Sheetlines

The journal of
THE CHARLES CLOSE SOCIETY
for the Study of Ordnance Survey Maps

“Gill Sans typefaces on OS maps”

David Millbank Challis

Sheetlines, 108 (April 2017), pp.2-8

Stable URL:

This article is provided for personal, non-commercial use only. Please contact the Society regarding any other use of this work.

Published by
THE CHARLES CLOSE SOCIETY
for the Study of Ordnance Survey Maps
www.CharlesCloseSociety.org

The Charles Close Society was founded in 1980 to bring together all those with an interest in the maps and history of the Ordnance Survey of Great Britain and its counterparts in the island of Ireland. The Society takes its name from Colonel Sir Charles Arden-Close, OS Director General from 1911 to 1922, and initiator of many of the maps now sought after by collectors.

The Society publishes a wide range of books and booklets on historic OS map series and its journal, Sheetlines, is recognised internationally for its specialist articles on Ordnance Survey-related topics.
Gill Sans typefaces leave a marked impression on OS maps
David Milbank Challis

In November 2016 Johnston & Gill: Very British Types was published. The book describes how two of Great Britain's most iconic san serif typefaces of the twentieth century were developed. The first was the sans serif commissioned by Frank Pick, for use on London's transport system, from the Art & Crafts calligrapher Edward Johnston towards the end of World War I. Then in the 1920s the Monotype Corporation (who manufactured sophisticated typesetting machines) commissioned a pupil of Johnston’s, Eric Gill, to design a sans serif typeface – the result was Gill Sans. The rest is history as both typefaces have been in use ever since; Johnston is still to be seen everywhere on Transport for London, and Gill Sans has proved to be equally prolific and long-lived, it’s on our television screens every day as the BBC logo font.

The entry on page 145 of Johnston & Gill about the use of Gill Sans typefaces on Ordnance Survey maps rather missed the point. True, it is probably correct that the first use of these typefaces, was on the majority of the one-inch to the mile Seventh series maps, as indicated by Richard Oliver; but that hardly does the matter justice! And, as the author freely acknowledges, because Richard was not asked, little else was said on the matter.

Ordnance Survey traditionally used a mixture of serif and sans serif hand-drawn letterforms for the cartographic annotation on their maps and plans – particularly the large-scale maps. The maps had to explain a plethora of administrative boundaries and a different engraved letterform was devised for each including sans serif styles for: parliamentary county divisions; poor law unions; municipal wards; urban districts; railways; etc.

After World War II the Ordnance Survey implemented the Davidson Committee recommendations which included changing the map projection to Transverse Mercator, displaying the National Grid; publishing the 1:25,000 maps; etc. Within this process of wholesale change, hand-drawn map annotation was superseded by typeset annotation and the OS appears to have invested in Monotype casting machines (either that or it contracted to buy the typesetting from a third-party) – I’ll leave that matter for Richard Oliver to pontificate about.3

1 The author was the lead designer for Ordnance Survey Maps: a descriptive manual and worked closely with Brian Harley and a small team at Southampton; he was based at HMSO in London.
2 Mark Ovenden, London: Lund Humphries, £40.00.
3 Richard Oliver informs me that he and Roger Hellyer are working on a new volume that covers the 1:25,000 Second series and he is hopeful that he can shed more light on the matter of post war typefaces.
The typefaces they decided to use were *Times New Roman* and *Gill Sans* (there were others fonts used as well). With *Times* they only had four basic options: upper and lowercase, roman and italic. I don’t think they ever used the small caps and certainly not the *Times bold*, which was far too heavy. This meant of the four styles they only had varying size to describe different information on the map, hence the use of *Gill Sans* for variety of categories (see 1:63,360 style guide below).

In the latter half of the 1960s Great Britain officially changed over to the Metric system [SI] and the Ordnance Survey decided to revise its main mapping scales from Imperial to Metric.

The large-scale maps and plans had changed by the end of World War II from the County series at scales of 1:2500 (about 25 inches to the mile) and 1:10,560 (six inches to the mile) to National Grid series at the same scales, plus a new larger urban area scale of 1:1250.

Metrification of the maps essentially meant changing the recorded heights from feet to metres and acres to hectares; plus one other basic change, the 1:10,560 maps were enlarged to 1:10,000 scale.

With the introduction of the metric versions the typefaces used were, in the main, changed to various weights and styles of Monotype *Gill Sans*. Monotype (and from the 1960s Monophoto filmsetting) *Gill Sans* was available in a regular weight, bold and light; as well as condensed versions – not that OS used all the options. The main drawback of *Gill Sans* was the similarity of the lower-case L, figure 1 and the capital I; whereas *Johnston’s* figure 1 has an angled top and the lower-case L is curved at the foot.

A summary of the general uses of *Gill Sans* on the various standard maps series follows, but do bear in mind that any explanation of Ordnance Survey practice is always subject to variations and anomalies.
1:1250 and 1:2500 metric series
These are identical, as the 1:2500 is a photographic reduction of the 1:1250 basic mapping.
• Cartographic annotation all set in Gill Sans in various standard styles that relate to specific types of information, such Civil parishes, or Street names, etc.
• Marginalia and the grid line numbering set in Gill Sans.
• Map titling, explanatory keys and publishing information set in Gill Sans.
• Map titles include a metric symbol.

1:10,000 metric series
Issued as 5 x 5 km squares and larger shapes to cater for coastal areas. As ‘economy’ was becoming a major concern at OS it was decided that the new 1:10,000 base mapping should be robust enough to be able to be photographically reduced to be used on the new Second series of the 1:25,000 maps (about 2.5 inches to the mile) which were about to supersede the First series (introduced immediately after World War II). Whereas the 1:2500 mapping looked the same, the 1:10,000 maps looked markedly cruder than the preceding Imperial versions.
• Contours were re-plotted at metric intervals.
• Cartographic annotation all set in Gill Sans in various standard styles that relate to specific types of information, such Civil parishes, or Street names, etc.
• The marginalia and the grid line numbering set in Gill Sans.
• Map titling, explanatory keys and publishing information set in Gill Sans.
• Map titles include a metric symbol.
1:25,000 Second series
Eight 1:10,000 sheets formed a new Second series 1:25,000 map, 2 x 10 km squares.

- Contours were at metric intervals.
- Cartographic annotation all set in *Gill Sans* in various standard styles that relate to specific types of information, such Civil parishes, or Street names, etc.
- Marginalia and the grid line numbering set in *Gill Sans*.
- Map titling, explanatory keys and publishing information set in *Gill Sans*.
- Map titles include a Metric symbol.

As noted above, to save on cartographic costs the base mapping was to be derived from the newly plotted 1:10,000 sheets.

The maps were folded into Leaf green front covers, a particularly nasty shade that was tonally too strong for the black tiling, particularly the Index box to surrounding sheetlines information. The then current house style typefaces were used – not *Gill Sans*.

![Map of Henley-on-Thames](image)

1:25,000 Second series sheet SU 68/78

Pathfinder
In late 1970s the 1:25,000 Second series was repackaged as the *Pathfinder* walkers maps which were self-covered, the cover (front and back, was printed as part of the map sheet and folded so they were all that was visible).

- Cartographic annotation all set in *Gill Sans* in various standard styles that relate to specific types of information, such Civil parishes, or Street names, etc.
- Marginalia and the grid line numbering set in *Gill Sans*.
- Map titling, explanatory keys and publishing information set in *Gill Sans*.
- Map titles include a metric symbol.

Front cover was green with black and white titling (not in *Gill Sans*) probably versions of *Univers*. The bottom half of the front was an Index of surrounding sheetlines again the typefaces used were not *Gill Sans*; except on some later states where the index place names were set in *Gill Sans* with those inside the
sheet area in bold. The back cover comprised the key which was all set in *Gill Sans* plus a bar code box.

*above: Pathfinder sheet 1192, below Explorer 162*

The most popular areas were styled *Outdoor Leisure Maps*. Some these maps used First series 1:25,000 mapping and others Second series. They had separate card covers with an illustration and then current house style typefaces.

**Explorer**

The 1:25,000 maps were repackaged again as the *Explorer* series, this time printed on both sides of the sheet and covering quite large areas, not to a regular grid pattern. *Gill Sans* was now confined inside the outer sheet black border line, for the marginalia and the cartographic annotation, but not the grid line numbers. Sheet titling and key were in then current OS house style typefaces.

This series has separate card covers. Orange banded front in series typefaces with colour photograph. The reverse was an Index to map location and walking information, again in series typefaces.
**1:63,360 Seventh series one-inch maps**

The series that incorporates initial use of *Gill Sans* by Ordnance Survey.

---

**Typeface style guide showing the use of Times New Roman and Gill Sans for map annotation on the Seventh series one-inch maps**
1:50,000 maps
These replaced the one-inch Seventh series maps. Initially the maps were a photographic enlargement of the existing Seventh series maps, so the map typography was a mixture of *Times New Roman* and *Gill Sans*. For the first complete revision of the series the typeface was changed to Monotype (probably Monophoto) *Univers* (a post war sans serif face), the OS version acquired a distinctive curved bottom to the lower-case L.

In the twenty-first century *Gill Sans* has finally made it to the cover titling of the *Landranger* and *Explorer* map series – see *Sheetlines* 105, page 2.

As a typographer, I consider the use of *Gill Sans* as the typeface for the annotation of the Second series 1:25,000 to be the best cartographic typography that the OS achieved; the various type sizes, weights and styles used are very subtle.

This was one of the reasons I selected an extract from one of the then recently published sheets TQ47/57 to form the basis of the cover wrapper of *Ordnance Survey Maps: a descriptive manual*, Brian Harley, Ordnance Survey, Southampton, 1975. The other was that it included the place where I was born – opposite to the railway station in Greenhithe – which is highlighted by the lighthouse beam. In fact, all of the map extracts in the Plates section were the choices of various members of the production team.

*Derek Deadman came across this postcard labelled Ordnance Survey Cricket Club ‘A’ team. On the reverse is the name of the photographer, GD Courtney, but no other information. Derek guesses the date to be about 1914, judging by the military uniform, but would welcome any comments.*