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Star performer at the recent AGM in Lincoln was author and CCS member Mike Parker. Rarely has an AGM talk been greeted with as much laughter, as members recognised their own home truths when Mike talked about his experiences as a map addict. *Photograph of Mike Parker and his title screen is by Richard Oliver.*

Also at the AGM came an historic moment for the Society with the retirement after sixteen years of our chairman Christopher Board and the election of Gerry Zierler as the fourth holder of the office. More about Chris and Gerry on pages 2 and 3.

Members attending the AGM unanimously approved a proposal that the membership fee, fixed at £10 since 1998, be raised in 2013 to £15, in recognition of increased postal, printing and other running costs. Full details are inside back cover.

Work is in progress on gathering and curating the materials for the proposed exhibition mentioned in *Sheetlines* 93, designed to show how OS mapping has recorded the many changes of land-use over time in some key localities. It had been hoped the exhibition would be presented as part of the London Mapping Festival, but it is now expected to be ready next year.

*Britain from above*, a fascinating collection of oblique aerial photographs by Aerofilms dating from 1919 to 1953 has been put on line by English Heritage at [www.britainfromabove.org.uk](http://www.britainfromabove.org.uk)
Thank you Chris Board ...

Sixteen years ago, Dr Christopher Board took over chairmanship of the Charles Close Society, the third chairman in our history, following Peter Clark and Yolande Hodson. Our membership roughly doubled during Chris's period in office, and keeping the Society on course during this expansion has required a steady hand on the tiller.

This Chris has always provided. A committee discussion brought to a sensible conclusion with a few points that nobody else had thought of; a quiet note of appreciation or a phone call to say thank you; a little, very mild, arm-twisting to persuade someone to take on a new role – and then gentle support while they gained confidence.

Above all, Chris Board is respected in his own field. This has built on the foundations laid by the other founder members to give the Society a standing which its ‘amateur’ members could not have achieved on their own and has opened many doors for us. Chris’s award of the British Cartographic Society’s Medal, that society’s highest honour, was followed by his OBE ‘for services to cartography’ in the 2005 New Year Honours.

In both his academic career and his chairmanship of CCS, Chris made many friends in the right places. Temporary difficulties for CCS have been overcome following a well judged phone call or his quiet comment to the committee, “Perhaps I should write to the Director General on that one”. Voluntary societies need suitably eminent chairmen, but to run smoothly they must also elect chairmen who are good with people. Chris Board has served CCS admirably on both counts and for this, and for his hard work over such a long period, we thank him.

Chris commented “If I have helped to make CCS more inclusive, to encourage anyone who wants to learn more about OS mapping, I am satisfied. I am sure that Gerry will rise to all the challenges facing us with aplomb”.

photos: top, Chris Board at 2012 AGM by Richard Oliver
lower, HM The Queen presenting Chris with OBE © BCA Films, Wokingham
... and welcome Gerry Zierler

Gerry Zierler has been a CCS member for 25 years. He says: “The Society has always been so informative and thoroughly enjoyable that I still feel like a new boy after all these years. Its members are so willing to share their expertise and experience that you just go on learning, and when it's your favourite subject that you're learning about, it’s fun too. It’s a great honour to be invited to take the chair”.

Gerry has collected maps seriously since about 1980, but confesses to still having a few Seventh Series and 2½ inch Provisionals from his schooldays. “I used to draw maps for fun as a kid, but never really knew why. Much later in life I discovered that my late grandfather had been a cartographer in the trenches of WW1, so it must be in the genes. I am now a self-confessed mapaholic!”

“There are areas where I’m sure we can continue to improve and grow. I’d like to see us attract more female members, and to arrange more visits, at home and abroad. We will aim to keep up and build on our excellent relationship with the slimmed-down OS. You can add, too, the reintroduction of local meetings for members to ‘show and tell’ – or maybe just to listen and learn from others. This works well for other societies, helps to make newer members feel welcome, and can cross-fertilise interests – military and railways for example. I intend to restart this soon in London, and hope that colleagues in other regions will take up the idea. I’d love to hear your suggestions; my contact details are inside the front cover”

photos: left, portrait of Gerry Zierler by Chris Higley
right, Gerry leading the way on 2011 CCS visit to Germany by John Henry
The Charles Close Society Archives now contain over 9000 items, and are still growing. Although originally on loan to Cambridge University Library (CUL), the Archives now form a formal part of the CUL collections, having been presented to the Library by CCS in 2009. They are under the care of the Map Department.

Although the material in the CCS Archives relates to the Ordnance Surveys of both Great Britain and Ireland, it intentionally includes very few maps. Those that are present are mainly proofs, or maps with manuscript annotations demonstrating the working processes of Ordnance Survey.

Cambridge University Library Map Department has over 1.2 million maps of all parts of the world dating from the fifteenth century to the present. Since Cambridge University Library is one of the six legal deposit libraries and therefore entitled to claim a copy of everything (including maps) published in Great Britain and Ireland, you will appreciate that its collection inevitably includes many Ordnance Survey maps. You will understand, therefore, why it is not – and has never been – the intention to include extensive map holdings in the CCS Archives.

For many years the cataloguing of the CCS Archives was undertaken largely by Roger Hellyer, most recently in an Excel spreadsheet. Some of you may remember that in 2007 a version of this catalogue became available through the Access to Archives (A2A) website – a union catalogue for archive collections. The A2A project has now been terminated, although the catalogue, as it stood in 2006/7, is still available on their website.

During 2011, however, considerable work was undertaken by Roger Hellyer and a colleague of mine in Cambridge University Library (very many thanks to Huw Jones!) to import the data in the Excel spread sheet into Cambridge’s own archives catalogue which is known as Janus (http://janus.lib.cam.ac.uk/). You will find the catalogue of the CCS Archives (CCSA) by clicking on ‘Participating Institutions’ at top of the page and then selecting ‘Cambridge University Library: Map Department’, and then CCSA. The direct link is http://janus.lib.cam.ac.uk/db/node.xsp?id=EAD%2FGBR%2F3296%2FCCSA

The catalogue entries are arranged in 22 groups, or ‘fonds’ (see below), which can be broadly identified as the originating organisation or collector. By clicking on a fond, you are presented with a list of items – or collections of items – in that fond. Click on the reference numbers to retrieve fuller information about the item or collection.

If you want to see an item, make a note of the reference (eg DA_394_1). If you would like us to have a quick look at an item to see whether it contains what you hope it might, then get in touch with us, but I hope that CCS members will understand that we are unable to undertake extensive research on behalf of

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1 The author is Head of the Map Department, Cambridge University Library, West Road, Cambridge CB3 9DR. Tel: 01223 333041; email maps@lib.cam.ac.uk
enquirers. We can make copies (for a charge, unfortunately) subject to various copyright restrictions and the condition and format of the item. Ultimately, however, you will probably want to come and have a look at items of interest yourself so that you can cast and informed eye over them. In this case you need to acquire a Cambridge University Library readers ticket. Members of the Charles Close Society wishing to consult the Charles Close Society Archives will not be charged for a ticket on production of their current CCS membership card and providing that they have first contacted me so that I can support their application. An appointment to acquire a ticket should then be made in advance with the Admissions Office (telephone 01223 333030, email admissions@lib.cam.ac.uk). And don’t forget to bring your digital camera with you (set to silent and with flash disabled!) so that you can take photographs of items of interest.

As new items are added to the Archives we plan to write short pieces for Sheetlines to alert members to their existence. If any of these, or items already in the Archives, catch your attention and you would like to write longer, more scholarly articles then please do get in touch since this would be a great way of demonstrating the value of the collection to the CCS membership and Cambridge University Library management.

It might be useful to look briefly at each of the fonds. Much of the following text was extracted from Janus – where further information, especially organisational and personal histories, can be found – and was written by Roger Hellyer, whom I thank for allowing me to use it. If you would like a paper copy of the extended text please ask.

**OS - Ordnance Survey**

A wealth of diverse materials – mostly documents – now surplus to the requirements of Ordnance Survey itself, and outside the scope of (or duplicate to) what is accepted by The National Archives. Further Ordnance Survey papers may be located in other collections in the Archive.

**OSI - Ordnance Survey of Ireland**

The archive contains various map indexes and catalogues dating from the second half of the twentieth century, including the 1949 issue and its supplements, some technical papers (see also the Brian Warren Adams and John Harwood Andrews collections), photocopies of the 1836 prospectus and a correspondence file (1867-1872).

**OSNI - Ordnance Survey of Northern Ireland**

Present is a comprehensive collection of the catalogues of maps, together with almost all their supplements, issued from 1935 to 1994, together with some price lists and map indexes.

**DOS - Ordnance Survey International**

Most of the files in this collection date from the 1960s to 1980s, with an overall span of 1949 to 2001. They concern matters such as technical assistance, co-operation and appraisal, map printing and production, cadastral and air survey, instruction manuals, staff lists, management committee correspondence, estimates, progress and annual reports, example sheets and authority for
mapping, for most of the smaller Commonwealth nations.

**MOD - Ministry of Defence**

This collection includes an accumulation of literature on United Kingdom mapping (mostly second half of twentieth century, but some dating back to before the First World War) – on new developments in map survey and printing techniques, reports on symposia, government generated papers, periodical offprints, catalogues, promotional literature, that has passed through the hands of the Library Information Centre, DGC, and its predecessors, and is now surplus to their requirements. There is in addition much material created by Military Survey itself – map indexes, catalogues, conventional sign cards, grid reading instructions and conversions, as well as an important collection of maps published by GSGS, in particular an almost complete set of special sheets in GSGS 3906 issued in the early 1940s not often encountered elsewhere.

**CCS - The Charles Close Society for the Study of Ordnance Survey Maps**

The archive contains some working papers, indexes to *Sheetlines*, some of its ephemeral publications, also a collection started in 2002 of security images on CD-rom and DVD (mostly TIF images) of very rarely encountered Ordnance Survey and military maps which, because of their potentially unique state, might otherwise be in danger of extinction. Those with NLS reference numbers can also be viewed in the Map Library, National Library of Scotland.

**BWA - Brian Warren Adams, 1924-2005**

This archive contains two overlapping bodies of material, reflecting Brian Adams's work with the Hydrographic Department (1945-1980) – departmental working papers, and printed works he acquired during those years, including his collection of Hydrographic Department Professional Papers; then as a private researcher into Ordnance Survey mapping (1980-2005) – his collection of source books (a mixture of original volumes dating back to 1858 and photocopies) that supported his research, as well as what survives of his research papers.

**AFB - Archibald Frederick Brown, 1897-?**

The archive holds a small collection of his personal papers – photographs, his Army Council certificates of education, passports, diplomatic papers relevant to his work in Belgium, pay book, soldier's small book. Born in 1897, Brown entered the Royal Engineers in 1913, served with distinction as a sapper in the First World War, then as a surveyor on the Germany-Belgium Boundary Commission and later in West Africa. He was Assistant Superintendent of the Proving Section in the Ordnance Survey in 1951, retiring in 1962.

**AEE - Albert Edward Eades, 1910-1992**

Albert Eades joined the Ordnance Survey in 1935 and retired in 1973. Among the items given to the archive are several notebooks on levelling and field survey used by Eades both as an instructor and as a surveyor in the field, including a wartime printing of *Notes on field survey*, which is prefaced by an introductory message from the Director General, G Cheetham, written in November 1943: ‘To members of the Ordnance Survey who are at present prisoners of war’. See also the short article in *Sheetlines* 91,58.
A selection of items from the CCS Archives, including one of David Archer’s recently donated proof Pathfinder maps and a retirement card for John Dennett in the form of a certificate [photo Ian Pittock]

FJ - Fred Joyce

Sometime employee of the Ordnance Survey, serving the department as a field surveyor (ca 1945-1974). The archive holds records of his work in diaries and other notebooks, as well as Ordnance Survey publications, many of them in serial form for the use of their employees, such as technical bulletins, trig. and levelling bulletins, instructions.

LR - Langdon Rowe

Ordnance Survey chief surveyor of South Yorkshire, based in Sheffield. Worked for the organisation as a draughtsman and field surveyor working on 1:2500 and 1:1250 mapping. The archive holds the diary recording his career (1952-1988).

GOAD - Charles E Goad Ltd

Between 1885 and 1970 the firm produced fire insurance plans covering most of the important towns and cities of Great Britain as well as many colonial and other foreign towns. Between 1892 and about 1925 the company maintained their own ‘Ordnance Index’ containing hand drawn Ordnance Survey town plan sheet indexes, together with lists of sheets. The archive now holds this index volume.

KGM - Kenneth Guy Messenger, 1920-1993

The archive contains the research papers as well as post-publication addenda. There is a substantial body of material for a full length monograph on Ordnance Survey half-inch maps which was left incomplete at his death. There are active but unpublished listings of several other Ordnance Survey map series, and much material relating to map cover classification. There are correspondence files, in particular both sides of his correspondence (1982-1993) with Richard Oliver,
wherein many themes in the largely unexplored territory of Ordnance Survey research, much of which would evolve into the published work of both men, were developed. Further details of his life and work appear in the obituary in *Sheetlines* 38.

**CG - Cartographics**

Irregular printed sales catalogues were issued between 1969 and 1996, and are represented in the archive.

**AG - Alan Godfrey Maps**

This archive contains copies of sales catalogues listing both second-hand maps and map reprints from 1976 onwards.

**DA - David Archer**

This archive holds a complete collection of sales catalogues, together with some occasional lists and other ephemera and also now some maps (see below).

**DEAL - Other dealers**

Many antiquarian map and book dealers offer some Ordnance Survey items in their general sales catalogues. Some of them issue occasional catalogues focussing almost entirely on Ordnance Survey or related material. This archive holds a small collection of such specialist catalogues, in particular five from the Dorking bookseller John Coombes (a founder member of the Charles Close Society), together with other lists issued by amateur collectors.

**IM - Ian Mumford, 1925-**

This archive holds a large part of Ian Mumford's working library including maps, official papers and documents concerned with Ordnance Survey and Military Survey matters, much of it original or photocopies of otherwise rarely accessible source material, such as the volumes containing Southampton Circulars.

**PKC - Peter Kenneth Clark, 1926-**

Peter's many cartographic interests include the Old Series and military mapping of Great Britain, both of which are represented by items in this archive.

**MM - Maurice Hubert Moore, 1914-2005**

This archive holds three occasional items marking special moments in Maurice's career in Ordnance Survey and the Corps of Royal Engineers.


The archive holds papers marking significant moments in John Dennett's career in Ordnance Survey and the Royal Engineers, including some very interesting group photographs.

**JHA - John Harwood Andrews, 1927-**

The archive contains some of the working papers used by John Andrews in his published works and some occasional items, including a fine sequence of Christmas cards sent to him by colleagues in the Ordnance Surveys in Dublin and Belfast.
Recent Additions to the Charles Close Society Archives

We are pleased to add several collections of proof OS maps to the Archives, all kindly donated by David Archer.

The first collection of 64 maps has been given the reference DA_412 and comprises proof copies of 1:50,000 scale Second Series Ordnance Survey maps from 1974-1975. The sheets are folded into home-made (by OS?) cardboard covers and are identified as proofs by the addition of various stamps. Typical is the proof copy of Sheet 9, Cape Wrath. ‘A’ [edition], 1976 [CCS Archives Reference DA_412/1_1] which has the following stamps:

- Proof 30 June 1975
- No ‘S’ or ‘C’ treatment required 1 Jul 1975
- National Trust 2.7.75
- Ordnance Survey Southampton 2 Jul 1975 Mapping Intelligence (boundaries)

In addition some sheets have manuscript annotations noting features that need to be corrected.

David has also donated a collection of folded, uncorrected paper proofs of 1:25,000 scale Second Series, Pathfinder and Outdoor Leisure series maps from the 1970s to late 1980s. There are 256 of these maps at reference DA_413. Typically these maps have fewer stamps than the proofs mentioned above. For example, Ordnance Survey, 1:25,000, Pathfinder 23, Papa Westray ‘A’ [edition], 1987 [reference DA_413/1_2] just has a single stamp: ‘Proof 27 Nov 1986’. The collection is accompanied by a letter in which it is explained that ‘Up until about 1990 printed paper ‘proof’ copies of Pathfinder & Outdoor Leisure maps (for both new and ‘revised’ editions) arose when the map components were nearing completion. These copies were taken off in very limited quantities, stamped as ‘Proof’ and distributed to relevant ‘authorities’ ... for comment. Any annotated copies were then used to carry out corrections to the map components before final printing of the sales copies. ... Around 1990, colour photocopied of a single proof replaced these printed versions’ [Source: 9 July 1999 letter at DA_413/1_1].

DA_414/1, 2, 3 and 4 contain a smaller number of proof maps, mostly from the 1980’s, including a few examples of the 1:50,000 First Series and the 1:250,000 scale Routemaster Series.

For a detailed listing of the sheets see the Janus catalogue at http://janus.lib.cam.ac.uk/ or get in touch with the Map Department.

Finally, and most recently, Richard Dean has kindly donated two collections of maps in pre-publication form. There are three one-inch Fifth (Relief) sheets (95, 96, 106), notable for the presence of Yard Grid values, but as yet without the grid, also the use of standard buff OS covers of the early 1930s, perhaps suggesting that the designated Fifth Edition cover was not yet ready for use. And there are nine Old Series quarter sheets (42NW, 42SE, 48NE, 48SE, 68SE, 82NE, 82SW, 82SE, 87SW) printed on cartridge paper (in two cases on India paper attached to the cartridge paper), some with incomplete hachures or other ornament at the edges, or incomplete imprints.
In the spring of 2012 the publishing arm of the Automobile Association announced the issue of 29 sheets of a 1:25,000 Walker’s map and 30 sheets of a 1:50,000 Leisure map, with both series selling at £7.99 a sheet. The AA website said that they embodied ‘Trusted and reliable Ordnance Survey data with a familiar look and style.’

The use of the word ‘data’ proved to be interesting. My own understanding of it is in the sense of ‘information’ rather than ‘presentation’: the latter for maps I understand as ‘cartography’. Accordingly, told that a map embodies OS ‘data’ I expect its appearance to differ somewhat from what the OS produces. The excellent qualities of AA cartography since its cartographic unit was established over 40 years ago might lead one to expect a new perspective on an established scale. After all, when the AA produced a motoring atlas at 1:100,000 in 2006 they used OS data, but the look was quite distinct from anything that has emerged from Southampton.

In the event it isn’t just the scale that’s well-known: so also is the cartography. The ‘familiar look and style’ is that of the OS Landranger and Explorer mapping. ‘Do you know what the difference is?’, asked the pleasant young man in Waterstones in Exeter as I bought Leisure map 22, Exeter, Sidmouth and Torbay, Walker’s map 13, Exmoor, and three entirely OS maps, including the recently issued edition C5 (dated 2011) of Landranger 192, Exeter & Sidmouth. (He must have suspected something. What ordinary person would buy two similar maps of the same area?) I said that I thought they were on different sheet lines. Well: some are and some aren’t. Exmoor differs in position by 1 kilometre west-east from OS 1:25,000 Explorer OL 9, Exmoor: it costs the same. On the other hand, Leisure map 22 covers the southern two-thirds of Landranger 192 and (with the help of an inset) the eastern half of 202, and is unquestionably useful: so is Leisure map 17, The Chilterns, which is essentially the southern half of Landranger 165 and the northern part of 175. But Leisure map 2, Torbay and South Dartmoor, is practically the same as Landranger 202, moved slightly further north to include Teignmouth; 14, Truro, Falmouth and The Lizard, is a version of Landranger 204 shifted west to include more of the Lizard. The recommended price of the Leisure maps is £7.99, £1 more than the Landranger, and whilst the difference is certainly worth it for sheets such as 17 and 22, it is questionable for the likes of 14, and – well, inexplicable for such as 2.

The design differences between OS and AA are few and relatively superficial. First, the outer frame is omitted, so that, as the paper sizes are the same as used by the OS, there is a good deal of white paper in the margins: this does not alter

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1 The sheets reviewed here are Leisure map 22, Exeter, Sidmouth and Torbay, ISBN 978-0-7495-7284-6 and Walker’s map 13, Exmoor, ISBN 978-0-7495-7319-5. As usual with reviews in Sheetlines, these were purchased in the normal way by the writer, rather than solicited as ‘review copies’. Information about other ‘titles’ has been obtained from inspection of retail stock and from the AA website (theAA.com/shop).
the ratio of map area to overall paper as compared with the OS, but it does imply that a kilometre or so more horizontally and vertically could easily have been fitted in. Second, the same basic border design is used on both, of dicing the grid at 100 metre intervals: the effect is similar to that on the OS 1:25,000, though the AA uses screened infill where the OS uses a single parallel rule. I think the AA style preferable. Third, the legends are wholly in English, which is certainly an improvement in consistency. The OS have been unusual in putting giving part of the legend on the Landranger in French and German: the usual European practice is either a fully monolingual legend – as on the OS Explorer – or else a fully multilingual one. Those conventions which the Landranger explains only in English are, to my mind, precisely those where explanation is most needed. The road classification can be broadly inferred from the hierarchical presentation, whereas conventions for such as religious buildings and vegetation need explaining across cultures and countrysides. One might say facetiously that it would need an Act of Parliament to get this done: it took the influence, rather than the letter, of the Welsh Language Act to provide a full Welsh legend on those Landranger sheets that include Welsh territory. Perhaps Brussels or Strasbourg will have to do their worst to bring the Landranger fully into line with practice elsewhere. Two other differences are the omitting of latitude and longitude values, though the five-minute intersections are retained on the map face, and the lack of any compilation information beyond acknowledgement of OS ‘database rights’. I do not know how the paper will wear – this is the sort of map I buy for my library rather than to use on the ground – but it has a ‘white’ quality that is noticeably lacking from Landranger 192, edition C5, which is noticeably ‘grey’ and ‘dull’ by comparison. But how many of the general public would notice this? The OS has what one might call a marginal advantage, in that names do not cut the sheet lines, as they are liable to do on the AA offerings. The effect is that of ‘custom mapping’, and not always elegant. Against that, the AA prices are reasonable: the OS Custom Mapping service offers 6400 square cm of mapping at 1:50,000 or 1:25,000 for £16.99, whereas for £7.99 the AA will supply 6400 sq cm of 1:50,000 or 19,200 sq cm of 1:25,000 mapping.

These maps might perhaps be bought for convenience of sheet lines; they might perhaps be bought for ‘brand loyalty’ to the AA, though one does wonder if such things count for much in these demutualisation days. It is possible that some people have bought them thinking that, with an ‘April 2012’ publication date, they must be closer to ‘ground truth’ than are the corresponding Explorers and Landrangers. In this last regard they may be disappointed. Comparison of OS and AA, in respect of Leisure map 22 and Walker’s map 13, suggest that whether or not one ‘goes private’, the service is pretty much the same. However, I have noticed an oddity on the south side of Exeter. Landranger 192, edition C4 of 2008, shows a group of buildings and roads centred on SX 952898, with a golf course symbol to the north-east. (figure 1) The buildings were a former naval stores depot, which has recently been demolished and the site cleared, pending redevelopment. On Landranger 192, edition C5, there is a ‘white space’ at 952898, the golf course symbol is replaced by words (a correct description of the
ground, but ‘wrong’ for the Landranger specification), and buildings and roads appear at 959903: this is The Rydons, an estate that is still in a fairly early stage of development. (figure 2). Leisure map 22 shows something that Landranger 192 does not: the old depot and The Rydons co-existing. (figure 3) Possibly the answer is that the depot site is in square SX 98 and The Rydons is in SX 99, and that the AA were supplied with an ‘unrevised’ SX 98. As it happens, 192-C5 is a good example of the map getting out of date as soon as the surveyor has left the ground: the road system west of The Rydons has been reconfigured, there is no recognition that the cycle route running mostly alongside the railway from 976874 to 998834 has been surfaced and functions also as a footpath, and worse of all, there is no hint of the impressive cycle bridge over the M5, to connect Exeter with the new science park at 969935. In this regard purchasers of OS and AA suffer equally.

Figure 1 (above left). OS 1:50,000 Landranger sheet 192, edition C4 (2008)

Figure 2 (above right). OS 1:50,000 Landranger sheet 192, edition C5 (2012)

Figure 3 (left). As shown on AA Leisure map 22 (2012)
So why have these maps been published? Perhaps it pays OS equally well to licence a commercial firm to use the ‘data’ (and the cartography) as to handle production and publication itself. One might buy a sheet such as Leisure map 22 for convenience of cover, but I am puzzled as to what claims can be advanced on behalf of Leisure map 2, and slightly improved cover of the ‘Doone Country’ (SS 7945) hardly seems a justification. Readers and followers of RD Blackmore would probably prefer a shift of 10 km to west or east. It remains to be seen whether these two series develop, or whether they come – and go.

It will be equally interesting to see what the future holds for the AZ Adventure Atlas series.² In one way this is a similar concept, repackaged OS mapping, but in another it is quite different, as it is offered in atlas form with a gazetteer. So far, only four have been published: I have the Dartmoor offering to hand.³ As compared with OS Explorer OL 28, Dartmoor, it is the same ‘folded’ size (about 13.6 by 24 cm), weighs a little more (about 130 as compared with about 120 grams: the ‘OS Active’ version is about 185 grams), and contains less mapping (1155 as compared with 1271 sq km), though it includes a strip on the east that is outside OL 28, which is of some advantage to those of us living a little to the east of the area. The price (£7.95) is a shade cheaper than OL 28. The basic map area of each page is 3.0 by 5.5 km, but there is a 250-metre (1 cm) overlap onto adjacent sections. As usual in atlases, the value of the overlap is lessened a little by bold indications of adjacent pages and alpha-numeric referencing, but against this the gutters – so often the downfall of atlases – are exemplary, with no information loss. Whilst the smallness of the opening increases the possibility of having to move from one section to another, the overlaps mitigate this. The gazetteer goes down to the level of villages, hamlets, notable hills and named cross-roads – a Devon speciality, this, with their names given on the signposts – but excludes farms and woodland. If a selection had to be made, then at least it seems to have been made intelligently rather than mechanically. References are both alpha-numeric and six-figure grid. There has been some discreet editing of the text on the source mapping: grid figures are confined to the margins, 10 km grid lines are not emphasised, and certain ‘large’ names, such as of towns and MOD ranges, are repeated from section to section. There is a full legend at the start, and the ‘access’ symbols are repeated on flaps inside the covers. As with the AA mapping, the paper is ‘whiter’ than that favoured by OS and the general effect crisper; for those of us with ‘green’ concerns, it is noted as from ‘responsible sources’. For those areas where I have walked recently the mapping seems to be reasonably up to date. Whereas an AA reinterpretation of the 1:50,000 and 1:25,000 would be interesting, I have never been so enthusiastic about AZ’s own style, and am happy to forego their reinterpretation for the present.

Whereas one is left wondering what real justification there is for the AA

² But is it ‘A-Z’, ‘AZ’ or ‘AtoZ’? All three appear on covers as registered trade marks. As the title of the series is ‘AZ’, I have used that.

enterprise, that of AZ has an element of innovation: this is something that I might use out of doors. It will be interesting to see whether and how this series develops.

That said, the distinguishing feature of both AA and AZ offerings is that, in cartographic and content terms, they are strikingly unoriginal. The OS Explorer and Landranger data are raster-scans of material produced by analogue means in 1962-89 and 1971-88 respectively, and revision, extra information and more elaborate colour-schemes cannot disguise this. Whilst the Explorer remains a good map, the Landranger appears increasingly overcrowded, and cries out for a fundamental redesign. So long as both series are produced from raster data, such wholesale redesign is out of the question, as is any meaningful customisation, either for commercial users of the data such as AA and AZ or those of us who are bold enough to think that ‘customised mapping’ should imply a degree of control by the customer over the content and colour of the map, and perhaps the output scale as well: in default of a proper 1:100,000, the 1:50,000 ought to be offered at half-scale, and perhaps at 1:62,500. This is for practical rather than sentimental reasons: the enlargement of scale from 1:63,360 to 1:50,000 in the 1970s meant an increase of 1.267 in scale but 1.56 in the amount of paper required. Metrication and ‘internationalisation’ are not necessarily more ‘green’. Direct derivation ought also to allow for more up-to-date mapping, and avoid instances such as Landranger 192 edition C5, of being out-of-date before it even goes on sale.

Redesign and real customised mapping depends on vector data that is not yet available. It has been a long-standing aim of the OS to derive its smaller-scale mapping from what was formerly known as Landline and is now known as MasterMap data. It was hoped that, when the Explorer mapping was republished from 2004 onwards to show access land, it would be produced by direct derivation, and indeed an experimental sheet was produced for consultation purposes. Most at least of its questionable features – replacing churches by buildings with spires and towers was the most notorious – were nothing to do with automated production, and everything to do with misjudgement and perhaps outright ineptitude or ignorance in some quarter at OS. If these innovations caused the attempt to be abandoned, then it was throwing out the baby with the bathwater. More recently work has been done on a directly derived 1:50,000, and to judge from the tiny published specimens the fault is all the other way, of a lack of innovation in design: but still there is no sign of such mapping reaching the shops.\footnote{Much of the Ordnance Survey Special Issue of the Cartographic Journal, 44 (3) (2007) is relevant, but see in particular Nicolas Regnauld and Patrick Revell, ‘Automatic amalgamation of buildings for producing Ordnance Survey 1:50 000 scale maps’ (pp 238-50), Patrick Revell, Nicolas Regnauld and Stuart Thom, ‘Generalising and symbolising Ordnance Survey base scale data to create a prototype 1:50 000 scale vector map’ (pp 251-7) and Lars Harrie and Patrick Revell, ‘Automation of vegetation symbol placement on Ordnance Survey 1:50 000 scale maps’ (pp 258-67).}

So perhaps the real ‘meaning’ of the AA and AZ mapping is not commercial or social, but rather an old-fashioned technical one: a negative expression of the
OS’s inability to offer its ‘consumer mapping’ in other than a form reflecting the world of three, four or five decades ago. Whatever the benefits of raster map-production for the OS’s internal economics, they are not apparent for the consumer, either as an individual or as a commercial publisher. One positive aspect of these two groups of publications is that there is still a good demand for paper mapping. The question is whether its form and content are suitable for the digital age.

Further evidence that the AA mapping does not correspond to current Ordnance Survey data is seen in the representation on AA 1:25,000 Walker’s map of the harbour at Wells-next-the-sea, Norfolk.

Construction work was completed in February 2010 of the new basin in the outer harbour as a base for the supply vessels serving Sheringham Shoal off-shore windfarm development.

The upper extract shows grid square TF 9145 as depicted on AA sheet 21 North Norfolk Coast, 1st edition, April 2012. The new jetty, already two years old, does not appear.

It is however shown on the previously-published OS Explorer 251, edition A4, revised for selected change 2011 (lower).
How far does £7.99 go these days?

In the case of AA Walker’s map 21, above, the answer is all the way from Hunstanton to Cromer. This double-sided map, although somewhat out-of-date (see page 15) covers all of OS Explorer 251 plus much of 250 and 252 plus some of 238. Great value!

On the other hand, £7.99 spent on AA Leisure map 6, below, only goes as far as £6.99 spent on OS Landranger 132, the sheet lines being identical.
Maps from the past?

Alexander J Kent

This short article outlines some of the approaches and techniques involved in creating the Maps from the past series of facsimiles published by the Society over the last few years. It describes some of the issues encountered and explains how these were addressed using various digital image editing techniques. The personal account given here is by no means exhaustive and what follows aims to illustrate some of the ideas and steps involved in bringing these fascinating maps back to life.

Since the publication of the first facsimile in 2008, the Maps from the past series has sought to bring a selection of significant (and often relatively inaccessible) maps – chosen for their historic and cartographic interest and visual appeal – to a wider audience via high-quality reproduction. The preparation of each map in the series involves making a digital copy of the original (an image), which undergoes a process of enhancement before joining an essay and/or notes explaining the map’s particular relevance to the story of Ordnance Survey in the final sheet layout. The series has progressed to include more challenging examples, and the facsimile of the colour proof of the half-inch sheet Leicester (1960), distributed with Sheetlines 93, marks the first attempt to reproduce a complex layer-coloured map.

The digital copy of the map is acquired by scanning the original at a high resolution. Briefly put, the scanning process involves shining light at the source (whether it is positioned flat on glass or fixed to a rotating drum) and recording the various intensities of light that are reflected back to the sensor. This is usually a charge coupled device (CCD), which is comprised of thousands of photosensitive cells arranged in a grid. Generally, the more the better, as this increases the resolution of the scanner and hence allows more detail to be captured, but at the expense of a larger file size. An output resolution of at least 600 dpi (dots per inch) can render details beyond the naked eye and allows correction of smaller features, such as fine linework. However, while a high resolution is therefore essential for making digital copies of maps, larger images can be slow and cumbersome to work with as they require more computer processing power.

The photosensitive cells receive the reflected light from the source and the relative intensities of electrical charge are subsequently converted into digital numbers (DNs), each representing a shade along a scale of 0–255. For a greyscale ‘black and white’ image, 0 would be black and 255 white, while in colour scanning, three sets of pixel values are usually recorded within the range of 0–255 each for shades of red, green, and blue (RGB). As light mixes in a different way to ink, e.g. cyan, magenta, yellow and black (CMYK), and the digital copies made here will eventually be printed, there is the possibility that the colours of the original will not be faithfully reproduced. More specifically, the gamuts (ranges) of RGB and CMYK colour spaces are different and in general, colours are
darker in print when compared with their display on a monitor. It is therefore crucial to consult the original and to use a colour key (stamp collectors’ versions are especially comprehensive!) for making an independent record of the colours to check against the proof. (Colour proofs are usually produced from a large-format plotter, but individual ink levels can be adjusted to calibrate the lithographic press and ensure a good match with the proof.)

There are various image editing software packages on the market and most include an array of functions and allow the application of various filters to change the whole appearance of an image at an instant. Adobe Photoshop (version CS5) is generally regarded as one of the leading packages and offers an extensive range of tools and analytical functions while providing the facility of working in layers, which is especially useful for enhancing the facsimile maps. It may be necessary to separate part of the map from the rest (eg the areas printed in black) and manipulate this, perhaps to darken these areas, without affecting the remainder. It is important to be wary of changes which affect the map as a whole, however, as there is the danger of arriving at a result which is too clinical that simply looks artificial. Some scanners can also apply various enhancements as they capture the image (eg an unsharp mask which attempts to bring out more detail) but these are best avoided as they can introduce effects (such as a level of contrast) not otherwise present in the original. As a map from the past, it should at least have an appearance that is consistent with its nature as a product of that society.

Much of the detailed map ‘restoration’ work involves the use of the clone brush (which works a bit like holding two paintbrushes at the same time, except that one copies the area covered by the other), either to repair lost material or remove blemishes, dirt, tears, and other marks on the paper. As the end product is an entire sheet, any localised changes need to be performed in such a way that they are subtle enough to blend in unnoticed. The physical state of the original map determines the extent to which these alterations are plausible or desirable to some extent; again, if too much ‘enhancement’ is applied much time can be spent creating an end result that still looks false. It is therefore important to decide early on what should be achieved through the process of enhancing the image.

The approach to recreating Maps from the past has developed since the series began with the reproduction of the London Passenger Transport Map, Sheet 106 (1934), which followed a method of image enhancement derived from the Cassini reproductions of Ordnance Survey maps. Consequently, this map was presented as an artefact that was meant to ‘look old’; its paper was given a slightly yellow tint and a light blur was applied. Furthermore, the map itself was given a shadow, which made it stand out from the rest of the facsimile sheet.

When Chris Higley asked if I would oversee the production of the City of York (1920) town map, the project was in its early stages and so there was an opportunity to reconsider the approach and establish exactly what we should be trying to achieve. A ‘mint’ copy of the City of York map had recently gone on sale on eBay for £1020, which perhaps inspired my attempt to create a ‘pristine’ version of the map, ie something that resembled, as far as possible, a fresh, mint
copy – to bring a map from the past back to life, so to speak. The *Map of York* was actually derived from two source maps, one of which had been folded, but both had blemishes in one way or another. The goal was simply to amalgamate the cleanest and most complete elements of these maps to ensure the best possible base from which the ‘restoration work’ could commence.

Although such detailed examination, treatment, and re-examination is a painstaking and time-consuming process, the creation of a refined digital image of the *City of York* map for printing was reasonably straightforward. The majority of work consisted of ‘repairing’ tears and reconstituting missing parts, while removing specs of dust, dirt, blemishes from foxing and other localised discoloration to achieve a standardised and uniform appearance in colour across the printed detail and the background. As scanners seldom capture the deep blacks inherent in printed originals, these were darkened (using a method of separation kindly taught to me by James Anderson who had worked on the Cassini maps) and some of the central, more detailed areas slightly lightened for consistency with the rest of the colours on the map. As the provenance of the sources themselves were of no particular significance on this occasion, library stamps (*eg figure 1*) and other additional marks were deleted and the resulting holes ‘filled in’ by cloning adjacent areas of the margin.

A greater challenge was presented with the Crystal Palace map, where the raw scan of the original preserved many rips, tears, blemishes, and other imperfections (including distortion of the paper) that beset this 150 year-old map. Moreover, adopting a similar approach to the *City of York* map and restoring the original to a ‘mint’ state was made all the more difficult by its being a hand-coloured map with variations in colour and shade that were part of the map’s original method of production and indeed part of its appeal. Standardisation of colour – apart from the background paper – was therefore out of the question. The intention here was therefore to identify and eliminate all visible traces of ageing (so to speak) while preserving the minor variations in intensity and beautiful characteristics of hand colouring which lend the map its charm, visual complexity, and impact. The resulting image is brighter and crisper than the original, particularly as the colour of the paper itself is restored (*figures 2a and 2b*). Some of the missing material was difficult to replace, but with the use of the clone brush and some other tools, it was possible to achieve a satisfying result (*figures 3a,b and 4a,b*).
Figures 2a (above) and 2b. The raw scan of the original copy of the Crystal Palace map was discoloured and included a host of imperfections which were corrected with minimal disruption to the original hand colouring.
above: figures 3a and 3b, below left: figures 4a and 4b

The restoration of material missing from the original Crystal Palace source map through careful application of the clone brush, which used material from visually similar areas elsewhere on the map.

below right: figures 5a and 5b
The latest facsimile map in the series is the proof of the half-inch sheet *Leicester*. This called for an altogether different approach; the idea being to provide as accurate as possible a copy of this one sheet as it currently exists – warts and all. The Ordnance Survey staff annotations and proof stamp have been retained, as have the colour blocks in the top right-hand edge and the two slight folds that are visible. As this map was a one-off, its condition is (in a sense) part of its history and the intention is to present the map as it is today. However, the scanning of the map introduced some aspects that did require some attention – a series of vertical distortions running through the height of the sheet. Despite several further scanning attempts, these would not go away and closer examination revealed that these were localised and irregular distortions that could not be rotated or transformed to correct as a whole. They did, however, occur in slightly different places in each scan. Figures 5a and 5b illustrate this issue and a result that was achieved by taking the best elements from different scans and incorporating these within a composite image.

Throughout the *Maps from the past* series, a flexible approach has been adopted (depending upon the map to be reproduced), and many techniques have been applied, in order to achieve a worthwhile and believable result. It will not be possible to ever recreate the exact circumstances of production of each of these originals and hence their freshest appearance, but through a sensitive appreciation of their unique qualities and application of digital image enhancement they can offer an interesting glimpse.

Rodney Leary spotted this plaque on the trig point at Marloes Beacon, Pembrokeshire (SM 785084) and has been unable to find an explanation. He wonders how many more such there may be.
Teaching OS map-reading as a foreign language (TOFL)

John L Cruickshank

I suspect that most members of the Charles Close Society learned to read OS maps so long ago they can barely remember how (or even when) they did it. I vaguely remember being introduced to the topic as a tenderfoot in the Boy Scouts (just before they introduced green shirts and long trousers). This must have been at the age of eleven or so. And whether in the Scouts or Guides, or at school, all kids of my generation learned to read an OS map as inevitably as we learned to read an LP record sleeve. I never did Geography at school, yet when I sat the Joint Matriculation Board General Studies A-Level in 1974, the examiners expected a familiarity with reading OS maps, even if their questions were rather old fashioned and artificial.

For British schoolchildren, learning to read OS maps in childhood was not of course new. Until 1921, when his father moved to Aberdeen, my father attended Dumfries Academy. One of my prized possessions is an OS six-inch quarter-sheet of Dumfries printed with the heading that it had been provided for that school ‘and on no account was to be sold or given away’. Sadly, I had to buy that map, but my father’s copy of the 1920 Deeside tourist map still carries the name of his subsequent school’s Scout troop, the 1st Aberdeen.

Foreigners however do not have the advantages of those raised in ‘this sceptred isle’. As Alex Kent has pointed out, their maps are produced using rather different symbolic dialects, as well as different verbal languages. Accordingly, when foreigners need to use OS maps they have to learn to read them as a second cartographic language.

In Britain the study of overseas and colonial maps was once part of mainstream Geography. In part this was a training for the administration of the Empire, and in part a response to the First World War when continental European maps suddenly became important to the insular British. Successive editions of Hinks’s textbook Maps and survey reflected this, even if his text eventually became a treasury of incomplete, unreliable and out-of-date information.

More recently, as geography has fragmented into smaller specialist areas, the idea that ‘Geography is about maps’ has become highly unfashionable. Perhaps the loss of Empire, and the concomitant reaction against imperialism, has made us uncomfortable with such imperialist (if not frankly militarist) practices as the study of foreign topographic maps.

For the study of foreign maps is, and has always been, part of the preparation for war. And of course, every nation embarking on a war always hopes to carry it

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1 The map extract provided was however startlingly novel: a 1:50,000 map of an area in the highlands of Scotland, enlarged from the one-inch map in the style of the newly-issued First Series 1:50,000 maps. Note that this was two years before the 1:50,000 sheets of north Britain were published, none of which eventually used the First Series specification.


out on someone else’s territory. This becomes uncomfortably clear when we look at the materials produced by other nations to help their soldiers to use British OS maps. The most comprehensive guides have been those produced by the armed forces of hostile belligerent nations.

However let us start with the Americans, since they were and are the allies with whom we are supposed to have a ‘Special Relationship’. Although the US had committed troops to the war in France in the final stages of the First World War, there was a strong isolationist response in the country afterwards. One effect of this seems to have been that although there was considerable inter-war American military interest in mapping, and in particular in the development of aerial photogrammetry, there was little study in the USA of the actual maps produced outside the US. This continued not only after war had broken out in Europe, but even until well after the Pearl Harbour attack (7 December 1941) brought the United States into what had become the Second World War. The immediate pre-war US military doctrine had assumed that any future war was likely to take place in previously unmapped territory, whether within or outside the USA. Hence a key element of mobilisation planning was to be rapid military survey by ‘systematic photography’ of ‘the probable theater’. The 1940 basic field manual *FM 30-20, Military Intelligence; Military maps* briefly mentions the possibility that there might be existing maps to be reproduced, but nevertheless concentrates on the organisation of aerial survey and mapping of territory from scratch. Only a full year after Pearl Harbour, in November 1942, did the US Army issue a manual with the highly revealing title: *Tentative technical manual: Use of foreign maps*. Military manuals are seldom tentative, because in warfare tentative behaviour is

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4 *FM 30-20, Military Intelligence; Military maps*, Washington, DC., May 27 1940, especially 1-4. The amendments C-1 of January 6 1941 did not change these pages.

5 Issued November 5 1942.
usually disastrous. This one was probably 'tentative' because it was not sufficiently widely based even to be regarded as 'provisional'. In essence it was simply a very brief guide for US personnel to the then existing world mapping of the British GSGS and the sources from which it ultimately derived, with an explicit assumption that US servicemen would be using this British mapping more often than American-produced mapping. Curiously enough, although the manual includes a US version, a GSGS version and a direct reproduction of the Dutch original of part of one sheet of the Dutch East Indies, there is no other hint that the US had already agreed in May 1942 to take primary responsibility for the compilation of the maps of half the world including the East Indies. The OS appears in this manual only as an body performing technical processes for GSGS, and there was no mention of the OS maps of Britain and Ireland, even though by then the flow of US personnel to the UK was already underway. One suspects that the US War Department had yet to appreciate the distinction between OS and GSGS.

During the war the relationship between US Army Map Service and GSGS of course changed rapidly and fundamentally, as the economic resources of the US devoted to the war increased and as progressively larger areas of the world became cartographically American. Thus, immediately after the war a number of new and updated US Army manuals were issued that reflected and documented eventual US intelligence and practice, including *TM 5-248 Foreign maps* of July 1946. However, while this is a very detailed catalogue of the topographic maps of the world and their producers, including the British and Irish maps that GSGS derived from the three different OSs, and while it does provide brief notes on the peculiarities of each series, it is not really a guide to the reading or use of any of them. Thus there are no conventional-sign tables, and no lists of standard abbreviations. The reason is made clear in the opening pages, where there is a section titled ‘How foreign maps are adapted to US Army use’. In essence US soldiers were not expected to have to read any of these foreign maps themselves, but only derived versions adapted to US specifications. The manual was purely a catalogue of the sources available on which American maps had been, or could be, based. Put simply, despite their presence in this country, American GIs were not taught to read OS maps.

II

In contrast, Germany was a combatant nation that did expect its soldiers to read OS maps. Under the terms of the Treaty of Versailles, Germany had only been

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8 Updated editions of this manual were issued in June 1956 and October 1963.
9 The US Army did however produce manuals on Russian and Soviet maps as AMS Technical Manuals No. 12 *Glossary of Russian map terms* and No. 17 *Russian map symbols*, November 1946, (largely a translation of a 1942 German manual), and the well-known TM 30-548 *Soviet topographic map symbols*, of June 1948.
permitted a very small army and was banned from having a General Staff. While various expedients were found partially to get round these stipulations, the fact remained that until Hitler had repudiated the treaty in 1936 and began to rearm and remilitarise the country, Germany had no military structure in place to study foreign maps. The appointment of Gerhard Hemmerich as head of *Kriegskarten und Vermessungswesen* within the reborn General Staff immediately changed this.\(^\text{10}\) From the outset the new German army planned to carry war beyond the frontiers of Germany. From 1938 onwards Germany was actively preparing mapping of Britain and many other countries.\(^\text{11}\) Almost all of the maps produced of Britain and Ireland were minimally modified copies of OS maps.\(^\text{12}\) Yet Germany was very much aware that failures to read foreign maps accurately had caused them important problems in the First World War.\(^\text{13}\) Therefore along with the maps detailed supporting documentation was also produced to ensure their effective use.

One example (of several possible) is a sixteen-page booklet issued in August 1940 with the catchy title: *Großbritannien: Liste geographischer Eigennamen mit Angabe ihrer Aussprache – Signaturen, Schriftmuster und Abkürzungen auf englischen Karten*. It contains what it says on the cover. The first twelve pages are a list of place-names with instructions for how a German should pronounce them. A few of these suggested pronunciations might be open to argument (for example Llandudno, Ramsbottom, Slaithwaite), but it’s a valiant effort at a difficult subject. The final pages give a modified version of the OS characteristic sheet for the six-inch map with German explanations in *Frakturschrift*. This includes a limited list of the often out-dated abbreviations used on the map (L&NWR appears, but not L&YR). Note also that the title to this characteristic sheet states that it is

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\(^\text{11}\) John L Cruickshank, ‘German Military Maps of the UK and Ireland of World War II’, *Sheetlines* 69,15-19.

\(^\text{12}\) The major exception being the fully redrawn 1:200,000 map produced later in the war.

applicable to the Sonderausgabe VI. 1940 of the German 1:25,000 map (of England), as well as to the Ordnance Survey 1:10,560 from which was derived. This German 1:25,000 map is not as well known as some of the other wartime German maps of the UK. Indeed surviving copies are scarce. The sheet lines and extent of the series are however well documented in contemporary German catalogues, such as the Planheft Übersichten West. The August 1944 edition of this confirms that the series was produced by direct reduction from the six-inch map and indicates that its sheets corresponded to whole sheets of the County Series maps. Thus four quarter sheets of the original had been assembled to prepare each German 1:25,000 sheet. The 1944 index sheet (Übersicht G 4 of the Planheft) shows that not all the counties of England had been prepared (although Wales was complete). The southern and coastal counties had clearly been prioritised, while for a number of midland and northern counties, although sheet lines were presented, the maps themselves were said not to be available. For the most northerly counties, Cumberland, Durham and Northumberland, no sheet lines were given. In concept the series seems to have been not unlike its British contemporary, GSGS 3906. The incomplete extent of the series seems to suggest that it had been hurriedly prepared for the expected invasion and that completion (and perhaps extension into Scotland) would only have been driven by the subsequent progress of that campaign.

Much better known now are the enlargements of the OS County Series six-inch sheets of many towns and cities

14 The booklet does not, in fact, give the whole of the OS characteristic sheet, because some parts of it were reproduced on the sheets of the map.
15 Sheet lines for the following counties (with their German numbers) were given, although the sheets were not available: XLI Shropshire, XXVI Staffordshire, XXXI Derbyshire, XXVII Leicestershire, XXVII Rutland, XXX Nottinghamshire, L the West Riding, LI the North Riding, and XLIX Westmorland
to 1:10,000 that were prepared in regional sets rather later in the war. Although the booklet would also have been a perfectly reasonable aid to these, it does not mention them. Nevertheless, what is clear is that German soldiers and airmen were expected to be able to read OS maps with all their detail, and that training documentation was produced accordingly.

III

During the Cold War the Soviet Union took a rather different approach to what was essentially the same problem. One of the lessons learnt in Russia from the experience of the First World War had been that copies of western maps that retained the Latin alphabets of the originals were largely useless. Unless all place-names and other written elements of a map were converted to Cyrillic, it could not be read by any but the most highly educated Russian officers.17 While the officers of the General Staff and the elite pre-WWI Tsarist regiments had often been highly multi-lingual, the officers of lower-status regiments and formations were not, and NCOs were often barely literate in their own language. For the mass army of the First World War the Cyrillic alphabet was the only useful one. Furthermore, following the October Revolution and Civil War there was a mass emigration of the minority social class that had known other European languages. The mass literacy drives of the USSR in the inter-war period were focussed exclusively on the Russian language and its Cyrillic alphabet. Indeed during successive purges from 1929 to 1953 any ability to communicate with the non-Soviet world was considered suspect at best, and frequently as prima facie evidence of treason. During the Great Patriotic War (1941-1945) all Soviet military maps were thus in Russian, and all maps based on non-Soviet material were redrawn.

17 VV Glushkov, EI Dolgov, AA Sharavin, Korpus voennikh topografov russkoy armii v godi pervoy mirovoy voini, Moscow: Institute of Political and Military Analysis, 1999, 143.
to Soviet specifications with Cyrillic lettering before printing.

The organisation of Soviet topographic mapping was transformed by the near-death experience of the Great Patriotic War. What emerged at its end was a very large, highly decentralised, but tightly centrally-controlled group of organisations. And despite some changes, this basic structure was maintained until the break-up of the USSR. Chains of command, responsibility and oversight were carefully divided between the General Staff, the civil organisation GUGK, and the security services, but policy-setting in most areas was dominated by the military organisation and military considerations. Crucial to making this complex structure work was the central production of documents (many of which had the force of law) giving precise standardised instructions governing the standards to be maintained, and the processes and procedures to be followed, throughout the structure.

For the first ten years or so after 1945 the overwhelming priorities for all map-making organisations were to resurvey and re-map the vast areas of the USSR that been devastated by war, and to survey and map for the first time the enormous spaces of Asiatic Russia and other similarly inaccessible and unexplored areas of the USSR. At the same time parallel organisations had to be developed in the ‘socialist brother-states’ that enabled their mapping to be incorporated into the overall system. By the late 1950s these things had been achieved, yet the Cold War was continuing and even intensifying. Not only was there a continuing possibility of a major ‘conventional’ war breaking out almost anywhere in the world, but ballistic missile systems carrying nuclear warheads were being developed that could be targeted around the globe. To provide for all these possibilities (and perhaps also to justify the continuing existence of a huge organisation) the world had to be mapped to Soviet standards.

This was before satellite technology had developed to the point where it could be used for topographic survey. During the 1960s and 1970s Soviet topographic maps had to be derived by conventional means from the maps produced by existing national surveys.\(^{18}\) And to do this required the production of detailed instruction manuals governing the translation of each nation’s maps into Soviet ones. A provisional list of such manuals is given at the end of this article, but others may well exist.

The Soviet manual on British OS maps first appeared in 1957, and a revised edition was issued in 1966.\(^{19}\) This manual in fact contained two parts, the first of which concerned OS maps, and the second the topographic maps of the United States. Each section begins with a short historical account of the survey of the country with a description of the projections, the information given in the margins

\(^{18}\) Note however that throughout this period techniques of topographic survey using satellite images were progressively being developed in the USSR. Work now in progress by Alex Kent and John Davies may help to clarify this evolution.

\(^{19}\) Uslovnie znaki, obraztsi shriftov i sokrasbcheniya, primenenyamie na topograficheskikh kartakh Velikobritanii i Soedinennikh Shtatov Ameriki, second edition, Redaktionno-izdatel’skiy otdel VTS: Moscow, 1966. OS maps, their conventional signs, writing and abbreviations are described on pages 4-35.
of the maps, and some broad comments about the conventional signs used. This is followed by tables giving the individual conventional signs used alongside their Soviet equivalents, and also the styles of writing used and their significance. There is then a complete listing of the abbreviations used on the maps with their expansions in English and Russian translations. These tables and lists are not structured in a way that we might recognise or feel familiar. They are structured to match the equivalent tables and lists that underpinned production of the Soviet Union’s own maps. In short, these tables and listings were made to match documents already familiar to, and used by, Soviet map-draughtsmen (actually, usually draughtswomen).

In the tables describing OS maps the conventional signs are numbered sequentially in the first column. The following two columns present the OS conventional signs used on the Provisional Edition 1:25,000 and on the 1:63,360 map, with a further column giving a description of the object in Russian. The final two columns were the most important, in that they present the corresponding Soviet conventional sign and its number in the standard list. Thus the draughtswomen preparing Soviet maps were provided with a precise code with which to translate a British map into a Soviet one.

Although the 1966 edition of this manual had been revised, some unrevised elements can be found. In particular, while the introductory account of the OS and its maps was up to date, the tables of symbols and styles of writing were not. By 1966 the Seventh Series one-inch map was well established. It carried no names of pre-nationalisation railway companies, even though many 1:25,000 sheets still did. Yet the symbol tables give (as no. 57) the initials ‘G.W.R.’ as the name of a railway at 1:63,360, and similarly item no. 172 in the examples of writing styles gives ‘Southern Railway’. Curiously however, the list of abbreviations does not include the initials of any of the old railway companies. In fact closer inspection suggests that most of the
styles of writing presented for the 1:63,360 map are the hand drawn alphabets of the old Fifth Edition that had been reproduced in southern sheets of the New Popular Edition. When the first edition of the manual had been prepared for issue in 1957 the New Popular Edition was only just being superseded, but by 1966 it was certainly history. However what appears to have happened when the 1966 edition was being prepared was that while the introductory account and the list of abbreviations were updated in letterpress, the artwork of the symbol tables and writing examples was left unchanged (although the new numbering of the Soviet symbols was given in the final column of these tables).

Nevertheless what is clear is that Soviet map-makers had studied the OS and its maps in some detail before using these maps to make Soviet ones. Front-line soldiers and airmen were not trained to use OS maps, but the map-makers themselves most certainly were.

IV

Overall it is clear that different countries (and their armies) have approached the challenge of using OS maps very differently. The American approach might be described as fundamentally *laisser faire*. The US soldier was expected to work out how to read a foreign map for himself, using nothing more than whatever conventional-sign information was provided in the margins. This happens to be what I myself do when visiting a foreign country, but I've got it wrong more than once.\(^{20}\) For an army this is less than ideal, particularly if standards of map-reading are not uniform. It is certainly not the way to ensure that important specific details on a map are immediately appreciated.

The German approach was to document the specific features of foreign maps in detail, and then to disseminate this information widely to all service personnel likely to need it. This approach is probably ideal when officers and troops are well motivated and have time to process and absorb the information presented. However one can readily imagine that in the summer of 1940 many found the quantity of new information being presented to them simply overwhelming. Information in a booklet or manual is not useful until it has been read and absorbed. And conventional sign charts and lists of abbreviations are seldom easy reading.

The Soviet approach has important advantages when front-line personnel have limited training in map-reading and use. An individual who has learned to read a Soviet map can read any Soviet map. It must be remembered that Soviet citizens were not permitted access to topographic maps until they began military training, and then only under tight security restrictions. Map-reading was to them a novel and unfamiliar skill. Keeping it as simple as possible made obvious sense. The disadvantage of this is that the conversion of all foreign maps into Soviet-specification ones must have been hugely demanding of time, personnel and resources. It also carried the risk (indeed likelihood) that personnel unfamiliar

\(^{20}\) I particularly loathe having to use Italian maps, but my most long lasting navigational error was on a Canadian map in the Rockies.
with the country being mapped would make their own errors of interpretation when doing the conversion. Such errors would then be propagated on every copy of the newly derived map. This risk is highest in areas with complex detail which perhaps had had to be simplified on the original map. An example of this is present on the Soviet 1:50,000 map showing Heathrow Airport. The draughtsman failed to appreciate that road access to the main terminal was through a tunnel under the northern runway. On the Soviet map the tunnel is missing and the road stops at the roundabout north of the runway.

Given that the attainment of world peace still seems as distant as ever, there are perhaps important advantages to be gained from all this potential and actual confusion. For the defence of the realm the Ordnance Survey should actively be working to maximise confusion amongst all foreigners, and so ‘frustrate their knavish tricks’. New unpredictable changes in specifications should thus be introduced for existing series of maps. Sheet lines should be changed and sheets renumbered from time to time (the present 1:25,000 map leads the way here). And given that the Second Series 1:50,000 has been in existence for over thirty years, consideration should now be given to its (possibly partial) replacement by a new Third Series with a different symbol set, different sheet lines, and perhaps even a different projection. Present-day electronic technology would make this quite simple to accomplish, but difficult for foreigners to understand. The new AA series, published this April, perhaps provide a pointer here, but while their sheet lines and numbering system are certainly different and confusing, the maps themselves are not significantly different from the OS originals. This surely represents a wasted opportunity to enhance our national security.

**Provisional list of Soviet manuals on the maps of other countries**
(based on: TV Vereshchaka, Topograficheskie karti, nauchnie osnovnie soderzhanie, (Moscow, 2002)).

- Conventional signs, examples of writing, and abbreviations, used on the topographic maps of Great Britain and the USA, 1957 and 1966.
- Conventional signs, examples of writing, and abbreviations, used on the topographic maps of Germany, and France, 1958.
- Conventional signs used on the topographic maps of Japan, 1958.
- Conventional signs, examples of writing, and abbreviations, used on the topographic maps of Denmark, Norway, Finland, Sweden, 1958 and 1960.
- Conventional signs, examples of writing, and abbreviations, used on the topographic maps of Canada, 1960.
- Conventional signs, examples of writing, and abbreviations, used on the topographic maps of Belgium, Italy and the Netherlands, 1976.
- Conventional signs, examples of writing, and abbreviations, used on the topographic maps of Spain, Portugal and France, 1986.
**Filling the gap: a short place-name excursion**

*Richard Oliver*

Whilst there seems to be a widespread belief that the Ordnance Survey is ‘the best’, this is not something that has ever been investigated rigorously. One reason may be that ‘the best’ can be defined in several ways. It might be internationally, which can include scales available, and detail shown at a given scale, or historically, either with earlier generations of OS mapping or with predecessors, or with commercial alternatives, or in terms of price and public accessibility. In comparison with its predecessors in Britain and Ireland it is likely that the OS would score highly for the precise delineation of altitude and recording of ‘lesser names’: those of minor settlements, individual farms and buildings, minor roads, and many physical features. As the shape of the land is substantially unchanged, altitude-recording is of specialised interest, but the recording of names is of much wider appeal. This includes both the identification of localities and the preservation of names which are little-used or obsolete. Names give ‘personality’ to physical objects, and a ‘lost’ name may be interpreted as a topographical demise: perhaps wrongly, as we shall see.

The prompt for this article is a recent book on coastguard stations in east Lincolnshire, by Peter and Gemma Leak.¹ This includes a map that identifies many of the places mentioned in the text, but I cannot find four of them on any of the maps listed in the Appendix to this article: a fifth, Oliver’s Gap, I have found only on a nineteenth century Admiralty chart.² *(figure 1)* This in turn leads to a wider consideration of names along the coast, and of how far the OS may be found wanting.

**The Ordnance Survey and name-collection**

The extent to which the OS has been innovative varies with the scale of the map: names of ‘parish’ and other larger villages and of larger isolated country houses, notable hills and the like were all recorded by Christopher Saxton in his mapping of England and Wales in the 1570s. A comparison of Saxton with, say, the OS quarter-inch will show far less innovation on the OS’s part than will a similar comparison of a later eighteenth century one-inch county map with the OS one-inch New Series of a century later.³ The OS’s contribution to name-recording is

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¹ Peter & Gemma Leak, *Washed in, washed out, washed away*, [? North Somercotes: the authors], 2011. The map on p.18, derived from AA data, is noteworthy for being compressed so that the horizontal scale is about 1:208,000 and the vertical scale is about 1:118,000.

² The chart is 1190, originally published in 1842, using a copy (private collection) with corrections to September 1885. Oliver’s Gap is at TF 477902. The others are: Paradise (TF 460930), a ‘black tower’, built by the RAF for observing the adjoining bombing range and now demolished (TF 472915), Mablethorpe Point (evidently TF 508853) and Trusthorpe Point (evidently TF 515842). Grid references are admittedly of limited use on maps not carrying the National Grid.

³ Two isolated examples of this: on OS quarter-inch Third Edition sheet 6 (1921) there are 57 ‘historic names’ in squares 4A, 4B, 5A and 5B, as compared with 54 on Saxton, who has two others not on the OS; on the revised New Series sheet 129 (1898) there are 37 names above high water in the Norfolk part, as compared with 25 on the Milne-Faden one-inch county.
even more apparent if one compares the six-inch and 1:2500 mapping with almost any enclosure map of the eighteenth or nineteenth centuries, or any of the tithe surveys of 1837-83 – even those of the latter in Lancashire and Yorkshire that were prepared by the OS. In comparison, the OS has, overall, made rather less of a contribution to the recording of older field boundaries.

However, the OS is anything but an exclusive source for ‘lesser names’. These seem to be rather lacking on most tithe maps, but these maps are intended to be read in conjunction with the accompanying apportionments, which can usually relied on to give not just the names of farms but also of individual fields. These last were never recorded by the OS, save in exceptional circumstances. As will become apparent later in this article, there are other categories of name where the OS is to be found wanting and the local historian must consult other sources.

The OS’s basic procedure for recording names is well-known: in essence, it was to collect them when the plot of the survey was being examined on the ground prior to fair drawing, and to obtain written authorities for form and spelling. On revision, the currency of names was checked and if necessary amended. Both currency and changes needed written authority from a suitable person: owners, occupiers, or responsible local officials such as poor-law overseers and postmasters. The administrative principle is well documented: what is quite unclear is what guided the initial selection of names. Characteristically, the account of OS methods and processes published under the direction of Sir Henry James in 1875 suggested a well-oiled procedure, with ‘the greatest care… that no names of importance are omitted’. What was ‘important’ was not defined.

The basic system apparently had its origins in pre-publication revision of the survey for the one-inch Old Series in Lincolnshire in the early 1820s: the earliest map of 1793-7, the 25 including a number of descriptions (eg quarry) of features shown only by symbol by the OS. (Whilst a comparison with the Armstrong map of Lincolnshire of 1779 might seem more appropriate, this has the look of a ‘Friday afternoon job’, and would not be representative: Milne-Faden is a much tougher test.) Incidentally, although no-one doubts that Saxton was the author of his maps, it is unknown to what extent he – or anonymous assistants – actually surveyed what was published in his name, and how far he reused earlier unpublished and now lost material.

4 This is very much a generalisation, as enclosure maps showed allotments but not their internal divisions, and for counties such as Leicestershire and Northamptonshire where enclosure and tithe map coverage is decidedly fragmentary the contribution of the OS can hardly be overstated, but one would not say this of Kent or Devon.

5 The instruction of 1888 to cease recording field names, known only from HStJL Winterbotham, The national plans, London: HMSO, 1934, 101, was no more than a minor tidying-up, the effects of which are mainly to be seen in comparing the six-inch first edition of Yorkshire of the early 1850s with the replacements of forty years later. Current or former open field names are in a different category.

6 Sir Henry James [ed], Account of the methods and processes… of the Ordnance Survey, London: HMSO, 1875, 46. This is repeated in the second edition, produced under Duncan A Johnston in 1902, 46; ibid, 86, discusses revision of names but still does not define ‘importance’.
known example is a roughly-drawn table on a sheet of corrections for sheet 86, south-west of Grimsby. In the mature system, what had been odd notes became proper books with printed columns. Those for the Irish six-inch survey of 1825-42 were roughly pocket-sized, bound in hard covers and organised by parishes, whereas later in Britain they were printed forms gathered together in paper covers as ‘object name books’, and organised at first by parishes and later by six-inch sheets.

Figure 1. Extract from chart 1190, England East Coast – from Trusthorpe to Flamborough Head, published by the Hydrographic Office of the Admiralty, 19 January 1842, with corrections to September 1885. Scale of original about 1:151,000. Oliver’s Gap is towards the bottom; right at the bottom is [Mablethorpe] St Peters, not named on any OS map.

The original intention in Britain was that the names collected and vouched for in the books would only be published on the maps, but the introduction of the 1:2500 scale in 1855 brought with it letterpress publication, in the form of what are known variously as the Area Books or Books of Reference. The primary object of these was to record field acreages – the six-inch mapping had only recorded the acreages of administrative areas – and a secondary one was to record land-use field by field: their evident ancestry was the tithe apportionments,

but they stopped short of recording field names. What they did do – and in this respect they definitely went one better than the tithe surveys – was to provide an index of place-names, together with short descriptions, for example ‘Golden Knob – A hillock’, ‘Pipes Place – A dwelling house’, ‘Shorne Mill – A windmill for grinding corn’ and ‘The Burnett – A shrubbery’.\(^8\) The basis for such descriptions was the name books, though sometimes these could be much more eloquent, for example ‘The Mount – A plain two story mansion with good offices & grounds. The property and residence of Lady Burrand.’\(^9\) The relative elaboration of some of the entries has more than a hint of the thinking behind the abortive Irish memoir project, abandoned in 1844, of providing a letterpress context for the six-inch mapping.\(^10\) Most of the name-books compiled during the original large-scale survey of Britain between 1841 and 1888 were lost in 1940, and the survivors have not yet been studied either to investigate how far the raw data was edited for publication in the books of reference, or in what way they may relate to the later name-books compiled in course of revision. The one certain thing is that the authorities for names were omitted. Thus we are left to wonder what an earlier generation of name books would have made of Pye’s Hall, on the Lincolnshire coast, which on revision in August 1905 was described as ‘A neat residence situate 103 chains NW of Marsh Grange’, and the currency of which was vouched for by Mr Houghton, Assistant Overseer and Postmaster of North Somercotes.\(^11\) Not recorded then was that the house was built in 1855 by Henry Pye, a solicitor, who by 1868 was in financial difficulties and fled in a rowing boat out into the Humber, where he boarded a passing ship.\(^12\) One feels that the Irish Memoirs would have been – well, more inclusive.\(^13\)

The books of reference were abandoned after 1884, and the acreages recorded directly on the 1:2500, and once again any name collection was solely for publication on maps, without any extra descriptive gloss, though such descriptions continued to appear in the name-books, for example ‘Healing Rookery – A residence, situated about 5 chains NW of Ivy House. The property of Charles F. Hicks the occupier’, which in one respect says more than was said about Mr Pye’s erstwhile abode.\(^14\) Whereas a new series of name-books was

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\(^8\) These are from the Book of Reference for Shorne, Kent, (1864).

\(^9\) Name-book for parish of Yarmouth, Isle of Wight, c.1863, The National Archives (Public Record Office) [TNA (PRO)] OS 34/350.


\(^11\) Object name-book for Lincolnshire 32 SW: TNA (PRO) OS 35/4221. ‘Neat’ in this context is defined by the Shorter Oxford English Dictionary as ‘Characterised by elegance of form without unnecessary embellishment: of agreeable but simple appearance; nicely made or proportioned’.


\(^13\) A considerable amount of the memoir material has been published by the Ulster Historical Society and other bodies.

\(^14\) Object name-book for Lincolnshire 22 NW, TNA (PRO) OS 35/4181. The original entry of
created for the first revision, on further revision these ‘revised name-books’ were themselves revised, so that the surviving books – and most do survive – often embody data relating to a succession of revisions.

Names that persist unchanged are less problematic and perhaps less interesting than those that either change or disappear, and yet more so are those not recorded at all by the OS. Evidently they were not regarded as sufficiently important: Oliver’s Gap was presumably regarded as much less so by the OS in the late 1880s than it had been by the Admiralty Hydrographic surveyors earlier in the century. Yet even today the name is not completely forgotten: an information board in the car park at the end of what a sign calls Churchill Lane (TF 477901) guides the reader to ‘Oliver’s Trail’ ('Easy' – 30 minutes) and ‘Coastguard Trail’ ('Easy/medium' – 50 minutes). However, there is no explanation as to who Oliver might have been: all that I can supply is a photograph of a quite different one, who is almost certainly no relation. (Figure 2, above, shows the writer at Oliver’s Gap, Theddlethorpe (TF 47799012), on 13 May 2012).

**Alternative sources: a comparison**

Possible alternatives for locating such elusive names are Admiralty charts, the independent one-inch surveys by Bryant (1828) and Greenwood (1830), and perhaps the Bartholomew half-inch map (1902). This last claimed to be reduced from the OS one-inch, but sometimes includes additional names not on the OS. In the event, none of these recognises Oliver’s Gap, though all three can be an interesting supplement to OS data. The sample of fifteen maps or groups of maps listed in the Appendix and covering the north-east Lincolnshire coast from Skitter Ness to Anderby Creek yields some 235 names, either on or within about 1 kilometre of the coast, recorded at various times between 1820 and 2006. The Appendix shows, first, how many appear on each map or group of maps, second, how many are ‘unique’, and third, what percentage of the 235 are present. Three points to note are: ‘names’ includes a considerable number of descriptive names

1906 was expanded in 1931 to include ‘residence’ and the owner-occupier. Its citation is an example of history saying something about the writer as well as the subject.
for such as coastguard and lifeboat stations and for outfalls; it is not always easy to distinguish descriptive from proper names, for example Old Bank; and the 235 includes both names that have not been current for the whole period and a few that are alternatives, for example Sand Haile Flats and Tetney High Sands.

It is predictable that the OS large-scale (mostly 1:2500) survey of 1886-8 and its revision of 1905-6 has the highest score, though it is perhaps surprising that it only records 50 per cent of the 235 names. Indeed, 27 names are unique to Bryant, Greenwood and the first Admiralty chart. More interesting, I think, is that a decrease in scale is not matched by a corresponding decrease in the number of names recorded: 77 per cent of names on the OS large-scale mapping of 1886-1906 appear on the one-inch New Series and 80 per cent of names on the New Series appear on the OS half-inch. The proportion on the New Series, and indeed its successors to the present, would be rather higher had it continued to name some watercourses and other features that appear on the Old Series, for example Oldfleet Drain and Mawmbridge Drain, north-west of Grimsby. Both are named on the parent large-scale survey, as well as on later 1:25,000 mapping, and the former appears both on the 1842-85 hydrographic chart and on the Bartholomew half-inch. (figure 3) These omissions can almost certainly be attributed to Major Claude Conder, who was in charge of one-inch engraving when the New Series sheets of the Lincolnshire coast were being produced around 1890. In 1892 he was praised by his Director-General, Colonel Sir Charles Wilson, as ‘an officer of great artistic taste’, and who, ‘guided partly by his eye, and partly by the importance of the names’, selected those that were to appear on the one-inch. Conder’s taste and historical continuity may have been at odds: figure 3D shows that his influence was long-lasting.

Thanks to coastguard and lifeboat stations and the like, our sample probably includes a higher proportion of descriptive names than there would be inland, and it would therefore be injudicious to extrapolate from these statistics without further investigation. This would probably be particularly apparent for Greenwood and Bryant, both of whom are conspicuously lacking in ‘foreshore’ names: indeed, a surprising omission by Bryant is the name ‘Donna Nook’, for the marked turn in the coast where the Humber meets the North Sea (figure 1), which was important enough to appear on the OS ten-mile map from the 1820s to the 1950s. Against this, Bryant includes two names – East Marsh (in Grimsby) and Humberston Fitties – that eluded the OS one-inch and only reached on its 1:50,000 successor in 1977.

15 Report of the Departmental Committee appointed by the Board of Agriculture to inquire into the present condition of the Ordnance Survey…., British Parliamentary Papers (House of Commons Series) 1893-94 [C.6895], LXXII, 305, evidence, qq 627-32.
Figure 3. (A) OS one-inch Old Series sheet 86 (1824), naming Oldfleet and Mawmbridge drains; (B) Hydrographic chart 1190, 1842/85; (C) Bartholomew half-inch sheet 10 (1902); (D) OS one-inch Popular Edition sheet 34 (1939), where the horizontal line marks the division between New Series sheets 81/82 and 90: comparison with (A) demonstrates Major Conder’s ‘artistic taste’.
**Haile Sand Fort: a misnomer?**

Whereas vouching for lesser placenames was a matter for local people, more substantial names, such as those of villages or extensive physical areas, were taken from published reference works. Thus of the four names in the name-book for Lincolnshire six-inch sheet 31 NE, three – ‘River Humber’, ‘Humber Mouth’ and ‘North Sea or German Ocean’ – are on the authority of ‘Kelly’s Directory 1900’; in the early 1820s village names had been investigated using Nicholas Carlisle’s *A topographical dictionary of England* of 1808. The fourth name in the book appears on the first edition of the six-inch and the first two editions of the one-inch New Series as ‘Haile Sand Flats’, but by 1906 this was ‘obsolete’ and, on the authority of James Jarman, ‘Coast Guard Officer’, was changed to ‘Tetney High Sands’, which has appeared ever since. Seen from the shore at Humberston Fitties at mid to low water ‘High Sands’ certainly seem appropriate: a colloquial and appropriate alternative is ‘the whaleback’.

There is, however, a complication. The most prominent offshore feature hereabouts is Haile Sand Fort, built in 1915-19 as part of a large defence scheme for the River Humber. (*Figure 4, right, shows Haile Sand Fort from about 100 metres to south at low water springs, 31 March 1983: staffage as for figure 2.*) It appeared on early printings of the one-inch Popular Edition, was then omitted on security grounds, and – by now militarily redundant – reappeared in 1961 on the one-inch Seventh Series. It was apparently always shown on Admiralty charts, presumably because it was and is a major navigation hazard.

Why wasn’t it called Tetney Fort or Humberston Fort? I have to say that I have not investigated the matter thoroughly, indeed surviving sources may

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16 TNA PRO OS 35/4216; Margary, *Old Series*, V, xv.
18 The B edition of Seventh Series sheet 105 is dated 1962 but was issued in December 1961: see OS monthly publication report. Not only the fort but also the boom connecting it to the shore – built in 1940, removed in 1965-6, and not shown on any OS 1:25,000 or smaller-scale mapping – appear on Admiralty chart 109 (copy with small corrections 1952-163 in TNA (PRO) WO 192/232): see TNA (PRO) ADM 1/27887 for the boom and the rodcollins web page for views of and on it. Since the 1960s the fort has carried navigation lights but for some reason the current OS 1:25,000 *Explorer*, 283, shows it as a ‘beacon’: perhaps whoever was responsible was unaware that navigation beacons are unlit.
preclude it, but there are two possible answers. The first is that, when the fort was being planned and named in 1914-15, whoever was responsible was using non-current OS mapping. I find that difficult to believe, to say the least. The second, more likely, lies in the wider name ‘Haile Sand’ or ‘Sand Haile’. The one-inch Old Series and the earlier New Series and corresponding larger-scale mapping has ‘Sand Haile Flats’ twice, centred on TA 365045 (later Tetney High Sands) and TF 455960 (which has remained unchanged). This latter is described in the name-book of 1905 as ‘Large extent of sand situate between high and low water mark, N from Saltfleet Haven’, to which, significantly, has been added ‘to Donna Nook’: it was vouched for by Mr Houghton, the postmaster. Both namings appear on the Bartholomew half-inch, as does ‘Sand Haile’, centred around TA 420015, and also ‘Sand Haile Flat’, some four to five kilometres offshore around TA 450040. It has already been noted that Bartholomew used some data from charts, and this provides part of the answer. Successive editions of Admiralty charts show only ‘Sand Haile’ on the foreshore at TA 420015 and ‘Sand Haile Flat’ offshore around TA 450040. (See figure 1, which will stand proxy for both later charts and for Bartholomew.) From this it can be inferred that Haile Sand Fort was named, not after the immediately adjoining foreshore that by 1914 was known as Tetney High Sands, but after a much more extensive area extending to the east far below high water, which has never been named on OS mapping. The Admiralty have persisted with ‘Sand Haile’ around TA 4202; Bartholomew adopted ‘Tetney High Sands’ when they converted their half-inch mapping to the 1:100,000 ‘National’ series in 1975, but the Admiralty only did so around 1990, whilst retaining Haile Sand in its accustomed position.

The companion fort to Haile Sand was Bull Sand Fort (TA 370091): Bull Sand as such has never been recorded by the OS, though the Bull lightship has been named in the past, but was duly recorded by Bartholomew, following their hydrographic sources. There is thus the curious situation that two forts manned by one branch of the former Board of Ordnance – the Royal Artillery – are apparently named after features that have never appeared on maps prepared by another branch working on the national topographic survey – the Royal Engineers – but that do appear on mapping prepared both by a separate armed service and by a commercial rival that the OS was long wont to regard as a thorn in its side.

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19 The Fort Record Book in TNA (PRO) WO 192/232 is unenlightening, and a recent search of the TNA website was uninspiring in this regard.
20 Object name-book for Lincolnshire 41 NW, TNA (PRO) OS 35/4249; repeated in 41 NE, OS 35/4250, and 41 SE, OS 35/4252.
22 See Bartholomew ‘revised’ half-inch and 1:100,000 sheet 30 and Admiralty chart 109, surveyed 1946/90-3, published 1994.
**An entrance moves, and then exits**

A second peculiarity is usually to be found in the vicinity of Haile Sand Fort, and that is what appears up to the 1960s as ‘Entrance to Tetney Haven’, but has since been unnamed, though Tetney Haven itself (around TA 353035) continues to be named. This inlet was formerly more significant than the others south-east of Grimsby as it was where the Louth Navigation, opened in 1767 and closed in 1924, reached tidal water. The channel from Tetney Haven across the foreshore has changed considerably over the past two centuries, as is indicated in figure 5. Recent Google imagery and personal observation suggest that the ‘entrance’ is much further to the south-east than is suggested by current OS small-scale mapping.\(^{23}\)

‘Entrance to Tetney Haven’ appears on the one-inch Old Series mapping prepared in the early 1820s and it appears also on the large-scale survey of 1886-7 and its derivatives. Very oddly, there is no mention of it in the surviving name-book for Lincolnshire six-inch sheet 31 SE. Is that because it was regarded as a descriptive name? Did the Louth Navigation (very much in decline by the 1880s) somehow justify a distinction that was denied to other havens? For nowhere else from the Humber to the Thames can I find a haven ‘entrance’ so named by the OS. The name evidently satisfied Major Conder’s ‘artistic taste’, but not, by that time, the hydrographers. The survey of 1828 shows ‘Entrance of Tetney Haven’, and looks as though foreshore as well as land detail was derived from the OS. The resurvey of 1851-2 retains the channel, but omits to indicate the entrance. The further surveys of 1875-7 and 1899-1900 do not even show the route of the channel, never mind name any ‘entrance’. The channel has reappeared on some more recent charts, but the entrance is left to visual inference rather than verbal expression.\(^{24}\) Thus it would seem that the Admiralty regarded Oliver’s Gap as more important than did the Ordnance Survey, but the OS regarded Tetney Haven as more important than did the Admiralty. Whatever the ‘answer’, the name was long regarded by the OS as important enough to appear on quarter-inch mapping, but by the last third of the twentieth century it had evidently lost any former functionality, and now it does not appear at all – cartographically.

**Inevitable conclusion: ‘more work needs to be done’**

This article has sought to be suggestive rather than exhaustive. Lincolnshire was unusual in having three nearly simultaneous surveys in the 1820s, by the Ordnance Survey, Bryant and Greenwood, complemented by one of the coast by the Admiralty hydrographic surveyors. These offer considerable scope for direct comparisons, not merely quantitatively of planimetry and of alternative ways of presenting apparently the same features, but qualitatively as a source for names,


\(^{24}\) It appears on chart 109 as surveyed in 1946 and issued in 1952, and the same chart as surveyed in 1946/90-3 and issued in 1994, but not on the version surveyed in 1971-3 and published in 1974.
and particularly of each map as a unique source for certain data not present on the others. The same principle applies in comparing later OS and hydrographic surveys. Whilst the OS may make the largest contribution to the sum of mapped topographical knowledge, it does not have things all its own way: other maps can fill the gap. A future study can expand on this.

Figure 5. OS one-inch Popular Edition sheet 40, overprinted with British System Cassini grid, 1928, and including Haile Sand and Bull Sand forts and (fragmentarily) the Bull Lightship. Various positions for the Entrance to Tetney Haven are indicated: although sheet 40 was nominally fully revised in 1920, the position of Tetney Haven seems to be unchanged from the large-scale revision of 1905.
## Appendix

### Maps consulted

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<td>1951/55</td>
<td>74</td>
<td></td>
<td>31</td>
<td>11</td>
</tr>
<tr>
<td>Hydrographic Office</td>
<td>1:146,000</td>
<td>-/1957-8</td>
<td>25</td>
<td></td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Hydrographic Office</td>
<td>1:150,000</td>
<td>-/1977-8</td>
<td>13</td>
<td></td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>OS Landranger</td>
<td>1:50,000</td>
<td>1974-8/77-80</td>
<td>77</td>
<td></td>
<td>33</td>
<td>14</td>
</tr>
<tr>
<td>OS Explorer</td>
<td>1:25,000</td>
<td>1962+/2006</td>
<td>97</td>
<td></td>
<td>41</td>
<td>15</td>
</tr>
</tbody>
</table>

### Notes

1. Old Series sheets 85 and 86, dated 1824, published 1825. The three unique names are ‘Clee Thorpe’, which occurs twice, and in fact refer to the hamlets of Itterby and Oole (the ‘thorpes’ of Clee) which survive as street-names, and ‘An Occasional Water’, centred on TA 383027, which describes a relatively ephemeral tidal feature.

2. The majority of these ‘unique’ names seem to be descriptive.

3. The two ‘unique’ names are both recorded subsequently on OS large-scale mapping.

4. Chart 1190, surveyed 1830/77, published 1842, ‘Large Corrections’ 1880, latest small corrections September 1885: scale deduced by measurement. This chart only covers the coast north of Trusthorpe, and so 25 of the 235 names would not be represented anyway. Of the seven unique names,
four are descriptions and one – [Mablethorpe] St Peters – appears on the
Index to Tithe Survey version of the OS Old Series, but derives from non-
OS (tithe) data. [Chart 109, which has been published at scales varying
from about 1:64,000 to 1:48,000, shows more detail, but does not extend
south of Donna Nook, and therefore is outside the area covered by the
Leaks.]

5 This relates mainly to the six-inch (1:10,560) mapping, and excludes urban
street-names. It includes a few that only appear on the first revision of
1905-6.

6 This gathers together sheets 81/82, 90, 91 and 104 of both the original
New Series and the revised New Series and the Third Edition: a few
names only appear on the last two.

7 Sheet 10, published 1902. This includes one descriptive name that does
not appear on any contemporary OS mapping, but which evidently
derives from a hydrographic chart.

8 Sheets 10 and 14. These are included as a comparison with the
Bartholomew mapping.

9 Sheets 33, 40 and 48, as first published. Later printings delete and add a
few names.

10 Although some quite recent fragmentary revision was incorporated, the
main source was the six-inch mapping mainly deriving from the revision
of 1905-6, with a limited amount around Grimsby and Immingham revised
1930-2. The 23 ‘unique’ names do not appear on smaller-scale OS
mapping.

11 Sheets 99 and 105, A editions. Haile Sand Fort was added to the B edition
of sheet 105.

Eight of the 235 names lie outside the area of the chart.

of the 235 names lie outside the area of the chart, which also lacks detail
inside the Humber estuary.

14 Sheets 107, 113 and 122, Second Series, A editions.

15 Explorers 274, 283, 284, A1 editions: these were the latest available at the
time of writing.

Acknowledgements
I am indebted to Ben Duncan for drawing my attention to the Rod Collins website and for
logistical support, including photographing me, and to Bill Bignell for helping with copies of
the Bryant and Greenwood maps.

Postscript
Ordnance Survey and the Maritime and Coastguard Agency (MCA) have just announced (27
June) that they are collaborating on a vernacular geography project, collecting local place
names used by people to improve emergency responses. OS have created a new system,
FINTAN, which is being trialled in the MCA Maritime Rescue Coordination Centres at Clyde,
Solent, Holyhead and Stornoway. The system allows staff to add local names for beaches,
rocks, waterways and other features onto the existing mapping data, something which is of
interest and benefit to both organisations and to the public.
The Dale Dike Dam disaster

Richard Dean

The Dale Dike Dam of Sheffield Waterworks was finished early in 1864 and filling of the new reservoir was almost complete when disaster struck on 11 March. A small crack in the earth embankment appeared, and later that stormy night there was a catastrophic failure, releasing 650 million gallons of water to roar down the valley into Sheffield. The flood drowned 250 people, and destroyed or damaged nearly 600 buildings and twenty bridges. It changed the area forever, but how did the Ordnance Survey react?

This part of Yorkshire had been surveyed at the six-inch scale nominally in 1850-51, but engraved sheet 287 (figure 1) was not published until 9 March 1855, before the project to supply Sheffield from a series of reservoirs had been developed. It records this remote Pennine area before it had been disturbed by the works. My copy of this map is blind-stamped with a printing date of June 1866, seven years after the contractors had moved in and over two years since the disaster; it had not apparently moved OS to make any changes. Thus far there is nothing unusual – apart from some limited attempt to add new railways and a smattering of other features (usually without any note or change to the imprint date), revision of published large-scale maps was non-existent at this period.

The dam was rebuilt in 1875 on a new site a little further up the valley, where it is still in use. I have another impression of Sheet 287 (figure 2) taken in September 1880, and by then the dam and reservoir had been added and named. But the depiction is clearly of the earlier works. So we might suppose that someone at OS had decided around 1863 or early 1864 to survey the new reservoir whilst it was under construction, including the intended final water line, and the revision sketch was passed to the engravers who, being fully occupied, were not able to add it to the plate until several years later. But if this was so, the disaster was national news and it is surprising that the revision went ahead unchanged. Even odder is the fact that the revised map also shows the fully completed Agden Reservoir nearby, which was still at an early stage of construction when the Dale Dike Dam failed. A true representation of the whole area including the rebuilt reservoir and the permanent changes wrought to the valley below the dam by the flood, was not available until the whole of Yorkshire was fully revised and republished in 1887-93.

It would be interesting to have details of other copies of Sheet 287 to try and pin down when the engraving was altered. The criteria and method for the sporadic revision of early OS mapping is still a largely unknown field, and episodes like this simply highlight the need for further research.
Figure 1. Part of Yorkshire Sheet 287 as originally published.

Figure 2. The same area after reservoirs had been added.
Why the blue ensign?

Peter Stubbs

In *Old Series to Explorer*,¹ Chris Higley wonders why Ellis Martin painted a blue ensign on the steamer in the lock on the cover of the 1923 Middle Thames tourist map (*above left*). I think he used this photograph (*above right*) of congestion at Boulter’s Lock, Maidenhead taken in about 1890 as the basis for this painting. I do not know who the photographer was; possibly Francis Frith?

Left are enlargements of the steamer and flag from the map cover and the same area in the photograph. The composition of boats and lock workers is identical but he has added more parasols/umbrellas. I understand that Ellis Martin frequently worked from photographs and, of course, if he was working from a black and white photo he wouldn’t be able to tell that the steamer was flying a red ensign. I suspect he chose the colours for artistic purposes because he thought they looked good, rather than strive for accuracy.

¹ Chris Higley, *Old Series to Explorer: a field guide to the Ordnance map*, Charles Close Society, 2011
The earliest Bender?

In the late 1980s and early 1990s there was considerable interest amongst some of us in the introduction of the now ubiquitous Bender fold, consisting of a single-piece card cover, wrapped around the folded map, as with modern Ordnance Survey Landranger maps. The earliest British example is the Ordnance Survey’s one-inch New Forest sheet, issued in September 1938, and the earliest non-OS example that has hitherto been reported, by David Archer, is Strassenzustands-Karte von Deutschland, 1:1,000,000, dated 1939. In Sheetlines 38 (pp 7-8) I suggested that the fold may have been invented independently in Britain and elsewhere. In fact, the Foldex company introduced a version of the Bender fold which they patented in 1936: it was distinguished from ‘Bender’ by the successive folds being narrower, so that each one could be ‘indexed’.

I have now found a distinctly earlier example of ‘Bender’ than that of 1939. Once again it comes from Germany and once again it is Strassenzustands-Karte von Deutschland, 1:1,000,000, published by Der Deutsche Automobil-Club, but now ‘Ausgabe Herst 1936 – Edition Autumn 1936’ (and in French, Italian, Spanish and Polish as well). As with the 1939 map, it is a true ‘Bender’: like the original issues of New Forest the horizontal fold in the cover is at the ‘bottom’ of the front and back rather than at the top. This style was presumably found unsatisfactory because, as the illustration shows, the map will not stand up by itself in window displays – ‘right way up’, anyway.

Apart from its role in establishing the primacy of Bender folding, one wonders by what route this ‘Mitgliederausgabe’ (members’ issue) copy found its way to a suburban charity shop in Exeter in 2012!

Richard Oliver

Left: Strassenzustands-Karte von Deutschland, 1936, propped up from behind
Centre: New Forest, 1938, as originally issued, ‘standing up by itself’, and thereby demonstrating how having the horizontal fold at the bottom of the front precludes conventional display.
Right: New Forest, 1938, in a later issue, with the horizontal fold now at the top.
Pumps and wells at 1:2500

Rob Wheeler

The 1887 1:2500 survey of Harmston shows an awful lot of pumps. If we ignore the small part of the village which lies on Lincs 78.14, there are 14 pumps and five wells. Look at the same area on the 1904 edition and one finds 14 wells and a windpump but no ordinary pumps at all. Of the 14 wells, three were there in 1887, three appear totally new, and eight correspond to pumps on the 1887 survey. The windpump is a new machine supplying the walled gardens at the greatly-enlarged Harmston Hall. So could it be that Captain Cockburn at the Hall, though anxious to enjoy the benefits of technology himself was so determined that his tenants should live in picturesque rusticity that he had ordered all their cottage pumps to be torn up and sent for scrap? It seems implausible; besides, he did not own the entire village.

What seems to be behind the change is the Ordnance Survey. The principle being followed at the 1887 survey appears to have been essentially one of showing what was there – at least what was out in the open. The move towards labour-saving kitchens had started even then and the better sort of house might well have the luxury of a pump at the scullery sink rather than out in the yard. That at least was the position in Lincolnshire. Inspection of contemporary sheets elsewhere shows a surprising variation in the density of pumps and wells. Of course, by this date some rural areas did have piped water supplies. Other areas lacked suitable aquifers and relied on rainwater or the occasional very deep public well. Nevertheless, some of the variability may stem from inconsistencies in survey.

In 1904, the OS seems to have changed its policy. Richard Oliver has kindly provided an extract from the Southampton Circulars.²

Re pgh 148, p.19 of ‘Instructions to Revisers’ [not available, but evidently the Instructions to Examiners of 1884; see Instructions to Field Examiners, 1905]: to be altered to ‘Care is to be taken to show wells or springs at farms or cottages, as they indicate the water supply, but natural springs should not be shown as wells, and artificial wells should not be called springs. Public pumps and water taps are shown – ie those that discharge in roads, streets, or other public situations – but not those in back yards or private enclosures. Fountains are shown.’ … ‘On page 28 the word ‘Public’ is to be inserted before Pump.’

No longer is the surveyor merely to record what he sees. Rather he is to take an intelligent interest in ‘the water supply’, but on behalf of whom? A cavalry officer (say) might wish to know where he might water his horses, but he would not be carrying a large-scale plan. At least the surveyor was not required to pass judgement on the potability of the water. But he may have been expected to make enquiries: the 1932 edition of the Instructions to Field Examiners noted that ‘rain water sunken tanks must not be shown as wells’. On the limestone belt,

¹ By 1914 he had a telephone line to the railway station, a motor car, and a gas engine – presumably to drive a generator.
many of the farms and even larger cottages had brick cisterns into which rain water from roofs was conducted; it was used for washing (especially of clothes), being pumped up as required. At least one of the Harmston cisterns could be reached from the yard by a circular shaft, as though it were a well.\textsuperscript{3}

The expression ‘farms or cottages’ in the instruction is an unfortunate one. Should it be understood as ‘farms and isolated cottages’? After all, in Harmston virtually all the dwelling houses would be regarded as cottages. Was the exclusion of higher-status houses intentional? Perhaps there is an implicit assumption that their inhabitants will not be reliant on rainwater.

In Lincolnshire the new instruction appears to have been taken quite literally, including the requirement that care is to be taken. Private pumps were indeed deleted but if it could be established that the pump drew water from a proper well, then that well seems to have been shown. Thus we have the conversion of eight of Harmston’s 1887 pumps into wells. Inspection of a couple of dozen Lincolnshire 1:2500 sheets suggests that this interpretation applied to most of the sheets bearing a revision date of 1904 and all of those having a date of 1905.

Elsewhere, the instruction appears to have been interpreted as applying to isolated settlements only. In consequence, sheets show almost no pumps and only a few wells. From 1906, Lincolnshire too adopted this interpretation.

Richard Oliver has observed that large-scale revision was handled by divisional offices, the Lincolnshire work coming under the Derby office. Derby was also responsible for parts of Lancashire, and Richard found a number of sheets there (bearing a 1904 revision date) that appeared to follow the Lincolnshire interpretation.\textsuperscript{4} Without knowing the exact boundaries of Derby’s responsibilities, one cannot say whether this applied throughout Derby’s fiefdom. There are two further problems with Lancashire: first, that the early spread of piped water supplies there may have meant that few wells survived; secondly, that no-one seems to have interpreted cottages to include urban housing. So much of Lancashire (especially the sheets in the Godfrey edition) was urbanised that it can be difficult to decide which interpretation the surveyors were following.

The question that started this investigation, of what was happening at Harmston, seems now to have been satisfactorily answered. The one that remains is the apparent diversity of practice on pre-1904 1:2500 sheets: how much does this reflect diversity of landscape as opposed to diversity of surveying practice? To put it another way, what deduction (if any) can we make from the absence of a ‘P’ or ‘W’ on a map of this era? That is a question which can only be answered by comparing the maps with photographic or documentary evidence for the water supply at the time of survey. Readers having such evidence are invited to communicate it, either directly to me or via the pages of Sheetlines.

\textsuperscript{3} One of our older inhabitants, playing as a child in that yard, fell into this shaft. His mother noted the absence of noise, came out to look for him, and found him hanging from the brick lining by his fingers.

\textsuperscript{4} Lancs 110.2, 110.6, 110.9.
It would be nice to meet and chat about maps

David Archer

In the past, I have agreed with others that the Charles Close Society needs more young people as members. Well, having thought about it again, I am not convinced. Desirable, yes. Necessary, no. It would be nice to see more twenty year olds joining, to know they have sixty years of OS map fascination ahead of them, and to be able to pass on a little of one’s knowledge, but they are not needed for the healthy well being of our society. Our local Silver Threads has a minimum age of sixty and is thriving. But as with any society, we do need new members. Of any age. People with a fresh interest in OS maps, who are prepared to do something for the society, who bring new ideas, and more importantly, new demands on the society. Luckily, we are not short of newcomers. New members are more likely to say 'Why not do this, or do that?', especially those who have recently joined, with expectations unfulfilled. But they keep it to themselves, because when it comes to encouraging members to take part, we are quite lax. Having built up a good financial balance and issued a fine series of publications, are we now just treading water, with nothing much happening?

To my knowledge, serious, large scale and long term research into Ordnance Survey maps is only being undertaken by a couple of members. The society is doing nothing actively to encourage others to conduct research, for example, either by suggesting areas in which work might be undertaken, or in giving classes in research methods. True, Sheetlines is full of small pieces of investigation on this and that, but substantial new material from new authors is lacking. Our constitutional objectives aim ‘to advance the education of the public by promoting interest in and research into the maps...’. Apart from the website, what do we do in a systematic way to promote maps to the public? We could have small, travelling exhibitions which tour libraries; we could offer talks to local history societies; videoed talks and slide shows could be on the website for the general public to download, or we could follow John Davies and get a slot on local radio. The 1991 Bi-centenary exhibition at the Royal Geographical Society was the last significant attempt we made in this direction. Twenty one years ago. The constitution continues that we ‘...hold meetings...’, we no longer have a meetings programme; ‘Encourage research by preparing carto-bibliographic records’, records have been prepared, but with little evidence that it has encouraged any further research.

It is so difficult for the Committee to know what is wanted by the membership, especially as the ‘wants’ of the membership change over time. Amongst the circle of friends I have made within the society I sense that things have changed. Thirty years ago, we were all keen young collectors seeking both maps and information on those maps. Today, extensive collections exist, but for many, the urge to fill gaps has diminished. Much more fun to play with the grandchildren than to attend a book fair. Indeed, many are wondering what to do with their collections. But they are still CCS members, and still enjoy Sheetlines. However, the emphasis today is more on reading and talking about maps than
chasing or researching them. An enthusiasm for OS maps has been down-graded to an interest in OS maps.

So, being less interested in OS maps, is it healthy for so many of the society's activities to revolve around older members, both on the Committee and in the background? After all, when the society was founded, the ‘leading lights’ were 35-50ish with a lot of enthusiasm, so why not hand over to this age group if enough are forthcoming? Why impose on them the waning desires of older members? It is far easier for young people to seek ‘wisdom’ from those who are their senior, than for the seniors to adapt to the youth culture. Consider the ‘new intake’. Those new to OS maps, map collecting and research, which I will call the younger generation, regardless of their age. What do they want from the society? What are their thoughts? We do not know, as they join their predecessors in the great silence. It has always amazed me that Sheetlines has so few letters, or that members seldom ask for something at an AGM. This makes an easy life for the Committee, but without any stimulus, there is the risk that a Committee just ticks over and merely administers a society, rather than develops it. New ideas are needed, and if the Committee cannot produce them, (though why it should be seen as solely their responsibility I do not know), it should encourage members to submit ideas, and if accepted, oversee their implementation.

However, getting ideas to the Committee can be a problem. It is exceedingly difficult to contribute to our society by getting involved, as channels for involvement are minimal.

Consider someone who has just discovered the wonders of Ordnance Survey maps. They quickly find the society’s website, join, receive a copy or two of Sheetlines, and then. And then? And then they have to wait. They are full of enthusiasm, with ideas of what the society might do, and are willing to devote time to these ideas if accepted, but would like to discuss them with someone first. How? There are no regular meetings they can attend. They might write a letter to Sheetlines which only appears every four months, they might write to the Committee, which meets twice a year or they might raise matters at the AGM. None of which would be a real discussion, and would not get them any closer to other members. If a new member were to write to the Committee, the first thing asked would be ‘Who is this person?’ And the chances are that nobody would know. Nobody had met them. This has far reaching implications for the society and individual members. Without meeting other members, new members cannot make friendships and fully develop their OS interests. Without meetings, the society cannot discover the interests and abilities of new members. We have no idea of what they can offer or what they want. Are we stifling their voices and contributions, and thereby the society? Newer members should be encouraged to stand for the Committee. Why not allow anyone who has been a member for around three years, and is willing to stand, to attend one or two Committee meetings as an observer? A ‘getting to know you’ exercise for all. This can only bring freshness and news of what is wanted from new members. Without regular meetings, everything is taking place in isolation. The Committee meet without having had contact with new members, indeed any members, and members have
no way of discussing things with other members, let alone suggesting things to the Committee.

For enlightenment, reading about maps is no substitute for handling them. One’s own collection is very limiting, we need opportunities to see examples and really should get a meetings and visits programme going again. Visits are the easiest. Most organisations have someone who hosts visits, and usually one just has to agree a date and time with them, publicise it in *Sheetlines* and turn up, though even organiser attendance is neither essential nor compulsory. In the past, most organisers have chosen to visit places that interest them, but the new Ordnance Survey headquarters should be full of interest, even without a printing department. Butler Tanner & Dennis who now print OS and CCS maps would love to see us. So, a plea to anyone who fancies organising one or more meetings: it is not difficult and you do not have to wait until the AGM to volunteer, just contact the Chairman. Great fun, and I speak from experience.

Some previous meetings were to non-OS related organisations. To a great extent, this reflected the interests of both the organisers and members, as meetings were well attended. But were they new or older members? It has been suggested that newer members are more interested in all types of maps, and see the CCS as the nearest to a general society for the modern map. We should ask them. I know that there is a small section of the society that is uncomfortable with the increasing number of articles on non-OS maps that have appeared in *Sheetlines* in recent years. This is countered by a leading member thinking out loud that maybe the society should become a general map society, so as to embrace such writings officially. The Ordnance Survey has never operated in isolation and the study of maps from other publishers is essential in understanding the OS, so perhaps there is justification in issuing a second, occasional journal for non-OS maps (Bartholomew’s, Bacon’s, Michelin and other foreign maps), and retain the purity of *Sheetlines*. Might such a second publication attract more members?

Most young people have grown up with computer technology, just as a new generation grew up with printed books rather than manuscripts. Sales of new printed maps are declining, whilst maps and sections of maps purchased on-line and printed out at home are rocketing. As a society, we know nothing of who buys these new style maps and have done nothing to attract the purchasers to join us. Our society was established using the communications of the day: telephone, Royal Mail, printing. We now have a website, and I wonder whether there are people out there who are interested in maps, and might join if we follow auntie BBC and have a Twitter and Facebook presence? Are we seen as a load of old fuddy-duddies without such a presence and not their kind of thing at all? Might this restrict our development in some way?

Chris Higley’s book\(^1\) is going to make a tremendous difference, and will provide an authoritative popular face for the society. It is a most attractive

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\(^1\) Chris Higley, *Old Series to Explorer: a field guide to the Ordnance map*, Charles Close Society, 2011.
publication, which I have spent twenty six years telling people does not exist. So many people have asked for a good introduction to OS maps, and now we have one. When it attracts new members, the all-colour Sheetlines is the perfect follow up. Many people have joined merely to sample the society, and might now want more than just publications and meetings, so perhaps we should get Facebook and Twitter going, or be relegated to the backwaters. Additionally, the society website has the facility to have a members-only forum, unlike ordnance maps, which is for anyone worldwide. If made available, this permanent on-line meeting would allow discussion of society matters, and be more intimate. However, we must remember that whatever technology is available, there are people who prefer a printed Sheetlines to provide the ‘news’ rather than computers.

Having gone on for too long, I should state quite clearly, that I am more than pleased with the position the society is in. It is well administered, we have no financial worries, we have a good set of publications, and Sheetlines is always full of interest. What concerns me is the end of term report, ‘Could do better. Needs better communications and more activities. More stimuli, for members and Committee’. This can only come from active members. So, if you have ideas and want to work for the society, why not organise a meeting or stand for the Committee, with the added bonus of two guaranteed meetings a year, each with plenty of map chat and possibly a sight of new discoveries?

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**The Metropolitan boroughs as defined by the Reform Bill**

The Society has been donated a map of London for disposal in aid of Society funds. Sized 19 by 24 inches, at a scale of 2 inches to a mile, it appears to be a later state of the map produced by Robert K Dawson (on loan from the OS) to illustrate the boundaries proposed under the provisions of the 1832 Reform Bill. This state is unsigned and undated. It appears to correspond to that shown on the British Library website ([http://tinyurl.com/bljo4kr](http://tinyurl.com/bljo4kr)).

This specimen is uncoloured; it had at some stage been folded but has now been mounted on linen and new paper (152gsm?) added outside the outer neatline to make a very presentable flat map. At two corners, new paper has been spliced in to a very professional standard and missing detail drawn in black ink; this affects about 2 square inches and is only apparent on careful inspection.

Bids may submitted to the Hon Sec by letter or email (contact details inside front cover) to be received by 17 September.

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2 Speaking at the 2012 AGM, Mike Parker noted that a lot of women were interested in maps; but few join our society. Why not have a lower introductory subscription to encourage people to try the society, with the map reprint issued only to those who renew?
It grew rapidly, is big, popular, dominant, easy and inexpensive to use. It exists alongside what was there before, and has had a profound effect on the buying of old Ordnance Survey maps. Emerging from Echo Bay, and originally called AuctionWeb, everyone is aware of eBay, the internet auction.

Maybe we can consider a few of the changes that have resulted from the growth of eBay auctions. First and most obviously, the size of the whole market has increased because eBay has not obliterated the traditional market which, if it has declined, has shrunk far less than eBay has grown. And eBay is big. Net result, a much larger market. Expansion has been rapid because it is so accessible and easy to participate in; anyone can buy or sell almost anything. There are numerous sellers, offering a vast number of OS maps to a very large number of buyers (well, hopeful bidders).

Anyone can now be a seller of maps. A couple of unwanted OS maps can be offered to the whole world in a few minutes, regardless of condition and lacking any knowledge of what is offered. Based on the assumption, fostered by charity shops and car boot sales, that everything has a re-sale value, there is also a lottery element, in that something might just be worth a fortune, so spending a few pence listing it seems sensible. At the same time, an increasing number of people look for OS maps on eBay. Collectors are able to look every day, not just Saturday or when catalogues arrive, and have been joined by casual purchasers, so that any map offered stands a greater chance of being seen by someone wanting it than if offered elsewhere. Buyers, as a group, spend more time looking for maps than previously, encouraged by a greater chance of finding choice items. Non-map people, local historians, for example, can search for anything on, say, Swansea and come up with books, mugs, ephemera, T-shirts or maps. Very few would previously have gone out looking for OS maps of the town, but a computer on one’s desk makes eBay at lunchtime irresistible.

Secondly, for the first time, all buyers have easy access to all sellers and vice versa. Previously, there was a pretty good geographical spread across England and Wales of stocks of OS maps for sale. But not everyone knew of all the sources, certainly not of auctions, and the seller with a shop in Portsmouth had little access to a collector in Durham. Now, all buyers know of all maps that are listed, and a seller in Aberdeen has access to everybody wanting to buy, no matter where they live. The traditional market has a hidden sector where mapsellers sell many items, standard and scarce, without them appearing in their general stock; but on eBay, if a map is available, everyone knows of it, has a chance to buy it, and can witness the sale.

Thirdly, a new, and ever changing group of sellers has emerged, the majority

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1 I will only consider eBay auctions in this piece, ignoring maps offered at a set price. The words seller and buyer usually refer to groups of individuals, and the traditional market refers to mapsellers, bookshops, and everywhere else one finds maps.
having no interest in, or knowledge of what they are selling. This need not be a hindrance to either side, as long as good honest descriptions are given, and questions are answered competently. Fail to do this, and one’s cherished 100% positive feedback is in jeopardy. The wealth of mundane descriptions helps knowledgeable sellers, who can highlight the unusual, thus attracting interest with resulting high bids. However, a seller’s ignorance of maps means that advice and guidance have vanished from the new market place, as have lasting personal contacts. Traditional mapsellers were, and are, happy to chat, advise and guide. They are knowledgeable and want customers to return, so try to build a relationship. They know a lot about their customers and can make introductions for those with similar interests. When all items listed are considered ‘one-offs’, continuity of any sort is lacking and buyers are very much on their own. Although eBay allows new collectors to see a wide range of maps and prices, it is no substitute for the map market at our AGM, where one can handle and compare maps and get advice, assuming members have not sold everything on eBay.

Fourthly, more maps are offered than could be handled by the traditional sector, even if they wanted them. Some even sell. No that’s not fair. The maps offered on eBay are numerous, ever changing and frequently very repetitive in nature, but like any outlet, there are good standard series maps, scarce maps and occasionally others totally unknown until listed. My feeling is that more maps are bought on eBay than from any other single source, possibly all other sources combined. A lot of people are delighted with what arrives, others content and some very upset.

I would suggest that a greater number of scarce and previously unknown maps appear during any given period, than would be acquired by the traditional market. Why? Just the sheer volume of what is offered must produce such items. A scarce map amongst a handful found in a cupboard would previously have stood a good chance of being binned, but with eBay, they are so often listed. Well known but scarce maps are easily identified by the accompanying photograph, but buyers have to be exceedingly diligent in order to winkle out the true unidentified goodies. They must take a chance and rely on intuition, as a question asked and answered can be added to the map description for all to see.

Any previously unknown map listed on eBay will almost certainly be identified by buyers not sellers. And unless the new owner publicises the map in Sheetlines, it will remain unknown, assuming nobody else spotted it. Previously, mapsellers would spot the majority of new discoveries coming onto the market and would tell people about them. So, there might be more discoveries via eBay, but the map community does not hear of them. Our inability to rank many maps in order of scarceness increases if new discoveries are not notified. We cannot use eBay prices for this purpose, and assume the higher the price, the scarcer the item, because high prices are for desirable maps, which is not the same as scarce maps. A tourist map once sold for a ridiculous price, but investigation showed the

2 A point made by Chris Bull, who kindly read and commented on this piece.
two top bidders were desirous local history collectors, with most people dropping out around a sensible figure.\(^3\)

Fifthly, compared to the traditional market, buyers have a far better understanding of how the new market works, and can use this information to their advantage. eBay is very transparent, and with observation, buyers now know far more about all maps, common, less common and scarce; the frequency with which they appear, how many bidders they attract, what price the peloton bid and what the high bidders offer. They can see what others think a map is worth, and just as importantly, they see what fails to sell.

As a group, buyers know far more about the old OS maps offered on eBay than the sellers do. Buyers study the market on their computer screens and note what is going on. Very few sellers do, unless they also buy. This is the opposite of the traditional market, where mapsellers need to keep an eye on what happens elsewhere. Previously, collectors were not really interested in the whole market, only what they wanted. They found it hard to gather information; comparing prices was difficult, except in a very general way, relying on periodic inspections of mapsellers’ stocks and catalogues. Unless they were the purchaser, they had no idea of what sold quickly or its price. Similarly, they had little idea of how long an item had been on display, or what sold well or poorly. But now, they can see what is happening, minute by minute, and they follow prices and what appears, using this information both on eBay and in the traditional market to assess what is on offer. No longer are buyers passive participants, but can now profit from their observations. For example, I wanted a limited issue American CD, which started to appear regularly. Initially the keen collectors paid £22-£24, but after about six months the price was below £10 and I bought a copy. Observing such price movements with ease are impossible elsewhere. Similarly, with so many maps appearing, many collectors have completed sets, so that good standard items often sell for low prices, if at all. A new collector can do well.

The final major change, as hinted above, is that on eBay, if an auction goes beyond an opening bid it is the buyer who determines how much is paid. Mapsellers no longer set the price.\(^4\) The only way a seller can influence the market is with the level of the starting bid and postal charges. Too high, and a sale is lost.

eBay does have some sort of price structure, but it is fragile and often broken. Many regularly offered maps, common and scarce, settle within a narrow price range after the really keen people have obtained copies. However, some people appear to have bursts of activity on eBay, and if these returning buyers together with new buyers get excited about an item the outcome will be unpredictable, bids above the range will result and price fluctuation occurs, prices flare, quickly falling back with subsequent listings of the map. But, I suggest, the greater the

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\(^3\) But if a map regularly sells for £100, and the pack only ever goes to about £15, what is the price? What would you consider a fair offer for such a map if wanted for your collection?

\(^4\) eBay auctions use the terms ‘Starting bid’ and ‘Winning bid’, but I have used the word ‘price’ to mean the total amount paid for a map, including postage.
interval between copies of a map being offered, the greater the risk of price fluctuation, without a ‘stable’ price being established.

Antiques, books and stamps abound in the auction rooms as single items and dealers know the sort of prices the market puts on them, but in the past, it was almost unheard of for single OS maps to be auctioned, so mapsellers never really knew what sort of prices the really scarce maps could fetch. Such maps were usually sold away from the public gaze and prices were confidential. When known, some collectors were invariably heard to say ‘I would have paid more’. Now, with equal access for all, they just bid to their limit, yielding markedly higher prices for scarcer maps.

I have heard people say that they use eBay to price maps, and when pressed it appears they have glanced across a few dozen unfinished auctions, and noted the unrealistic starting prices and silly descriptions put up by the ignorant to attract the gullible. Only completed auctions are meaningful, showing final prices, the number and spread of bids, and unsold items.

The above is full of generalisations, but as an intelligent reader, a Charles Close Society member, will forgive this and add the exceptions to certain statements. As with any market place, there are problems, pitfalls, bargains, rogues, kindness and dishonesty. I feel that eBay works well, except that a lot of people do not look anywhere else for maps. Is that bad, sad, or unfortunate?

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Letters

Richard Dean writes: I was interested in Debbie Hall’s account of the Unpopular Edition in Sheetlines 93. Although issued in monochrome it is clear from the extract that these unusual maps were produced by photozincography from fully coloured originals identical to the series which followed it. So would it be foolish to speculate which came first, the chicken or the egg?

Philippa J Corrie writes: I am enjoying Maps from the past, half-inch sheet 37 Leicester, particularly since it is my home area. I idly traced the course of the then new M1, in its difficult-to-follow red. Interestingly the projected spur near Watford Gap was unlabelled whilst the continuation to Birmingham was labelled ‘M1’. I thought ‘No it’s not’ and dug out Seventh Series sheets 131 and 133. I don’t possess an appropriately-aged sheet 132. On sheet 133, published 1953, and reprinted with major roads revised in 1961, sure enough the northern spur near Watford Gap was now labelled M1, and the western continuation of the motorway to Birmingham was now the M45. However on sheet 131 published 1967 and fully revised 1964-65, major roads revised 1967, there is no M45 at all but the A45 appears to follow the same route. Presumably the M45 was demoted from being a motorway, apart from a spur, and eventually the M6 slightly further north replaced it, although this is not depicted on this sheet 131. I cannot remember when the M6 was built. So we have the same bit of road apparently labelled variously over few years. So: please can someone look up sheet 132 to see what happened on that? Can anyone remember when the M6 was built? Was the M1 initially planned to go to Birmingham and were the plans changed and thus the name, or was this an error on the half-inch sheet?
People

Peter Barber, Head of Map Collections, British Library was awarded the OBE in the June Birthday Honours ‘for services to Cartography and Topography’.

John Crutchley (22 March 1932 – 26 May 2012)
Like so many others, John was proud to be a member of our society, and although he only ever went to a few meetings, he corresponded with many members in his single-minded pursuit of the one-inch Popular Edition of England and Wales. With a very distinctive voice and a forthright approach, he was one of the politest people I have known.

John loved his collection of Pops and nothing was too much trouble for them. The intention was always to keep the collection together and happily, around 900 Pops, including supporting tourist sheets, have been accepted as a donation by the National Library of Wales. As an example for others to follow, a full catalogue of the collection has accompanied the maps, making life easier for the recipient library in times of limited resources. That such a large collection of the Popular Edition has been donated to a library can only be good news for future generations. Whilst other private collections usually focus on print codes, John was fascinated by cover variants, and herein lies the strength of the collection for future researchers.

I understand that John was pleased to receive Steve Braim’s Popular Edition based card, which so many members signed at the last AGM. A little something from the society for someone many of us will miss.

David Archer

Roy Boud (10 April 1932 – 21 May 2012)
An early member of Charles Close Society (number 139), Roy was noted for his extraordinary writing and calligraphy. He produced the certificates which, for a time, were presented to Honorary Members and others who had performed exceptional services for the society.

Appointed to the post of Cartographer in the Department of Earth Sciences at Leeds University in 1966, having previously worked in a similar capacity for the Ordnance Survey and the Institute of Geological Sciences, Dr Boud was held in high esteem in his profession, serving as the Chairman of the Society of Cartographers from 1970 to 1975. He published a number of significant papers on the history of geological maps and mapping; in 1989, he was awarded the British Cartographic Society’s medal and prize for published research.

His most notable contribution to the study of Ordnance Survey came in his 1987 Open University PhD, ‘The Highland and Agricultural Society of Scotland: episodes in cartographic patronage and government lobbying, 1833-1875’.

John Davies