

SPRING 2018

# Maplines

THE MAGAZINE OF THE BRITISH CARTOGRAPHIC SOCIETY

UK  
Mapping  
Festival  
update



[www.cartography.org.uk](http://www.cartography.org.uk)

UK £3.00



Welcome to a fantastic edition crammed pack full of extraordinary articles on all sorts of topics – All concerning Cartography! There is Art, Military History, Tourism and Marine mapping. And on this sad day of UK Science Week '18, hearing about the death of Professor Hawking – I believe Space has been mapped – down to the finest detail!

We couldn't have completed this edition without the

articles from you! So please keep them coming in to [editors.maplines@gmail.com](mailto:editors.maplines@gmail.com) and if any of you would like to be an Editor, we are always looking for keen eyes! Book reviews and reading amazing insights into the Cartographic World. Exciting news in - the preparations for the UK Mapping Festival in September are in full swing! Happy Mapping!

Alice, Louisa and Martin

### BCS Website Contact List

Website Coordinator: Overview and coordination:  
**Warren Vick:** [wvick@europa.uk.com](mailto:wvick@europa.uk.com)

Home page content/coordination with other members of this team to ensure consistency throughout the website and liaison with **Warren Vick:**  
**Mary Spence:** [maryspence@mac.com](mailto:maryspence@mac.com)

Membership/Members Directory:  
**Shona Frost:** [shona.frost@staffordshire.gov.uk](mailto:shona.frost@staffordshire.gov.uk)

Corporate members:  
**Alan Grimwade:** [alangrimwade@cosmographics.co.uk](mailto:alangrimwade@cosmographics.co.uk)

Events: **Paul Naylor:** [Paul.Naylor@os.uk](mailto:Paul.Naylor@os.uk)

Careers/education: **Giles Darkes:** [giles.darkes@talktalk.net](mailto:giles.darkes@talktalk.net)

Awards: **Angela Wilson:** [angelabcs@virginmedia.com](mailto:angelabcs@virginmedia.com)

Website Statistics: **Warren Vick:** [wvick@europa.uk.com](mailto:wvick@europa.uk.com)

Chair of Publications Committee and Maplines editor:  
**Martin Lubikowski:** [mldesign@btconnect.com](mailto:mldesign@btconnect.com)

Who's Who entries:  
**Alex Kent:** [alexander.kent@canterbury.ac.uk](mailto:alexander.kent@canterbury.ac.uk)

For any issues, problems or proposals regarding the website, the first point of contact should be **Warren Vick**. For any specific requests for items to be included into sections of the site, please contact the people listed above.



### Editorial Contact Details:

Editorial Team: Louisa Keyworth, Alice Gadney & Martin Lubikowski  
[Maplines.editors@gmail.com](mailto:Maplines.editors@gmail.com)

Deadline for copy for the Summer 2018 edition is 11 June 2018.  
The views expressed in *Maplines* are those of the Editors and Contributors and not necessarily those of the BCS.

© The British Cartographic Society 2018

**Publishers:** Geomares Publishing UK Ltd  
Unit A2 Mindenhall Court, High Street, Stevenage, Herts, SG1 3BG, UK  
[www.geomares.nl](http://www.geomares.nl)

**Printing:** The Manson Group, St Albans

### Advertising in Maplines

Consider the Society's magazine a shop window to promote your company, event, course or publication to the mapping community.

To submit editorial, contact the Editors: [maplines.editors@gmail.com](mailto:maplines.editors@gmail.com)

For display advertising, contact Sharon Robson:  
[sharon.robson@geomares.co.uk](mailto:sharon.robson@geomares.co.uk) or +44 (0)1438 352617

All photography and illustrations in this issue have been provided to *Maplines* by the article authors unless stated otherwise. All contributors to *Maplines* are responsible for assuring that they have permission to use images and content. Please add credits/acknowledgements as appropriate.

If you would like to sponsor a *Maplines* Quiz please contact the Editors for more information.

## Contents

The Magazine of the British Cartographic Society (Registered Charity No. 240034)  
Volume 32, 1st Issue – Spring 2018

### Maplines Regulars

p.08 Admin Report  
p.28 UKCC Report

### Also in this issue...

p.04 BCS Map Design Group  
p.06 3D Data Formats for GIS  
p.08 UKMF Update  
p.09 A-Z Glasgow  
p.12 UK Mapping Festival 2018  
p.16 BCS ICA Awards  
p.22 Restless Earth Report  
p.23 Whale Spotting  
p.26 Mapping the Borders



### Setting in Place

10

Bonnie Craig describes how she created a map made of jellied sweets.

### SOE and Maps

13

22 colleagues travelled through France looking at various historic maps.





# A Message from the President

I hope by now you've had an opportunity to look at the details of our 2018 awards on the Society website. I'd like to particularly draw your attention to three of this year's awards for which 2018 carries special significance:

- This year sees the first award of the Garsdale Design Award for 3D mapping which is looking for "interesting, informative and exciting" 3D cartography. Entries can depict real or imaginary places and use any technique or medium.
- Our New Mapmaker Award (supported by ESRI UK) has been relaunched for 2018 and will now be open to those studying for GCSE or A-Level with entries needing to demonstrate the use of GIS or web-mapping to view, analyse and interpret places and data.
- Our Children's Map Competition (supported by the UKHO) is held every other year to alternate with the ICA's Barbara Petchenik Children's Competition which is held in conjunction with the biennial International Cartographic Conferences. 2018 is a year for the BCS competition and it is open, in four age bands, to children and young people between 7 and 16. This year's theme is 'Sustainable Seas'.

In all cases, see our website for complete details of these and the other Society awards. We look forward to seeing your entries.

Recent news around further surveying in the Indian Ocean following the loss of Malaysian airliner MH370 in 2014 has again highlighted just how difficult it is to gather bathymetry in the deep ocean. It's becoming a truism that the surface of nearby planets – especially Mars – has been mapped in more detail than we've yet achieved for the whole of our own Earth – or at least the 71% that lies beneath the sea.

A recent estimate of the task to survey the entire ocean bed – even for a 100m grid – thought that it would take a single ship 1,000 years to complete. We can compare this with the 11 day mission back in February 2000 that allowed the Shuttle Radar Topography Mission (SRTM) to gather sufficient data to produce a one arc second (30m at the equator) elevation model for 80% of the world.

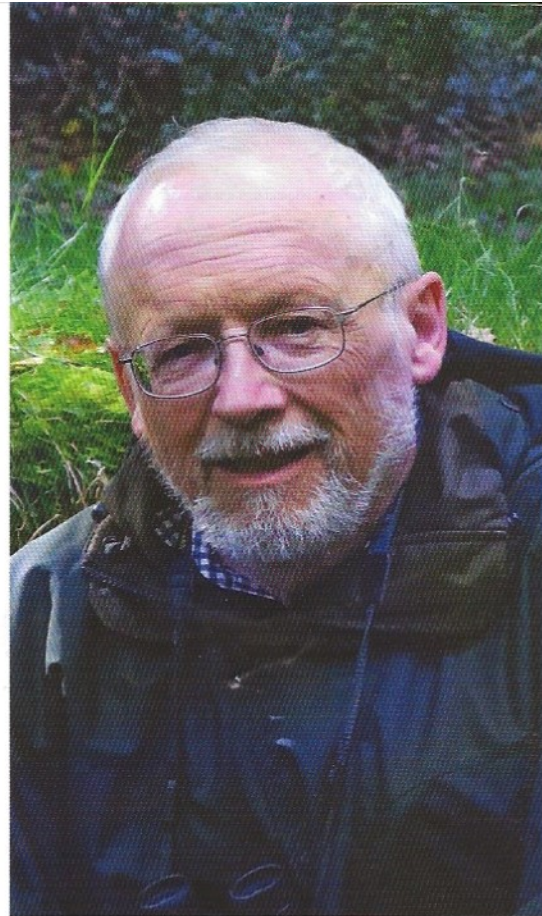
In this context, it has been interesting to see news of two recent initiatives:

- The joint project between GEBCO and the Nippon Foundation which is intended to ensure that by 2030, "No features of the accessible parts of the world ocean floor larger than 100m remain to be portrayed."
- The Shell Ocean Discovery XPRIZE aimed at the development of innovative solutions for the autonomous collection of high resolution bathymetry which would be

tested at depths of 2000m and 4000m.

So just over another decade before we have a picture of Earth as complete as that gathered by the Mars Global Surveyor back in the 1990s. Bear in mind though that when deep-ocean surveying began with the Challenger expedition in the 1870s a single sounding could easily take half a day to complete!

**Richard Carpenter,**  
BCS President



*Richard Carpenter*



## Loving a Map of Vincent

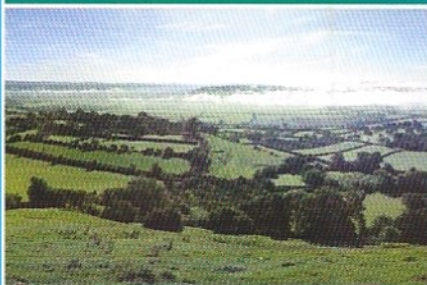
18

Jane Tomlinson has created a loving map in honour of Vincent van Gogh.

## Marvellous Maps

20

Humphrey Butler attempts to do justice to Britain's most picturesque landscapes.



## Journey to the Past

24

A review of a recent trip to see ancient rock drawings displaying the past.





# BCS Map Design Group

#BCS\_MDG

**M**ap Design Group was relaunched in 2017 under the hashtag #BCS\_MDG with the aim of providing a social forum to share and engage with map design and map designers. We have been working closely with the wider Programme Committee to deliver events that represent interest and value to an ever-growing map design community, starting with the return of Better Mapping and the introduction of 'group' events open to all.

## Better Mapping

Better Mapping took place in Manchester last November. With so many different groups of people involved in visualising geodata, never before has the importance of understanding the fundamentals of good map design been greater. With the help of the GIS special interest group and sponsors, we have had a number of successful workshops in recent years and in Manchester we returned to a seminar format.

With presenters from Europa

Technologies, Garsdale Design, Global Mapping, Harper Collins and Steer Davies Gleave, as well as freelancers; we were able to offer specific expertise from different parts of the map design process to form a day of seminar sessions designed to offer advice on improving the quality, accuracy and effectiveness of maps.

Since the seminars, we (BCS) have been working closely with friends at the Royal Geographic Society (RGS) and the Association for Geographic Information (AGI), to evaluate the event and feedback with the aim of offering an improved, structured programme going forward.

## Map Design Tools

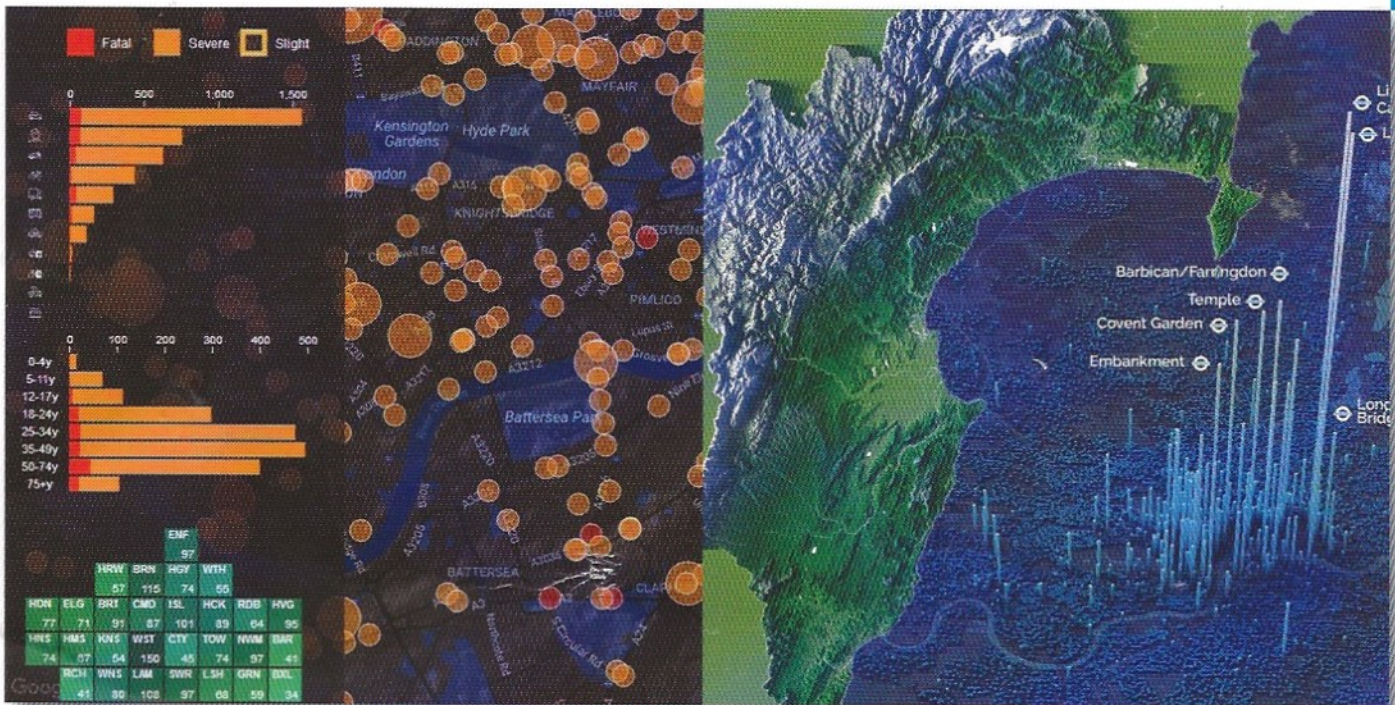
For many years the digital era of cartographic design has revolved around graphic design packages and GIS. Sure there's been a move to web and application-based mapping too, but anyone following map makers on Twitter will have seen that the map design world has become braver, more cutting-edge and

increasingly immersive. Developers, Consultants and Data Visualisation Designers working with geospatial data have brought a whole new world of tools to map design.

The now traditional cartographer's toolkit hasn't been replaced, more expanded. There are now greater possibilities in how we can share geographic information; with interaction, 3D, animation and so on; alongside an increasing number of different ways to get there.

In light of this, in July, the BCS Map Design Group held an evening of short talks on the subject at London's Urban Innovation Centre – to which an enormous gratitude goes to Geovation (Isabel and Alex in particular), all the speakers and their employers, and Alicja Karpinska of Ordnance Survey, without whom this event could not have taken place. Making the event open to all allowed map designers from all backgrounds to come together and share both their work and their ideas.





After a chance to get to know one another, the evening kicked off with two insights into the use of programming languages to present geospatial data. Firstly, Steve Kingston a Developer/Consultant at Ordnance Survey (OS) gave us an introduction to R, D3 and Python, explaining where and why each may be useful in a map design and map production environment. I know that Steve finds it to be a very useful time-saving workflow. This was seamlessly followed by Lucia Kocincova, a Front-end Engineer at QuantumBlack, explaining how to use the JavaScript library D3 to create statistical dot maps of city populations by postcode and then showing examples of her work using D3 to make interactive visualisations of Transport for London accident data, along with the integration of other tools such as Google Maps API, HTML and WebGL.



We then moved into data manipulation and were brought into the third dimension by Owen Powell, Senior Consultant at Arup, showing how he uses FME and Blender to create 3D scenes to bring his projects to life. Craig Taylor, Senior Data Visualisation Manager at Ito World Design Lab, brings the data visualisation and 3D worlds together in his work, and showed us the latest Ito in-house tools as well as a rather impressive project demonstration video.

To close the evening, I asked Jack Harrison, Technical Consultant at OS, to demonstrate a situation where an expanded set of map design tools is most definitely required. He gave an overview of the collaborative work OS are doing with 5G networks and how visualising 5G signals is something of a new and unique challenge.

Every single presentation had so much wow factor but all for very good and sound reason. The work of our five speakers is truly inspirational and I am so pleased they were kind enough to give up their time and travel to our event to share their knowledge with our special interest group. I am delighted with how the evening went, everyone seemed to enjoy

it, hopefully everyone took something away from it to help them with their own design processes, and we saw some proper kick ass visuals that I am more than happy to call maps. We are currently looking into ways to share the slides on the BCS website.

### What's Next?

We hope to bring to you more map design themed events in the near future. With the inaugural UK Mapping Festival coming to London this September, we are exploring the possibility of a conference workshop session on 'Map Design, Effects and Animation' (tbc).

In the meantime, I would encourage you to use the hashtag or search 'BCS Map Design Group' on Twitter or Facebook and share your work, ideas, questions and knowledge. Map design is obviously a key component of cartography, so please also share your work in *Maplines* and *The Cartographic Journal* publications.

**By Christopher Wesson,**  
Convenor of BCS Map Design Group  
Find us on social media, search 'BCS Map Design Group' or #BCS\_MDG



In the previous piece, we swept over how (3D) data is captured, the aim of this article is to cover how to use the data which has been captured.

Before I begin, I need to explain that where this data is captured in 3D, you would expect to then use the data in 3D but this is not

can extract land classification, vegetation or change (by analysing multiple rasters of the same area).

Stereo imagery, as well as being used to extract point clouds, as mentioned above, is the primary method for obtaining 3D vector features. There are many feature

but in general most point cloud systems also export in .las or .laz format, which has widely been accepted as the standard (onshore) format.

Using point clouds used to be a chore, you would have to interpolate the points into a surface raster or Triangulated Irregular Network (TIN)

# Using 3D Data Formats for GIS

always the case. For years, we, the geospatial specialists, have had to analyse this enriched 3D data within clunky 2D machines, all the time using compromises and workarounds to obtain results. So this piece will cover the way we commonly use this surveyed data in both 2D and 3D within a GIS, then my hope is to discuss display and visual representation in the next piece.

## Aerial Survey

Data is collected as stereo imagery or straight forward imagery.

Any georeferenced imagery, captured by either of these methods can be processed using photogrammetry software like Pix4D and Drone2Map to produce point clouds relative to the raster cell size and 3D mesh similar to those draped imagery 3D features you see in Google Earth.

Basic georeferenced imagery is also good for classifying and extracting features. By using raster classification algorithms we

extraction software to extract vector features but due to the lack of consistency, many experts prefer to use 3D drawing tools to manually create the 3D vector data from the imagery.

Normally working with stereo imagery has required specialist photogrammetry software but at the end of 2017, Esri enabled their flagship software ArcGIS Pro to be able to use and create data from this form of imagery.

## LiDAR, Laserscan & Sonar

Most point cloud capture systems will have its own proprietary recording format. This isn't because they want you to buy into their eco-system (not all the time), this is mostly due to the way their systems capture the data and how the data can be "compressed" to process faster.

Some of the better known formats are; Faro - .fls & .fws, Leica - .pts & .ptx, Reigl - .3dd & Autodesk Recap - .rcp. Obviously, there are other formats for other systems

so that you could analyse the 3D data on a 2D plane. The method works well and is still widely used, though many GIS now have point cloud tools or .las file readers (LiDAR, Laserscan, sonar and even xyz can all be used as .las format).

By using the point cloud as a raster or TIN we are able to analyse interactions and also surface constraints and variables, for example, measuring the slope, height of comparable intersecting points, line of sight or visible areas from a point (used commonly in renewables to see which turbines are visible to population and the landscape).

The issue with using the raster and TIN methods are where objects like trees and shipwrecks occur as there is no way to see the information which lies beneath the initial surface (in survey it is called the "first return").

In recent years, with the advent of OpenGL, we have been able to visualise and analyse point clouds in true 3D, so we can see both the surface but also subsequent points, where they occur. This way we can get more accurate tree analysis of both the upper and lower canopy. Of course, this isn't just limited to trees but they are the best way to comprehend the 3D issues that point clouds used in a 2D plane present.

Recently it is common to make 3D models or meshes from point clouds, for calculating volumes or rendering for visual analysis, it is sometimes clearer to see when



*Extracting rooftop potential (yellow) from aerial imagery*



viewed as a solid, for examples with wrecks and landscapes. This is often done using a Poisson wrapping method, similar to the 2D raster interpolation but in 3D to create a "3D TIN" that encompasses the external shell of the point cloud. The resulting "model" is similar to that you would get from Google Sketchup or build for 3D printing, in that it can have extremely good detail provided the resolution of the point cloud is high enough.

Many GIS software handles point clouds, such as Bentley Systems, Esri ArcGIS Pro & Desktop, QGIS and GRASS. All of these can also be used to do 3D analysis as well as some data formatting.

Possibly the most efficient way of manipulating and converting between point cloud data formats is the open source software CloudCompare, with this you can alter, edit and transform large point clouds as well as import and export between popular formats. This software is often used in conjunction with MeshLab (another Open Source software) for the conversion of point clouds to mesh models and model sculpting. These software packages are extremely efficient for thinning (subsampling) and adding RGB values from imagery.

## Land Survey

Using the good old fashioned theodolite and RTK, we digitise vector features on the ground with height attributes. More often than not, it gets wasted on the CAD users and it is only seen a few months down the line with all the coordinate values stripped out... Not all the time though, the data can be digitised out in the field to high accuracy and then exported almost directly to any GIS. There are even a few GIS centric survey tools like the Esri ArcPad or the QGIS plugin ROAM which allow you to capture the data straight into a GIS readable format.

3D vector lines, points and polygons are a traditional way of



*Land surveyor with digitiser. Image courtesy of Ordnance Survey*

working with 3D data and can be used to create 3D plans and surfaces (using 3D lines/contours).

The great thing about this method is that your data is in GIS formats which are universally read, like shapefile, postgis, fgdb or spatialite and can therefore be used in almost all GIS.

## General

Truth is that in this modern, geospatial age, many of the GIS can utilise 3D data in many of the

*Getting the vertical datum right was essential in analysing this wreck*

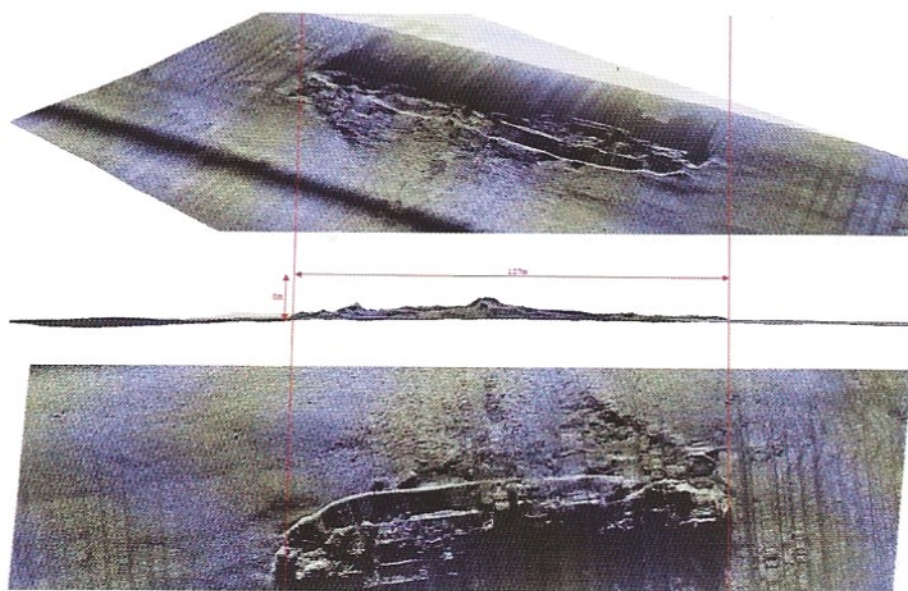
common interchange formats. Working with 3D has no longer become the complex mathematical tour de force that it once was as GIS is moving with the times and supporting a growing list of vertical datum.

So, let me let you into a little secret that will turn you into a 3D superstar overnight, you won't like it... Metadata! You see, the most complex issue with 3D is similar to the issue within the 2D plane. If you don't know what coordinate system you are working with, then you have already got the map wrong. When working in 3D, this issue is magnified 9 fold and that is before you factor in issues like the units as our American colleagues tend to use for their vertical datum, like feet, survey feet or meters (metres) height or depth (oh yes, they love to confuse us!).

This is why metadata is vital, with full knowledge of the coordinate system, both horizontal and vertical (and what direction, depth or height) we can sometimes simply use tide tables or known conversions to simply adjust the data between datum.

On that fun note, let's put a hold on things and look forward to the next (and potential last?) Piece on displaying and ways we show these 3D formats.

**By Nicholas Duggan**





# UK Mapping Festival 2018 Update

If you haven't heard, the UK Mapping Festival 2018 will take place between 2-7 September, with the three conference days at the ILEC centre in West London between Tuesday & Thursday (4-6 September). Make sure it is in your diary!

The three conference themes will be Mapping for the Future (run by BCS and SoC), GIS and Geo analytics (AGI as the partner), and 3D, Imagery and Survey (with BARSC).

Each conference day will have 12 talks in 4 sessions, each being 25 minutes, running from 9:30 to 17:00. In parallel there will be 4 workshops aimed at being hands on training events.

The free-to-attend exhibition and activity area will be laid out in the form of a street scene. It will include 'shops' as exhibition booths, vehicles, a food court, signs and activities including an augmented reality app of the exhibition and large screen displays. We will be inviting local educational establishments to take part in an After School Club, including a Geo Fair and London bus activity centre.

At the end of each day there will be a 'celebrity' speaker telling us why they love maps. So, there will be something for everyone!

There will be a number of parallel events running in other

locations, including a map-themed pub crawl, quiz, awards dinner, picnic on Hampsstead Heath and visit to the Churchill War Rooms.

The full programme comes out in March and there is a full promotional and social media campaign which will start then.

The UK Mapping Festival is expected to attract over 2,000 visitors and conference attendees. For many events places are limited, so you will have to book early to avoid disappointment. For more information and all the details you need, please go to [www.ukmf18.org](http://www.ukmf18.org)

**Seppe Cassetari**

## Admin Report

### Membership

Thank you to all our members who have renewed their membership for 2018. And of course, a big welcome to our new members.

#### Affiliate Members:

Nicholas Hinchliffe,  
Harriet Phillips & Wyn Lloyd

**Full Members:** Sam Tenenbaum,  
Marina Cofino, Daisy Atkin,  
George Firth, Kevin Ford,  
John Kennedy &  
Marion Perrett-Pearson

**Student Members:** Peter Evans,  
Wei Zhang, Matthew Law,  
Mohd Shahmy Mohd Said &  
Haonan Zhang

Please note: Subscription year is from 1 January to 31 December.

### Renewal / Joining Methods

- Through the website: [www.cartography.org.uk](http://www.cartography.org.uk)
- Personal Cheque made payable to The British Cartographic Society – please write your membership number on the back.
- Debit/Credit card details sent with your renewal form.

### Discounts

Great news – we have another offer for our members! 30% discount on books from

[www.crcpress.com](http://www.crcpress.com),  
[www.routledge.com](http://www.routledge.com) &  
[www.tandfonline.com](http://www.tandfonline.com). Head to our website, log-in and retrieve the discount code from the members area. Don't forget to check other discount codes while you are there!

We are reachable by telephone and email Monday to Thursday 9:00am – 5:00pm and Friday 9:00am – 4:30pm. We are happy to help any members with any issues or queries they may have related to the Society.

Email: [admin@cartography.org.uk](mailto:admin@cartography.org.uk)  
Phone: 01223 894 870

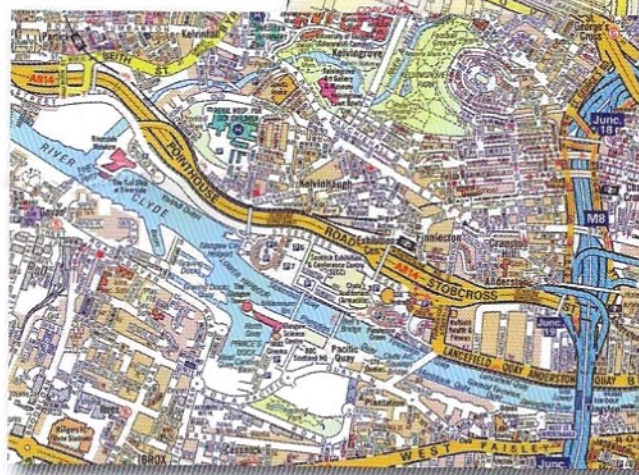
**Deimante Janaviciute,**  
BCS Administration



# The Changing Face of Glasgow



Above: A-Z Maps:  
Glasgow 1951



Left: A-Z Maps:  
Glasgow 2016

**A**t Geographers' A-Z Maps Company we have been looking through our map archives to see how sections of Great Britain have changed through the 20th century. In this article, we shall have a brief look at the extensive regeneration of Glasgow west of the City Centre, an area previously home to Govan Graving Docks and Pacific Quay, the largest docks on the Clyde. This area is now home to Glasgow Science Centre and BBC Scotland HQ.

Glasgow City has been subject to large urban regeneration most famously seen in the "The Bruce Report" published in 1945. The report influenced an intensive programme of regeneration and rebuilding including, most vividly, the M8 motorway which is the only motorway in the UK to directly serve and bisect a large urban area. The M8 can be seen crossing the Clyde as the Kingston Bridge in the latest 2016 map.

The area was first mapped by Geographers' A-Z Map Company in the 1951 Glasgow Premier Map. Glasgow was one of the largest cities in the world during the 19th century and was disputably known as "the Second City of the Empire" after London. The city became the pre-eminent shipbuilding and one of the biggest trading centres of the world.

## Pacific Quay

Prince's Dock was formally opened by the Duchess of York in 1897. The dock basin was the

largest on the River Clyde operating as one of the principal unloading destinations for trade throughout the British Empire. However, it ceased to be used as a commercial dock by the Clyde Port Authority during the 1970s as the volume of shipping using the Upper Clyde declined with the onset of containerisation.

The majority of the Prince's Dock area was infilled in the 1980s for the 1988 Garden Festival, and part of the Festival site was redeveloped for housing on its completion. Festival Park is an area of green space left over from the Garden Festival.

Today, Pacific Quay includes:

- Glasgow Science Centre
- BBC Pacific Quay, BBC Scotland headquarters and studios
- STV, headquarters and studios for the Scottish ITV network
- Scottish Exhibition and Conference Centre

## Govan Docks

To the immediate west of

Pacific Quay lies the former Govan Graving Docks. Graving docks are a classic form of dry dock. These docks were opened in stages from 1875-1897 to cater for the inspection and repair of the bottom of ships. These docks remained in use until 1988.

The area is currently being considered for development, perhaps to be preserved for industrial/maritime heritage.

A-Z Maps produce a wallpaper of Glasgow and we have a host of archive and current map data that is available for purchase; please get in touch with us to get more information.

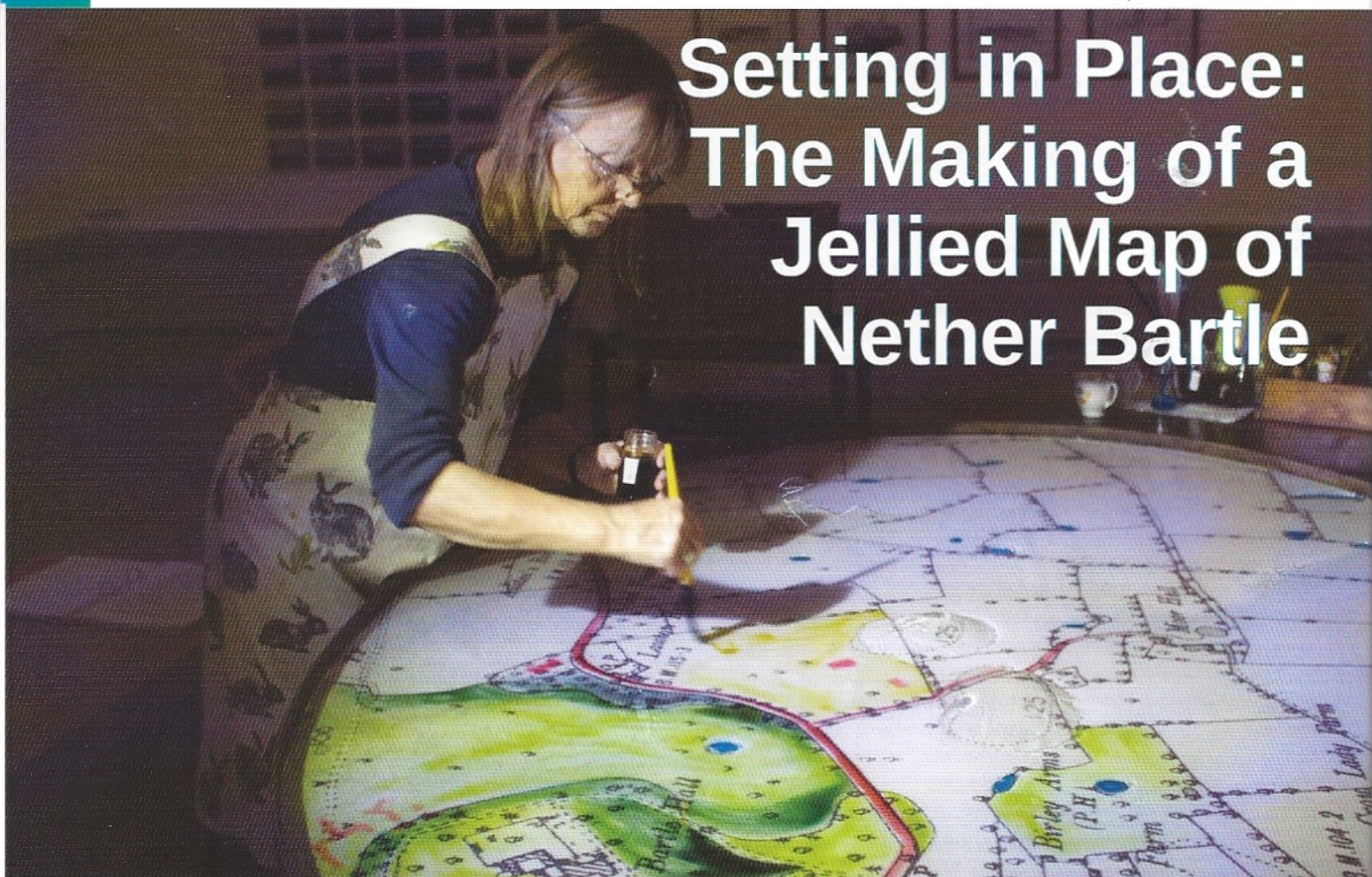
Find the wallpaper on our website: [www.azdigital.co.uk/products/az-map-wallpaper/](http://www.azdigital.co.uk/products/az-map-wallpaper/)

All images reproduced by permission of Geographers' A-Z Map Co Ltd. ©Crown Copyright and database rights 2016. OS 100017302

By Simon Kettle, New Business Development Manager



# Setting in Place: The Making of a Jellied Map of Nether Bartle



**W**hen artist Olivia Keith was commissioned by Preston-based arts organisation In Certain Places to create artwork in response to the City Deal – a £430m, 10 year infrastructure scheme to deliver jobs and 5,332 new homes to the city – she discovered an area rich in stories and memories.

Her project, *Traces of Place*, focused on a rural area in north-west Preston that is set to be transformed over the next few years. In considering the proposed changes to the landscape, Olivia wondered what would be lost – footpaths, field boundaries, local place names, trees and wildlife. She was also interested in what details would 'make it through' to the new development – might the street names reference the history of the ground they stood on, or would new residents meet the people who had once walked the local footpaths?

Olivia wanted to record some of

the area's history before it was destroyed, and she set out to create a map as a way to record information and stories: the tangible and intangible, personal and collective, historical and geographical. She hoped that plotting this precious information on a map would preserve it for planners and residents.

Olivia began a process of gathering and recording stories, initially by walking the area, talking to people she met and reading. She produced large-scale drawings of the area layered over enlarged sections of the 1895 OS map of the places she was drawing. Doing these drawings in situ lead to many conversations with local residents. These drawings were exhibited in a local café, where Olivia was based for two weeks – collecting more stories and holding events to bring people who were interested in the area together.

Olivia collated these contributions –

including words, photos, drawings and poems – on an online map: [tracesofplace.blogspot.co.uk](http://tracesofplace.blogspot.co.uk). This map is updated as new roads and houses appear, and the stories and memories become more powerful as these developments happen. For example, the field where nine hares were once seen simultaneously has now been built on, but the photo of the hares remains on the map.

As well as recording and sharing stories, Olivia wanted her artwork to show the changes to the landscape – from 1895 to the planned future development. She decided to present the map as a 5.5 hour performance: the first 4.5 hours were devoted to creating the features on the 1895 map and making the minor adjustments to bring it up to 2017, and the final hour of the piece was created by the audience in a flurry of activity that represented the next 15 years.

Olivia chose an unusual material for her map: jelly. She was drawn



to its transparency and responsive nature: it changes with temperature, light, time and touch, and when left it may shrink, grow mould, smell and deliquesce, perfectly representing the sense of change that she wanted to portray. Working with a transparent material meant that Olivia could use many layers to represent simultaneously the past, present and future.

The final piece used 22 litres of transparent food-grade gelatine, which was poured over a large oval dining table that contained an enlarged section of an 1895 OS map (Lancashire 60NE). Significant hills were set into the jelly, as were traces of pre-1895 stories, such as the possible site of a medieval village.

As she was working with food, and presenting it on a dining table, Olivia used culinary tools to create the features on the map during the performance: icing piping tubes and nozzles for trees and hedges and to fill ponds with coloured jelly, cheese wires to cut walls and houses, cutlery to make footsteps and furrows, pastry wheels to cut

roads, food colouring to paint on tracks and fields.

Olivia experimented with ways to use the jelly expressively: thin layers of dense set jelly were cut in ribbons and rolled out to be new roads; muted rustic hues were mixed to contrast with the commercial jelly colours that were used for future housing developments; in certain lights imperceptible marks on the jelly's surface cast visible shadows beneath.

The map was performed twice in Preston – at Bartle Hall Hotel and the Harris Museum and Art Gallery. Bartle Hall Hotel is on the jellied map, which presented an opportunity to invite very local people and collect more information about that specific area.

At the Harris Museum and Art Gallery the map was performed as part of an exhibition of paintings by local artist Edwin Beattie (1845–1917), who painted Preston at a time when the town centre was being swept away to make way for new buildings. Like Beattie's work, the jellied map focused on a part of Preston

undergoing rapid development – exploring the sense of a changing place. Once it was finished, the jellied map was left in situ for several days, where it could melt, mould and deliquesce.

Taking part in the creation of the jellied map gave people a sense of being empowered in that landscape and brought about different responses. Some visitors described the process of carving up the fields to create new roads as distressing, whereas the process of building the new homes – deciding where they should be and what the residents would need – gave some residents a new perspective on the proposed developments.

Olivia's research and performances have started many conversations – building her knowledge of the area and taking her to places that she wouldn't otherwise have found. A local historian and metal detectorist brought finds and photographs to Olivia and they spent a day exploring the area. She has visited local residents who came to the performance at Bartle Hall Hotel to see some of the points







on the map. Five of her map drawings are now permanently housed close to their 'locations', where they will continue to stimulate conversations.

Olivia has also developed a relationship with the planning department of the county council and is discussing possible names for

new features in the area based on all the information she has gathered. She is working on a printed map that will collate all the stories, which she will give to residents of the new houses as they are built, with the intention that they will feel more connected to where they live.

Through Traces of Place, Olivia

has started conversations between residents, prompted discussions within the council and recorded and shared a wide range of local memories and stories, all of which will have a valuable and lasting impact on the area and its residents.

**By Bonnie Craig, Research Associate, In Certain Places, University of Central Lancashire**

In Certain Places explores how cultural place-making shapes the fortunes of our cities and regions. By sustaining a flow of trans-disciplinary artistic interventions, it encourages artist-led and community-focused networks of practice to develop projects which reveal and engage with 'places'. <http://incertainplaces.org>

Traces of Place:  
[tracesofplace.blogspot.co.uk](http://tracesofplace.blogspot.co.uk)

# UK Mapping Festival 2018

As many of you will be aware, the annual conference format is changing this year. We are taking the event to London and running 3 consecutive one day conferences at the ILEC conference centre near West Brompton. The middle day – Wednesday – will be dedicated to Cartography, Tuesday is given over to GIS and geospatial issues and Thursday will be for 3D, imagery and survey. The event will also include activities, visits and talks either side of these 3 days, running from 2-7 September (Sunday-Friday). The whole event is being called the UK Mapping Festival 2018 ([www.ukmf18.org](http://www.ukmf18.org)).

Because of the change in format there will not be the usual desk top exhibition space for Corporate members of BCS. There will be a large activity area, laid out like a street scene with 'shops' that will be available as exhibition space. These will be charged at £1,600 per day or £3,600 for 3 days. BCS Corporate

members may book these for the discounted rate of £1,400 per day or £3,000 for all 3 days.

The walls around the street scene will be covered in images that enhance the scene but it will contain panels that will be used to promote sponsors and corporate members. The panels will cost £100 for the day but all BCS Corporate Members are being offered a panel for the Cartography Conference day for free.

The panel will consist of a space about 1.5m tall by 0.75m wide, with a box for a logo, a box for product descriptions or marketing information, a box for a map image and space for a brochure holder. All panels will have a QR code which will link the viewer to the company website.

To take up the opportunity of having a panel, you will need to book your panel no later than 1 April 2018,

after which BCS will not be able to guarantee availability. This opportunity will only be available to fully paid Corporate Members (Ordinary and Small). Attendance at the event is not required and there will not be space in front of your panel to set up a display or for an individual to stand.

The graphics for all panels will be set-up by the organisers in advance and printed on Vinyl for fixing to the walls. All copy and images must be submitted to the organising committee (Ryan Harrow at [ryanh@geoinformationgroup.co.uk](mailto:ryanh@geoinformationgroup.co.uk)) by 1 June 2018. A draft panel will be available for approval by 30 June 2018 and must be approved no later than 15 July 2018. Organisers reserve the right to cancel the opportunity if panel content is not received by the due date or is not approved by the due deadline.

UK Mapping Festival Organising Committee, [www.ukmf18.org](http://www.ukmf18.org)



# Fair stood the wind for France...

## We few, we happy few

In October 2017 we travelled with 22 colleagues on a Staff Ride through France. A "Staff Ride" is a formal battlefield tour in which all participate in research and give lectures to their fellow participants, which we did in pairs (two talks in England, eight in France). This Staff Ride was devoted to the activities of the Special Operations Executive (SOE) in France during WWII. SOE was set up by Churchill following the fall of France to "set Europe ablaze" i.e. carry out sabotage and subversion and foster resistance to the Nazi occupier. SOE's F Section was responsible for inserting and running agents in France. Many of the agents who carried out this dangerous work were female, such as Odette Sansom, Noor Inayat Khan and Violette Szabo (all of whom received the GC). Many, both male and female, lost their lives at the hands of the Nazis (including Khan and Szabo). Our guide on the Staff Ride was Col. Nick Fox, Retired.

Starting from RAF Wyton near Huntingdon on Monday morning, our first stop was the former RAF Tempsford in Bedfordshire. RAF Tempsford is sometimes described as a "secret" WWII airfield. The airfield was not very secret – it is clearly visible in wartime air photography – but its purpose was. This was one of the airfields (the other was Tangmere, near Bognor Regis) from which SOE agents would take off on their missions to

the Continent. Like so many small wartime airfields in Britain, it is no longer in use, but a small private museum has been set up with SOE memorabilia which can be visited by prior appointment. We were shown round by Lady Isabelle, Countess of Erroll. Then the short drive to Gibraltar Barn, where SOE agents were given their final equipment and briefings before flying off.

There followed the first of many long drives, this one of 140 miles to the New Forest and Beaulieu, whose name gives away its origins from across the Channel seven

Maj.-Gen. Sir Colin Gubbins, Head of SOE 1943-46.

This was the day (16 October) that Storm Ophelia hit the British Isles, resulting in three deaths in Ireland. The local manifestation of this, apart from a warm wind, included the strange orange sun and yellow skies caused by Saharan dust. The thought of an overnight Channel crossing in a hurricane was not inviting as we drove into Portsmouth at sunset. The ferry was not due to depart for four hours, so we had time to walk to the waterfront at the Square Tower

*Fabric map and George Fielding obituary inside SOE Museum Beaulieu Hants*



hundred years ago. Beaulieu (seat of the Barons Montagu) was one of many stately homes requisitioned for the war effort. It was the main SOE training school and there is a small museum devoted to SOE within the grounds. It is beyond the National Motor Museum and is reached by a monorail. In the grounds of the ruined abbey is a plaque to SOE, unveiled in 1969 by

and the Round Tower, paying our respects to Lord Nelson's statue (a famous landmark which was relocated by the Council in 2005 to confuse tourists and ghosts) and having a good look at the choppy waters, which nevertheless did not seem too rough.

The car ferry left at 11pm. In the event, the six hour voyage was not too uncomfortable, with a little rolling. By chance, we followed the hundred nautical mile route of many Operation Overlord ships, but arrived peaceably at Ouistreham on the Norman coast before sunrise. But this was not a D-Day Staff Ride and we drove non-stop south to Argentan for breakfast and a talk (no. 3) by the town's war memorial.

Followed by 150km south to Château-du-Loir for a briefing on



*Photos & poppies etc inside SOE barn at at Gibraltar Farm RAF Tempsford Beds*



the establishment of agent networks in France, held by the war memorial, which is next to the scanty but picturesque flower-bedecked remains of the otherwise vanished chateau, a few kilometres from the Loir (not the more famous Loire).

We then travelled 80 kilometres south to a field near Azay, near Tours. The field was a typical landing place for the Lysanders which flew from Tempsford or Tangmere. There's not a lot to see (it is a field, basically, like Crécy or Agincourt) but Col. Nick had a knack for creating atmosphere and bringing these places alive with a description of the "Prosper" network of agents, which was betrayed to the Germans by a collaborator. Apart from the dangers, it must have been a navigational challenge to find from the cockpit of a Lysander, in moonlight, one particular field, even in this distinctive location between the two big rivers, among all the other "vast fields of France". The last planned "stand" of the day was abandoned, as one of our vans broke down. This would have been the drop zone for Georges Bégue, the first French SOE agent dropped by parachute on 6 May 1941.

The final drive of the day took us south again along the typically dead straight tree-lined roads of France (most of which follow routes laid down by the Romans). We stayed two nights in a simple hotel in Châteauroux in central France.

On Wednesday we walked the short distance to the house where the first SOE agent to be dropped

in France (at the spot we had not seen the previous afternoon) made the first known radio message back to England in May 1941.

Then we travelled non-stop 150km further south to Oradour north-west of Limoges. On 9 June 1944 the Waffen SS "Das Reich" Panzer Division was heading north for Normandy. A major (Sturmbannführer) was captured by the French Resistance and taken to Oradour. This was Oradour-sur-Vayres, a small village on a small tributary of the Charente. In retaliation, the SS burnt, shot or otherwise massacred 642 inhabitants of Oradour-sur-Glane, a different village on a small tributary of the Vienne 26km to the north-east. Much of the village was also destroyed. This area near Limoges was too far south to be mapped in detail by the British: the SS too perhaps had only the contemporary French map no. 154 at scale 1:80,000 on which the "sur-Glane" element is in small print and not obvious on a black and white product obscured by hachures (the presence of hachures and absence of contours on the 1:80,000 Series was perplexing to friend and foe alike in both World Wars).

The other Oradour is on the adjacent sheet. This must be one of the most extreme cases of the unintended consequences of mistaking a toponym. After the war's end, the ruined village was preserved as a memorial, while a new village and a museum were built nearby. We explored the ruins including the church where most had died, a pilgrimage best completed alone and in silence. We could "Remember" first seeing



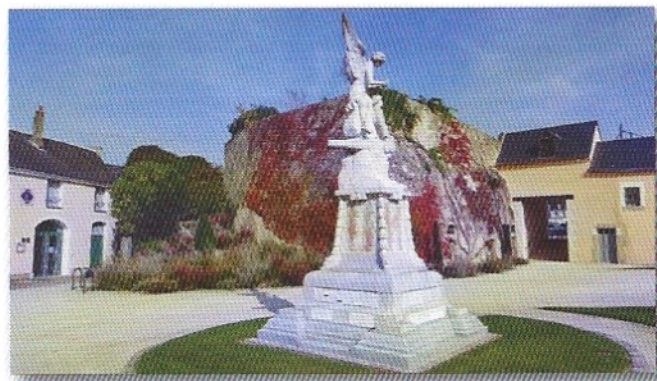
*Parachute canister in Resistance Museum in Blois, France*

Oradour at the very beginning and the poignant end of "The World at War" TV series in 1973, narrated by Laurence Olivier. In the museum we learnt what Olivier had not told us: at their post-war trial many of the surviving perpetrators turned out to be French, from Alsace, and they argued that they had been coerced into German service. All perpetrators were released from prison in the 50s, to local dismay.

On the way back north to Châteauroux, we stopped to visit the monument where Pearl Witherington (codenamed Marie, later Pauline) parachuted into France in September 1943. By good luck Nicholas had bought her autobiography in an Oxfam bookshop a few days earlier.

Though capital of the Indre department, Châteauroux is a modest town of under 50,000. It is not on the tourist trail, a town plan does not seem to be commercially available in Britain and it does not appear in most guide books. However, it has some attractive old streets and the lovely eponymous Château Raoul towers above the Indre river.

France is one of the best mapped countries in the world. IGN, the national mapping agency,



*War memorial in Chateau-du-Loir, France*



produces maps of every conceivable scale, for every conceivable purpose and in every conceivable format. John had brought a selection of IGN maps including the regional map, the departmental map, some Series Orange (1:50,000) and some Series Blue (1:25,000). But, alas, Chateauroux is too small to merit a IGN town plan. Luckily, John had also brought his trusty Michelin Guide with him – published in 1939. The invading Wehrmacht found it invaluable in 1940, not least in showing the location of petrol stations where the German tanks could be refuelled during their race across France. It was also invaluable to SOE agents operating in wartime France. It devotes 2 pages including a map to Chateauroux. It shows that in 1939 the Hotel France occupied the same address as our modern hotel. After dinner we went in search of the oddly named “Au Chat qui Fume (Jayez)” restaurant in the Rue Grande, recommended in 1939. The building is still recognisable but the non-PC name has been changed.

On Thursday we packed for the long drive north and said au revoir to Chateauroux. We stopped first at Valençay to see the Memorial to all the dead of F Section which was erected by the French Republic in 1991 in the middle of a roundabout and 46 years after the end of the war, but better than nothing and better late than never. Another briefing here (no. 8), and Col. Nick led a short wreath-laying ceremony. We drove on minor roads across country to the village of Dhuizon.



*SOE memorial near Valençay, France*

Col. Nick spoke here, but no one else. Nicholas walked round the pleasant village, which included an impressive church, a phone box tuned into a library, a butcher's whose windows were decorated with beautiful paintings of pre-slaughtered deer and rabbits, and the pretty gardens of the local town hall.

To another landing zone at Bois Perrier for briefing no. 9 then finally westwards to Blois. The occupied zone (non-Vichy) of France was covered at scale 1:50,000 by Series GSGS 4250. Blois is on sheet 9J/1, also numbered 108NW. The map shows numerous railway lines that no longer exist, including one that crossed the Loire just upstream of Blois. The railway bridge was destroyed by Allied bombing in 1944 and was never rebuilt. The scanty remains of some supports are still visible in the wide river.



*German guide to Occupied France in Resistance Museum in Blois, France*

In Blois we visited the Museum of Resistance, Deportation and Liberation. Our guide was Michel Duru, a surviving member of the Resistance, presumably at least 90 but fit and alert. The museum is well stocked, with exhibits including British silk maps, Sten guns, a 1.8 metre long canister used by SOE for dropping equipment, and examples of sand from the Utah, Omaha and Juno beaches of Normandy. The textures and colours of these three are obviously different.

The final briefing (no. 10) was given by the two of us by the great door of Blois cathedral, talking about how SOE was wound up, what happened to surviving SOE agents in later life (a very large number lived to a great age), and how the activities of SOE have been portrayed since WWII in the UK and France through books, films and TV programmes of varying degrees of accuracy. Nicholas whipped a wartime silk map of France and northern Spain out of his pocket to demonstrate how silent and compact they were. We had just a few minutes to walk round Blois, but it was nearly 5 o'clock and we were still 200 miles from Ouistreham, so back in the vans for the drive north. We didn't have time for the planned dinner in Alençon so could not field check our War Office 1:7,500 town plan dated April 1944 from Series GSGS 4234, which covered the towns of northern France, not as far south as Blois or Chateauroux.

We reached Ouistreham in rain (up till then the week had been unseasonably warm and sunny), but with a calmer crossing back to Portsmouth than the outbound voyage. The day after we returned from this most fascinating and thought-provoking 727km tour of France, we read of the death of Yvonne Burney, one of the last surviving SOE F Section agents. We salute her and all who served with F Section SOE.

**By Mr Nicholas Hutchings and Dr John Peaty**





## The Fate of Your Entries for BCS and ICA Awards

**Y**ou may have wondered what has happened to the entries submitted annually for BCS Awards and bi-annually for ICA Awards. Well, until recently they have been held in a variety of locations between London and Edinburgh and, as far as I can tell, have not been catalogued in any sort of systematic manner and consequently have not been readily available to would-be enthusiasts for further study or display.

Now, all the entries that we are aware of have been delivered to the Map Room in the Bodleian Library. We have received maps going back as far as 1999 but the bulk of the maps are from 2005 to the 2017 entries. However, if you know where others reside then please do get in touch. The entries arrived rolled-up in cardboard tubes or in boxes, the latter contained folded maps, atlases, small books, CDs and some paperwork. The most

important piece of paperwork is the applicant's entry form which details not only the applicant, the award category: Stanfords, John C. Bartholomew, Avenza, OS Open Data, New Mapmaker etc., but also the purpose of the map and the production technique - both aspects are most important for the archive.

From the Bodleian Map Room perspective there are standard elements of a 'map' that have to be recorded and so a comprehensive spreadsheet is used to describe all the entries. Each entry where the information is available, includes the ISBN, map title, cartographer(s), scale, production company, location, date of data used, date of production, what it is: an atlas, map, book, CD, etc., colour yes/no, submitted by, for which award, area covered, BCS entry number and shelfmark.

So, it should be fairly simple, mapping material on one side and

spreadsheet on the other, but not really! The lack of entry lists for the earlier years was an issue as all we had was the list of winners taken from the old BCS website. Then the maps that had been rolled up for years were reluctant to come out of their comfy tubes and be flattened. Fortunately, there are some fairly heavy metal bars in the Map Room to which they succumbed. The maps are different shapes and sizes and some had velcro pieces on them having been on display at a BCS symposium. This is why those submitting entries are asked for two copies, one for display and the other for archiving. I think too that BCS inherited some extra maps that hadn't been submitted for the awards but were collected up from the stands at the end of the symposium and included amongst the material.

All that said it's been good fun and worthwhile. What has been so impressive is the high quality and variety of maps, atlases and



electronic products that have been submitted over the years. Although the Bodleian is a legal deposit Library, many of the maps are new additions to the overall collection. If there are duplicates they will go into the main Library collection if a copy is not held already. If the Library has a copy then the duplicates are offered to other libraries. The BCS and ICA collections are held in separate map chests in the BSF, the Bodleian's Book Storage Facility at Swindon. We are still waiting for and working on the 2017 entries but already some previous BCS entries have been exhibited in Convocation House, part of the Bodleian, for the benefit of the Cambridge Conference attendees last July.

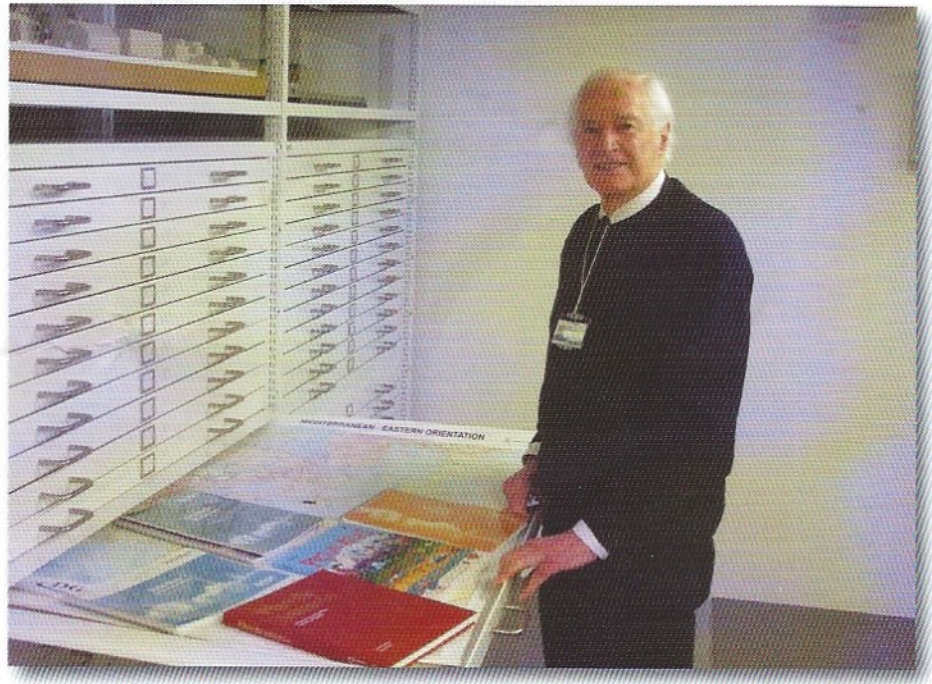
By Peter Jolly

*Footnote: Peter Jolly is being way too modest – he and his colleague Peter Hawksworth, both*

*former RAF navigators – have been volunteering in the Map Room, and their presence and cartographic expertise has freed up time for the Library to undertake this challenging project.*

*We hope to have records loaded onto the Bodleian's online catalogue, SOLO, by the end of this year.*

Nick Millea



The BCS are looking for a convener to support their popular GIS Special Interest Group (SIG).

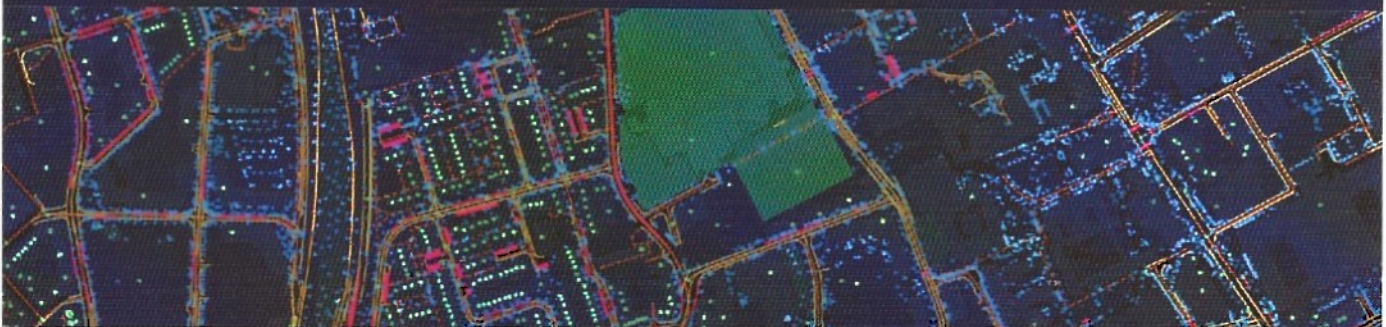
This SIG is a research-based group providing a point of contact and discussion for those engaged in any aspect of Geographical Information Systems and associated sciences.

The aim of the SIG is to:

- Promote activities and events such as seminars, workshops, visits and open meetings during the Annual Symposium
- Encourage participants in its meetings to publish their ideas and findings in the outlets provided by the Society
- Seek to publish an occasional newsletter, distributed free to members of the BCS and on subscription to others.

This is a great opportunity to become part of the wider BCS community and actively help with the Society's goals and programme.

If you are interested, please email Paul Naylor (BCS Programme Chair) at [paul.naylor@os.uk](mailto:paul.naylor@os.uk)





# Loving a Map of Vincent van Gogh

**L**oving Vincent, the first fully painted feature film, recently was nominated for an Oscar for best animated feature, exposing the life and works of Vincent van Gogh to audiences afresh.

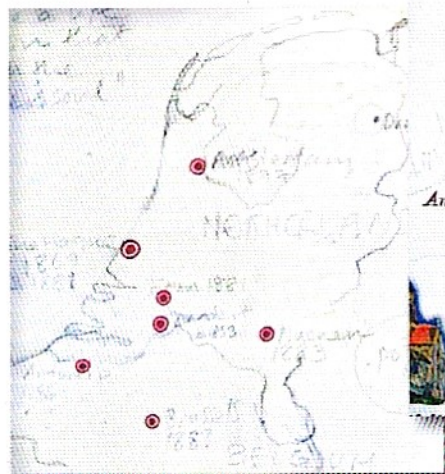
Artist and map-maker Jane Tomlinson has loved Vincent since 1979 when on a school trip to the National Gallery, "...the yellow of The Sunflowers hit me right between the eyes!" she says. "From that dazzling moment, I needed to discover more about what drove him, and see what he saw."

Last autumn Jane finally dared to begin what had been haunting her since she started painting maps eight years ago – a map of van Gogh's life and works. The map, hand painted on a sheet of A1 in watercolour and ink, shows where he lived and when, and what he painted when he was (roughly) in that location.

## The Study of a Lifetime

The map combines 47 of van Gogh's masterpieces – many of his best-loved works and some lesser-known – that chart Vincent's extraordinarily wide range of interests: boats, trees, flowers, people, architecture, trees, even the stars.

"The actual drawing and putting down of paint took only



**"You can't be at the pole and the equator at the same time. You must choose your own line, as I hope to do, and it will probably be colour" wrote Vincent van Gogh to his brother Theo in April 1888.**

about six weekends," says Jane, "but really it's taken 38 years of research and thousands of miles of travel. Vincent was an avid letter-writer and reveals his innermost thoughts, and so it was vital to include quotes in the painting." Jane painstakingly copied them in Vincent's handwriting.

## Making the Map

Jane works by hand, using paper, pencils, paint and brushes. "The only thing I use the computer for is picture research – it's quicker than leafing through all my books" she explains. "Planning is everything because once I've started putting paint and ink down there is no going back. I began by drawing out the outline of the land in pencil, and marking the position of towns, names of countries, international boundaries, and noting where I wanted the quotes to appear."

"Using a long list of all the main motifs I wanted to show, for example sunflowers, boats, etc, I noted them

in pencil their approximate position on the sheet. I wanted sunflowers at the epicentre of the painting. It's pretty messy at this stage. I have to think about how each element will morph into the next, and how the overall colour balance will work –

with Vincent there was always going to be a lot of blue and yellow and I didn't want them to be bang slap next to each other."

"And at some point, I can't take fiddling around in pencil anymore, and I just have to get the paint out. It's pretty scary putting the first colour down, but a massive relief to finally be painting. Colouring-in is the best bit!"

"France and the Netherlands were easy and I began with those, but for ages I couldn't decide what to do with Belgium and England. England was especially tricky as Vincent was not an artist when he lived here. In the end I chose books because he was a vicarious reader, and religious figure because he was a trainee preacher in London."

"At some point, maybe 15% of the way into the painting, it takes on a life of its own. This happens with all my paintings, and long ago I learned I must follow where it takes me. It often means rethinking quite large sections. For example, the lifting bridge that ended up in roughly the centre of France started in the planning stage much further east."

The painting was not a commission, it was done entirely in Jane's 'so-called spare time', for her own amusement. "All this time I have studied his works and I still 'discover' paintings and drawings I've never seen before. There's still so much more to learn, and making this map taught me just a little bit more."

Signed prints of Jane's Map of Vincent are available at: <http://janetomlinson.com/artworks/life-and-works-of-vincent-van-gogh>



Working stages of the finished map







# Great Britain: The Great Unsung Adventure Playground?

A foolish attempt to do justice to Britain's world-class adventure playground status in a few short paragraphs

**R**ant alert! It's odd, isn't it? Britain is consistently one of the most visited places on Earth[1], its constituent parts frequently do well in polls to name the world's most beautiful country[2], and there are plenty of quotes from notable well-travelled folks saying Britain is pretty bloody gorgeous. For Bill Bryson, for example, Britain is "the best place in the world to stand on a hillside and take in a view"[3].

And yet, there are many reasons - young people getting outside less[4], our preference for holidaying abroad before we've seen the best of our own country [5, 6], broader trends like our startling performance in the world obesity league[7] - to suggest we need to get off our backsides and into the Great British outdoors a whole lot more.

With that befuddling state of affairs in mind, here's a whistle-stop tour of Britain and its credentials as an adventure playground of the highest order. (Spoiler: it's a tiny bit biased).

## Wondrously Wild Places

Britain has 15 national parks and

80 odd second-tier "really beautiful places" (AONBs and NSAs), and more nature reserves, geoparks and acronyms than a keen bureaucrat could wave a large clipboard at. But that's only part of the story. Ours may be a small, crowded island but it has some superlative slices of wilderness, such as:

- The northern part of Wester Ross, Highlands: Scotland's "last great wilderness"
- Knoydart, Highlands: accessible only by ferry or a 16 mile hike
- Dartmoor: wild, lonely Baskerville country, and a bronze-age treasure chest
- Fair Isle, Shetland: Britain's most remote populated island

## Magnificent Mountains & Hills

There are 302 mountains in Britain over the height of 3,000ft, almost all of them in Scotland, of course (Munros). We Brits often use feet when talking about our mountains and hills to make them seem bigger, but don't be fooled - they are spectacular. And (bonus) you don't need supplemental oxygen to get to the top.

- Glen Coe, Highlands: Iconic Buachaille Etive Mor and the

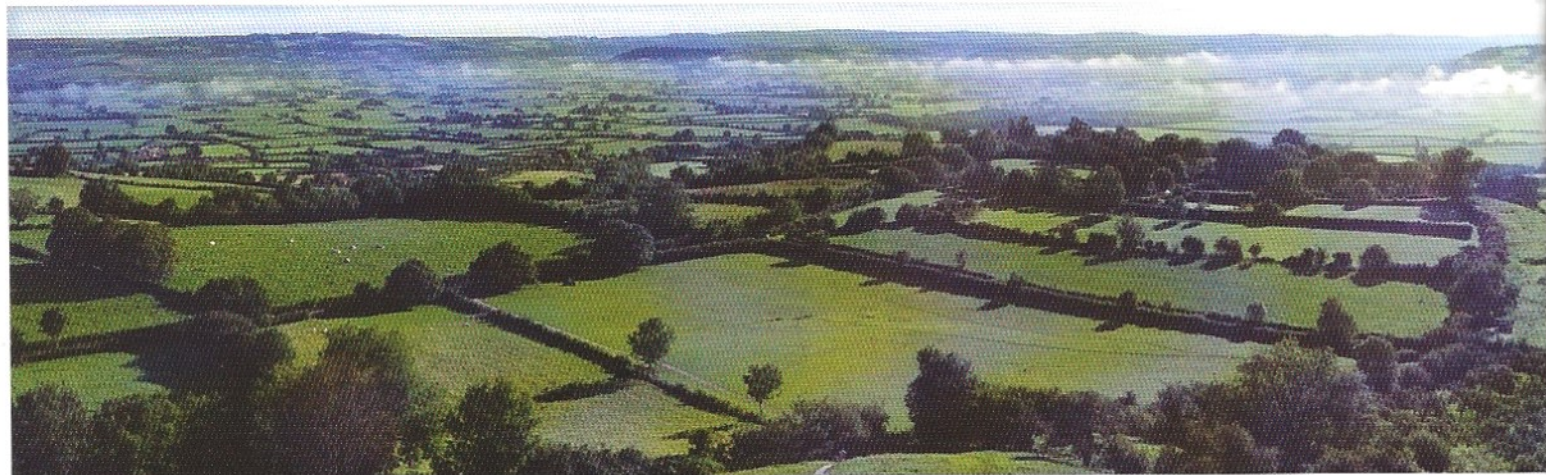
Three Sisters

- North West Highlands: Suilven (the finest of them all?) and the Fisherfield Five (the most remote Munros)
- Snowdonia: Cadair Idris (don't go to sleep up there!), Tryfan and its jagged ridgeline
- Lake District: Helvellyn (recently voted Britain's favourite walk[8]), and England's highest, Scafell Pike

## Classy Coastline & Unbelievable Beaches

Suspend your disbelief: Britain possesses a huge number of brilliant beaches, including the one that was mistakenly used to advertise a Thai beach resort in 2009\*.

- The Outer Hebrides: White sand and azure seas - Scarista, Luskentyre and the islands of Berneray\*, Barra and Vatersay
- The Gower Peninsula: Classy coastline at Rhossili, Llangennith, Three Cliffs Bay
- The Scilly Isles: Heaven on sand - pretty much everywhere you look is beach
- Morar, Moidart & Ardnamurchan: From the much-filmed Camusdarach and Silver





Sands of Morar to Sanna and the Singing Sands further south

## Eye-popping Islands

Thousands of them! From the big islands with people living on them to the tiny ones mainly covered in bird poo, Britain is an islomaniac's fantasy.

- Shetland: Half way to Scandinavia, including remote Hermaness and its views to Muckle Flugga lighthouse and Out Stack, Britain's northernmost point
- Inland islands like Inchmurrin (the largest in Britain) and Inchconnachan (with its own wallaby population), both on Loch Lomond
- Bardsey Island: A wild and holy place off the tip of the Lleyn peninsula, north Wales
- Arran: A self-contained miniature Scotland

## World-beating Waterways

Besides messing about in boats, there is so much you can do on, in and near the rivers, lakes, canals and other watery wonders of Britain.

- The Great Glen: Four connected lakes running 62 miles coast-to-coast from Inverness to Banavie - one of the great journeys
- The Broads: Perfect for pootling, 120 miles of shallow lakes / rivers in a serenely flat landscape
- The Thames: Canoe it or walk it from the Cotswolds to the North Sea

- The River Wye: Beautiful scenery for a gentle paddle

## Legendarily Good Long-distance Routes

Britain is blessed with some first class long-distance routes. Whether you're travelling by foot, bike, car, public transport or some contraption you've been tinkering away at in your shed for years, these routes do a mighty fine job of showcasing Britain's most spectacular scenery.

- Cycling or driving from the furthest south to the furthest north: Isles of Scilly - Shetland
- National Trails / Great Trails like the South West Coast Path, Wainwright's Coast-to-Coast route and the epic Cape Wrath Trail
- Lôn Las Cymru: cycle the length of Wales from Anglesey to Cardiff
- Hebridean Way: 185 miles of peaceful cycling or driving through the spectacular Outer Hebrides

## ... And some other Random Stuff

A great British adventure isn't just about the landscape. There's so much else going on: the people, the history, the rapid change in accent, language and culture as you move through the country is remarkable by almost any international comparison. And then there's the random sideshow that lets you know you could only be in Britain:

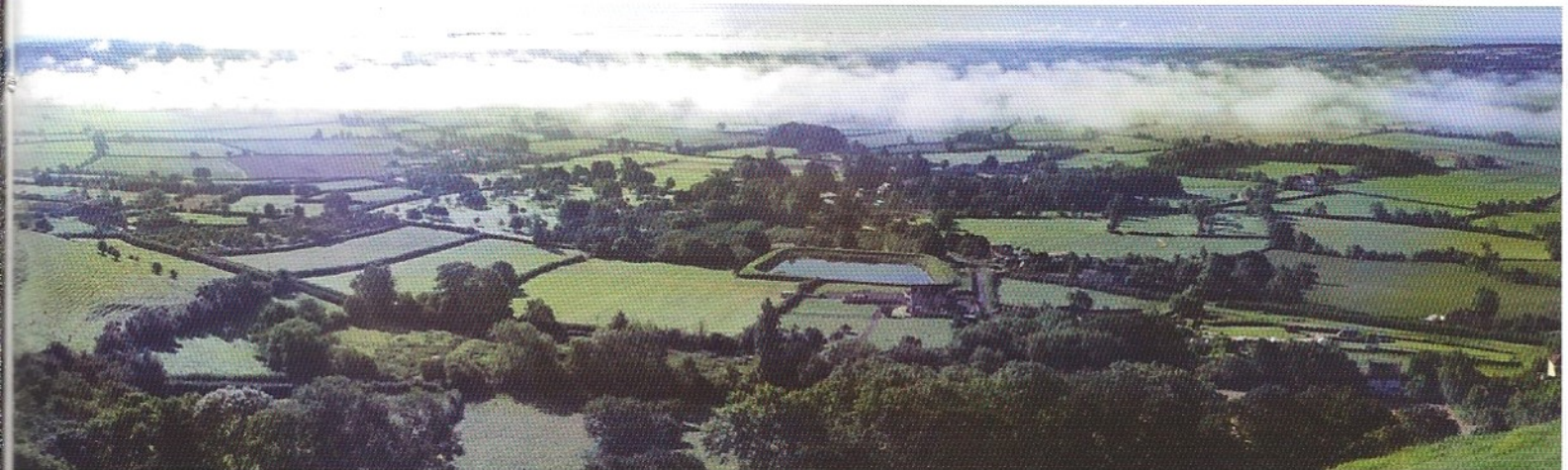
- Excitingly eccentric events, such as the Bognor Birdman, cheese

rolling in Gloucestershire, bog snorkelling in mid-Wales, flaming Tar Barrels in Devon, Dorset Knob throwing, and centuries-old street football matches involving hundreds of people in the Midlands.

- Supremely random world records, such as the biggest hedge on earth, Meikleour Beech Hedge, Perth and Kinross (30m high, 530m long), and the world's smallest pub, The Signal Box Inn, Cleethorpes (64 square foot).
- The world's best funny place names, like The Devil's Arse (a cave in the Peak District, named for the flatulent noises it emits), Lord Hereford's Knob (a prominent hill in the Brecon Beacons), the village of Dull (Perthshire), and lots of places called 'Bottom', like Galloping Bottom (Somerset). This topic is, of course, a whole other can of presidential hairspray, but we're about to run out of page...

So, with a nod to Bill, perhaps Britain isn't merely "the best place in the world to stand on a hillside and take in a view". Maybe it's the best place in the world for an adventure, full stop. Maybe. Let's leave it there before any fights break out.

ST&G's Joyously Busy Great British Adventure Map shows off all Britain's best bits on a single sheet of paper - thousands of great wild places, mountains, islands, beaches, waterways, views, long-distance routes, points of interest, eccentric events and a whole raft of entertaining,







inspiring and even vaguely useful information. £14.99 from [marvellousmaps.com](http://marvellousmaps.com)

By **Humphrey Butler**, founder of Strumpshaw, Tinkleton & Giggleswick's Marvellous Maps [hb@marvellousmaps.com](mailto:hb@marvellousmaps.com)

Strumpshaw, Tinkleton & Giggleswick's Marvellous Maps ~ [marvellousmaps.com](http://marvellousmaps.com)

ST&G's Joyously Busy Great British Adventure Map Unfolded

## References

- 1 Visit Britain ([www.visitbritain.org/visitor-economy-facts](http://www.visitbritain.org/visitor-economy-facts))
- 2 2OK, mainly Scotland! Rough Guides, 4 September 2017 - Scotland voted most beautiful country in the world
- 3 Bill Bryson, Notes From A Small Island: Journey Through Britain (Black Swan, 2015)
- 4 The Times, 31 January 2018 - Screen-addicted children spend 16 minutes a day outside
- 5 Sunshine.co.uk, 26 September 2017 - British Babies Now Visit Beaches Abroad Before UK Shores
- 6 It's nothing new: Over 300 years ago, adventurer Celia Fiennes was encouraging people to get into the Great British outdoors, to "cure the evil Itch of overvaluing foreign parts". From Celia Fiennes, Through England on a Side Saddle in the Time of William and Mary, Being the Diary of Celia Fiennes (Field and Tuer, The Leadenhall Press, 1888). Available online here.
- 7 NHS - Britain's obesity crisis
- 8 ITV's "Britain's 100 Favourite Walks", January 2018

## Restless Earth Report 2018

**H**ello all, my name is Jennifer Johnston and I'm the new Restless Earth Coordinator! I'd like to send a big thank you to Alice for helping me get up to speed and for the continued support.

I have just relocated to the UK from Toronto, Canada. My background is in Geography, Fine Arts, GIS, and Cartography. I've been working as a cartographer for the past 9 years. I started with the Atlas of Canada making maps upon request for different departments. I then moved up the Alaskan Highway making wall maps for a land surveying company, and then across the Pacific Ocean to Australia to work for Explore Australia and Lonely Planet. While I was in Australia I was awarded the opportunity to go to India and train their new GIS team in cartographic design principles.

I'm excited to be in the UK now with the Restless Earth workshops. They are an exciting and practical way of getting a new generation interested in cartography and maps. Several of my friends and colleagues have been asking if there is a similar

program available in Canada for their children to participate in. Unfortunately I am not aware of anything comparable on offer.

Using the real-life example of the Japanese earthquake, tsunami and nuclear disaster of 2011, there is still relevance, as there seems to be an increasing number of multiple disasters happening at once and their effects are felt for many years later. It works well in the classroom with the Japanese text being illegible to the students and forcing them to rely on the symbology of the map to understand a landscape that is unfamiliar to them.

If you know of any schools in the UK who would be interested in having this workshop for their year 10 and 11 students they can find more information on the BCS website [www.cartography.org.uk/members/education-schools/welcome-to-the-bcs-restless-earth-workshop/](http://www.cartography.org.uk/members/education-schools/welcome-to-the-bcs-restless-earth-workshop/) or they can email me at [restlessearth.coordinator@gmail.com](mailto:restlessearth.coordinator@gmail.com)

We currently have 2 dates booked. One is on 28 June 2018

in the greater Birmingham area and the other is on 15 October 2018 in Dartford. There are plenty more dates in the works so please if you would like to volunteer and participate at a workshop near you contact me by email [restlessearth.coordinator@gmail.com](mailto:restlessearth.coordinator@gmail.com)

If you chose to volunteer the time can be taken off work as a voluntary day or part of your Corporate Social Responsibility day. It is an opportunity to use these days to promote cartography and to instil an interest and memorable experience in students around the country. My hope is that these workshops will prompt students to consider a future in cartography or mapping. I know that for myself I wish I had heard about the cartography discipline much sooner in life.

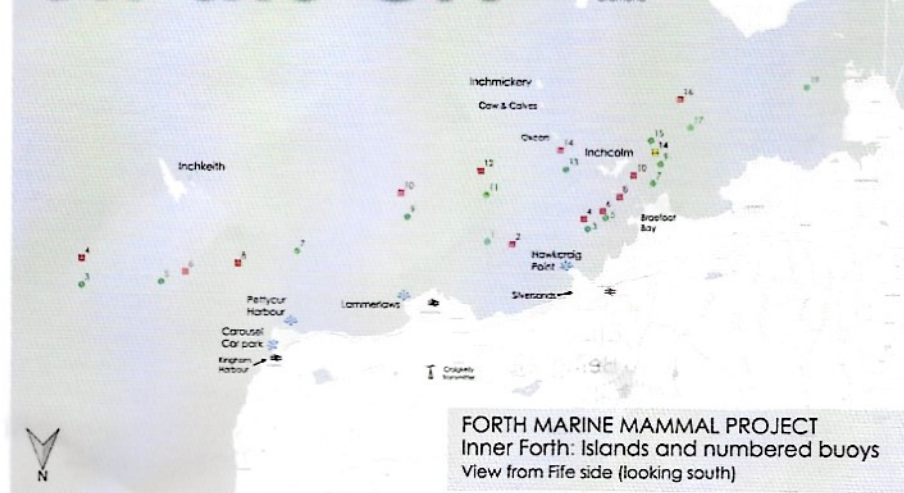
I look forward to meeting you all at the workshops. Participant emails will be sent to the email addresses we have on file to the members within a 40 mile radius of the workshop locations.

Please do respond or feel free to pass the opportunity onto a friend if you can't make it.

Looking forward to a great year ahead!"



# Humpback Whales off the UK



**W**ith their distinctive long flippers and exuberant breaching behaviour, humpback whales (*Megaptera novaeangliae*) are one of the most easily recognised and best known of the large whales. People travel the world to catch a glimpse of these charismatic megafauna, but what if I told you that you could see humpbacks within walking distance of a UK railway station?

A highly migratory species, humpbacks spend most of the year in the productive seas of higher latitudes before migrating to warmer breeding grounds in winter. One of the Pacific migrations features in the John C. Bartholomew award-winning "Where the Animals Go" by James Cheshire & Oliver Uberti.

In the north-east Atlantic, Humpback whales have been seen off the Scottish islands during their autumn migration as they head from the Barents Sea to the Caribbean. For the last two years however, humpback whales have been regularly encountered on the eastern coast of Scotland, arriving off the Aberdeenshire coast in September and the Firth of Forth by January.

## Making the map

The Forth Marine Mammal Project,

a Facebook group of marine spotters, regularly report sightings of seals, porpoises, dolphins, and the occasional whale from both sides of the Forth. The group is a fantastic resource for sharing sightings, but personalised reference points like "buoy no. 7", "white building", "three spires", and the similar names of the Forth islands (Inchcolm, Inchmickery, Inchkeith) was causing confusion. It was clear the group needed a reference map. Hydrographic charts were felt to show too much information for land-based observers, so I offered to make a custom map.

I'd missed the humpbacks in 2017, so this year I took every opportunity to jump on the train between the main viewpoints at Kinghorn, Burntisland and Aberdour. That allowed me to identify key features for a map through my own experience and speaking with fellow spotters.

The whales were generally moving in the deeper shipping lane, so I digitised the numbered lane buoys from OpenSeaMap. In real-life, the buoys aren't colour-blind friendly being red (port) and green (starboard), but I used different symbols as well as colour to improve accessibility.

For viewpoints and reference points

like Edinburgh castle, I made a design decision not to use a legend, instead using labels and common symbols including some from Ordnance Survey's GeoDataViz toolkit. I opted for Carto's Positron as a muted basemap to make the symbols stand out.

To promote responsible whale watching, I marked nearby railway stations to encourage travel by public transport, and made the decision not to show viewpoints which had limited parking to avoid congestion and not to upset residents.

After testing early versions, I also broke with tradition and made a south orientated map for people viewing from the Fife (north) side.

## Impacts of the map

The map was very well received and provided a common language to share sightings. We could look at the map, either printed or on our phones, and know "white building" was the Chancelot Mill or "three spires" was St Mary's Cathedral.

A local newspaper published the map along with the photos of a whale breaching with Edinburgh castle in the background, which in turn was picked up by national newspapers.

There was real excitement about these urban whales and the Facebook group grew from 300 to 1,600 members in a few days, with people travelling from around the UK to see them. But nature is a fickle beast and just as interest peaked, the whales disappeared.

As I write, the whales haven't been seen for a week, but we'll continue to watch the sea, hoping for them to return in 2019.

**By Liam Mason,**  
Liam provides spatial analysis and data visualisation for Marine Scotland, a directorate of the Scottish Government. In his spare time, Liam is an instructor with Kirkcaldy & district sub aqua club and a marine mammal medic for British Divers Marine Life Rescue.



# Journey to the Past

**J**ibal Al Masma displays the past through wonderful ancient rock drawings. Abdullah A. Al Sayari outlines the rewards of a recent trip.

In mid-March, I made my first trip in the footsteps of the old caravan route between the cities of Hail and Tema with a group of friends. The trip, over six days, retraced the steps of a route that has attracted travelers for hundreds of years, and more latterly, orientalist who visit the Arabian Peninsula to study the early civilisations that lived and traded there.

It is impossible for anyone who visits these areas not to go away with fond memories for this part of the Arabian Desert, and the desire to have the opportunity to return again and again. The scenery is breathtaking and the experiences along the way stretch the imagination and force you to carry them after you have left.

We started our journey on the Riyadh to Hail road in the early morning as we needed to reach the city of Hail around noon. Here, we took a break and had lunch before setting off for our next destination, Jabal Habran, which lies to the north-west of Hail, around 160km on a paved road.

We left Hail on the road to Medina and after about 38km turned to the north onto the road to Taima. After some 46km on this road, we turned again, this time towards Jabal Habran, for a further 80km, which we managed to reach before sunset. We chose a nice site off the road to erect our camp and spent the night in the arms of the Habran Mountain.

The next morning after a leisurely breakfast, we set off for a nearby mountain called Furdhat As'Shamoos, which lies to the south-west of Jabal Habran, around 30km away. It stands alone from the rest of the mountains and in between the

terrain is rugged road, alternating between sand and rocks and we had to spend more than an hour covering the short distance.

We stopped every now and then to search the folds of the mountain and at every likely spot that seemed as if it may have offered shelter, and we were rewarded when we found Thamudic engravings of a group of beautiful horses that were obviously domesticated. The engravings were located on a smooth rock face some fifteen metres from the base. We took a short break next to the engravings to take photographs and explore the area for more of these rock drawings by the people who lived in this place in ancient times.

Afterwards, we set off to the west towards Jabal Al Masma, a range of mountains stretching from north to south over approximately 50km. When seen from a distance, the mountains seem to block the road to An Nafud Al Kabir. However, to the east of the range there are many valleys through which you can pass and when we reached the foot we crossed through a valley called Wadi Ghadab. As we progressed into the valley going westwards, towards the centre of the mountains, the valley narrows and the terrain becomes increasingly rugged. We came to, and had to pass through, a huge rocky arch formed by erosion, which is named Ghar Ghadab. To the east of this formation there is a smooth black stone wall, which is filled with beautiful Thamudic engravings of a herd of camels etched in all different sizes.

Beyond the stone arch, we continued toward the source of

*Wadi Ghadab inscriptions*







the valley where the terrain is even more rugged and the valley gradually narrows until it became too difficult for the cars to progress. So we abandoned them and continued on foot. As the area looked extremely interesting, we thought we'd split into groups to explore the valley.

It only took a few minutes of walking into the valley before loud cheers and cries could be heard. Everyone was calling their friends to come and see what they had

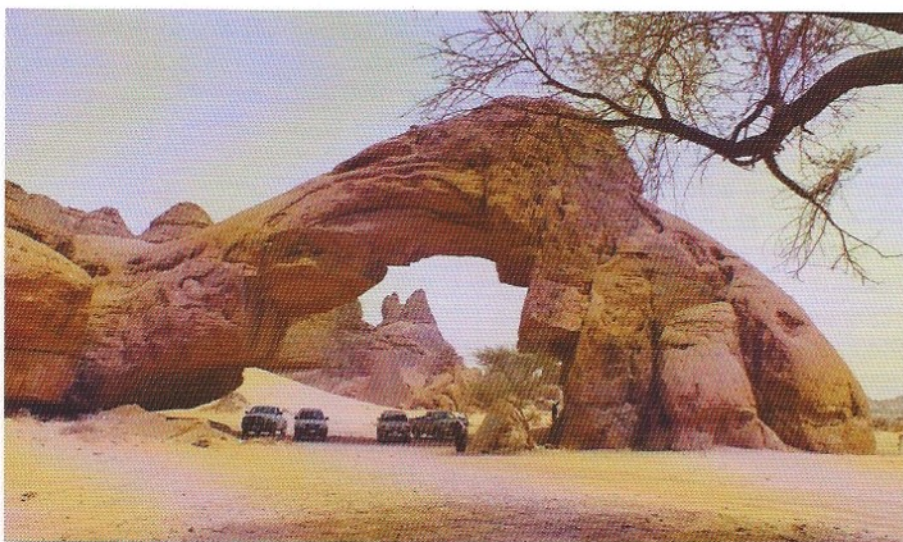
discovered. There were numerous Thamudic drawings and it was obvious we had found a large garden of engravings, perhaps as old as 7,000 years, or even older. I was struck by the large number and diversity of patterns in the valley. Within a couple of hours I had seen more Thamudic engravings and drawings than I've ever seen in my life of searching in the Kingdom.

Some were etched on horizontal surfaces, others on vertical rocks

and there were engravings from different periods and generations. There are engravings of animals, people and tools prevalent during the various periods. I particularly liked the drawings of the saddles used for carrying goods on a camel's back and allocated for the women when inside the tent. There is even an engraving of a warrior carrying a spear and leading his camel.

We spent several hours in this fine, rocky park taking many photos and sharing the experience, with no words being able to describe the splendor and beauty of the place or the emotions it evoked.

*The Ghar Ghadab - a huge rocky arch formed by erosion.*

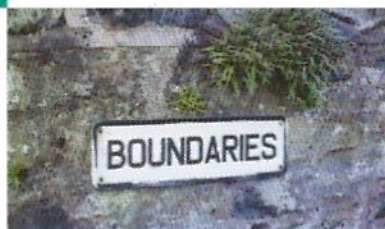


**By Jibal Al Masma & Abdullah A. Al Sayari**

## Voyager Tip

Abdullah A. Al Sayari runs Desert Maps in Riyadh's Industrial City 2. After nearly a decade of mapping, he has an extensive catalogue of maps covering the Kingdom. For more information contact Desert Maps at [www.desertmaps.com](http://www.desertmaps.com)





# Mapping the Borders: Charting Change

**M**apping the Borders was a week-long programme of cultural events which brought together contemporary art projects with maps chosen by the artists from the National Library of Scotland (NLS). The map collection was thus used as a lens through which to bring together diverse interpretations of the Borders' culture. Mapping the Borders was a partnership between the University of Sunderland, the NLS and local partners as part of the 2017 nationwide Being Human Festival<sup>1</sup>.

Mapping the Borders brought together the work of ten artists, using different media to interrogate the notion of 'borders' and in particular the Anglo-Scottish border. It is a region defined by its geographical location, of rolling hills and river valleys but steeped in contested history where tradition forms an important part of the cultural identity of its people. The actuality of this border gained particular significance in the 2014 Scottish Referendum debate, and it is no coincidence that several works in this show originated during this period. The two years leading up to Referendum was a significant time for a collective examination of the Scottish national identity, and by implication of the English nature of Britishness. The Brexit referendum has arguably brought this cultural identity crisis to the fore once more, but with broader geographical and political ramifications which will have long term implications on the concept of 'border' in the whole of Britain, as the current Irish border question is already making manifest. It is within this broader political and cultural background that this project should be considered.

An afternoon of Pecha Kucha talks at MacArts in Galashiels on Saturday 18 November launched

the week-long Mapping the Borders<sup>2</sup> event. The map curator of the NLS and the artists gave a succinct visual overview of the diverse maps and art practices presented. The talks were framed by the Lawes of the Marches (2013) film by Katie Davies, which explored the common riding traditions of the Borders, bounding the borders on horseback to this day<sup>3</sup>. The talks launched the exhibition that brought together the work of seven artists at Creative Coathanger in Venue 50 in Galashiels. Artist John Wallace used the Ecosystems Services Modelling Framework as a guide, exploring human connections to the ecosystems of the two border-marking rivers in his epic cinematic experience Tweed Sark Cinema (2013).

Zoe Childerley walked the length of the Anglo-Scottish border and recorded her encounters in *The Debatable Lands* (2016), in photographs and a hand drawn map collated in a concertina book which was stretched out in the exhibition like a meandering river. The *Riverways* (2013) map by Kate Foster, devoid of any place names or geographical data, observed that the catchment drawing 'moves you from the predominant perception of the Scottish Borders as a series of discrete small towns, towards seeing it as a region connected by the dense network of tributaries of the Tweed'. Similar in style to the hand-drawn map of Foster, if not in scale, was the *Upper Teviot Watershed* map (2017) by Alec Finlay and Gill Russell, displayed alongside the *Phylogenetic Diagram of the Upper Teviot river*, representing the flow of water, emphasising the arboreal nature of

rivers as a prompt to plant more trees in upland areas to potentially mitigate further flooding<sup>4</sup>.

Engineered flood protection schemes are currently changing the townscapes of Selkirk and Hawick. Change was also the theme of *Absense* (2013), an installation by Inge Panneels of the four Border Abbeys' floorplans embedded in glass and placed on a loosely drawn meandering river, chalked on an old plan chest. Their prominence in the landscape, nestled along the main river networks, are visible reminders of a turbulent past. But perhaps more importantly, their agricultural innovation changed the Borders landscape and land use forever. Clare Money's *Maplines* (2017) also reflected on absence in her works, notably the disappearance of the 98 mile Waverley Route between Carlisle, Hawick and Edinburgh in the Beeching cuts in the mid 20th century, which affected the rural Borders town. This disappearance is made visible by the erasure of the Riccarton Junction from the old OS map and the altered colouring of the landscape, now cloaked in regulation pine.

Prof. Mike Collier's work *Boundaries Are Well Observed by Crossing Them* (2013-18) was also explored

*Exhibition shot showcasing 'Border' and 'Drawinglines' by Clare Money. Photograph by Kevin Greenfield, 2017*







*Walking the Line and Crossing Boundaries, two walks on 19 November, Jedburgh. With Mike Collier (left) and Keith Bowey (centre). Image by Kevin Greenfield, 2017*

in two walks on Sunday 19 November in Jedburgh, organised through W.A.L.K from the University of Sunderland<sup>5</sup>, in collaboration with long term collaborator naturalist Keith Bowey. The walks raised the question as to whether ecological systems might be 'helped', not harmed, by incoming flora and fauna and thus asks whether conservationists might sometimes, unwittingly, promote a set of ideas that are tantamount to 'green xenophobia'? Bowey and Collier argued that borders visualised on maps are political and social constructs made substantial on the ground, and in our heads. Although borders may indeed sometimes be real in geographical terms, as physical barriers (mountain ranges or river valley systems for example), in ecological terms, the line on a map matters not to a nesting bird who chooses a habitat that will support its survival, and is thus not defined by geographical locality or human political identities, but by mortality. It was fitting then, that the final walk took in the town cemetery, where borders though present in temporal terms, are ephemeral.

The walk ended at the Hutton Unconformity, at Inchbonny, just outside the town centre. James Hutton sensed that the earth was many millions of years older than previously thought and came to realise 'That before the present land was made, there had subsisted a world composed of sea and land, in which were tides and currents, with such operations at the bottom of the sea as now take place'<sup>6</sup>. It is this movement that artist Claire Pencak observed in her chosen NLS map by Ptolemy: 'the vigorous way the sea is depicted suggesting a dynamic inter-relationship between the ocean and the land. You can sense the ebb and flow of the tide

and hear the sound of waves on rock'. Pencak explored this sense of movement in *Entr'actes: Alternative Arrangements*, a durational performance in collaboration with Felicity Bristow which took place at The Bakery Studio in Jedburgh in the ten hours from the dark before dawn to the dark after dusk. This experimental work, only glimpsed in fractions by its audience, explored accumulation and dis-accumulation, erosion and deposition, change of state, reset and rearrangement and the near, far and infinite through movement and materials to Hutton's Unconformity.

Mapping the Borders thus drew together ten diverse interpretations of the Anglo/Scottish border region, guided by historical maps to provide context to a contemporary interpretation of change. The timeframes of geological movement, the changing boundaries observed of non-human species because of climate change or the loss of human infrastructure,

and language... all allude to change. The Borders' expression; 'It's aye bin', which roughly translates as 'it has thus ever been' may refer to fondness of tradition and the slow pace of change, but as both the historical maps and the contemporary art works attest, change it ever was.

A short film about the exhibition can be seen here:

<https://youtu.be/x9UfBqn2wvE>

A short film about the walk can be seen here:

<https://youtu.be/KngbPqoy3Ro>

The artists talks can be seen here: [www.pechakucha.org/cities/galashiel/events/59f0e7c93c70ef911c0003dc](http://www.pechakucha.org/cities/galashiel/events/59f0e7c93c70ef911c0003dc)

## By Inge Panneels,

Inge is an artist and academic. For the last decade, her research has focussed on the use of maps in creative practices, including her own practice. She lectures at the National Glass Centre at the University of Sunderland where she teaches place making and mapping practices in a creative curriculum. She is also currently undertaking an AHRC funded PhD research project at Northumbria University looking at how artists are charting change in the Anthropocene in the New North.

## References

- 1 The Being Human Festival aims to engage the public with research taking place in the humanities, and is organised by the School of Advanced Study at University London in partnership with AHRC and the British Academy and delivered by HE institutions and their cultural partners across the UK: <https://beinghumanfestival.org>
- 2 Pecha Kucha talks, is a format of twenty slides shown for twenty seconds each which has been used worldwide to present in a succinct and visual manner. The Mapping the Borders talks can be found online at the Pecha Kucha website: [www.pechakucha.org/cities/galashiels/events/59f0e7c93c70ef911c0003dc](http://www.pechakucha.org/cities/galashiels/events/59f0e7c93c70ef911c0003dc)
- 3 The Lawes of the Marches was produced during the Berwick Visual Arts Residency for the 10th Berwick Film and Media Arts Festival and funded by Arts Council England in 2014. You can see Lawes of the Marches film at Katie Davies' website: [www.katiedavies.com/lawes.html](http://www.katiedavies.com/lawes.html)
- 4 Finlay worked collaboratively with Gill Russell and Kate McAllan to map the Upper Teviot. You can read more about this project on Alec Finlay's blog: <http://alecfinlayblog.blogspot.co.uk/2017/10/upper-teviot-notes-on-place-names.html>
- 5 W.A.L.K: Walking Artist Landskip Knowledge is a research centre based at the University of Sunderland exploring how we might creatively engage with the world as we walk through it: <http://walk.uk.net>
- 6 James Hutton from an abstract of his dissertation Concerning the System of the Earth, its Duration and Stability, 1785 presented to the Royal Society of Edinburgh. Reference made in notes made by Keith Bowey reflecting on the walk of 19 November.



## UKCC Report

**A**t the recent ICA Executive meeting in Zurich, we received the final report from the International Cartographic Conference in Washington last July. There was a total of 907 who participated in the conference in some capacity, with 650 full registrations and 150 students.

The scientific programme, arranged around 40 themes, included 466 oral presentations, 196 posters and 6 panel discussions. All presentations were reviewed by 3 members of the 80 strong Scientific Committee. Only 8 submissions were rejected outright, but about half those accepted as posters were submitted for oral presentation. In addition to these presentations, many Commissions had business meeting and most were involved in one of the 12 one or two day pre-conference workshop.

The table of presentations by country makes interesting reading, and perhaps raises some concerns the level of cartographic activity in the UK. Presenters came from 59 countries, an encouragingly wide range even if 18 countries only had 1 presentation. Not surprisingly, the US with over 100 presentations was way out in front, but some of our European neighbours were well represented with Switzerland at 34; Germany 28; and France 27. The UK with only 9 is a reflection of our current state of academic cartography. In comparison, the Czech Republic at 15 presentations and Poland with 12, many by young academics, reflect recent expansions of academic cartography in those countries. Surprisingly, there were only 10 Canadian and 3 Mexican presentations given their proximity to Washington, but a very significant 26 from Brazil which has had a major resurgence of cartographic research in recent years at several universities.

Presentations are only one side of the conference and not totally representative of overall activity within ICA, but they are a useful

indicator of engagement with cartographic research. Of course, these figures need some caution in interpretation. They reflect the declared nation of the lead author or presenter of the paper. Many are jointly authored, and my joint paper was delivered by my Malaysian PhD student, so is not included in the UK figures, whereas one suspects some PhD students will be associated with their country of study rather than their nationality.

The Cartographic Exhibition included 479 maps and cartographic products from 36 national and affiliate members of ICA. While there was an attempt by the organisers to de-emphasise printed mapping, there were almost 300 entries in this category, but only 44 digital cartographic products. The challenge of how best to showcase digital products remains an issue, but it is clear that printed maps are still very much a key element of cartographic output.

One must congratulate the Cartography and Geographic Information Society (CaGIS) for an excellent conference, but also for producing such a clear and comprehensive report in a timely manner. It will be most helpful to future organisers or those considering bidding to host an ICC.

As mentioned, the ICA executive recently met in Zurich, hosted by Sara Fabricant at the University of Zurich. As usual the meeting was very intense, but we managed to cover everything on the agenda by the end of day 2, prior to an excellent dinner generously hosted by the Swiss Cartographic Society. Despite the time of year, the weather in Zurich was quite benign, with temperatures in the 7-9 degree range and no sign of snow.

A new ICA Publication policy agreed at the previous meeting has been developed and agreement reached with the hosting service. This is intended for outputs of conferences and workshops. It has a 3 tier structure. Advances in

Cartography and GI Science will be for fully refereed papers; Proceedings of the ICA will be for papers based on refereed abstracts; and Abstracts of the ICA will be for refereed abstracts. These will all be open access publications, with the modest processing fee for each entry included in conference registration fees.

The current ICA Strategy is for the period until 2019, so half a day was spent discussing an updated strategy for 2019-27. It's early days and this will likely be a major focus of the next couple of executive meetings. More immediately, the President is very keen follow up on the ICA posters about mapping to support the UN Sustainable Development Goals, with a book on the same theme. If successful, this could be a significant way for cartography to reach government decision makers and scientists in other disciplines, and show that cartography can make a significant contribution to understanding issues and tracking achievements.

The UK Cartography Committee will next meet in June. A major item on the agenda will be the UK National Report to ICA, to be submitted to the General Assembly in July 2019. Our plans are to again publish this as an issue of the Cartographic Journal early next year, so requests will be going out for contributions later in the year. We also need to start considering UK representation on Commissions. But following on from some of the figures presented above, we also need to think about how we can encourage more UK cartographers to engage in ICA activities.

**By David Forrest, ICA Vice-President and Chair of UKCC**



*ICA Executives, Zurich 2018*