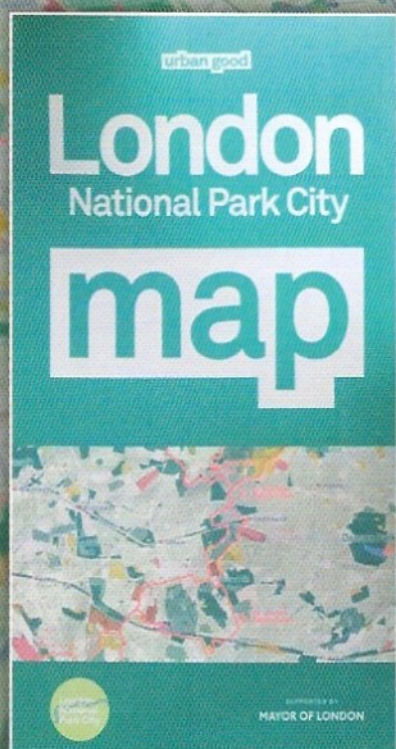


WINTER 2017

Maplines

BCS
Conference
Report

THE MAGAZINE OF THE BRITISH CARTOGRAPHIC SOCIETY



www.cartography.org.uk

UK £3.00

From the Editors

Welcome to the bumper winter edition of Maplines! For the first time in many years, we have put together a 28 page magazine. Please remember that Maplines is only as successful as its readership, so please feel free to submit articles and contact us with any thoughts you have on the content. Corporate Members may wish to consider placing an advert, or supplying information on new products and developments. It's your magazine and we cannot

compile it without relevant and interesting articles from BCS members. If you are a budding editor, please also contact us as we are always looking for volunteers. Whether you can give a few hours per edition to read some articles, or have a little more spare time to take on a Senior Editor role, we would like to hear from you. It just remains to wish you all a Merry Christmas and a Mappy New Year from the editorial team.

Louisa, Alice and Martin

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Contents

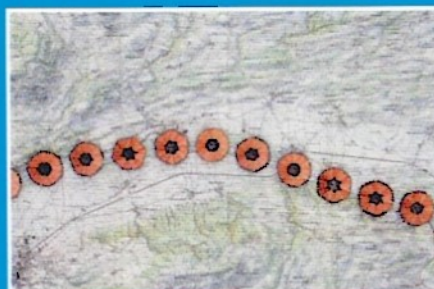
The Magazine of the British Cartographic Society (Registered Charity No. 240034)
Volume 31, 3rd Issue – Winter 2017

Maplines Regulars

- p.08 Admin Report
- p.26 Corporate Report
- p.27 UKCC Report

Also in this issue. . .

- p.04 Lore in the Time of Cholera
- p.06 Displaying 3D - Part 2
- p.08 Membership Changes
- p.09 National Map Reading Week
- p.14 TOSCA 2017
- p.15 Restless Earth Report
- p.21 Big Day Out
- p.26 Meet the Council



Along a Different Path

10 Tour of the 'Maps of the Imagination' exhibition and what was on show.

National Park City Map

12 A description of a new map showing London as a City of parks and green spaces.



A Message from the President

When Pete Jones asked me to stand as BCS President, I must admit that I was daunted by the prospect. If I had said in November 2015 that in two years' time we were going to rebrand the Society (including all our publications), launch a new website, work with partners in industry to introduce a range of discounts for Members, introduce a new bursary scheme for Symposia, establish a Social Media Team, fill half the posts on Council with new blood, expand our Restless Earth programme, take Better Mapping to local authorities and universities, publish the second edition of Cartography – an introduction, revise our membership categories to make it easier for anyone to join, open a dialogue with SoC to discuss merging the societies, and initiate a World Cartographic Forum to enable us and similar societies from around the world to share and learn from one another – all while changing the Society's administration and several key posts on Council – you would have thought that I was crazy. And rightfully so, since these are not my achievements but ours as a

Society, and each of them has depended upon the commitment and dedication of many individuals on Council and beyond.

The BCS is a great organisation and serving as its President for this short but exciting time in its history has been truly an honour and a privilege. Of course, there are many other things that I would have liked to see happen on my watch and the ride has not always been an easy one. But I am immensely grateful for every experience and to all who have supported me or challenged everything I have attempted to do. You have all helped to re-affirm why we do what we do as a Society and to maintain that level of accountability which is essential for good governance.

Anyone who has served as President will know that you are merely a steward for the next in line and I am confident that Richard Carpenter will build on what we have achieved to keep in tune with our members old and new. I know that you will join me in wishing him the very best of success in taking the Society forward and the opportunity to



Alex Kent

chart a sound course through the wide ocean that lays ahead. Onward and upward!

Dr Alexander Kent,
Outgoing BCS President

To read a message from the new President, turn to page 5.

Barbara Bond Honoured

Barbara Bond, BCS President from 1990 - 1992, has recently been inducted into the US National Geospatial-Intelligence Agency (NGA) GEOINT Hall of Fame. The Society congratulates Barbara on achieving this significant honour and on being the second Briton ever to be inducted.



BCS-SoC Conference 2017

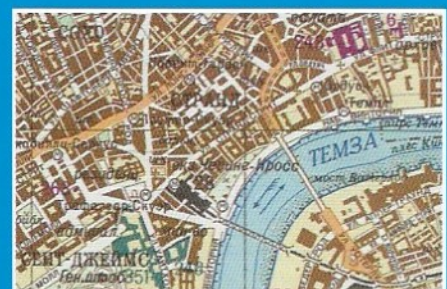
16

Everything you need to know about the conference, from the event itself to the awards.

ICC 2017 Reflection

22

Alex Kent reflects on the recent ICC 2017 held in Washington, D.C.



The Red Atlas Story

24

John Davies reviews The Red Atlas: How the Soviet Union Secretly Mapped the World.



It is perhaps one of the most evocative stories in the field of geography, John Snow, map in hand, storming into Broad Street, tearing off the handle of the water pump and saving countless lives from the misery of Cholera. Snow's study of the "Broad Street outbreak" has long been heralded as the start of spatio-analytical research and is often cited as a fundamental example of epidemiology. The story has been handed down, repeated, discussed and presented thousands of times as a vindication of the good things that maps and data can do. But what if the story is wrong, what if our geographic solipsism and romanticisation have distorted our understanding of the methods employed in its creation, and the conclusions that were drawn at the time. Two misconceptions persist around Snow's maps that have significant implications for how we merge examine geographic information and data at large. Firstly, that it was maps that led Snow to reach the conclusion that Cholera was water born. And Secondly, that his maps provided good evidence for this conclusion.

The first edition of *On the mode of communication of cholera* (OMCC), published in 1849 had actually contained no maps at all, and nor did Snow allude to the idea that a map had been instrumental in his discovery¹. It was not until the 1854 edition of OMCC that Snow's spot map was first published. It would appear then that Snow had developed and tested his hypothesis well before he drew his map. This is not an unlikely scenario given that he was already engaged in an ambitious

Lore in the Time of Cholera

study of cholera in South London. It was likely these earlier studies that led him to conclude that a sharp localised outbreak pointed to a contaminated pump rather than, as commonly reported, an induction arrived at primarily from the geographical facts of the case. Snow's map then did not give rise to the insight, but was the tool used to confirm and illustrate an already held hypothesis and conclusion. Furthermore, the idea of using a map was not uniquely his. Snow had cited the work of T. Shapter in OMCC's second edition, referring his production of spot maps of Exeter to examine the spread of none other than cholera. And spot maps had previously been used by both contagionists and anticontagionists to advance their stance in Yellow Fever research as early as 1798.



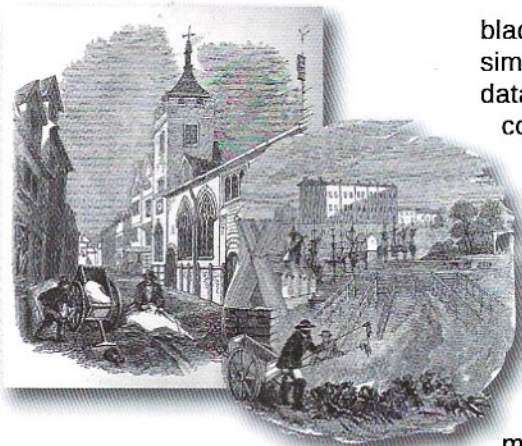
Thomas Shapter's History of Cholera in Exeter map.

Snow's map was really a data visualisation to prove a point he had already concluded. Yet, simply plotting deaths on a map did not lead others to reach the same conclusions, nor the immediate, unquestioning adoption of his theory. "On examining the map given by Dr Snow, it would clearly appear that the centre of the outburst was a spot in Broad-street, close to which is the accused pump; and that cases were scattered all round this nearly

in a circle, becoming less numerous as the exterior of the circle is approached. This certainly looks more like the effect of an atmospheric cause than any other" was the conclusion reached by Edmund A Parkes in his review of OMCC. Snow's map alone was not enough to convince either his contemporaries about his, albeit correct, theory.

What can we learn from Snow and his approach in the age of vast data sets and prolific uses of visualisations. The trap of examining Snow's work is in positioning him as a mapmaker without an appreciation of Snow the thinker. Data is meaningful because of how someone collects, interprets, and forms arguments with it. Data is not neutral. The goal of Snow's maps was not to produce data, but to filter data, to reframe his hypothesis. Snow's original theorem was discounted and his map was misinterpreted. Yet, together they were able to support each other, leading to the saving of many lives. The Big Data age is moving us into a new epistemology in which knowledge politics are deeply embedded in what counts as data, how those data are represented and the proposes for which those representations may be used. Evidence has shown that we will continue to see marginal increases in predictive performance through data to a massive scale², but these increases are useless if we are representing this data through an epistemology that embodies an unquestioned form of legitimacy and power, such as that often given to map-based artefacts, and which leads to wide misinterpretation or which is based on unsound hypothesis. Data, plotted in the form of a highly sophisticated and accurate map, may easily seduce us into concluding that we have learned something.

Our new found access to data should be considered as less a physical change, but more as a



People removing and burning clothes infected with Cholera.

paradigm shift. Data won't solve issues on its own, but it allows us to think differently. We should embrace this technology, but not to become besotted by it. Key to the integration of data as a meaningful tool of analysis is ensuring that it is viewed as much as a social innovation as a technical one. The future of GI isn't about pulling mass amounts of data towards the centre like a

black hole, it's about pushing for simple, purposeful and considered data collection leading to better collaboration, analysis and understanding. While our understanding of Snow's map production and methodology might be skewed by myth and legend, the truth of the story is still a shining example of how to blend mapped data, visualisation and theory. The Broad Street maps and Snow's work demonstrate that the mere act of arranging data graphically in space does not yield new understanding without the support of a solid, considered and researched theory, and that our theories will be widely dismissed if we have not explored all hypotheses and represented them appropriately, regardless of the size of our data set.

By Doug Specht,
Doug is a Lecturer at the Communication and Media Research Institute, within the University of

Westminster. His research examines how knowledge is constructed and codified through digital and cartographic artifacts, centering on development issues. He sits on BSI committee IST/36 Geographic Information and holds positions at Media Culture and Society and Westminster Papers in Communication and Culture. He is additionally the director of the human rights mapping platform Voz; a trustee of the Santa Rosa Fund; and a core member of the Environmental Network for Central America.

References

- i Brody, H., Rip, M. R., Vinten-Johansen, P., Paneth, N., & Rachman, S. (2000). Map-making and myth-making in Broad Street: the London cholera epidemic, 1854. *The Lancet*, 356(9223), 64-68.
- ii Junqué de Fortuny, E., Martens, D., & Provost, F. (2013). Predictive Modelling With Big Data: Is Bigger Really Better?. *Big Data*, 1(4), 215-226.

A Message from the New President

Firstly, I'd like to express my thanks to Alex for his energy in taking the Society forward over the last two years, in so many ways and providing us with a momentum to take us further.

A key element of our recent membership review has been to reflect on how we can better interact with you as members. We want to ensure that as we develop further member benefits, these are delivered in ways and places as accessible to as many of you as possible.

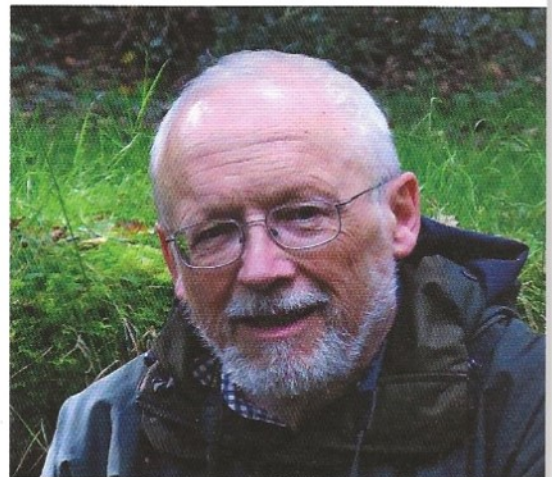
As your new President, I am determined to ensure that the Society maintains its relevance and vitality in a changing social and technological context. To this end I hope that we can continue to connect with the full breadth of the cartographic community, and in so doing, provide:

- A forum for the exchange of ideas across the whole spectrum of cartography
- A space where both specialists

and generalists can feel comfortable and yet also be challenged

- Enrichment for those coming into the industry or producing maps on an occasional basis through events like Better Mapping and our less-formal publications
- A wider awareness of the practice and profession of cartography
- Inspiration for the next generation through activities such as Restless Earth
- Representation of the cutting edge of cartographic research through publication of the journal

On a personal note, it's now almost 40 years since I entered the professional world of cartography on joining the UK Hydrographic Office having worked with OS maps in my teenage years, dabbled in geological mapping while at university and encountered nautical charting while working as a volunteer (with what is now the Mission to Seafarers) in the port in Rotterdam.



Beyond cartography, I've now reached the age of grandchildren and am actively involved in our local church and as governor of a highly successful, large primary school here in Taunton.

In closing, I am glad to be able to report good news regarding the Restless Earth Coordinator role and can confirm that Jennifer Johnston will be taking up that activity from January.

Richard Carpenter

Displaying 3D GIS

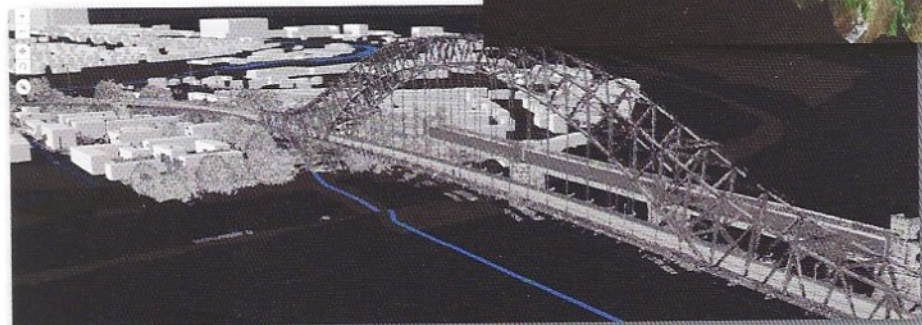
In this article, I aim to cover ways in which we can display 3D GIS. Now it would be way too easy to get embroiled in the arguments over 3D cartography, how many hours have I lost discussing the issues with mimicking the real world over conveying insightful information? I've lost count! No, instead we will carry on where we left off and discuss how we take 3D data which we have collected from a survey or by creation and we make them available to be seen and used.

Before we fully discuss how we can relate our data to others, we need to understand how the end user intends to consume the data. Much like normal 2D mapping, you can relate the information in all manner of fashions, from web mapping through to your good old faithful PDF (yes you can provide 3D in PDF!). So first of all, I'm going to return to our list of data types and discuss how they can be represented in different GIS before the crescendo that is how they can be displayed.

Point Clouds: (LiDAR, Bathymetry, Laserscan)

Often displayed in 3D within a software like Meshlab or CloudCompare, though recent innovations in technology (by use of quadrees and octrees) have allowed point clouds to be rendered in a 3D GIS like Global Mapper or ArcGIS Pro but also via the internet in 3D, using

Point cloud rendered through WebGL.



software like PoTree (LASTools), ArcGIS Online (from ArcGIS Pro) and Cesium.

Point clouds are difficult to relate in a 2D format and therefore they are converted to raster more often than not as a compromise when used through PDF and paper formats.

Image Formats: (Aerial, Digital Elevation Model)

For GIS purposes, these formats can be used easily in all 2D GIS and 3D GIS. Elevation is normally represented by colour ramps to indicate the difference in elevation within a GIS, though contours and hillshade are often used on media.

These image formats can be provided in 3D through 3D WebGL, 3D GIS (normally the imagery is draped on the elevation data), in 2D this data can be provided in all the normal print and paper formats using good cartography to overcome the representation of elevation.

DEMs are easy to use in virtual, mixed and augmented realities and, when used with other

Mesh derived from aerial imagery.



topography can be a good method of delivery to engage clients but interaction with tools like measuring and attribution are still in the early stages.

Mesh: Google Earth type buildings and triangulated models

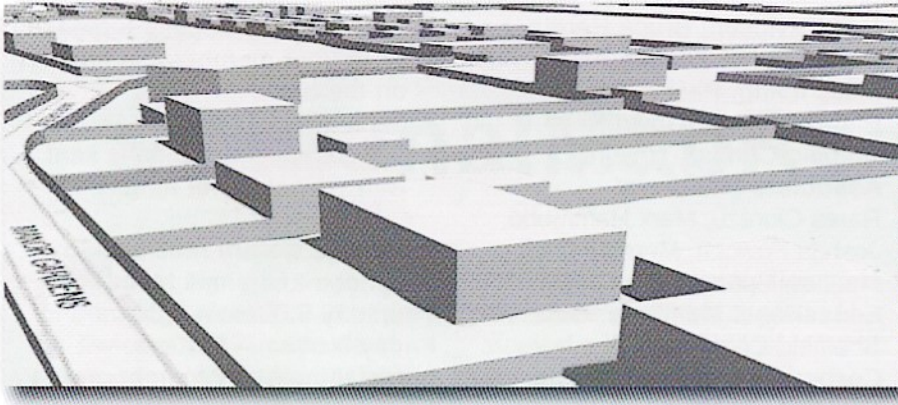
Although I've previously discussed mesh, I will reiterate that it is a triangulated surface which is commonly derived from stitching DSM data together, sometimes with LiDAR or laserscan.

This has to be shared in 3D. Best known for its' use in gaming this data is light and fast in a digital 3D environment but lacks detail when close up so is often presented through WebGL (as is expected due to its' frequency on Google Earth).

Vector Formats: (Point, polyline, polygon, multipatch, multipolygon)

Vector formats are the most flexible as they can be represented in the most display and media formats. Interestingly the polygon, multipatch and multipolygon can

not only be represented in the normal 2D print and 3D WebGL but also in 2.5D... This is a new concept whereby the extrusion is shown in 2D to form a "pseudo 3D" - you cannot swivel and orientate yourself around the data in the same way you can in a 3D



Vector data represented in 3D GIS.

environment but you can get an idea of the height of objects easily. This is often found in QGIS (through the 2.5D style option) and Mapbox WebGL. One further format which is often overlooked for vector data is 3D printing.

Let's now look at those representation formats a little closer and how they are commonly used:

2D Printing & PDF

This is the oldest and most common format for relating information, good for both individual use or in print for collaboration. 3D models can be used within the PDF format (digital only) though it is for small models and individual features as the PDF file size can grow to be too large to be of use.

Using vector layers allows attribution and hyperlinks to be kept within the data layers so that you can provide more informed mapping.

Did you know that PDF format can be geospatially enabled or that the military use it in this way?

Web Mapping

This comes in 2 guises, 2D and 3D (also 2.5D but not as common). Web mapping is extremely useful for relating information to teams at distance. The primary reason web mapping is more useful in both 2D and 3D is that multiple layers of information can be viewed interactively (turning on and off layers) or specific areas can be focussed on using zoom to provide more information. This is

something which is not possible with printing or PDF.

More advanced web mapping can make use of mark-up and measuring, meaning that issues, questions and changes can be related in real time through the internet.

Desktop Interface

Often overlooked as a provision option but in this day and age there are many free GIS options or even GIS data viewers which provide many options to gain more information from the data or to create presentations and animations.

Where non geospatial users are used to using interfaces like Google Earth and online maps, using these data viewers (ArcGIS Explorer, QGIS, Google Earth) are second nature.

I've personally found these extremely useful in client consultations or where there are large amounts of information to convey but the client wants full understanding of the risks & issues (these can be provided as hyperlinks to documentation, videos & external website).

Virtual, Mixed and Augmented Reality

This is slowly becoming a common technology for client engagement due to the ability to move around and be more interactive with the data. Although it is relatively cheap and easy to create, the Virtual Reality headsets are still quite expensive and changing geospatial data over to a gaming environment can lead to issues.

Augmented and Mixed Reality are a lot more affordable and the information can be often given as a mobile phone application which makes it ideal for large teams but, at present, the current wave of AR & MR software lack the ability to provide measuring tools (though can provide attribution identification). That is not to say that it can't be done with development, as there are examples out there, though it is a cheaper option to use a desktop interface or web mapping at present.

Of course there are other niche methods for presenting data which I cannot cover in this brief piece, things like immersive rooms, holographic presentation and even plain old Powerpoint presentation, I am sure there are yet more than this too.

In each of these representation formats, whether it be print, 3D web or augmented reality, there are different cartographic challenges, from the way light can alter colours in 3D, through to the brightness of the computer screen affecting the clarity of information, the great thing about the British Cartographic Society is that there are experts from all these fields ready and waiting to help. Now that I've laid out how the many types of data can be captured, used in GIS and represented, I look forward to articles on the challenges of representing information using these mediums cartographically.

By Nicholas Duggan,
Nicholas is a Chartered Geographer and Fellow of the Royal Geographical Society. Currently the Principal Geospatial Specialist at Garsdale Design Limited, Nicholas is also European Editor for xyHt magazine. With a career spanning both offshore and onshore sectors, from survey to as-built monitoring, he has innovated solutions and has extensive experience in visualising geospatial information. Nicholas has done many talks on 3D GIS, as well as contributing to the BCS's "Better Mapping with QGIS" workshop. He is Co-Convener of the 3D SIG with Elliot Hartley.

Admin Report

Membership

Thank you to all our members who have renewed their membership for 2017. And of course, a big welcome to our new members.

New Members

The Society has the pleasure of welcoming the following new members to the BCS:

- **UK Members:** Henry Holbrook, Aubrey Thomas, Matthew Chaddock, Kevin Black, Geoff Chapman, Mike Hollies, Giulia Lucangeli,

Neil Davidson, Bruce Hardie, Robert Lang, Zeshan Alli, Miles Irving, Paul Ayres, Piotr Zdziarski, David Kaye, Antonio Cendan Teixeira

- **Associate Members:** Rares Ciurezu, Mark Hammond, Joshua Fawcett, Morris Pamplin, Matthew Spencer
- **Educational Members:** Ormiston Sheffield Community Academy
- **Corporate Members:** Pindar Creative

Renewal / Joining Methods

- Through the website: www.cartography.org.uk
- Personal Cheque made payable to The British

Cartographic Society – please write your membership number on the back.

- Bank standing order
- Debit/Credit card details sent with your renewal form.

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

Email: admin@cartography.org.uk
Phone: 01223 894 870

Deimante Janaviciute,
BCS Administration

Membership Changes

Recognising that costs have risen for us all, the Society has been loath to increase subscriptions in recent years, but it has become clear to Council that we now need to do so if the Society is to sustain and develop its activities. While our finances remain sound, the Society does require further funds to, for example, continue expansion of our educational provision – not only through the Restless Earth schools programme, but also, we hope, through shorter talks (based on the Better Mapping principles) delivered to specific audiences. We have already piloted these both for university geography students and local authority GIS teams.

We approached this issue not just as a question of finance but to use the opportunity to re-examine how we provide access to the Society and its benefits for different sectors. From this review, we have left the various corporate memberships largely untouched but have taken the opportunity, we hope, to raise the profile of those active in our profession and to provide two,

new, lower-cost categories with benefits targeted at the need of specific communities.

We are therefore renaming Ordinary membership as Full and replacing Associate with Affiliate and Student, with minor changes to the benefits received. The latter in particular is designed to provide the key benefits of membership at the lowest cost for those entering cartography.

Full Members will receive all the existing benefits of Ordinary Members, plus free access to BCS workshops (such as Better Mapping) and associated resources. Full Members can be listed in our Freelancers' Directory (as appropriate) at no additional cost.

Affiliate Members will receive *Maplines* in print form and will continue to have access to the archive of back issues but, unlike the previous Associate membership, will no longer receive *The Cartographic Journal*.

Student Members will get access to *Maplines* and *The Cartographic Journal* in digital form and will be

able to attend workshops (such as Better Mapping) for free.

From 1 January 2018, the annual subscription rates for each category will be as follows: **Full** (£40); **Fellow** (£60); **Student** (£20); **Affiliate** (£20); **Corporate** (£200); **Small Corporate** (£100); and **Educational** (£60). In all cases, there will be an additional charge of £15 per year for overseas memberships. VAT on subscriptions for individual membership categories will be rated at 0% and at 20% for corporate membership categories.

You will have noticed that the original proposal for the recent EGM including the renaming of Ordinary membership as Professional. At the meeting, it was agreed to adopt an amendment proposed from the floor to use the term Full instead of Professional and to make a minor modification to the description to read, "Full Members, who shall be over 18 years of age who normally are, or have been, professionally engaged in mapping or associated fields, or who have a substantial interest in maps or cartography." as this was deemed to be more clearly inclusive and therefore more closely aligned to the spirit of what Council were trying to achieve.

NationalMapReadingWeek

This year National Map Reading Week (16-22 October 2017) coincided with one of my Mini Map-Makers Workshops. A last minute 'save the day' at Park Street Primary in Cambridge as they had been let down by another provider – to host a map day with all 120 children. I received an email and call the Friday before to ask if I could come up with something for 4 years from Reception to Y4 (ages 4-9) and them all to have a go at each session...

Challenge Captain Alice! I asked what they were doing in their Maths, English, Science and Geography subjects and to base it around that...and to get outside! No point using maps just inside! After all Mini Map-Makers motto is #GettingChildrenMapping

Timetable sorted, activities sorted, resources purchased, printed, stapled and sorted! Now slow puncture – don't let me down. BEEEEEEEEPPPP as I left Bedford..NO NO NO! Phew just a false alarm..sensitive car.

I stayed in Cambridge the night before at my family home – my mum was a teacher, so she really appreciated what a last-minute effort that this had been and reassured me how brilliant it would be the next day!

The next day I met the teacher at the gates – at a school I know as I used to cycle/walk past it daily on my way to school. There were 5 teachers and 5 support staff, 112 pupils (8 were off as it was the day before half term) and me and all the resources!

Each class had been allocated an activity and were to rotate, the older ones went on their Walk-About with their map books and compasses! It started raining...while I took Reception, Yr1 and 2 children for 'X' Marks the Spot, Year 3 started their Colourful Cambridge competition! It was all go!

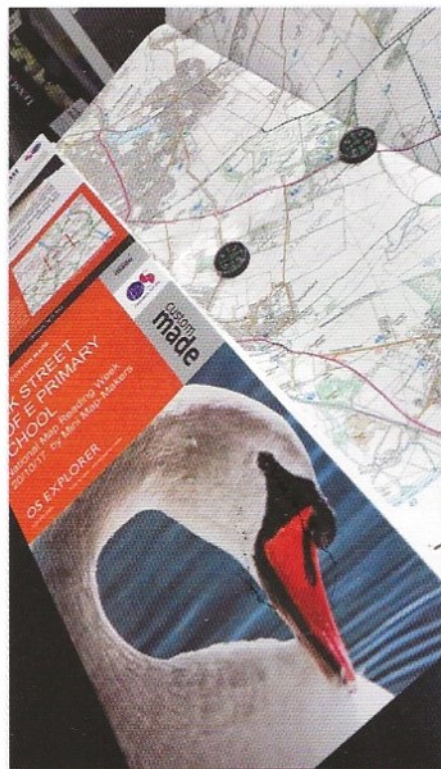
Each school I visit, I gifted them a custom-made site centred Ordnance Survey Map, printed and delivered by Dennis Maps, for them to use with instructions on map reading and symbol identification!

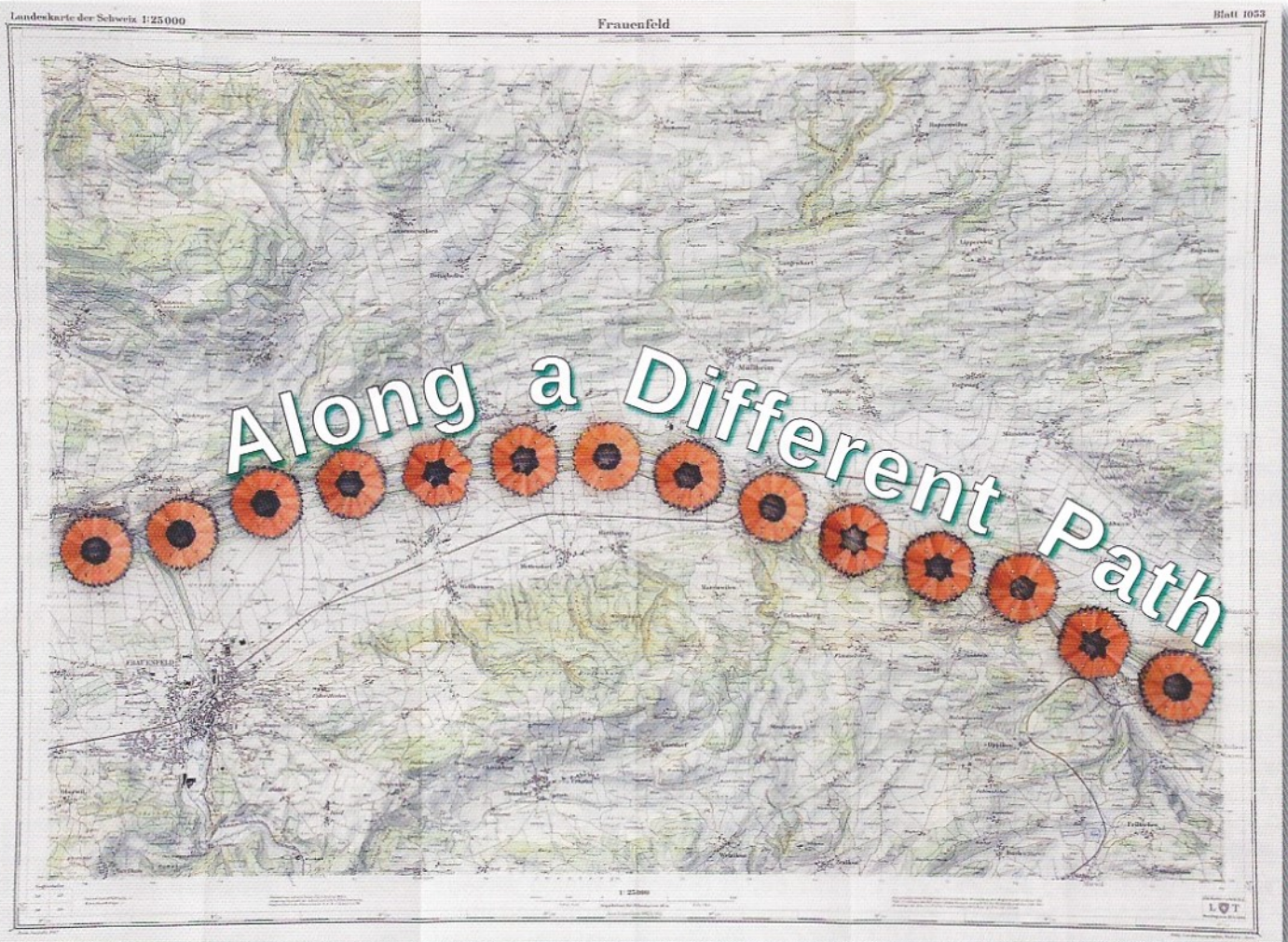
Colourful Cambridge is an Art display for each class to have on their wall – decorated by each pupil to make up one cARTography piece.

By Alice Gadney



Below: Custom-made Ordnance Survey Map, printed and delivered by Dennis Maps.





In the Spring of 2016, I was walking around an exhibition in London, when something seemed familiar about a pattern of lines, cut with precision from white card, floating in a frame. 'Just like the street pattern of Edinburgh', I thought. 'And isn't that Duddingston Loch?' There was nothing to guide me, just an expanse of white and the shadows cast by the missing spaces. A glance at the wall label adjacent indeed told me, 'Edinburgh'. When we think of maps, we think of information that exists outside ourselves, in clear labels, contour lines, colours and symbols. Artists present us with new ideas, inviting us to experience things differently. Here was a map that made me aware of the cartographer inside myself, of the shape of a city I love. 'Edinburgh' (2015) is the creation of Andrew Wenrick, an architect-artist whose meticulous craftsmanship and attention to detail is evident

in all his artworks. Now in a Private Collection, it was nevertheless to become the inspiration for curating a map-themed show and 'Maps of the Imagination' became the opening show for my gallery in St Andrews, Scotland.

I soon began to find other artists inspired by maps. Whenever possible, I met with the artists and visited their studios. Andrew Wenrick showed me some of his other map-themed work and together we made a selection of six for the exhibition. 'I WONDER . . . BRITISH ISLES' [pictured above] has been a favourite with visitors to the gallery. Longitude and latitude lines form a precision-cut grid over a map of the UK printed on Italian art paper. Concentric circles in the London area draw the eye toward the site of the Greenwich meridian. The artist has cut out each and every resulting rectangle and crushed the paper

"I Wonder" by Andrew Wenrick.

in hand until it felt soft, 'just right,' then replaced it in the grid – the process is invisible in reconstruction and the resulting surface contours are gorgeous. While the work is on display on an easel in the gallery window, I invite viewers to have a look at the back of the frame, where there's another treasure waiting to be found.

I'm also excited about presenting six of Elisabeth Lecourt's 'Les Robes Géographiques,' a series of 'map dresses' she has been developing over the past 16 years. She created one especially for 'Maps of the Imagination,' from an 1893 map of St Andrews. Her use of colour and composition delights everyone who views her work, as does her originality and craftsmanship.

At the same time, I commissioned a map-inspired collection from the

jeweller Dominic Walmsley. I visited his Kent shop and workshop to show him Geddes' mediaeval map of St Andrews (c. 1580). Having already seen the jeweller's collection inspired by a mediaeval map of Clerkenwell, I knew he would create something beautiful from Geddes' cartography. We identified an iconic location on the map, still clearly recognisable in the St Andrews of today. He and his workshop have created beautiful St Andrews map cufflinks, earrings and pendants in

St Andrews silver pendant with Swiss blue topaz hallmarked - Dominic Walmsley.

silver, gilt and precious gems.

The Gallery opened on 18 August this year. For me it was a dream made reality, as well as a switch from 'gown' to 'town,' from my student days in St Andrews some 40 years ago, to living and working here. I've enjoyed the enthusiastic responses from townspeople and international visitors alike, and was excited to have geographers, a cartographer, a navigator and even a member of Washington DC's Map Society visit. The

gallery exists to support artists in their living, so I always hope

enthusiasm will translate into support for them. They're all immensely talented, hardworking and certainly have good futures ahead of them. All works are up on my website. Please call me or send me an email if you are interested in starting, or adding to, your map-themed art collection, or if you wish to purchase a very special gift for someone else. Please do support these gifted, committed artists with the encouragement and affirmation your investment represents.

May I wish all members of the Cartographic Society a very happy, peaceful Christmas season.

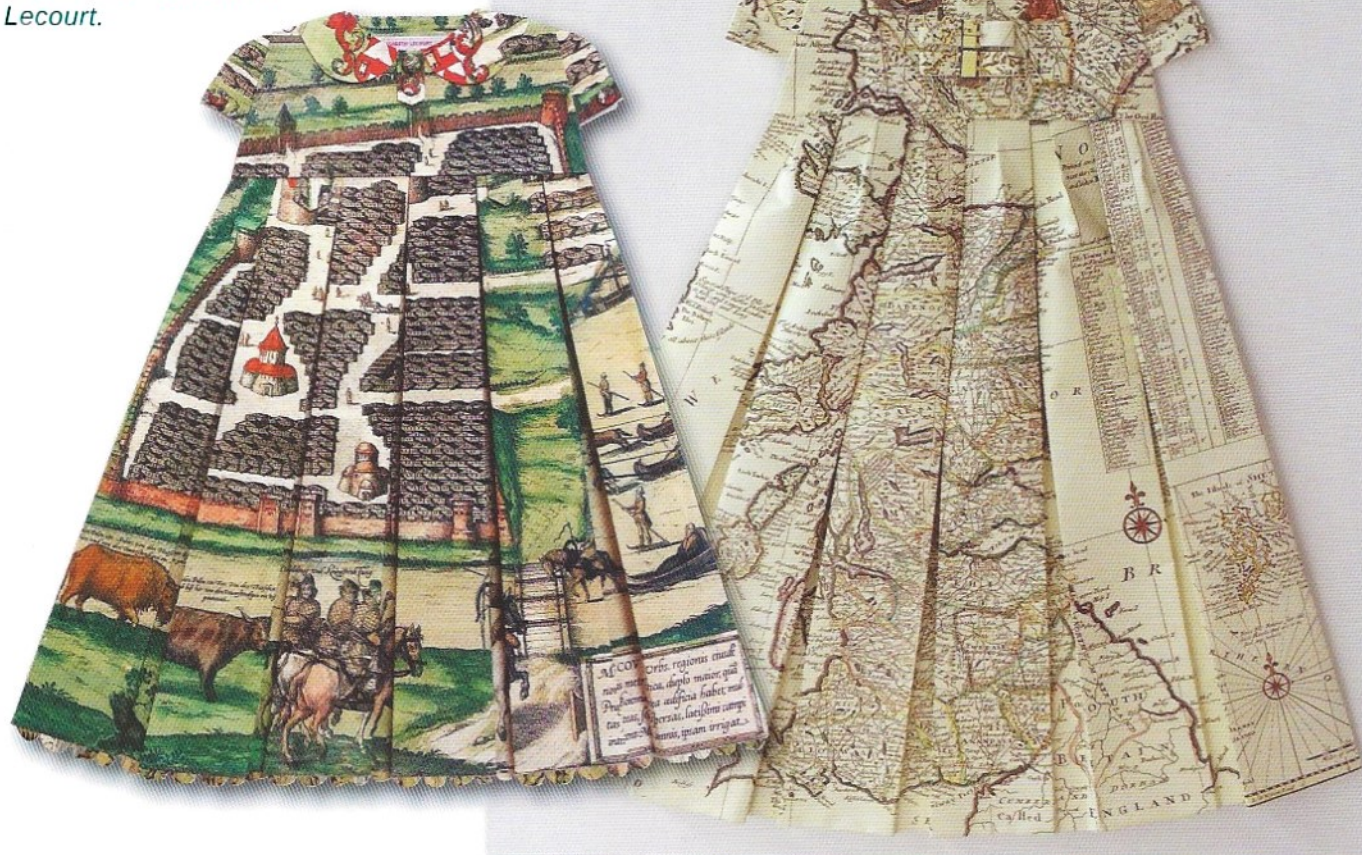
By Beth Junor,

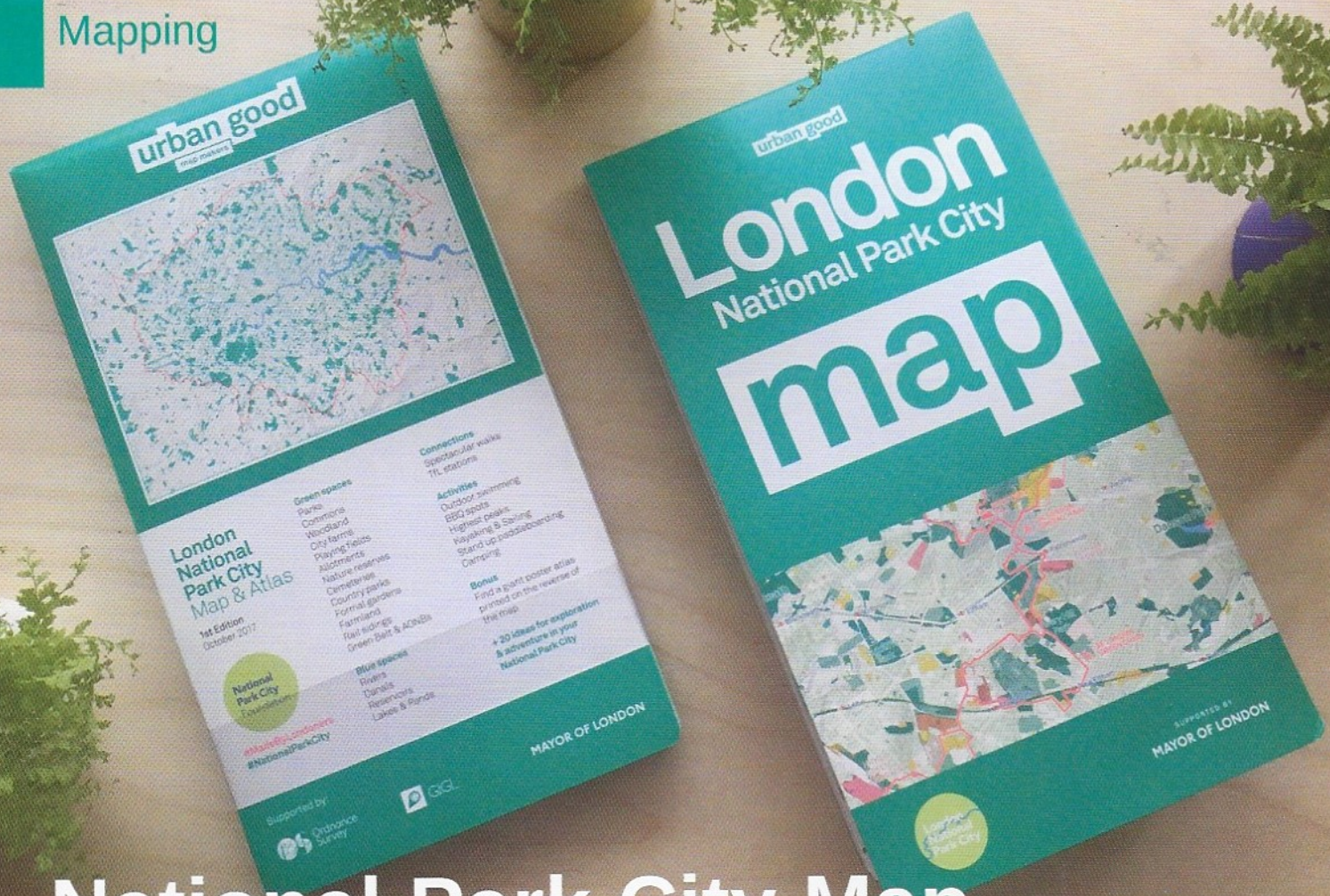
Website: www.junorgallery.scot

E-mail: info@junorgallery.scot

"Les Chaussons Précieux (Pommes) Regardent Le Sud" Map of Scotland – Elisabeth Lecourt.

"Anastasia Princesse Des Emeuraudes" Map of Moscow - Elisabeth Lecourt.





National Park City Map Reveals London as a Territory for Outdoor Adventure

A beautiful new map showing London as a City of Parks, Waterways and Wild green spaces has been created by Charlie Peel, founder of Urban Good.

When I heard that a quarter of 14 year olds in London had never seen a woodland, yet all of them lived within a few miles of one, I realised we needed a new map of the capital. Connecting children and adults to nature, finding play spaces and sports pitches, seeking out new trails, cycle paths and outdoor pools, and where to look for all the above was ample motivation to keep Urban Good on the year-long journey to create the map.

We have an amazingly green capital city. Our outdoor spaces are largely free to access and the

activities they offer are generally subsidized with the aim of being affordable to all. Yet the knowledge of where to find these places and how to access them is not as widespread as I would like.

For me, the London National Park City movement is all about inviting Londoners to look again at the city they live in. We need to celebrate the green spaces we have and spread knowledge and awareness of them. This map is my contribution to that aim.

The view of London that you unfold in this vibrantly coloured and giant expanse of paper is filled with 1000s of parks; places you never knew were right around the corner. But as your eyes adjust to the overwhelmingly green depiction of the city, I hope

you'll see there is also a wealth of information in there.

Epic walks that bisect or circumnavigate the city are drawn as florescent Pantone lines, weighted to distinguish the official Walk London set of seven from other beautiful trails around the city. Mini pictograms show activities across the capital: from barbecuing sites and city farms to places for kayaking, sailing and stand up paddleboarding. The woodland regions and a rich hill shade bring the landscape to the fore and sit this map firmly in the canon of National Park maps. This one of course charts a fundamentally different territory; it shows the world's first National Park City.

Flip it over, and a whole atlas is revealed. We graphically tell the



midnight hours spent refining the artwork.

I wrote to Iain Sinclair about the map. Through his written words on London he has inspired thousands to lace-up their boots and trace historic or contemporary narratives through the urban form. He wrote back with some words for me to print inside the cover, and I think they warrant any cartographer's attention: "Maps are the memories we have not yet earned. A solicitation and a goad to get us out in the territory and on the move, challenging or approving the fictions of the map-makers."

A single glance at the National Park City map cannot help but re-frame the way you see this favourite city of mine. But to study it will empower you. Urban Good would love to share it with you and will send you a free copy if you help us pay the postage. Visit urbangood.org to get yours.

By **Charlie Peel**

All image credits go to **Charlie Peel, Urban Good.**

story of why London deserves this noble title: infographics depict the breakdown of land uses, and show the near one-to-one ratio of trees-to-people. The most popular element has been an inset map of London's rivers: lost or flowing. Then 20 ideas for exploration.

So what's missing from the map?

Just the buildings and the roads that can only be read from the white space they leave behind. Powerful data from Greenspace for Greater London (GiGL) and Ordnance Survey's new open data GreenSpace underpin the map, while numerous data sources layer up all the activities. It was the result of hundreds of



Ask most people what is the purpose of a map, and you'll get an answer along the lines of 'to tell you how to get from A to B'. To those of us who read maps with the same avid concentration as a great novel, we could add 'to travel the world, without leaving home'. At the recent 25th anniversary gathering of the Oxford Seminars on Cartography (TOSCA), both strands were evident. In the comfort of the Weston Library of the Bodleian, we went from A to B, via most of the other twenty-four letters of the alphabet, and roamed widely, not just across the continents but the centuries too.



*Danny Dorling delivering his paper.
Photo courtesy of Tessa Rose.*

"Enlightening maps" was the theme, and it was no empty promise. In his opening lecture, Danny Dorling set the bar high, in showing how the digital age has revolutionised cartography as he crunched and cross-referenced data between its social, geographic, cultural and economic components. The spirit of political focus continued with Megan Barford of the Royal Museums in Greenwich looking at modern migration maps. The morning was wrapped up by an entertaining freewheel through loaded propaganda mapping by Kenneth Field. In the era of fake news and fake facts, and of easy counterfeiting, there was plenty both to laugh at, and be quietly horrified by.

Fake mapping has a very long pedigree, as shown by Katherine

Parker of the University of Pittsburgh, who gave a hugely entertaining lecture on the cartography of thin air, explorers' chimeras in the south Atlantic in the eighteenth century. Vanessa Collingridge continued the theme with an exploration of the fantastical geography of the fabled Great Southern Continent in the same era, just before explorers joined the dots and its shape finally coalesced into the Australia, New Zealand and Antarctica that we know today.



*Cartographic conversations in the Centre for Digital Scholarship.
Photo courtesy of Nick Millea.*

Booted out of our seats and sent upstairs, we were encouraged in a series of 'Cartographic Conversations'. There had been plenty of those happening all day, but these were structured, with different experts – some of the day's lecturers included – presenting assorted maps of interest and enabling one-to-one discussion. Again, a wide and fascinating variety, with some focus on the eighteenth century: the evolution of the Prime Meridian, explorer James Bruce in Abyssinia and Benjamin Cole's Oxford maps of the age.

It was supposed to be the estimable Peter Barber delivering the final lecture, but a snapped Achilles tendon put paid to that. I

am a huge fan of Peter's, but I have to say that his replacement – Mary Pedley of the University of Michigan – could not

have been bettered. As co-editor of the forthcoming volume 4 (Cartography in the European Enlightenment) in the mammoth book series, The History of Cartography, she pulled together many of the day's themes and gave them depth and context.



*Mike Parker delivering his toast.
Photo courtesy of Nick Millea.*

Nick Millea, the Bodleian Map Librarian, and Dr Elizabeth Baigent of the University's Geography department are to be congratulated on such an enjoyable and well-organised day. I only wish that more punters had made it to the event; if you've never been to a TOSCA day, consider it seriously. Beyond the quality of the presentations and the efficiency of the organisation, the Weston Library made for a superb venue. In a day of so many great maps, my favourite lives in its foyer: the huge and colourful sixteenth century Sheldon tapestry map of my home county, Worcestershire. Meeting it for the first time was like coming face-to-face with a venerable ancestor. It was the perfect coda to an excellent day.

By Mike Parker,
Website: www.mikeparker.org.uk

This event was kindly sponsored by Esri UK and Lovell Johns.

Restless Earth Report 2017-18

A huge congratulations to Ormiston Sheffield Community Academy for winning the Restless Earth Award 2016-17! Also to King Edward VI Camp Hill School for the Commended Award!

I was really happy to see the Sheffield students again and great to see them participate in the conference and talking to delegates!

It gives them a great insight to the world of cartography and gives us great exposure to the younger generations of potential cartographers.

Likewise, with the Restless Earth Volunteer of the Year Award Winner River Burton – he attended the conference and gained valuable insights to the cartographic world. He also met someone who he read about at university and studied their new ways of Mapping – Professor Danny Dorling!

Restless Earth is in a transition period of Coordinators, but I am very happy to announce that we have found a new one! Jennifer Johnston has accepted the role! She brings extensive knowledge of cartography both educational and practical and I can't wait to welcome her from Canada in the New Year.

The format and the resources of the RE Workshop haven't changed however we are considering developing a digital version, that can be accessed post workshop.

After the recent few months of hurricanes, earthquakes and potential volcanic explosions, the world has been exposed to exactly why disaster aid mapping is essential. The roles played out in RE have certainly been visible on the screens and in our papers!



Students of Ormiston Sheffield Community Academy collecting their winning certificate.

Restless Earth isn't a made up scenario – it happened and still in 2017 people of Sendai and the surrounding areas – especially Fukushima are still not allowed to return home..like if you left your house today, that's it – you can't return for another 25-30 years, if ever. What would you do? Have you got a plan?

We rely on our members as expert volunteers to help in the schools with the workshops – all you do is turn up on the day and answer questions the students may have. There is an 'elevator pitch' introduction for the students to gain insights to how varied and exciting the cartographic industry is!

It is not taken as holiday – it should be agreed by your firm as a voluntary day or part of your Corporate Social Responsibility day. An experience for you to be proud of and share with colleagues and report back to the company. To date we have not asked for DBS forms as policy is

that we are never with students on our own without a teacher/member of staff present.

As I say goodbye to Restless Earth as a Coordinator, I say Hello as Education Committee Chair. So, I will be involved with the RE workshops and helping Jennifer out!

I look forward to seeing you in 2018 for Restless Earths! If you feel you would like to participate, emails will be sent (to the email you gave us – (if it has been updated – please tell admin@cartography.org.uk)) to the members within a 40 mile radius.

Please respond if you can or even if you can't make it – or if you have any friends who would like to do it instead please forward their information.

Please make sure your data is up to date!

By Alice Gadney



BCS-SoC Conference 2017

Mapping for Changing Reality

On the 5th September, the British Cartographic Society (BCS) and the Society of Cartographers (SoC) joint conference got underway at the Redworth Hall Hotel in Durham. After months of careful planning and meticulous organisation the stage was set for 3 days of inspirational presentations, hands-on workshops and the annual BCS/SoC awards ceremony.

Day One

Events got underway with a free half-day workshop hosted and sponsored by Verisk Analytics. The workshop, Urban Cartography in 3 and 4D was hosted by Tom Timms and focused on exploring the challenges of mapping urban space in two, three and four dimensions.

In the evening, Philip Hatfield from the British Library gave the Helen Wallis Memorial Lecture entitled 'From the Arctic to the Euston Road: Digital Maps at the

British Library'. His talk gave an interesting insight into how the library is working with various forms of digital maps from the institutions historic and contemporary collections.

This was followed by the Ordnance Survey sponsored quiz where 4 OS Maps subscriptions were up for grabs to the winning team.

Day Two

The next day saw the main conference kick off, with a full day of presentations and workshops to look forward too.

The topics included Indigenous Cartography, Historical Mapping and Current Affairs and included an interesting talk from Claire Thomson from the National Library of Scotland. Claire spoke about the restoration process needed to conserve a 17th Century map found up a chimney by a property developer in Aberdeen where it was being used to stop a draught. There are

only 2 other known copies of this map in existence and it was produced by a Dutch engraver named Gerald Valck.

Day Two concluded with the Gala Dinner and Award Ceremony where James Cheshire and Oliver Uberti were crowned winners of the BCS Award for their entry 'Where the Animals Go'.

This is a fascinating book charting and mapping a data-driven portrait of how animals navigate the world. Some of the visualisations are incredible and it is a worthy winner.

Day Three

Day three saw another excellent programme of presentations and workshops with topics covering Topographic Mapping, Mapping our planet and Data Visualisation. I opened the Data Viz talk session with my presentation 'Cartographic Design to GeoDataViz – an evolution' where I discussed how geographic data is being used in new and innovative ways and how

our team has adapted to meet these changes.

Sandwiched in between these talk sessions was the map debate where two panels argued over whether the S Bahn Berlin Map was a map or diagram. This was a great debate that threw up some interesting concepts and assumptions on what makes a map a map or indeed a diagram.

Gary Gale closed the conference with a presentation looking at where the map ends and the visualisation starts, treating us to an in depth look at some interesting geographic data visualisations and some poor ones too!

The conference was another huge success and work has begun

already on next year's conference which will, for the first time, be held in London and billed as the UK Mapping Festival.

If you would like to know more about either society, the event itself or have any ideas for what you would like to see included at the UK Mapping Festival 2018 then please feel free to get in touch via email: cartodesign@os.uk

Don't forget if you have any questions about cartographic design, data visualisation,



1931 S-Bahn map.

geographic data or anything else map related then you can use #cartoclinic on Twitter to reach a wealth of experts from both Ordnance Survey and the British Cartographic Society.

BCS-SoC Conference 2017

A View from an Attendee

The BCS-SoC Conference was a delight to attend with expert cartographers from all sectors of the cartographic world. As a recent Graduate from the University of Exeter, my cartographic knowledge was founded strongly within GIS, working on maps from erosion in the River Exe Basin, to mapping outlet glacier velocities in Greenland; the fact that no map is correct but a representation of reality.

As expected, the conference was full of maps but, to my surprise, not many that conformed to the common purpose of a map. A map that engaged my attention was 'Where the Animals Go' by James Cheshire and Oliver Uberti. This was one of many maps depicting the migration of travelling habits of different animals. For example, one showed the migration routes of several albatrosses which flew around the entire Antarctic Circle, in a pattern not known or depicted until this. Many maps like this,

opened my mind to the possibilities of what maps can show besides common streets and rivers.

Complementary to this, the conference provided a live debate that argued what differentiated a map from a diagram. This challenged my perception of what maps are and what they aim to do. Overall maps were defined to be geographically founded but that, also, no map is correct but a representation of reality. It is this representation that allows cartography to be creative and inspiring, enabling the world to be seen through a different lens.

After graduating university, I missed the guest talks and workshops that my lecturers would organise and run, as they were both informative and fun. Thankfully, the conference provided multiple talks and two workshops over the two-day event. I particularly enjoyed the 'Current Affairs' talks, as they both

surprised me with how incorrect and unrepresentative some maps, in everyday media, can be but how easily they can be believed.

Overall, the conference was more than what I bargained for with multiple talks, a live debate and free workshops of which both enhanced my view on the potential of maps in changing perspectives and representing reality and the amount of influence maps can have on the public, even when they are unrepresentative of what they are showing. Consequently, if you're looking to learn more about maps, have your perspective changed on maps or the world itself, or you are just keen to meet some fellow cartographic enthusiasts then the BCS-SoC conference is a welcoming, friendly environment in which to do so.

By River Burton

The British Cartographic Society Awards 2017

The BCS is one of the world's leading cartographic societies and our range of awards aim to support and showcase better mapping by recognising the very best cartographic work and scholarship from around the globe. We present trophies and prizes at our Annual Symposium to individuals and companies who have shown excellence in the cartographic field for work produced within the previous year.

The British Cartographic Society is pleased to announce the results of the 2017 Awards as follows:

IAN MUMFORD AWARD

For excellence in original cartographic research undertaken by university or college students

Winner: Tomislav Jogun from the University of Zagreb, Croatia, for his research project regarding the creation of a world political map from OpenStreetMap.

Judges' Comments: "The work is impressive and shows a good grasp of technical issues and of cartographic design throughout. The panel liked Tomislav's utilisation of OpenStreetMap data to create an attractive world map as part of the project, and that the code has been written under an Open Source and Creative Commons Licence so that it can be shared in future. The choice of a dark colour for the oceans in the finished map may have made the overlaying black labels slightly more difficult to read, but all-in-all, a deserving award winner."

ESRI UK NEW MAPMAKER AWARD

Open to those starting out in cartographic or related industries.

Judges' Comments: The judges report that there were no winning entries this year. However they concluded that one entry deserved a special acknowledgement and awarded with commended.

Commended: Isabel Williams, a PhD student from Newcastle University for her Human Geography map.



STANFORDS AWARD

Awarded to the best entry for printed mapping.

Winner: Dragon's Back Race by Harvey Map Services.

Judges' Comments: "A robust map with plenty of appropriate detail required for the task. The highlighted route is very clear and easy to follow, allowing the footpath detail to be shown underneath."



HENRY JOHNS AWARD

Awarded for the most outstanding paper published in the Cartographic Journal.

Winners: "Projection Wizard – An online Map Projection Selection Tool" (Volume 53 No.2, pp.177-185) are Bojan Šavrič, Bernie Jenny & Helen Jenny.

Editorial Board Comments: "A genuine contribution to the science and use of map projections that makes theoretical and practical advances for their application in many areas of cartography."

STANFORDS AWARD

Highly Commended: Bedrock Geology of the UK & Ireland by Henry Holbrook of the British Geological Society.



Judges' Comments: "Colourful and easy to use with useful added town names to aid orientation. Effective generalisation of data and great to see an update with additional information for a wider audience. Could be a map to hang at home, school or office."

Commended: The Map - Addis by Kirsty Henderson.

Commended: The Historical Map of Kingston upon Hull by Giles Darkes.

Commended: A Paddler's Guide to the Schuylkill River Water Trail by Brian Swisher.

AVENZA AWARD

Awarded to the best entry for electronic mapping.

Judges' Comments: The judges report that there were no winning entries this year. However they thought that two entries deserved to be awarded a commended.

Commended: Shrink Swell HEX Grid map of Great Britain by Clive Cartwright.

Commended: Imray Navigator by Lucy Wilson

JOHN C. BARTHOLOMEW AWARD

Awarded to the best entry for thematic mapping.

Winner: Where the Animals Go by James Cheshire and Oliver Uberti.
Judges' Comments: "Well designed maps consistent in style throughout. Pleasing layout and use of text placement. Maps give a fascinating insight into the migration routes and journeys of a wide range of animals. Great to see how biodiversity and maps come together."

Highly Commended: The Map - Addis by Kirsty Henderson

Judges' Comments: "A highly accessible map with a good mixture of formal and informal elements. Huge amounts of vital, local information presented in a personal and approachable way. The user's needs are at the forefront of everything on the map, making it indispensable for any visitor to Addis. Judges were impressed that Kirsty drew the map from scratch adding useful local knowledge by walking the area, and enriching the maps detail."

Highly Commended: A Paddler's Guide to the Schuylkill River Water Trail by Brian Swisher.

Judges' Comments: "Very good use of colour and symbology make these maps easy to access and indispensable to boaters. Clever ideas in presenting North arrow and flow direction, together with huge amounts of local information. A lovely accessible and useful product."

Commended: New York Seascape by Jon Bowen and Debbie Gibbons.

Commended: The Puzzling Presidential Election by Kenneth Field.



THE BRITISH CARTOGRAPHIC SOCIETY AWARD

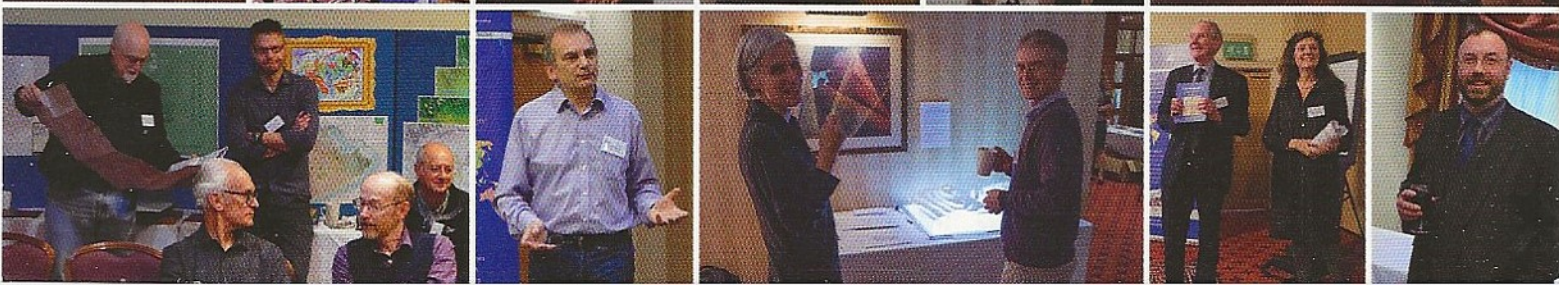
The prestigious BCS Award is presented to the best entry from the winners of the major design awards.

Winner: Where the Animals Go by James Cheshire and Oliver Uberti.

Judges' Comments: "The judges thought these were clever and attractive visualisations of multi-scale, multi-dimensional and fascinating geographic data. Good design makes the maps easy to understand and beautiful to look at. Huge amounts of information presented succinctly and in an engaging style. The overall product is beautifully presented."



BCS-SoC Conference 2017



Big Day Out

The reasons for traveling to the University City of Cambridge on a grey November day were many fold. This is the time of year when we have our AGM and the Programme Committee tries to tie this in with a Fellows' Lunch and the Autumn Lecture as well as Council and Committee meetings. The Fellows' Lunch is an annual get-together where Fellows of the Society catch up with each other amidst much putting of the cartographic world to rights. The occasion is labelled as a 'Fellows' Lunch' but is open to invited guests also. Thus it was that twelve of us dined regally in the opulent surroundings of the Parker Suite at Corpus Christi College. It is a very welcome opportunity to spend a convivial hour or so in a non-work environment with colleagues from different sectors. Fellowship of BCS is a recognition of dedication to the discipline as well as support of the Society and is open to members with more than two years' unbroken membership and with at least 10 years' relevant experience. Take a look at the Fellowship section of our website www.cartography.org.uk/members/fellowship for more information and do consider joining us.

Following lunch, we were treated to a tour of the Parker Library, named

after its greatest benefactor, Archbishop Matthew Parker (1504-75) who donated over 400 manuscripts to the college in 1575. Our host, Alex Devine, entertained us with a spirited description of the library's history and its treasure trove of medieval and Renaissance manuscripts and early printed books. The static displays of ancient works were fabulous but the highlight for me was when a book of bound manuscripts by Matthew Paris (c1200 - 1259) was taken from the shelf and opened carefully to reveal several pages of itinerary maps from London to Jerusalem. Pages were annotated with extra notes as more information had been discovered and extra leaves inserted with extensions appended to some of them - 'outriggers' to us cartographers. There was a lot of ooh-ing and aah-ing as we admired the beautiful hand writing (some of it Paris's hand) in Latin and Anglo-Norman, not to mention the fabulous maps.

All too soon we had to leave for the first official part of the day - the President's Address where Alex Kent summarised his thoughts at the end of his two-year Presidency. This was followed by an EGM where constitutional changes were approved after much discussion with members in attendance. Immediately after the EGM was the 54th Annual General Meeting of the British Cartographic Society and the review of the past year with officers of the Society. After the official business,

Dr Timothy Rideout was awarded an Honorary Fellowship of the Society - he had served as Honorary Secretary for 11 years organising us and keeping us in check at Council meetings. Well done, Tim. Finally, the Presidential chain of office was handed to our new President, Richard Carpenter of UKHO.

Tim Marshall was the guest speaker at this year's Autumn lecture, 'Geography, Globalisation and a New World Order'. After thirty years' experience in news reporting and presenting, Tim left news journalism to concentrate on writing. He has become known for his analysis of developments in foreign news and international diplomacy. His best-selling book, 'Prisoners of Geography: ten maps that tell you everything you need to know about global politics', formed the basis of his talk with additional insights and personal anecdotes added to the thought provoking story. If you haven't read this book already put it on your Christmas list immediately. His follow-up book, 'Worth Dying For: the power and politics behind flags', covers the histories of the symbols that unite us - or divide us. Another book is on the anvil, due out in Spring 2018 which I shall await with interest. The lecture was open to non-members who flocked in after the AGM and Tim kept us entertained well beyond his allotted time, answering questions from the audience with great humour.

The final event on the Tuesday was dinner with the speaker at The Senate (yes, more food) when members of Programme Committee enjoyed more of Tim's company.

The following day we made up for all the merriment on our Big Day Out. Westminster College was the venue for Programme and Membership Committees in the morning and the 256th meeting of Council in the afternoon.

It was fabulous to see and be part of university life for a short time in such a beautiful city. We all agree it was a splendid two days.

By Mary Spence





Come and join us for a great celebration of cartography! beckoned Prof. Menno-Jan Kraak, President of the ICA (International Cartographic Association), and Prof. Lynn Usery, Chair of the Local Organizing Committee, in their invitation to the 28th International Cartographic Conference (ICC) held in Washington, D.C. from 2-7 July. The city which had seen Donald Trump sworn in as the 45th president of the United States earlier in the year now welcomed cartographers from all over the world (916 delegates from 75 countries to be precise!).

A Personal Reflection

The prestigious Marriott Wardman Park Hotel, located in the northwest of the city, was the venue – the largest hotel in the city when it first opened in 1918 – and 99 years later it still provided a glamorous, yet intimate, space for the ICA's biennial celebration of cartography. The main event was preceded by several pre-conference workshops run by ICA Commissions. The Maps & Emotions workshop, for example, involved an exercise I had devised for its

participants to wander around the neighbourhood of the White House in groups taking photographs and using different maps, including a Soviet military plan of the city from 1975. Unfortunately, the exercise coincided with a sudden torrential downpour, which nonetheless seemed to have left spirits undeterred – if totally ruining the maps.

Getting the conference underway, the Opening Ceremony was certainly one to remember. Hundreds of cartographers united to sing the ICA anthem, which was introduced

following its surprise première by the Brazilians at ICC 2015 in Rio de Janeiro. We were fortunate to have been led by the exuberant Howard University Gospel Choir, who took us through its chromatic opening bars to the triumphant march with the words "Always count on maps, maps show the way to follow...". No doubt the experience enhanced the prospect of enjoying the next few days, which would see 527 presentations and 200 posters organised into 40



research themes. Some insights into the meticulous planning that had gone into the organisation of the sessions were given by Prof. Cindy Brewer, Chair of the International Scientific Program Committee.

The main conference, with its 144 sessions, presented the unavoidable dilemma of choosing where to be and when, but the task was made much easier this time with the help of a very clearly designed hardcopy program and an app that could be downloaded onto a smartphone. The four keynotes were well chosen and sensibly placed to allow people to attend. Tom Patterson, Senior Cartographer with the US National Park Service, gave a fascinating talk on mapping the Grand Canyon and told us that 'It has never been a better time to be a cartographer'; a theme that was echoed by fellow keynote speakers Robert Cardillo (Director, National Geospatial-Intelligence Agency), Lee Schwartz (Geographer with the US Department of State) and Mikel Maron (Mapbox

and the OpenStreetMap Foundation). The parallel conference sessions seemed to have fewer no-shows than previous ICCs and were well attended, particularly by younger delegates. Thanks to the conference organisers, the World Cartographic Forum was given a well-placed slot for its inaugural session, allowing over 40 senior representatives from national cartographic societies to take part and to share ideas.

Holding the event over the '4 July' celebrations was always going to be a big draw and although delegates were left to find their own entertainment for the evening, it was not difficult to join in the fun. I managed to enjoy the fireworks near the Netherlands Carillon by Arlington Cemetery and won't forget seeing 'square' and smiley face fireworks! Delegates had to find their own lunch for most days, although the local eateries were close by and really very good. This time, the Gala Dinner was a Texan BBQ; a more casual (yet substantial) affair than



ICC delegates have been used to in recent years.

I have no doubt that many delegates would join me in concluding that the event was well organised, informative, and enjoyable. The only slight disappointment for me was perhaps the exhibition, which was smaller than usual and lacked the 'wow' factor of recent ICCs. Nevertheless, if there truly has never been a better time to be a cartographer, we can look forward to seeing what Tokyo has to offer in two years' time.

Dr Alex Kent,
Deputy UK National Delegate

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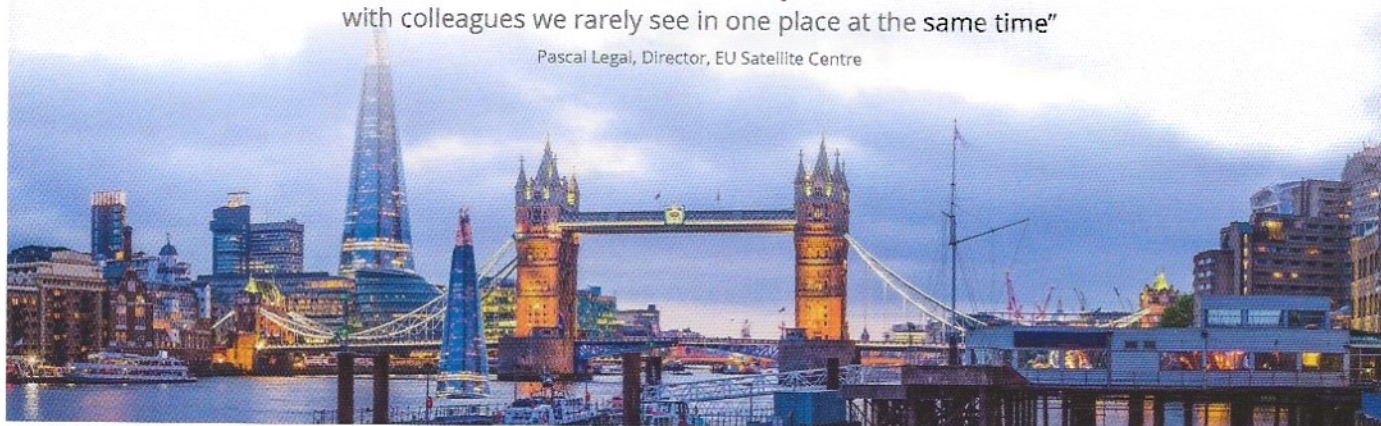
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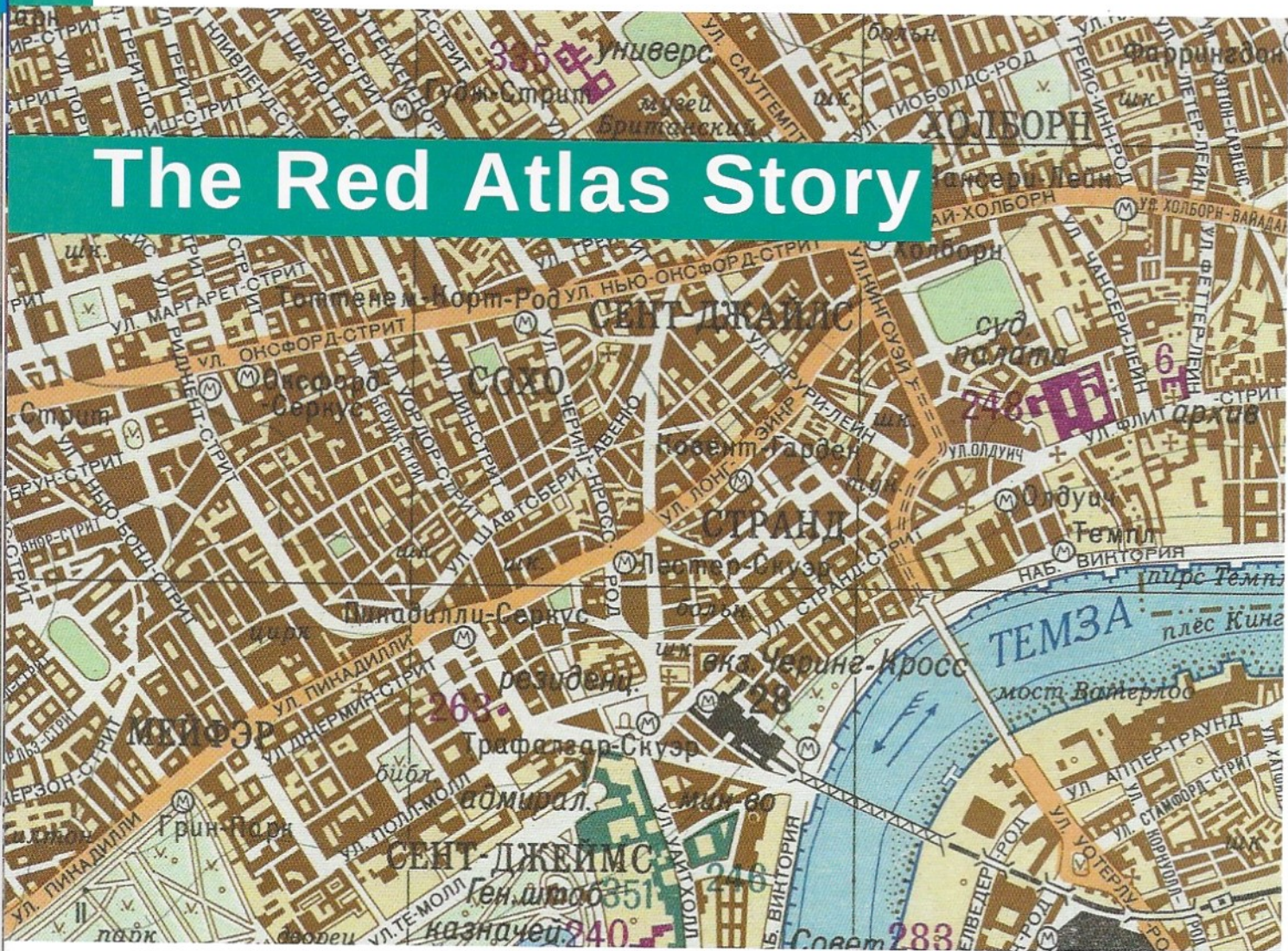
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Pascal Legal, Director, EU Satellite Centre





The Red Atlas Story

Awareness of the huge global mapping project by the former Soviet Union and of the existence of a vast number of detailed, accurate maps of Britain and much of the rest of the world has been an 'open secret' in the cartographic community for over twenty years. As long ago as 1996, David Archer published a catalogue of Soviet topographic maps for sale and in 1997 Ordnance Survey issued a statement claiming that Soviet mapping of UK infringed OS copyright.

However, other than a two-part article in *Sheetlines* in 2005, 'Uncle Joe knew where you lived', in which I set out the results of my researches so far, no proper account has, until now, been published.

BCS president Alex Kent and I have been collecting these maps

and sharing our enthusiasm and our discoveries, ever since we met on a fact-finding visit to Riga in 2006. At the start our interest was little more than curiosity about the project and a fascination with the maps themselves. But the more we found out, the more we wanted to know. In time, as we posted our work on sovietmaps.com and received valuable feedback from around the world, we began to realise we had the makings of a substantial story. In 2011 we were invited to present our research at the International Conference on the History of Cartography in Moscow, which was held in the Lenin Library, opposite the Kremlin, an auspicious location. We thought that this would offer the golden opportunity to discover the background story about the people who made the maps and the organisation responsible. But

A Soviet map of Central London.

we hadn't reckoned with the culture of secrecy still prevailing in modern Russia and every attempt to glean information was stonewalled.

For the next few years we continued to gather whatever we could and in due course we were approached by an American journalist, Greg Miller. The eventual appearance of his story in the online journal *Wired.com* in 2015 turned out to be a very significant development. It not only gave us global exposure and bestowed credibility on the work we had been doing, but it also drew a huge response from readers in various parts of the world who had been using Soviet topographic maps in their work in countries where these maps were the only available source of geospatial data. They included

such diverse activities as New Zealand army intelligence in Afghanistan, water-resource management in Armenia, oil exploration in Nepal and UN border patrols in Lebanon. These stories added a human dimension to the story and demonstrated vividly how comprehensive and reliable the maps were.

The *Wired* story also resulted in an invitation to present a talk in 2016 to the National Geospatial-Intelligence Agency (NGA) in Washington DC, the American opposite numbers to the Russian map-makers. What surprised us was that the existence of the Russian maps seemed to be hitherto unknown – at least to the present generation of NGA officers.

Meanwhile we collected as many examples of the various map series as we could and by now felt we had enough information and sufficiently good illustrations to produce a worthwhile book. As all budding authors know, it's not that easy, but one day University of Chicago Press

came calling and in due course a contract was signed.

The resulting book *The Red Atlas: How the Soviet Union Secretly Mapped the World*, attempts to address (and as far as possible, answer) the questions that immediately come to mind when one first encounters Soviet maps: what, who, where, when, how and why. It comprises four chapters and eight appendices, with supplementary information and examples of maps on the accompanying website redatlasbook.com.

Chapter 1 looks at the prehistory: how Russian cartographic expertise originated in tsarist days. The next two chapters focus on the Soviet military mapping of the Cold War era. Chapter 2 describes the maps as artefacts, defining the various series, scales, and specifications. In chapter 3 the question of how the maps were made is examined, with examples of interpretation and misinterpretation by the compilers of the data they had collected. Chapter 4 concerns post-Soviet times, after the fall of the Iron Curtain, and tells of the emergence of the maps in the

West: their "afterlife" as the only reliable maps of many parts of the world, and their legacy long after the demise of the regime that produced them.

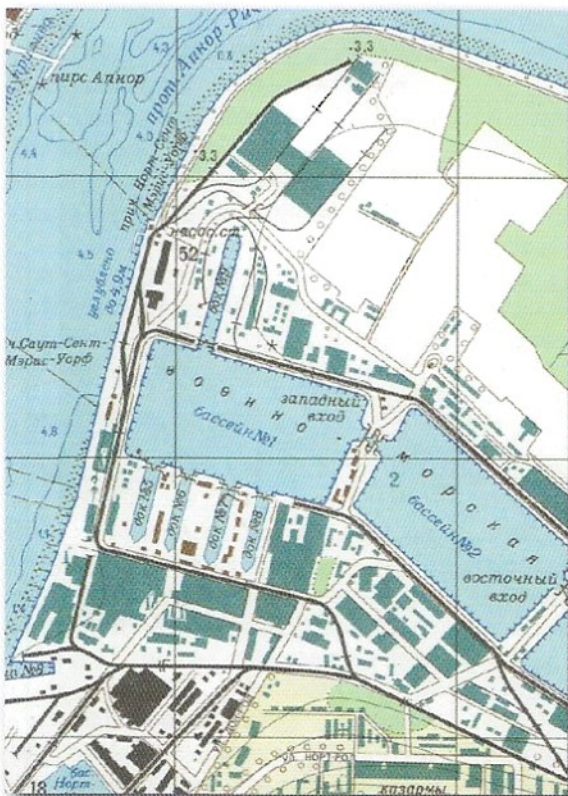
Appendix 1 includes a selection of examples of Soviet maps to showcase the range of styles and the evolution of the specifications over time. Other appendices provide a resource for assisting the interpretation of these masterpieces of cartography.

Publication date was October 2017 and the book seems to have filled a need and captured readers' imagination, as early sales figures are very encouraging. What we really hope will happen is, that as with *Wired*, people who used the maps (or even those who made them) will come forward and will learn more about this cartographic project of unprecedented scale and ambition.

The Red Atlas: How the Soviet Union Secretly Mapped the World, by John Davies and Alexander J Kent is published by University of Chicago Press.

By John Davies

Two maps of Chatham.



Meet the Council Members



Richard Carpenter -
President



David Forrest -
Chair of UK
Cartographic
Committee



Dr John Peaty -
Convenor of the
Historical Military
Mapping Group



Martin Lubikowski -
Vice President and
Chair of the
Publications
Committee



Paul Naylor -
Chair of
Programme
Committee



Ann Sutherland -
Convenor of the
Map Curator's
Group



David Sherren -
Hon. Secretary



Alice Gadney



Warren Vick -
Convenor of the
GIS Special
Interest Group



Jim Nichol - Hon.
Treasurer



Jim Goldsmith



Elaine Watts -
Chair of
Membership
Committee

Corporate Report

The combined BCS-SoC Conference in Durham was well attended by representatives from all areas of the business of maps. Corporate members filled the exhibition area and there was a real opportunity to network. Thank you to all who participated and especially to the sponsors who helped make the

event a great success.

We are always looking for new ideas for activities, workshops, and venues for events to engage the membership. Could you host an event? I would be interested to know if you have any ideas.

Please make sure you are taking

full advantage of your membership. Keep your directory entry up-to-date on the website and submit your latest news to the Maplines editors. Help us promote your company to the cartographic community.

Alan Grimwade,
BCS Corporate Liaison Officer
alangrimwade@cosmographics.co.uk

Events

January 2018

- **22-24 January** - DGI Conference, London

May 2018

- **10 May** - GeoPlace Annual Conference, Birmingham,

Edgbaston

- **22-23 May** - GEO Business, Islington, London, Business Design Centre

September 2018

- **2-7 September** - UK Mapping Festival, London, ILEC Centre

- **13-15 September** - 7th International Symposium on the History of Cartography: Mapping Empires Colonial Cartographies of Land and Sea

<http://www.cartography.org.uk/product-category/events>



The International Cartographic Conference in Washington early in July was a great success by all accounts. As expected it was very well organised by the local committee, with everything running very smoothly. The facilities were excellent, although more extensive than demanded by an ICC, which no doubt had some impact on the costs of running the event.

The programme had the usual mix of keynote addresses, many parallel papers sessions – often 10 or more simultaneously, commission meetings and social events. There were no printed or digital proceedings distributed, with the expectation that people would use the conference app to access such information. I personally found this less than satisfactory and had trouble getting the app to work initially, and while the concept is great, lack of full wi-fi coverage in the venue (due to hotel costs) also increased the frustration.

The week kicked off with an extraordinary General Assembly. These are normally held every 4 years, but the Executive decided that there were some issues outstanding from Rio and other business that needed to be dealt with sooner than Tokyo in 2019. It is certainly one of the challenges of running an organisation like ICA, with the normal four year cycle of General Assemblies meaning it can take a long time to get changes approved and implemented.

Eight changes to Statutes were proposed, plus two to By-Laws. Although the Executive and Statues

Committee had spent a lot of time on the proposals, there were still areas where some thought the wording was not clear, compounded of course by many not having English as their first language. With 72 National members currently eligible to vote, 36 votes were required for changes in statutes to be approved, including those present and any postal votes.

Changes approved include: Article 3 giving full member rights to new members approved by Executive pending approval by the next GA; Article 6, the removal of a committee who's role is now undertaken by the Executive; Article 19 changing wording about funds for Scholarships; and Article 24 adding a requirement for Commissions to report at least annually to Executive as well as every 4 years to the GA.

Change to Article 11 sought to bring in a requirement for a quorum at GA's, nothing currently being specified. The proposal was that the quorum should be one third of voting members, but this was not accepted. Article 13 aimed to clarify the number of terms officers may serve. There was no change in the principle or intention here, just clarification, but even so this was not passed. Changes to Article 14 sought to give the Executive more control over the operation of Commissions and to empower them to take action if Commissions were inactive. Finally, changes Article 28, linked with introducing a quorum in Article 11, aimed to solve the problem of relatively low attendance at the GA and lack of postal votes, meaning it can be impossible to

achieve the 50% positive vote currently required. In recent years attendance at GAs has been around 50% of membership and with only a few postal votes, it means that even if there is an overwhelming vote in favour of a proposal, it often falls just short of the overall majority of members required.

By-laws simply need a majority of those voting to be in favour to pass, so there was less difficulty here and both passed. By-Law 7 now removes the out-dated restriction of only allowing one member of a commission from each national member. Rather bizarrely, By-Law 9 now details the measures the Executive may take with inactive Commission, but the Statue giving it the power to take these actions did not!

Some of these proposed changes we will have to revisit in Tokyo as the current statutes can make it really difficult to move the organisation forward. I think the President may reflect on how the business was conducted; dealing with all the proposals and discussion first followed by voting in a block may not be best. Discussing then voting on each amendment would mean more challenging organisation, but would mean the voting was more connected with the discussion.

Of course, such conferences are also important social gatherings. There were pros and cons to having the conference in the week of 4 July, but many did join in the Independence Day revelries. Some of us were fortunate to be invited to the top floor suite of one of the US organisers which gave a perfect view of the fireworks at the Mall. The orienteering event must be one of the wettest on record, with tales of streams bursting banks and bridges being washed away; all survived to tell the tale.

As ever, it was great to meet a wide range of people, renew old acquaintances, establish new ones and talk cartography. Role on Tokyo in 2019!

By David Forrest

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