, Hill height 0.03m per 1m. The road in front of the pub could be seen to be about 1m above the high tide and therefore 5m above mean sea level for the tidal range of 8m on 28 September 2022. (Google Earth 5m and OS MAPS 6m) Adding an estimated minimum 5m (Scaling from Google Maps and Streetview suggests 6m) for the photographer in the first-floor room in the pub gives an observation height of at least 10m.
Searching for clues to the actual source of elevation data led eventually to OS Land-Form PROFILE from Edinburgh University’s Digimap service where an example fragment of a tile for this DTM was downloaded (Figure 10). The contours are exactly as seen on the current map for the area.

![Figure 10: Land-Form PROFILE tile. (Great How, Little Langdale NY 32170 02581).](image)

This prompted a further question to Ordnance Survey:

**Q** Contours on the current 1:25,000 OS maps have been compared with the contours from both Terrain-5 and Terrain-50, and can be seen to be similar, but significantly different in both cases—so could not have been derived from either of the data sets. What is apparent, however, is that the example tile fragment from the DTM Land-Form PROFILE matches the contours on the current map exactly. So could I please ask again :- For maps displayed by the app OS MAPS, what is the source of the elevation data displayed at a dropped pin and for contours? Which currently available maps use data from Terrain-5, Terrain-50 and Land-Form Profile?

**A** When dropping a pin in OS Maps, it uses either Terrain 5 for the UK or a third-party service called Cesium Ion for the rest of the world. In our standard map layer, the contours displayed are currently from Mapbox Terrain however we are in the process of updating these, so they use the contours in OS Zoomstack. In our premium topo 1:25k map we display the contours as they are supplied on our leisure mapping. Contours on 1:25k and 1:50k mapping were originally sourced from Land-Form Profile which is now a withdrawn product.

It would be interesting to see beyond the point where the existing contours disappear into the sand at Drigg Point.

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4 In response to my enquiries to the very helpful Help Desk at EDINA (Edinburgh University) Geoservices, I learnt that the web page from where I downloaded the example should not have been there - and it has since been deleted.
Q  Where can I get a single LandForm Profile tile, specifically for SD09.
A  As Land-Form Profile is a withdrawn product, it is no longer available to access.

This is not strictly true because the EDINA Digimap service has retained an archive of
LandForm Profile which is accessible through subscription, by academic organisations only.
One of the terms and conditions terms of use is that data is not shared with any other party.

Finally, to address the possibility that not all the land surface at Drigg Point should be
depicted as sand, at sea level:

Q  Earlier mapping, up to the time of the first 1:50,000 Landranger series, showed solid
ground and contours at Drigg Point in area SD09, an area now shown as being entirely
sand at sea level. What is the basis for this latest categorisation of the land surface?
A  The categorisation of the land surface is from the large-scale source data OS
MasterMap, where the data is commonly gathered through surveys and aerial
photography.

Q  Terrain-5 shows that some areas of Drigg Point are above 15m and aerial images show
substantial vegetation, small trees and several walking tracks. Is there a process whereby
the decision to describe Drigg Point as being entirely sand at sea level can be reviewed
and what would be the timescale for any changes.
A  The dunes are shown correctly to current specification for 1:25k and 1:50k mapping,
and there are no plans to change how the dunes are depicted on these products.
Therefore, there is no process that would be undertaken to change how they are shown.

This does not answer the question about the depiction of the surface, but to avoid
taking advantage of the good will shown by the OS Customer services team, I decided not
to pursue the issue further. The message is clear; this part of the map will probably never
change. However, if the map was revised, and contours from Terrain-5 added at Drigg
Point, it would look something like this … (although because of the adjacent mountains,
Terrain-50, with 10m contours, would probably be used.)
OS maps and the ecology of extinct British animals

Stephen JG Hall

How extinct animals lived has long been a source of fascination. The ancestor of our domesticated cattle, the aurochs *Bos primigenius* died out in Britain around 1500 BC, probably as a result of hunting and loss of its habitat to farming, but lingered on, amazingly, to AD 1627 in a forest reserve in Poland.¹ Julius Caesar described it as a woodland animal, but some stratigraphic and palynological (pollen analysis) characterisations of archaeological finds have suggested it inhabited riverine and estuarine flatlands. However, no formal review has been made. Recent studies ² have provided evidence that it specialised on the lush pastures associated with river plains and other fertile flat lands. This work capitalised on the fact that stable (ie non-radioactive) isotopes of elements, notably carbon, nitrogen and strontium, are not evenly distributed throughout nature and, when found in archaeological bone and tooth specimens, can often indicate the probable diet and habitat of an animal.

So, the evidence base for the actual habitat preferences of the aurochs is becoming stronger, and readers of *Sheetlines* might like to know how an enthusiasm for OS maps played a supporting role in an earlier generation of research in this apparently abstruse area³. But before telling that story, I should point out that there is a definite present use for this research. Rewilding projects are generally accepted to need large-bodied herbivores to maintain vegetation and landscape diversity, so an understanding of the ecology of aurochs is necessary if an adequate substitute or proxy for that species is to be identified.

² For example Diana Pushkina, Juha Saarinen, Reinhard Ziegler, Hervé Bocherens,‘Stable isotopic and mesowear reconstructions of paleodiet and habitat of the Middle and Late Pleistocene mammals in south-western Germany’. Quaternary Science Reviews, 227 (2020), 106026.
The late Dr Derek Yalden included, in his splendid account of mammalian history and prehistory, OS map references (termed here “find squares”) for archaeological records in Britain of aurochs, beaver, brown bear, elk (*Alces alces*, or moose) and wolf, and he kindly provided me with extra data on red deer and roe deer. A high proportion of the finds were undated. The present-day ecologies of all these species, apart from the aurochs, are of course well known and it occurred to me that if the ecologies of the extant species could be accurately inferred from characteristics, then it was reasonable that valid inferences could be derived for the extinct species, ie the aurochs.

So many happy hours were spent with notebook, dividers, calculator and ruler in Lincoln City Central Library, and at home, studying 1:50,000 First Series and 1:63,360 New Popular and Seventh Series maps, to record for each 1 km² find square the following numerical features – height above sea level, number of contour lines and distance between highest and lowest contour lines (“available relief”, indicating flatness), and landscape features – presence/absence of cliff, lake, woodland, marsh, heath. The same data were recorded for a randomly selected 1 km² square within 10 km. The 1:63,360 maps were preferred because print quality was better and there was not so much confusing modern detail; such as motorways. Three find squares are illustrated here.

Find square SK 0954 is to NE of symbol (near Dove Dale, Derbyshire)
Species found - Brown bear & wolf

Find square TL 5467 is to NE of symbol (Cambridgeshire fens)
Species found - Aurochs

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Find square TA 1656 is to NE of symbol (S. of Bridlington). Species found - Beaver & wolf.

In the case of numerical features, when the find squares were compared between species, there were statistically significant effects of species on the height above sea level (metres) and the distance between highest and lowest contours (metres). Beaver and aurochs were both associated with low-lying, flat lands.

For some species and some landscape features, there were substantial differences between find squares and their respective control squares. The most striking examples are illustrated:
Map squares with beaver finds are significantly more likely to have a lake today, than the control squares, and similar effects are seen for brown bear and wolf, in relation to presence of cliffs. In the light of what we know of these species, these findings are not surprising. In the case of the aurochs, while woodland was present in 45 per cent of find squares, a higher proportion (57 per cent) of control squares had this feature. In Britain today, woodland tends to be on the more infertile ground, and this suggests the aurochs was a creature of the more fertile areas.

Finally, comparing the altitude and available relief of aurochs find and control squares, median height above sea level of find squares (30 metres) was significantly lower than that of control squares (50 metres) and so, too, was available relief (10 and 20 metres respectively). It is abundantly clear the aurochs lived in landscapes that were relatively low-lying and flat. Of course, this large-bodied and highly successful animal, which at its peak was found across most of Europe, into north Africa, and across much of Asia and into China, may well have had migratory subpopulations and local adaptations, so this can only be a generalisation.

To conclude, three separate approaches have been applied to aurochs landscape ecology. These are the stratigraphic and palynological characterisations of find sites, stable isotope studies – necessarily limited to a very small proportion of actual finds – and the map-based study described here. The novelty of the map-based study is that the methodology used for aurochs, of inferring ecology from landscape features, was tested and confirmed to be valid by applying it to species whose ecology is already known. Whether there are any other ecological puzzles that can be examined by the pleasant activity of scouring Ordnance Survey maps in a calm and peaceful library I don’t (yet) know!

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5 Full statistics and tests of significance are in SJG Hall, *op cit.*
6 Van Vuure, *op. cit.*, 41
Letters

In a recent edition of *Sheetlines*, Richard Oliver treats us to an interesting discussion¹ of how milestones and their like are treated by the Ordnance Survey at different scales. In Footnote 17 to that paper, he hints at a forthcoming “guide post” article. This note is to encourage him to include in that article some recognition of what I have called the Wayside Markers in Eastern Fife, a group of cast-iron plaques all of the same design, giving directions to settlements and farms in the vicinity, often with distances as well. They are additional to any regular mileposts in their area, and are shown on the two-and-a-half-inch scale and larger by the abbreviation GP, Guide Post. Only 15 are now to be found, though the total number erected is not recorded.

My wife Elizabeth and I published a detailed description of all the fifteen, with photographs, in the Milestone Society’s Journal Vo. 12 of 2020. We would of course be happy to provide Richard with a copy of that text.

*Peter Wynn*

Some years ago I found a copy of OS six-inch map of London, Sheet S in excellent condition on a secondhand stall for a giveaway price. I had to have it as it was the first six-inch map that I had seen folded into a cover. A decade or two later I still haven’t seen another, though I haven’t been actively searching. I will present a brief description for the benefit of others who may not be familiar with these maps. A copy of the flat sheet is on the NLS website.

The map has an attractive pictorial cover showing a night time scene of the Thames from near the site of Embankment station (Charing Cross) with the dome of St Pauls in the background, Cleopatra’s Needle silhouetted on the well illuminated Victoria Embankment and Waterloo Bridge in the middle distance. Whilst I haven’t seen this cover before and it isn’t illustrated on the CCS web site, David Archer mentions “Thames at Night” covers in his Kerry Musings in *Sheetlines* 125, so they are perhaps not as rare as I originally imagined. The folded map has an overall size of approximately 140mm x 210mm. The rear of the cover has a key to other sheets in the London series from A to T. The map is printed on paper somewhat thinner and finer grained than any other six-inch map in my possession, presumably to reduce the bulk of the folded map. The mapped area is 36 inches x 24 inches (six miles x four miles).

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The map itself is headed “Edition of 1919” and includes areas from County Series plans of London, Surrey and Kent, revision information is shown for all three series in the range 1907 to 1914, re-levelled 1911 to 1914, with “Boundaries Revised in 1919” for all three. The map content is as far as I can see standard six-inch material in black with red contours. SHEET S is printed in red in the top right-hand corner above a list of the London, Surrey and Kent sheet number from which it was compiled.

The price printed on the face of the map was 4/- net (flat sheet price), but the pictorial cover carries a sticker stating “Revised Price 5/6 net” pasted onto the bottom right-hand corner – it is impossible to tell whether there was a previous price on the cover beneath the sticker without damaging it. The revised price presumably reflected the cost of folding and mounting in its cover. 4/- is 20p and 5/6 is 30p in decimal currency which according to the Bank of England’s inflation calculator would be about £8.15 and £11 today assuming the price was set in about 1920. The 1938 edition of Sheet S was priced at 5/- net as a flat sheet, an increase of 25 percent. Interestingly in the period 1919 to 1938 the Bank of England’s inflation calculator returns a negative value for inflation, so the increase in price in real terms is greater than it appears to be. A price for the flat sheet in 1938 reflecting the negative inflation would be reduced to about 3/- (15p).

John Ambler

From The Guardian.com, 12 February 2023

For more than 200 years, Ordnance Survey maps have featured symbols denoting everything from churches to battle sites. Now the agency is to consult members of the public on new symbols to bring the maps into the modern world. It will run a project later this year to discover what the public would like to see on its leisure maps. It could be symbols for bike repair shops, cafes, dog waste bins, or jetties and safe river-access points for water sports. “If you’re canoeing, it could be safe places on a river where you can launch your canoe or get to the water safely. Or for cyclists, the location of bike repair shops. So it could be very specific, tailored information,” a spokesperson said. The OS is suggesting updates such as marking accessible routes by showing paths with or without stiles, to help wheelchair and pushchair users.
Ordnance Survey covers and titles – a further note

Derek Deadman

For John Paddy Browne’s *Map Cover Art*, Roger Hellyer devised a numbering system to identify Ordnance Survey cover types. This book, and his *Ordnance Survey Small-scale Maps Indexes 1801-1998* give much invaluable information. What seems to be lacking in both, however, is a list of which covers may be found on which maps within series. This is particularly true of some ‘subseries’ within standard series and includes alternatives to the adhesive and hinged map such as book-fold and Bender covers.

Based on Roger’s numbers, which are also used in the CCS online collection, I have been compiling a provisional list of cover titles (not map titles which may differ from cover titles). I am very aware that there remain many gaps to fill. A comprehensive list to go with the online collection and map image library would be of great interest and value to CCS members and I would like to suggest that members be invited to contribute information to create such a list. The following details are incomplete and I’d ask anyone able to provide additional information or corrections to please contact the editor.

Items are those added after publication in *Sheetlines* 111, 114, 118 and 121.

Series Sheets. Neither Scotland nor Ireland sheets were issued with this cover. See Deadman (*Sheetlines* No 125, p.55) who reports that all these series maps are now known in one or both of covers H.10.1 and H.10.2.

Add known: Sheet 107

11.2.a Popular Edition. One-inch. England & Wales. Dark red and black. Location map. Series sheets except sheet 17 (pictorial cover) and 140 (place-name list). All other 144 numbered series sheets known in this cover.
Book-fold covers (‘wrap round’). From the large number of different sheets that have now been identified with these covers, it seems likely that all sheets were available in this form. Add known sheets: 10, 11, 31, 62, 130.

Add known in Bender covers: Sheet 96

12.2.a Car passing signpost. Half-inch, green and brown. England & Wales (40 numbered sheets)/Scotland (34 numbered sheets)/Ireland (25 numbered sheets) series sheets. G.R. arms. All numbered series sheets are known for each country with these arms. Covers with ER arms are also known to exist for maps of England & Wales and of Scotland.
Add known England and Wales ER arms: Sheet 11

Add to book-fold covers with ER Arms. Known sheet: 36

Add to Bender covers. 1939-40. Known sheets: 8, 21

Add to known sheets: Tunbridge Wells (via a sticker).

Thanks to Chris Bull, Graham Cornell and Peter Gibson for their help in the preparation of this note. Remaining errors are those of the author.
Kerry Musings

David Archer

If you change from being a map collector to a mapseller, you lose a hobby. Rubbish some say, a mapseller gets to see far more goodies than any of us, is the first to see or hear about most of the new discoveries and can keep whatever he or she wants, a hobby within a business. Rubbish again I say, when you spend all day handling and thinking about maps, the last hobby you want is map collecting. A hobby should be relaxing and enjoyable, something other than work, not an extension of the weekly grind, even if the grind is enjoyable. See a map, and one is back thinking of the boxes to be seen to on Monday, and the requests to check.

Yes, a mapseller does see some wonderful previously-unknown items, but is not allowed to get excited because he or she is supposed to know all about Ordnance Survey maps. A customer or someone with maps to sell expects a polite air of having seen it all before. Admit to having something new before you and their confidence is shaken, might you not be up to scratch, might your prices be too high or your offers too low? Get excited by a new acquisition and you risk becoming attached to it. Only when more knowledgeable friends show a discovery, can one be animated, confess ignorance and then envy and offer praise. Surely part of collecting is the immediate excitement of a find, major or minor? Having to suppress feelings of pure joy until one gets home is not part of a hobby. The great moment has passed, hobby RIP. For a mapseller, the acquisition of stock, and constant pondering of where one might find maps is identical to collecting, but on a larger scale, meaning relaxation must be found elsewhere.

Yes, I did add to my accumulation of maps whilst trading, but literally that, just added, maps were put in the box with the others and the lid closed. A collector enjoys poring over new acquisitions and absorbing them, both into the collection and emotionally. I was unable to do this; again, too much like work. So when it looked like closing time for the business, I wondered whether I could regain a hobby? Answer: Yes, but only the maps themselves would be as before; both I and the world had changed since 1985.

In 1985, the Charles Close Society was still very young, *Sheetlines* had reached issue 14, the big articles had started, but cartobibliographies and monographs were yet to appear. In the April issue, Tim Nicholson had given us a first list of tourist and district maps, but we only had map titles, with few illustrations. Few of us had ever heard of Deeside, Oban or the Middle Thames maps. My list of things to look for grew rapidly because information was spreading quickly via *Sheetlines* and Society meetings. We were all learning and friendship was an important part of collecting, the sociable giving and exchange of information.

Where did we look for maps? As now, everywhere, but mostly in secondhand bookshops, followed by book fairs, booksellers’ catalogues and mapsellers’ catalogues. People mention charity shops, but I have never found anything of interest in them. If you were lucky, bookshops were the key to finding maps. And they were cheap, which is why I can say that I bought almost everything I saw. I did not see much, those found were inexpensive, and frequently something was totally new. I can remember finding my first
Fifth Relief Edition under a stall near Petticoat Lane one Sunday morning in 1974, and on returning home was unable to learn anything about it.\(^1\) An unknown series, but why a red cover border, whilst other maps with a modern hiker had blue borders? I obviously did not look too closely at the wording, nor the map inside. An Arthur Palmer Peak District appeared in a secondhand furniture shop. One looked everywhere.

Bookshops were certainly my main source of maps before 1985. Shops one kept returning to because they once yielded something good, and never did again. Shops where, on enquiring, the owner always told the same story, year after year, of the large box of OS maps that came in a few months ago and sold at once. One always felt the need to enquire, just in case. And then one would try to get the owner to promise to let you know if anything came in, and sometimes they might even take your telephone number. I never received a call. One lived in permanent hope of arriving just after a big collection had been purchased. The only person I can think of who was this lucky was a good friend who dug out a *Forth Clyde and Tay*, as we called it then, amongst other things. Amongst other things. Dream on.

I never went to book fairs before 1980 because I did not know of them. Such ignorance. Had I known, I would certainly have gone, as one would have seen and learned so much. Many members indulged in the Saturday tour, especially if it included a fair. A trip around bookshops, antique arcades, junk shops and anywhere else that might yield the goods. Such collectors are fuelled by a vast reserve of hope and need a thick skin against the disappointment of endless searching with only limited success. If one stayed at home, there was always the printed word. Several CCS members issued catalogues of OS maps, causing palpitations when the post arrived. There was always enough to keep you quiet for a good while, marking, checking, checking again, adding up, hoping, telephoning.... odds and ends were found in general booksellers’ catalogues, but today the golden days of catalogues have long gone. Certainly the golden catalogues; all catalogues.

On Thursdays I might have bought the *Exchange and Mart*, a wonderful publication. At the end of primary school it told us of a shop in Shepherd’s Bush market selling terrapins, in our teens it directed us to record and scooter shops in Brixton, and in my mid-twenties it offered OS maps, 13 Civil Air Edition maps caused a thrill. Wonderful items were sometimes listed, including, Brian Bechter tells me, the magnificent Mudge map that the OS displayed at the 2014 AGM map market: “Large Mudge of Kent” with a phone number, £20 cash paid.

The changes since about 1985 are pretty obvious: our society and its publications have flourished, *Map cover art* exists, there are fewer bookshops and booksellers, fewer mapsellers, map prices have increased and the Internet is everywhere. Anyone starting to take an interest in OS maps can quickly read enough to become far more knowledgeable than an experienced collector of 1985. Even without the decline in bookshop numbers, the gradual rise in petrol prices and city centre parking charges would have devastated the Saturday tour. Using the Internet’s convenience and vastness, one can now search for maps

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\(^1\) There was only one reference work available: JB Harley and CW Phillips, *The historian’s guide to Ordnance Survey maps*, 1964, which does not mention the Fifth Relief Edition. Pre-war *Descriptions* were not known to me.
worldwide, from home, office or on the train, whenever one wishes. Sadly, amongst collectors today, all one hears mentioned is eBay, and it would be Canute like to suggest that bookshops, book fairs and junk shops are a truly comparable alternative. The auction site allows collectors to see many more maps than previously, with a greater chance of finding, and for those with deep pockets, buying scarce items. Traditional economics predicts that if scarce items appear more often, supply and demand dictates that prices fall; eBay has obviously not read the text books, and fantastic prices are paid for the really scarce items, although prices can be startlingly low for standard series maps.

So, in these changed conditions do I want to re-gain a hobby and start collecting maps again? The world has changed, so have I, but the maps remain the same. Yes, I would like to try, but only on my terms. Given the prominence of eBay, I am not prepared to spend hours sitting alone in front of a sterile computer screen; this must be kept to a minimum. I want collecting to be sociable, taking me out and about, talking to people, getting a feel of what is going on in the reduced real world of secondhand books and maps. One has to out to stumble upon maps in unexpected locations, the only source of OS maps to have remained largely intact. I want to visit bookshops, where one is easily distracted from the map quest. Indeed one wishes to be distracted, it is all part of the leisure activity. Relaxing, a word one cannot honestly use for searching eBay.

Of course eBay will come into it, but with rules. I will not bid on anything with an inflated postage charge, nor for an OS map described as rare, retro, collectable, vintage or antique. The words nose and spite come to mind. Above all, I intend that eBay will not be the only source of maps, nor the main source, and will try to plough other furrows as much as I can. I cannot see how one can get satisfaction from a predominantly eBay collection, where one never touches a map until it arrives, never stands and opens a map for consideration, having the pleasure of re-folding a poorly folded map, or of flicking through ordered rows of maps at a fair, indeed, one does not even bend over a box of tatty specimens in a bookshop. “Get up to date” someone shouts from the back, “Do it at work whilst the boss pays you”.

Ah, but what about the chase? True, one can still have the thrills of the chase with eBay, as it is so vast and human error is so prevalent. Many things are missed by the crowd due to poor spelling or miserable descriptions that are wrong or lacking in detail. An early bird spots a ‘Buy it now’ item and others are none the wiser.

Bookshops might be closing, but a lot of the closures result in the stock being put onto the Internet, and thankfully, many booksellers maintain their same attitude to selling, shunning auctions, preferring to name a price and letting the buyer find the item. Maps are frequently listed on bookselling sites. But one has to read carefully. An entry: ‘Ordnance Survey six-inch map of London, 1921, Sheet H, covers slightly scuffed, otherwise nice condition, £10’, did not mention the moody Ellis Martin illustration of the Thames Embankment, but Sheet H was a giveaway.

So, mostly for the pleasure of the chase, I will give it a go. And having decided, what am I looking forward to? As of old, making endless lists, lists of what I would like to find, lists of what might exist, lists of where to look, lists of who to contact. Friends are weeding collections, maybe I can be cheeky and ask whether they have anything I might want. A day
out, strengthening an old friendship, see their collection again, map chat. Sounds too good to be true. Henceforth, it will be a real pleasure to look through even a handful of tatty maps with no pressure attached. I will look for myself, not for stock. It will not matter if I see some nice bright Third Editions at a price higher than would allow me to take them into stock, nor will I have to scan Seventh Series or Pops, looking for ‘good numbers’ to buy. As far as maps go, I intend joining the ‘me’ generation.

Writing things down often helps to clarify thoughts, and the above shows me that my greatest pleasure has always been in looking for maps, thinking where they might lurk and winking them out. What maps they turn out to be is mostly irrelevant. All a bit like work really, the constant hunt for new stock. Maybe I never lost a hobby, and that the hobby was always the search for maps, with a business within a hobby as a sideline.

PS. The above was finished in January 2015, and having tried it, I do not think it will work. My gaps are few, the maps required so specific and the rate that any appear, so slow. I am not going to spend the rest of my days sitting around waiting, having been spoiled by the quantity and rate of map acquisition as a mapseller.

PPS. Alas, or hooray, according to your nature, this is my last offering of Kerry Musings. Seventy times I have tried the patience of members, and maybe now is the time to stop. I have always been pleased when my scribblings bring in brief comments or longer pieces to Sheetlines, and am grateful for the many kind comments received over the years.

The three editors, Chris Higley, John Davies and Andrew Darling have been very kind in letting me go my own way. My initial intention was to write pieces commenting on Ordnance Survey matters, and to insert small observations and information that would be difficult to work up into an article, even of half a page.

So, thank you all for reading them. With the first musing, Chris Higley suggested that they might become regular; with this one, they might become irregular. Might.

Editor’s Footnote: David and I have been pondering possibilities for a replacement series with which to close forthcoming editions of Sheetlines; perhaps on a theme of ‘Map moments’ or similar, with short pieces of a light and hopefully amusing nature. The idea is attractive in principle, and readers with ‘moments’ (or any other suitable topics or, indeed, musings) to share are invited to submit potential candidates for consideration.

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2 So ends Kerry Musings, which, even if contrived, end as a small footnote in history.
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