

Geography Group Meeting 21st April 2022

Seven members contributed to April's meeting, "Tales from the Map Room". The title was taken from a major BBC TV series about maps screened in 1993. Gerald had contributed by telling the story of the 1912-13 Sudan-Uganda Boundary Commission, whose work was disrupted by personal differences between two British officers representing the two territories.

Probably the most famous map room is in the Royal Geographical Society in London. The RGS was founded in 1830 and played a significant role in Britain's overseas adventures. Its map collection was consulted by explorers, adventurers, the military, and Royalty planning overseas trips. It grew into one of the best map collections in the world. The maps were stored in large wooden chests of drawers and taken out to be examined on tabletops or light tables.

Today the RGS has one million maps and 3000 atlases available for consultation. Most of the sheet maps are now in digital form. Similarly, all the most important map collections in Britain have been digitised, including notably the British Library and Manchester University.

The meeting began with Hazel Yeadon's review of *How Bad Are Bananas? The Carbon Footprint of Everything* by Mike Berners-Lee. Ann Richards reviewed *Erebus* by Michael Palin – a story of exploration and a disastrous attempt to chart the Northwest Passage.

Jane had discovered some old tourist maps. Bacon's County Map of Somerset was an early example, produced by George Washington Bacon, an American, who established his publishing company on The Strand, in London, in 1870. He capitalised on the growing market for maps amongst the expanding cycling community. Some of his earliest maps used copper printing plates produced by engraver John Cary, which were nearly seventy years out of date! The Somerset map, which was probably printed in the late 1800s or early 1900s, used plates produced by Edward Weller in the 1860s. A grid of five-mile squares was superimposed on them, and an alphabetical index of the towns and villages was added, together with a table of cycling distances. The railway network was updated, as many cyclists used the train to take their bicycles into the countryside.



The Ordnance Survey, which mainly supplied large scale maps to the War Office and civic administration authorities, was slower to respond to this demand. It was only after the First World

War that sales to the public began to increase. The appointment of a commercial artist, Ellis Martin, in 1919, helped to promote the one inch to one mile series (1:63360). Martin did all the artwork on the map covers, including the calligraphy. The inter-war years also saw the production of tourist maps for popular destinations, such as the Lake District, and the use of colour layering in addition to contour lines.

Les Knight and Phil Johnson tackled two of the trickier issues related to maps. Les illustrated the Coastline Paradox. When the coastline of the British Isles was measured with 'rulers' ranging from a 100km down to 50m it was found that the length kept increasing indefinitely as the measurement became more accurate. This was due to the coastline being rough at all scales. It led to the discovery of 'fractals'. These are lines that are infinitely long and look the same at all scales (self-similar). Many natural features show fractal behaviour; examples include fern leaves, river systems and clouds, where the whole has the same shape as its parts.

Our perceptions were challenged by David Yeadon, who showed us an arts magazine featuring the work of artist Layla Curtis. She had skilfully merged European road maps to produce new imaginary maps, including one showing the Yorkshire coastline grafted onto parts of Denmark, the Isle of Mull, and the Ile de Noirmoutier!

The problems of mapping a 3D world in 2D were discussed by Phil Johnson. All map projections make compromises. The 16th century Mercator projection served the purpose for navigators by preserving directions but exaggerated the size of high latitude land masses. More recent projections, such as the Gall-Peters projection, have produced very different shaped world maps.

Gerald talked about some interesting newspaper reports featuring maps that he had collected over the years. He picked two to look at in more detail. One report, in May 2021, was the opening of the Kazungula Bridge across the Zambesi River. The bridge is almost one kilometre long, not least because it takes a crescent shape between the banks of Zambia in the north and Botswana in the south. Its objective is to increase trade between African states. When the bridge was in the planning stage President Mugabe of Zimbabwe declared that he did not want any part of the bridge on Zimbabwean territory, so it was designed with a magnificent but costly curve to do just that!

Another delightful report last year was of a Belgian farmer who had moved a boundary stone marking the border between France and Belgium since 1820, because it got in the way of his tractor! Only a few metres were involved, and France regained its lost territory without a shot being fired.

The stars of the show, however, were three original Luftwaffe bombing maps of Britain, which Gerald had been lent for the occasion. They were part of a remarkable collection of Luftwaffe bombing maps belonging to a Teesdale resident and had been acquired by her father, while serving with the RAF, in Belgium, towards the end of the war in 1944 or 1945.

In 1939 and 1940 the Germans produced a series of secret maps to prepare for the invasion of Britain. They made them with considerable skill using Ordnance Survey maps (easily procured before the war) or air photographs taken by the Luftwaffe. The maps identified strategic targets in all our major cities and ports with chilling accuracy. The Luftwaffe planned to destroy them all before invading Britain, and in many cases succeeded in doing so.

The bombing maps were of Tyneside, Hull, and Glasgow and showed the targets marked on in red. Tyneside and Hull were both heavily bombed, Glasgow rather less so. Belgium, where these maps were found, was geographically convenient for the Luftwaffe to strike the North East. The maps are folded and well-thumbed, suggesting that they were frequently used, presumably on operations. They

tell a human story, and they are evidence of German attention to detail, and the crucial role of maps in war. Some of the detail, especially on the map of Hull (e.g. notes as to the content of warehouses) must have come from non-cartographic sources. The anti-aircraft gun emplacement by Tynemouth Priory can still be seen today.

All the Luftwaffe's 30,000 raids have been mapped as part of a project between the University of York and the National Archives.

Report by Jane Harrison with many thanks to Gerald Blake and Les Knight.

Next meetings:

Tuesday 17th May 10.30am. Visit to the Map Archives at Raby Castle.

Thursday 19th May 2.00pm. Landscape Interpretation at Laithkirk Church with Professor Brian Roberts and Professor David Evans.

Thursday 16th June, 2pm. Witham Hall. Professor Michael Alexander will speak on soils and their formation.

Thursday 7th July (not the 21st) Professor David Newman from Ben Gurion University. Title of talk and venue to be confirmed.