

# MAPLINES

THE MAGAZINE OF THE BRITISH CARTOGRAPHIC SOCIETY



60<sup>th</sup> Anniversary 1963–2023

WINTER 2023

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## CONFERENCE REPORT

ANTARCTIC  
ROAD  
MAPS

SMALL WORLDS:  
ILLUSTRATOR'S  
MAPS

Sfântul locaş  
**MĂNĂSTIREA  
CERNICA**

Peste 400 de ani de atestare documentară şi de rugăciune

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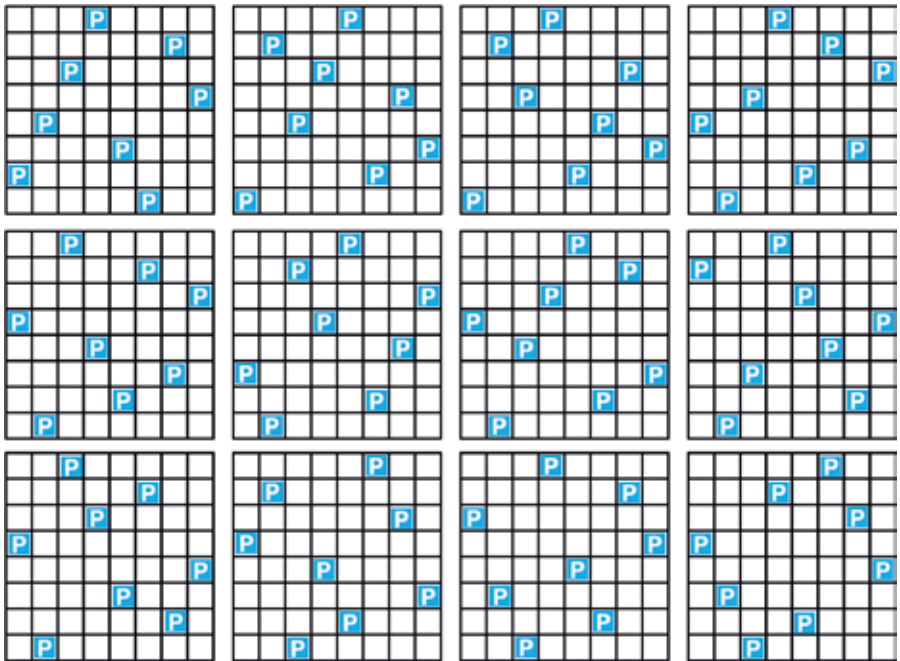
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Dastardly puzzle answers

# FROM THE BCS PRESIDENT



Dr Seppe Cassettari  
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As the British Cartographic Society draws towards the end of its sixtieth year, we should not only celebrate what we, as a professional society, have contributed to the development of map making in the UK, but look to what the future might bring. We need to look at the role we should play in the further evolution of the subject we are so passionate about.

There is no doubt we exist in a very different professional landscape in 2023 from that in which our founders conceived the Society in 1963.

The way in which maps are consumed has changed out of all recognition. Paper maps have in large part been replaced by screen versions, some of which mimic their forebears but many are new and exciting visual representations of our world. The use of maps in the workplace has increased enormously and we all have access to a great range of maps in

our private lives, way beyond the classic image of walkers with their folded OS map sheets.

There are fewer people working in the creation of maps. The process of building large, highly complex and sophisticated databases from which a multitude of maps can be generated has superseded the hand-drawn processes, and in doing so changed the ways maps are sourced and created.

The traditional split into the various mapping disciplines that was quite stark in the 1960s, no longer exists. Specialists in geodesy, photogrammetry and cartographic compilation are much rarer. We all have tools we can access that allow us to make high-quality maps from the collection of aerial imagery by drone through to the extraction of our own GIS database.

So, what is the role for the BCS over the next 60 years?

My view is that maps are becoming more of a necessity in all forms of decision making – personal, professional, institutional. We will continue to consume more maps, in more forms, and rely more on the information they contain.

All forms of mapping must remain credible, valuable and accessible.

We need to ensure that as the pool of geospatial professionals grows, with wider access to sophisticated tools, the cartographic aspects of mapping are not dumbed down.

Accuracy, quality, consistency, currency ... These are the bedrock of great maps and we must ensure that those making maps strive for the highest standards. But visualisation is becoming, and will continue to be, increasingly important. We must support, educate and encourage those who make maps, wherever they are working.

In this respect, our education programme, Restless Earth, and our focus on the GeoViz Programme are cornerstones of

what we should be focusing on in the years ahead.

To reap the rewards of these programmes we should set ourselves some challenging goals going forward.

- We need to encourage new and younger members and greater diversity as the industry evolves. We are doing extremely well, even growing slightly over the last few years and our membership database shows that nearly 40% of our members are under the age of 40 and of those 35% are female. But we need to do more to make ourselves relevant to the next generation of map makers and users.
- We must engage at all levels of map use, especially those professionals whose work focuses on large-scale maps, something we have traditionally not been strong on.
- We need more active participants to help set the agenda and support our activities.
- We need to recognise that the work of the BCS comes at a cost. We are extremely lucky in that we have an extra stream of income through *The Cartographic Journal*, but we will always rely on membership subscriptions to fund our work.
- And finally, we need to continue to rebuild the community that is the BCS, that was so damaged by the pandemic, making it an organisation that people want to be part of. Whether that is building on the fantastic social media presence we have established or running more online and in-person events or collaborating with our sister organisations in the geospatial world.

As my time as President draws to a close, I would encourage anyone with an interest in maps to get involved. Join our committees, put yourself forward for election to council, offer to contribute to our events. The next 60 years will be built on your ideas, your passion, your engagement.

Welcome to 2024 and what promises to be a very exciting future!



# OUR MEMBERSHIP



This issue, we've asked Mary Spence MBE about her cartographic background.

Our Society is proud of its varied membership, welcoming people who work in the sector, students and teachers, as well as those simply with a love of maps. We have members who are at the start of their cartographic journey as well as those who have retired after a rich career in the sector. Each month, we feature a member who is happy to share their story as well as their favourite map-related projects.

## WHAT IS YOUR ROLE AND WHAT ARE YOUR CARTOGRAPHIC QUALIFICATIONS?

I am a Cartographic Design Consultant and publisher. In a career now spanning more than fifty years and with numerous award-winning maps to my credit I was invested with an MBE in 2004 for Services to Cartographic Design. I am a Chartered Geographer, a Fellow of the Royal Geographic Society and a Past President and Honorary Fellow of the British Cartographic Society.

I am co-author (with Giles Darkes) of *Cartography: an introduction*, now in its second edition, published by the British Cartographic Society. My chapter on *Colour in Cartography* appears in *The Routledge Handbook of Mapping and Cartography*, a collation of contributions from specialists in their field.

## WHAT INSPIRED YOU TO WORK WITH MAPS?

My introduction to maps was at secondary school where our geography teacher started each lesson with a map drawn on the blackboard – a clever way of locating and remembering the where and why of what we were studying. Then at university I found the cartography classes with Mike Wood almost more interesting than physical geography which had been my main interest up to then. Rather than go onto teaching which was my original plan, I chose the cartography course at Glasgow with John Keates. So, you could say that meeting maps changed my life path.

From there I sought a career as a cartographic editor applying to John Bartholomew in Edinburgh and Pergamon Press in Oxford. Both offered me a place but I chose to travel south with the plan to return to Scotland after a couple of years. That didn't happen. And here I am still south of the border, right on the edge of Wales.

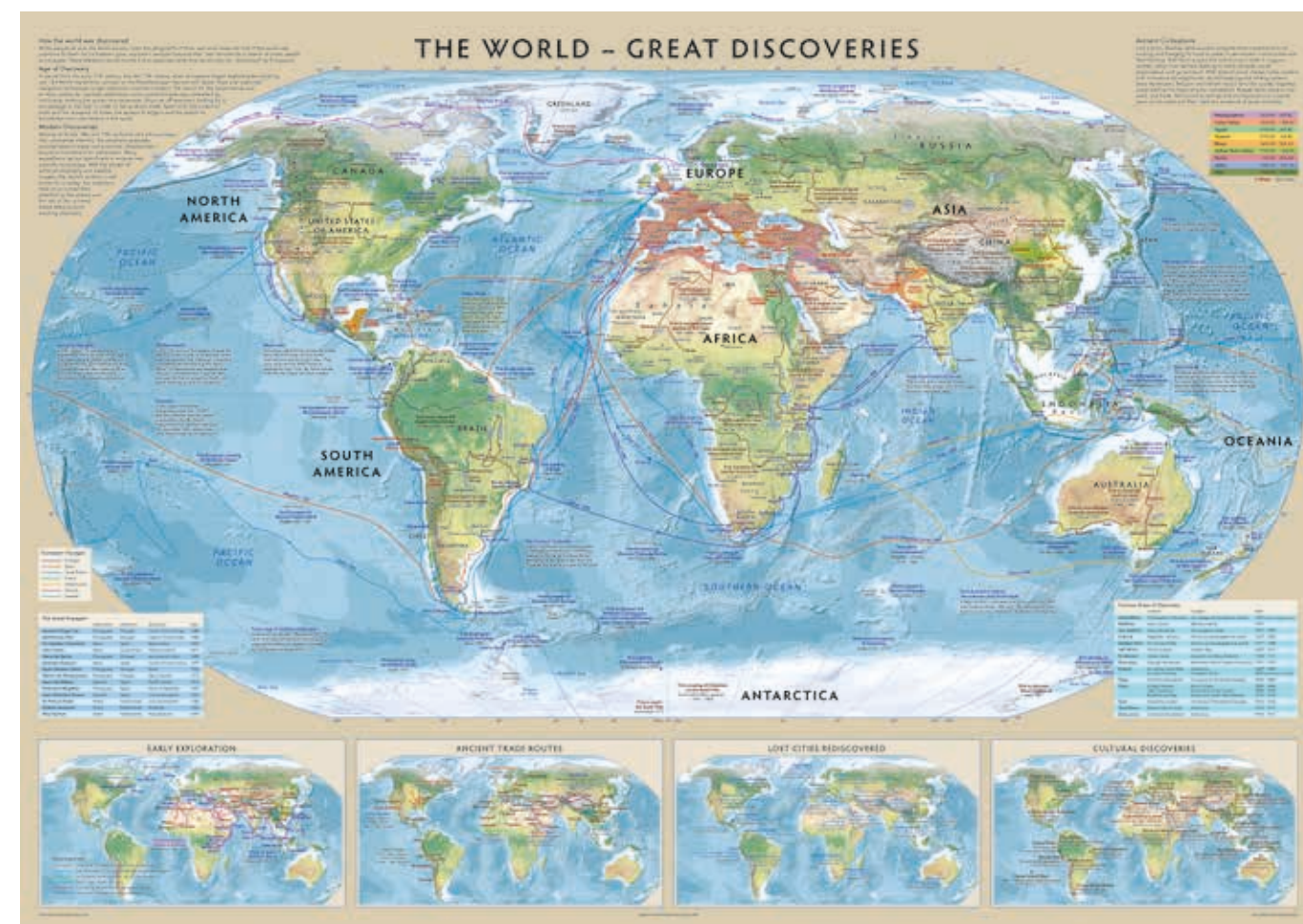
## WHAT IS THE MOST EXCITING MAP/S-RELATED PROJECT YOU HAVE WORKED ON?

I have long had a passion for Antarctica – the ice thingy from physical geography – and I was privileged to be the cartographic editor working on the Scott Polar Research Institute's *Antarctica: glaciological and geophysical folio* in 1983. That was back in the days of scribing, peelcoats and type patching before computers came along.

Gradually I became more and more interested in the actual creation of the maps instead of preparing and supervising, leaving the doing to someone else. Eventually I extended my role from research and design into the actual preparation of the finished product. Most of the maps I make I suppose would be called 'traditional' in that they are static and designed for print. One of my recent works and the most interesting to research was *The World – Great Discoveries*; a wall map depicting how the world was discovered, from ancient civilisations to the age of discovery. Showing the sea routes of early European navigators and the first explorers to 'discover' places previously unknown to the Western world; generously annotated with concise descriptions of interesting snippets, such as the fact that Magellan did not circumnavigate the world – he was killed in the Philippines on the way. His ship did complete the journey with Elcano at the helm.

Insets show Early Explorations, Ancient Trade Routes, List Cities Rediscovered and Cultural Discoveries.

This particular map won second place in the Maps on Panels category at the 2023 International Cartographic Exhibition at Cape Town in August 2023, presented at the 60th Anniversary Dinner in Cambridge by Gregor Gartner, President of the International Cartographic Association.



## New subscription rates for 2024

The BCS has held its subscription rates since 2017 but with current cost pressures and the desire to keep investing in the GeoViz and Restless Earth programmes going forward, we have reluctantly come to the decision that it is necessary to raise rates for 2024.

It is worth noting that in 2023, compared to 2022, we have seen a drop in non-subscription income (*Cartographic Journal* royalties, Gift Aid, investment returns) and we have seen a drop in the value of our overall assets, mainly because of our investment in GeoViz.

None of this leaves the Society in a difficult financial position for our current activities, we continue to be well resourced and the level of our assets are above that recommended by the Charity Commission and our own targets. But we do want to continue to invest in the two core programmes going forward. To do this with confidence over a two-to-three-year period we feel it is necessary to increase subscriptions.

All the extra income will go towards increasing awareness in the importance of data visualisation, creating the maps of tomorrow, and at the same time in educating students about the important role maps play in our everyday lives. As a professional society, the BCS remains significantly

cheaper than similar organisations (AGI, IMIA and RSPSoc all have individual membership around £60).

We believe your professional membership is extremely good value, even at these increased prices, and hope you will all renew promptly so we can plan for 2024 with confidence.

Sepp Cassettari  
President

**Please note: if you currently pay by standing order, please adjust it to match the new rates below.**

2024 revised membership rates  
Fellow £65  
Full £45  
Affiliate £25  
Student £20  
Corporate £264 (£220 + VAT)  
Small Corporate £132 (£110 + VAT)  
Educational £78 (£65 + VAT)

(Overseas members will pay the UK rates and will receive all our publications including *Maplines*, digitally. If you would like to continue to receive hard copies you may do so, but we will charge extra for the postage. The annual postage rates for 2024 are: Europe £20 and Rest of the World £30).



# SMALL WORLDS: ILLUSTRATOR'S MAPS

Tania Willis

**I segued into map-making from the world of illustration – which might make me something of an outlier in this community of highly skilled cartographers. You might have seen us illustrators straying over into your territory over the past couple of decades, especially as the world's fascination with maps has grown, and the definition of 'a map' has become somewhat elastic.**

Initially, I never considered myself a map-maker. However, as my commissions increasingly required cartographic precision, I felt the need to connect with the map-making community. Joining BCS has helped me understand where illustrators like me fit into that community.

Illustrated maps have become a popular art form, accessible and democratic to everyone. This may partly explain their popularity in recent decades. They can serve a functional purpose, hold memories, tell stories, or transport us geographically, historically and imaginatively. As a wall poster they can signal our well-travelled worldliness or they can simply be a form of armchair travelling – transporting us geographically, historically and imaginatively.

Many people have an emotional, nostalgic connection to maps, whether it's remembering deciphering a 17th-century map on their grandparents' wall or the imaginative journeys guided by endpaper maps in books like *Swallows and Amazons* or *The Hobbit*. These childhood experiences inspired me to map the fields, rivers and woodlands around my home, and I'm sure they were formative for many of you as well.

My earliest memory that might be reflected in my current mapping style is my grandma's huge Chinese cork diorama in a glass box, similar to her 3D willow pattern plates. I would spend a lot of time imagining myself small enough to walk around inside that world. I got a similar, but in-real-life thrill, navigating Thai backstreets with my dog-eared and much-

loved copy of Nancy Chandler's *Map of Bangkok*. Chandler's interactive maps have always been a great inspiration, striking a fine balance between accurate cartography and playful, world-making imagery and graphics. I still find the interaction of reading a pictorial map while standing in the physical reality of a place strangely exciting. And recreating these miniature worlds through illustration remains at the core of my map-making practice.

To provide some background on my career, I initially studied Fine Art at BA before pursuing Illustration and Visual Communication for my MA at the Royal College of Art.

In 1997, I was living in Hong Kong and working as an illustrator, when my accidental journey into the world of cartography began. I was asked to illustrate a weekly map for the wine section in the *South China Morning Post*. The journalist provided the text and it was left up to me to research the locations using the text. This was the era of Netscape Navigator and slow-speed dial-up connections and long before easy access to Google Earth or Maps. And most small vineyards didn't have websites. Consequently, a significant portion of my time was dedicated to deducing the whereabouts of obscure family wineries. One journalist (and only after persistent emailing) finally admitted that he had sampled the wares of a Greek vineyard so enthusiastically, he was unable to give me any information regarding its location. So very occasionally I had to admit defeat and was forced to guess.

I worked on at least fifty wine maps for the *South China* and honed some rudimentary cartographic skills. My initial inspiration came from studying 19th-century panoramic maps in the online Library of Congress collection (a rare online resource at the time). These 'bird's-eye view' maps, tilted at oblique angles, played a pivotal role in developing my own mapping projection and gave me the opportunity to describe the landscape and create the small worlds that had initially inspired me. Using custom colour palettes, culturally-specific imagery and appropriate typography, I found I could design for each map a unique identity which alleviated the potentially repetitive nature of the blue-green/sea-land palette.



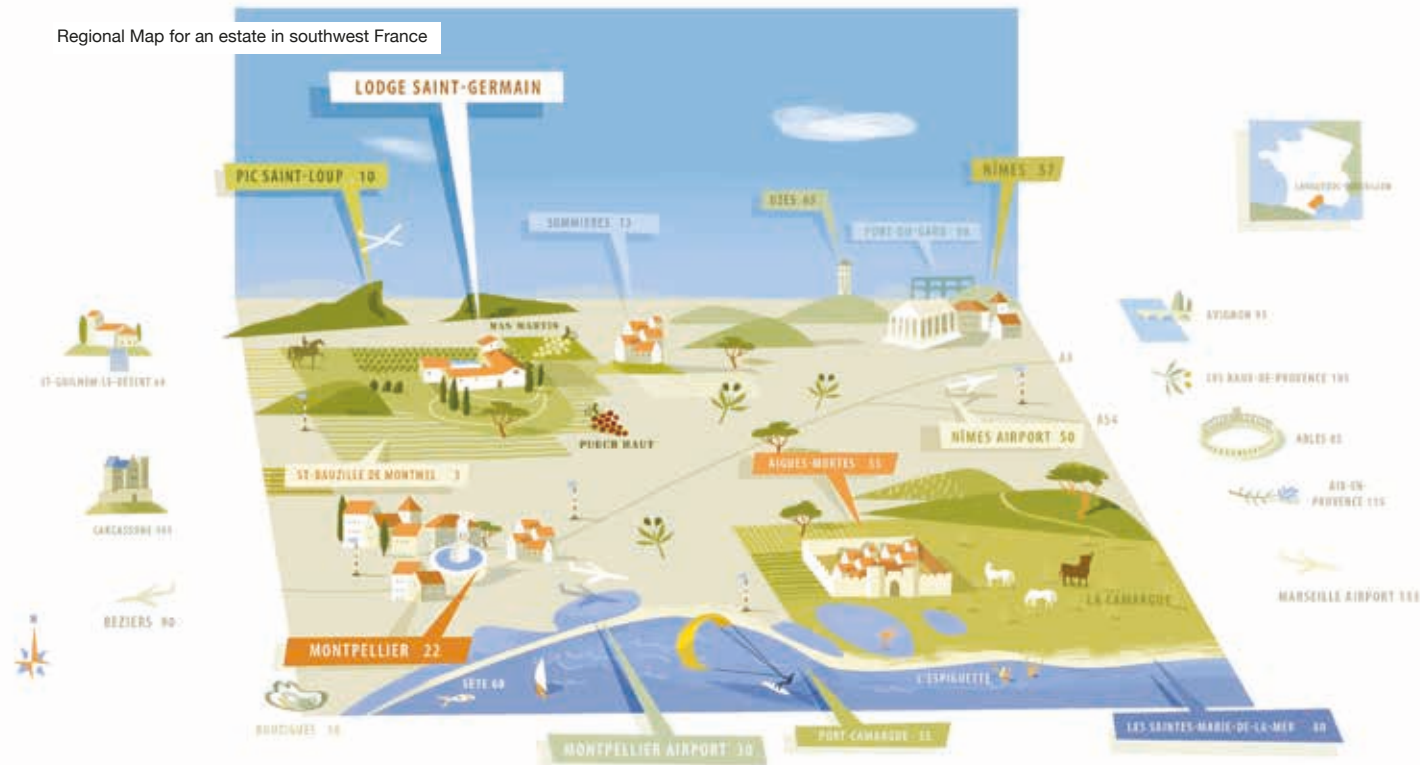
Later, I became a regular map contributor for *Condé Nast Traveller*. During this period, it became evident that illustration had firmly entrenched itself in the realm of cartography. Travel journalism and the rise of city breaks, driven by budget airlines, led to articles featuring '24 hours in ...' or 'An Insider's Guide to ...' various cities. Typically, these editorial maps were inherently approximate, with visual engagement and interpretation taking precedence over cartographic precision. They were primarily aesthetic visualisations, leveraging the visual language of maps without strictly qualifying as maps.



My next step into mapping materialised through collaborations with design groups working for large developers. My role was to visualise and map yet-to-be-built luxury residential developments or resorts for brochures. I learned to read architectural and engineering plans to create aspirational but accurate projections of these future developments.

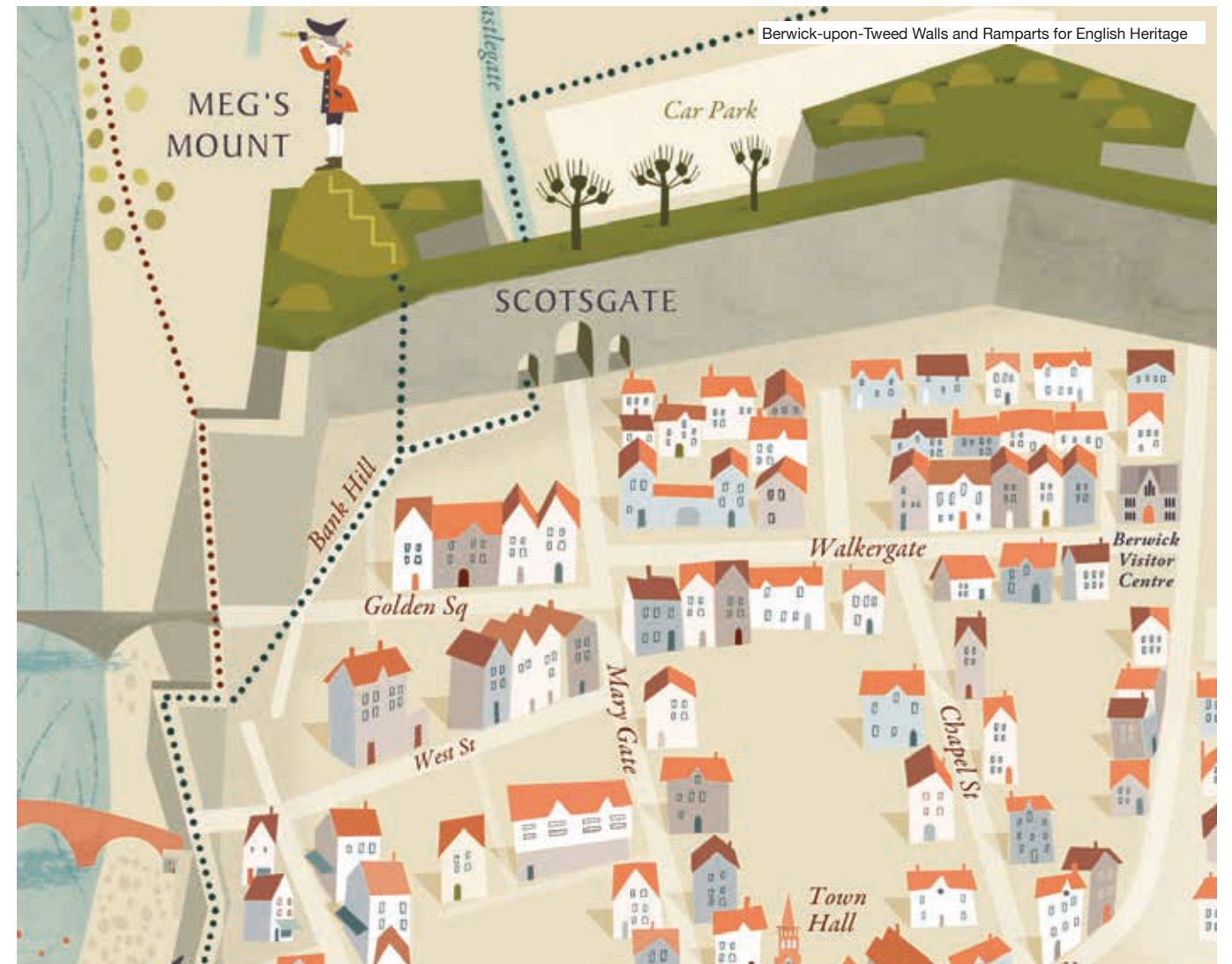


Regional Map for an estate in southwest France



There seems to be an endless appetite for map imagery, whether for navigation or simply for fun. For three years, I worked with a US fashion brand on a series of coastal location maps. These are reproduced on bags, scarves, quilts, notebooks, etc. and were intended for tourists and home-loving locals alike, who are well-versed in the geography, so there was no room for fudging it. Locations needed to be accurately located as well as visually appealing (you can see these on my website).

In 2016, I relocated to the historic town of Berwick-upon-Tweed, a place with much to map. English Heritage commissioned me to illustrate a detailed map of the town's Elizabethan and Medieval walls, telling different stories from the town's colourful history. This was to be an accurate walking map for visitors, requiring me to reach for a new level of cartographic accuracy. It was the first map I've made with intimate knowledge of a place, which made it such a pleasure to work on. No guesswork here – perhaps that explains why it's still one of my favourites.



Berwick-upon-Tweed Walls and Ramparts for English Heritage

My base in Northumberland, situated along the Scottish border, a region rich with castles and country estates, has led to an increase in commissions for historical maps. Two recent projects – a visitor's map for Alnwick Castle and the Ford and Etal Estate – were both complex locations that required meticulous attention to detail. Both needed drone shots and Google Earth renderings to ensure I could achieve the required accuracy for them to function as visitor maps. This felt like real cartography. It was at this point that I decided it was a good idea to find my other tribe and join the BCS. I'm grateful to have had my Ford and Etal map recognised by Stanford's Travel with a commendation award in this year's BCS Awards.

I had been contemplating the relationship between pictorial map-makers and geovisualisers: illustrators seldom generate a map's content; rather, our job is to use our visual skills to articulate the data in a way that's accessible to all. We balance the communication of content with the aesthetic possibilities. Although I'm a visual communicator, I'm easily overwhelmed by too much information, which is why I create maps that I can understand. My concern is to balance that elusive 'sense of place' with a visual hierarchy in a way that someone looking at a map for the first time can easily grasp and enjoy.

While I still rely on hand-drawn illustrations for many of the map's icons, I digitally compile the artwork in Adobe Photoshop (occasionally Adobe Illustrator). The iterative nature of this

process has deepened my profound respect for those who work exclusively with traditional art materials when creating maps. Multiple revisions can damage artwork and make updates challenging. The digital process is much more forgiving.

It's rare that I visit a place without a desire to map it, and my cupboards are overflowing with maps collected during my travels. My dream is to work as a map-maker in residence for a UNESCO heritage site, such as Angkor Wat, Lucca or the Forbidden City. I realised from my experiences documenting Berwick that the best maps are derived from experiencing and understanding a place in situ. Perhaps this is why Nancy Chandler's intimately researched maps of her home were a joy to navigate with.

When I work on a map, my intention is for it to serve as both a navigational tool and a memento. I hope that when people read the map at home, they take an imaginary and immersive stroll inside it, much like I did with my grandmother's Chinese cork diorama. Nothing brings me greater satisfaction than hearing that users found their way around a site and took the map home to frame.

You can see more of my maps at [www.taniawillis.com/maps](http://www.taniawillis.com/maps).



The Great Australian Art Tour- Ultratravel Magazine. Telegraph Media Group



# MEANDERINGS ... WALKING WITH WOOL IN MIND

*Llwybrau'r Gwlan, 'Woollen Trails' Drefach-Felindre, Carmarthenshire*

Tucked away in the folds of quiet, steep-sided valleys in Carmarthenshire, is a collection of small villages, and the National Wool Museum, representing a time when woollen manufacturing was one of the most important industries in Wales. The 19th-century villages of Drefach, Felindre, Waungilwen, Drefelin and Pentrecagal probably produced more flannel than anywhere else in Wales. The area teemed with mills, weavers, spinners, specialist yarn makers and knitters: at its peak in 1925 there were more than fifty mills in operation.

In 1994 Carmarthen District Council undertook a survey of buildings associated with the woollen industry and restored many paths in this historic hub of activity. Each village was given an interpretation board, including maps. Footpaths were cleared and upgraded (57 rights of way totalling nearly 25 miles), and an impressive map published (A2, folded) with illustrations celebrating the area's heritage.

I came across the map in 2001 when I first began to explore these trails; it is carefully labelled with a detailed key, contemporary images showing significant views, and a wealth of historical information in both Welsh and English. The reverse is an aerial image that provides a wonderful bird's-eye view of the terrain. The map invites various routes based on history as well as geography, although I admit I often augment it today with portable Ordnance Survey (OS) technology. My map's battered state is testimony to the many walks it has inspired.

A favourite walk starts at Dolwion Mill (SN 35597 38283), present in 1899 and still in full production in 1947 according to the map. Today it is a private home still bounded by the fast-flowing Nant Bargod and is reputed to have been the ancestral home of US President John Adams. The track crosses the Nant Bargod and leads up to the narrow high street of Felindre where some of the older terraced and detached houses were previously handloom and knitting workshops. Turning into the heart of the village draws you northwards to where Felindre and Drefach villages merge. On either side of the street in Drefach, tightly packed terraced houses and occasional larger buildings bear further testament to the weaving industry, all carefully documented on the map (in undertaking the project, some 173 properties were identified on 1888, 1906 and contemporary OS maps).

The route leads past the Red Lion pub, formerly a domestic weaving workshop, noted on the map, and then to the Cambrian

Mills. Here, the National Wool Museum with its working sheds is still producing cloth to sell to tourists along with tea, cakes and other crafts. The trail leaves the high street to follow a path as wide as an avenue, framed by beech and pine trees. Passing the Wool Museum is evocative of times past: the air is filled with the sounds of working machines as they steadily shunt and weave yarn, a rhythm that must have once dominated the whole valley. Even the Nant Bargod can't help weaving, and as it is crossed yet again its babbling tones replace the industrial chatter.

Striking west, one of the routes leads to Waungilwen, then southeast back towards Felindre and Saint Barnabas Church, built in 1862 to supplement the small parish church at Penboy as the local population grew with prosperous employment. The centre of the village, also known as Sgwâr Y Gat (Gate Square), references a tollgate destroyed by Rebecca Rioters (1843), part of a series of protests by local farmers and agricultural workers in response to high taxation and road tolls.

The many paths threading through woods are a favourite haunt, including tracts of ancient woodland hugging the steep valleys: oak, holly and beech dominate and some parts, with damp tree trunks hung with moss and lichen, must qualify for temperate rainforest status. There are many trails to choose from, most easily passable – although after heavy rain, the steepness of some paths can be challenging.

The map's design is simple but effective for planning and navigation. The use of colour is spare, with muted yellows through orange to reds for the woods, key sites, roads and footpaths. One hundred and thirty-two buildings are shown on the map, and the historic role of each is indicated by a simple and effective key and symbol set (e.g. scissors for a 'hand weaver(s) workshop').

The map has enabled my exploration up, down and across these wonderful valleys. I return regularly to walk some of my favourite trails and yet, even after 20 years there are still some nooks yet to be explored in this fascinating area. Sadly, this map no longer seems to be on sale, although another is available (National Wool Museum) for an hour-long walk around the village of Dre-fach Felindre.

**Dr Paula Owens** is an independent education consultant and Visiting Research Fellow at Canterbury Christ Church University. She has worked with the BCS and Historic Towns Trust on a recent map education project for schools (see pages 10–12).







Studying site and situation (OS 1:50 000)

# ALL ROADS ...

## ... LEAD TO CORINIUM DOBUNNORUM

(Cirencester), whose walls enclosed the second-largest settlement by area in Roman Britain. Corinium, a *civitas* capital (administrative centre), formed a key node in the Roman road network, with the Fosse Way, Ermin Street and Akeman Street intersecting there, as well as the White Way (an ancient track adopted by the Romans).

Cirencester was, in 2023, one of three project sites, part of an education partnership between the BCS, the Historic Towns Trust and Canterbury Christ Church University. The projects involved working with local primary schools to develop resources to enhance fieldwork and map use in the history and geography curricula (recognised by Ofsted as areas of challenge). The overall project aim is to test and refine education resources, with a strong focus on map use, to be offered to schools across the country.

The Cirencester project, with Down Ampney C of E Primary School,

developed a learning experience to enhance children's understanding of Roman history (Key Stage 2). The learning involved understanding the broader influence of Rome on Britain, but also its impact on a specific location. Maps were a key resource, from use of the OS Historical map of Roman Britain (1:625 000 scale) to place Cirencester in its wider context, to detailed bespoke maps of Corinium. OS topographic maps at various scales (including large scale historic maps containing detailed information of archaeological finds) were also used.

The local study element of the project adopted the concept of 'settlement site and situation'. 'Site' is the specific location of a settlement, while the 'situation' relates to its adjacent features, both managed (e.g. pasture and woodland) and natural (e.g. water and geological resources). Maps and related graphics (including LiDAR imagery) were used to stimulate discussion of the factors that might have led to the establishment of Corinium, and the resources its people would have relied on. Both hard copy and electronic sources were used (e.g. 'Digimap for schools' and the National Library of Scotland) to explore the town and its surrounds, although the exercise is easily adapted to a variety of settlement size and historic contexts. LiDAR DTM

(Digital Terrain Model) imagery was particularly useful in helping the children to understand the town's amphitheatre and its adjacent Roman quarries, much now hidden beneath woodland. DTM is useful for 'uncovering' other Iron Age and Roman structures hidden by trees; e.g. remains of the Roman town wall, or the Tar Barrows close to the Fosse Way where it enters Cirencester.

Classwork with maps and graphics was a preliminary to fieldwork; for example oblique 'aerial views' (artist's reconstructions) of the Roman town and other features. The children walked through the town – from the Roman amphitheatre, along the Fosse Way that bisects the town, via the site of the Forum, and finally to a surviving section of the Roman town wall. A bespoke map of the Roman town and artist's reconstructions helped the children imagine the living townscape. The children recorded the smells, sounds and feel of the place as it might have been, as well as what they might have seen. This formed the basis for a class exercise focused on 'sense of place' (a key theme in geography at KS2) in which the children wrote a diary of their imagined visit in Roman times. Their entries included the smells associated with the town's waste (not all Roman towns had efficient drainage and horse and ox-drawn carts would have left

their traces!), the taste of street food, and the roar of the crowd attending the amphitheatre. Positive reaction from the children included:

Alan – *It was really interesting to see on the maps where the forum and markets were and then retrace them with our walk.*

Arno – *We learnt lots about the Roman amphitheatre and Professor Peter was able to explain lots about the sights, sounds and smells that we would have experienced.*

The local saying "scratch Gloucestershire, find Rome" is nowhere better exemplified than Cirencester, with abundant nearby villas and other Roman sites. During the fieldwork, the children visited the Corinium Museum and were introduced to a wide range of artefacts that helped to bring the townscape alive.

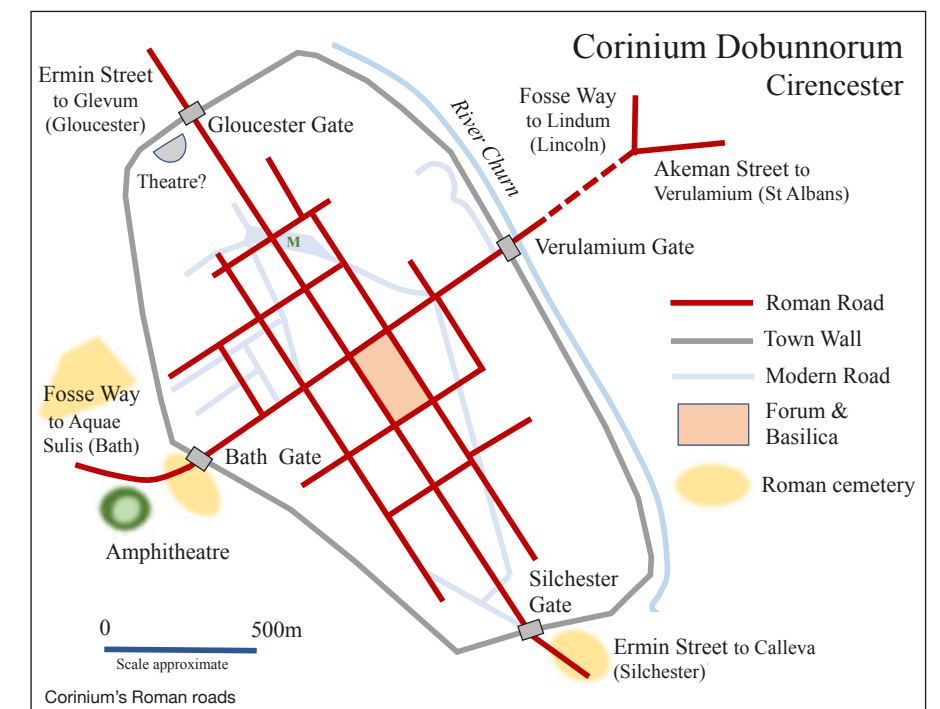
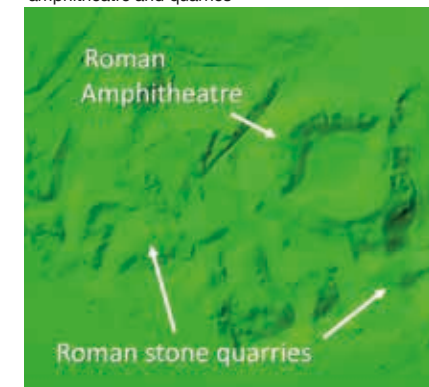
The success of this and the other two projects (seed-funded through Research England's 'Participatory Research Challenge') will provide the impetus for further collaboration to enhance school education through map and fieldwork. Watch this space!

**Helen Russell** – Geography Lead at Down Ampney C of E Primary School, and Social Media Coordinator of GlosGeog, the Gloucestershire branch of the Geographical Association.

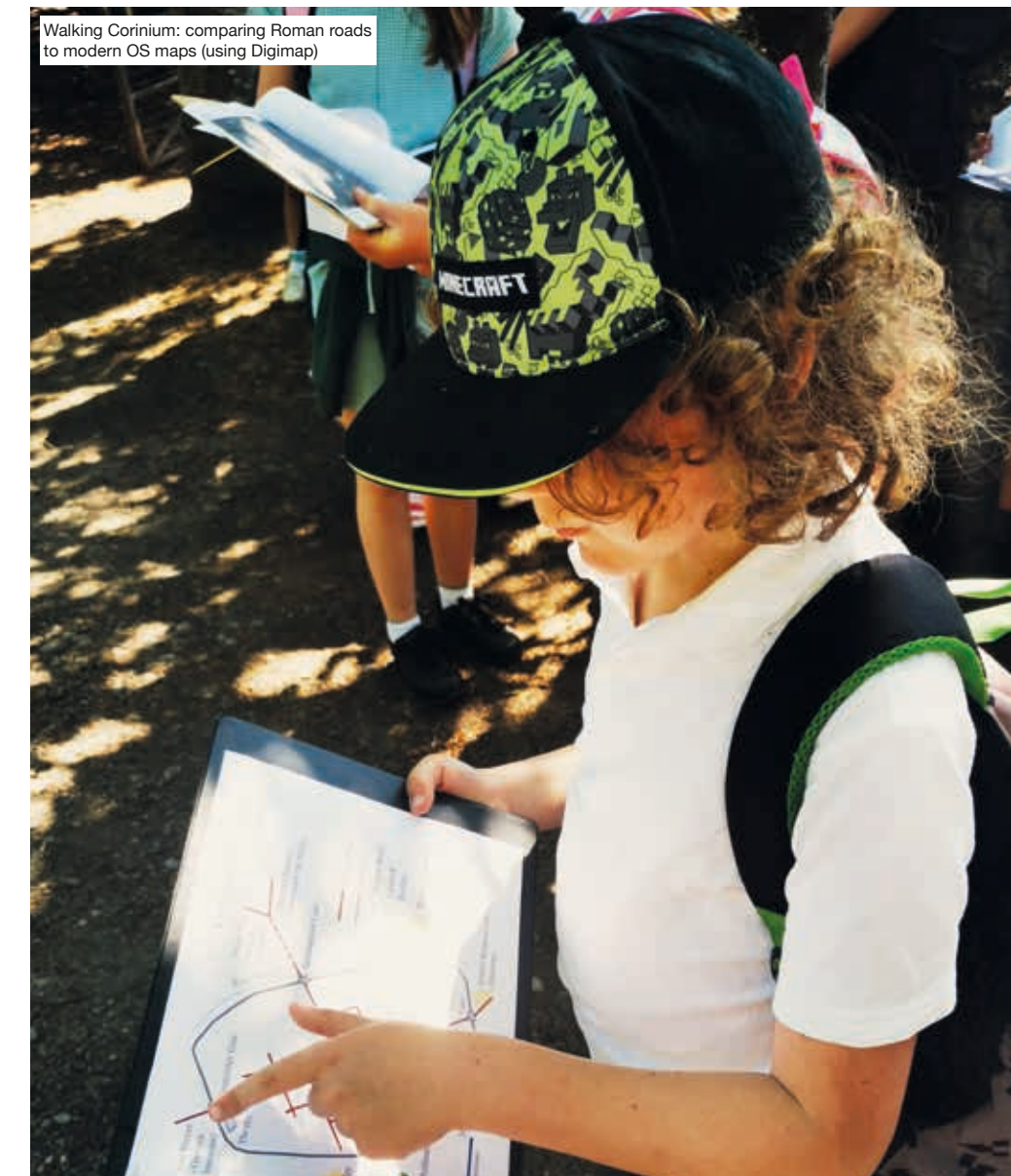
**Peter Vujakovic** – Emeritus Professor of Geography at Canterbury Christ Church University and Secretary of GlosGeog, the Gloucestershire branch of the Geographical Association.

The project team gratefully acknowledge the funding provided by Research England via CCCU Department of Research Development in 2023. A significant sum was spent on providing participating schools with OS map resources used in the project work with children.

LiDAR image of the Roman amphitheatre and quarries



Walking Corinium: comparing Roman roads to modern OS maps (using Digimap)





# BCS 60TH ANNIVERSARY CONFERENCE

The 60th Anniversary Conference and dinner was held in Cambridge on the 20 and 21 September. It was our first in-person event since the pandemic and there was a real anticipation and, perhaps, some nervousness among the organising team leading up to it. In the end it did not disappoint. It was an excellent two days full of varied and challenging talks to an audience that exceeded expectations in size and make-up.

The whole event was hosted at the British Antarctic Survey (BAS) which proved to be a superb venue. Our hosts did a great job of making us feel welcome and meeting the demands of such a large group. Despite a hiccup with the recording of the talks we were able to engineer a solution that means they are all available on the BCS YouTube channel if you want to have a look.

The first day was a Map Curators' Group meeting, which MCG were very pleased with (see their report below) and a GeoViz Hackday run by BAS staff. This proved to be a brilliant hands-on workshop that many used as a valuable CPD opportunity, and which was universally enjoyed.

The Anniversary Dinner and Awards ceremony was held in the old dining hall at Christ's College in Cambridge. It was a lovely venue befitting the occasion. We had an excellent guest speaker beforehand, Alex Hibbert, the polar explorer, who entertained us with a fascinating insight into his daring adventures. The dinner concluded with the annual Award ceremony, with some very worthy winners to mark the occasion. The winners are all available on our website (and see pages 16–21 for details). The only disappointment was the inclement weather so we couldn't enjoy the Fellow's Garden for the pre-dinner drinks.

The conference itself was a real treat, meeting old friends for the first time in a long while, and making new ones. It would be unfair to pick out any particular talks, because they were all excellent and added up to a most interesting look across the world of modern-day mapping. Thank you to everyone who spoke and put so much effort into their presentations.

Congratulations to the whole 60th Anniversary programme committee for putting together such a memorable couple of days.

Finally, a word about Chris Board, an ex-president, who had an unfortunate fall at his hotel and missed the whole event. We wish you well and hope you will make it next year!





Map Curators' Group: Exploring Maps

The Map Curators' Group workshop was on the theme of Exploring Maps. This was a deliberately broad topic looking at the use of maps for exploration, the cartographic outputs of travel and discovery, and looking into the content of maps themselves.

Our day started appropriately with an overview of the archive at British Antarctic Survey (BAS). Described as 'dense' by leuan Hopkins, the archive includes maps, air photography, oral histories as well as books and records. It enables BAS stakeholders to make comparisons through time and to identify new areas for study. One example was the use of aerial photography to identify colonies of snow petrels; their regurgitated stomach acid can persist for thousands of years, giving insights to their diet and population size.

Members of the Alpine Club similarly use the Club's library to plan expeditions. Librarian Emma Macdonald gave an introduction to the Club collection. It can be difficult to source appropriate mapping from some countries where circulation of maps is banned and copyright for historic examples unclear. Taking the idea "you may not assess the difficulties from a map" (from the Mountaineering Handbook 1950) to heart, often the members prefer guidebooks and route maps, confusingly known as 'topos', to standard topographical maps.

The contributions of indigenous peoples are often elided, erased or hidden in catalogue descriptions, requiring librarians and researchers to peel back layers of meaning and question attributions to develop wider understanding of their production and use. Katie Parker of the Royal Geographical Society explained their current initiative to find and describe indigenous items in their collection, engaging with local communities for creative responses.

The National Archives is home to a rich variety of maps and papers regarding well-known explorers: Cook, Flinders, Vancouver, Bligh, Franklin, Parry and Scott to name but a few! Archivist Rose Mitchell described her own searches to find them. The archives are arranged by government department. This means that it can be difficult to track papers through the labyrinths of government but also gives any maps or plans found context, embedded as they are in the letters and paper of their creation.

With these papers as a backdrop some of the group began a discussion about decolonising and diversifying collections, which we hope to continue online soon.

After lunch we heard about the fascinating collection at the Museum Plantin Moretus. This house was home to the Plantin Press for more than three centuries, with many cartographic connections, most notably printing the first atlas by Ortelius. Joost Depuydt and Zanna Van Loon shared some of the treasures from the almost intact business archive dating back to 1555.

Collections need to be arranged and securely stored to be findable. Many of the large UK collections use a system known as Parsons to classify and shelfmark their maps by geographic region. In a new development at the Bodleian Library, Martin Davis has taken this 80-year-old schema and made it fit for use in the 21st century by creating an online version for use by cataloguers.

Our exploration now looked into the content of maps themselves. Valeria Vitale of the University of Sheffield shared the 'Machines Reading Maps' project where AI searches in the text on maps. An example of this is now live on the David Rumsey Map Collection. By being able to search individual words as they appear on maps, we can find new and more diverse narratives, and ask more complex questions of them.

How to ask maps questions was the topic of our final presentation of the day. Katie McDonough of the University of Lancaster and the Alan Turing Institute used Map Reader to interrogate the content of digitised and georeferenced Ordnance Survey 62 to the mile sheets. In a physical collection, research is structured and constrained by the physicality of what you can view. However, using AI to search can move away from precision of replication and 'truth' and provides a faster way to look for evidence. As with all machine-reading, the outcomes will depend on the human user choice of what data to use.

We had a fascinating day, with many questions asked by the enthusiastic delegates, with more raised and to be discussed in the future.

Paula Williams, Convener of the Map Curators' Group



GeoViz Hackday

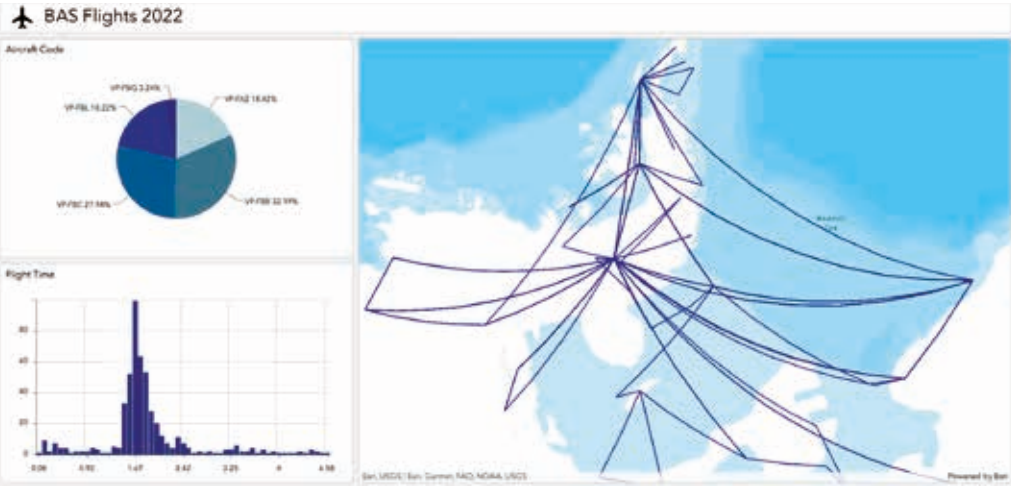
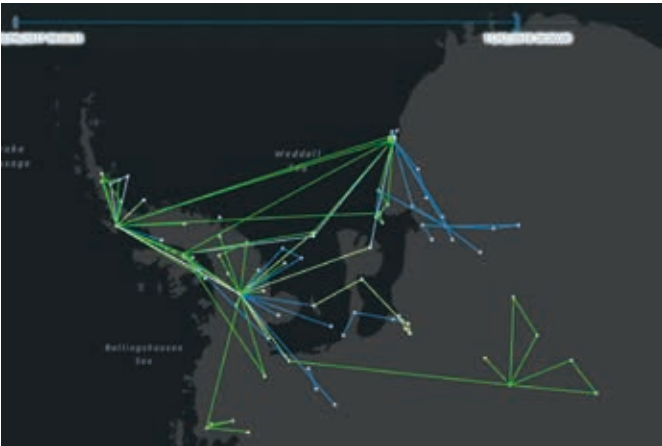
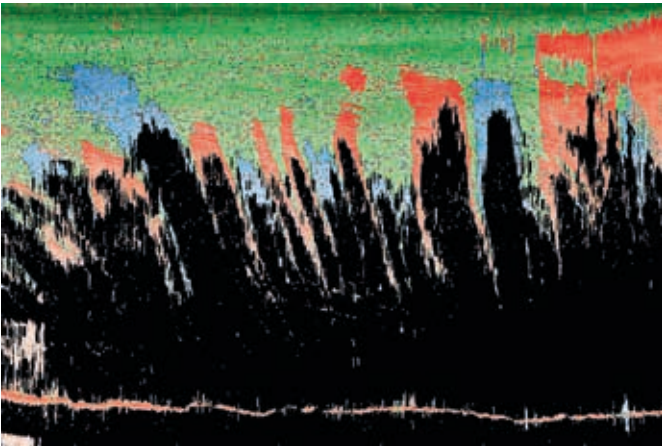
The BCS GeoViz Hack Day took place on the first day of the BCS Conference this year, running alongside the Map Curators' Group session. The hackday presented a fantastic opportunity for cartography and data visualisation enthusiasts from a wide range of backgrounds to join together and look at innovative ways to visualise the unique data sets provided by the British Antarctic Survey (BAS). The aim of the day was to unlock the data sets, looking for patterns or trends in the data and ultimately making the data sets usable and understandable – showcasing the power of data visualisation.

Around thirty BCS members attended the hackday and were presented with five data sets by members of the Mapping and Geographic Information Centre (MAGIC) team at BAS. The data sets included:

- Synthetic Aperture Radar (SAR) images for colour-blind interpreters: how to make SAR radar images easier to interpret for those with colour vision deficiencies.
- Wandering albatross nesting habits: looking at the breeding success of wandering albatross on Bird Island, its change over time and whether location and physical features have an impact on breeding success.
- BAS operational air routes: exploring historic flight data to look at how flights have changed over time to help inform future decisions regarding logistics support for fieldwork.
- British Antarctic Territory Gazetteer: how to group names by theme and visualise them.
- Plankton database: visualising the plankton community in an innovative way to reveal patterns, trends or relationships in the data.

The day started with a brief introduction to the projects before everyone chose their preferred data set and settled down either individually or in small groups for a few hours to explore and visualise the data as they saw fit. Each group used different tools and techniques in addition to sharing knowledge and expertise. The outputs were presented back to the group at the end of the day with some really interesting and exciting outputs including animations, dashboards, hex-bin maps, code-based solutions and graphs.

Overall, it was a well-attended and really enjoyable day with lots of knowledge sharing between the cartographic and research communities.





# BCS AWARDS WINNERS 2023

By Jim Goldsmith, BCS Awards Officer

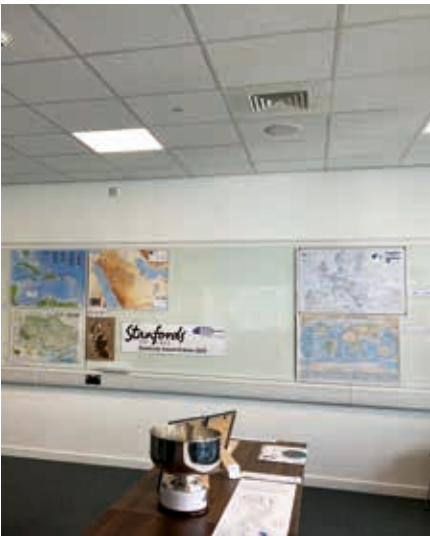


This year the Awards announcements and presentations took place at the end of the BCS 60th Anniversary Dinner at Christ's College Cambridge, a fantastic venue for the event (and a logistical challenge!). It was well attended but sadly not all the winners were able to be there.

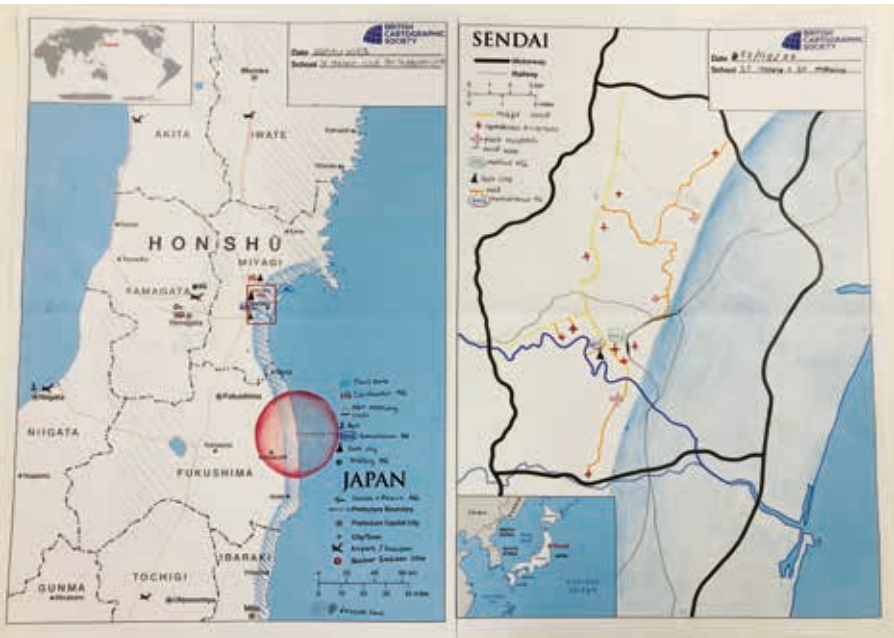
The main conference was held at British Antarctic Survey where we had a room to display all the Award entries. Some were physical and others were shown on posters, and there was a TV running a looping slideshow with all the 2023 entries.

I'd forgotten how complex running an in-person conference is – the logistics and organisation that goes on in the background is phenomenal. As the BCS Awards officer, it's been a pleasure to administer and collate the entries. I'm very grateful for all the support I receive from the Award sponsors, the BCS council members, BCS Admin, BCS Social Media team, Dominique Rene (who helps me with displaying the entries on the BCS website) and of course the people who submit their entries.

The next pages show the results of the 2023 Awards.



## Restless Earth Award



**National winner:** St Helen and St Katharine, Abingdon, Oxfordshire.

**Second place:** Doncaster UTC, Doncaster, South Yorkshire.

**Third place:** The John Fisher School, Purley, Surrey.

## Avenza Award for Electronic Mapping Products

**Winner:** Ribbon Mekong entered by Marko Kallio.

**Judges' comments:** Unusual and fun presentation of a river course. Very original, entertaining details. A simple concept, clearly executed and easy to follow.

### Commended

**Deep Mapping Estate Archives** entered by Scott Lloyd and Jon Dollery.

**Judges' comments:** Well-constructed site with excellent descriptions, history and explanation of components and instructions on how to use with each subject.

### Highly commended

**North Sea Emissions Uncovered** entered by S&P Global Commodity Insights.

**Judges' comments:** Great presentation of data in an innovative way. Engaging graphics and composition.





# Garsdale Design 3D Award

Announced by Elliot Hartley, Managing Director of Garsdale Design.



**Winner: Cherry Blossom Invitation**, entered by Zhang Jiangyue, Wang Lingqi, Zhang Yiqi, Huang Xuyuan, Weng Min, Kang Mengjun, and Su Shiliang Urban Computing & Visualization Lab.

**Judges' comment:** Visually striking set of two 3D maps highlighting locations of Cherry Blossom routes. Careful choice of 3D modelling vs 2D mapping here creates an informative and beautiful map.

## Highly commended

**The Great Fire of 1666 in Modern London**, entered by Julian Hoffmann Anton.

**Judges' comments:** Visually engaging and a great use of LiDAR and 3D software that makes you 'feel' the information here.

## Highly commended

**Thames Water**, entered by Loraine Rutt.

**Judges' comments:** Beautiful artistic 3D porcelain physical map which is derived from a multi-step process, based on digital data but finished with artistic choices.

## Commended

**Blood and Plasma Powerhouses**, entered by Matthew Lam.

**Judges' comments:** A nice example of mapping information in 3D. The judges like the presentation of information and the stylistic approach to the map.



# John C. Bartholomew Award, best entry for Thematic Mapping

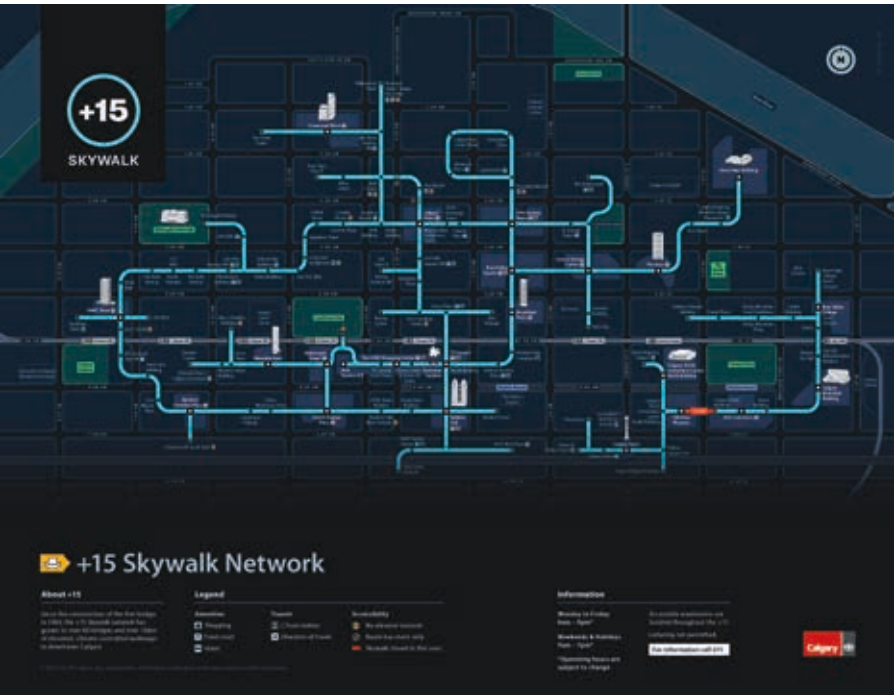
**Winner: Mapping Calgary's +15 Skywalk**, entered by Steer.

**Judges' comment:** This map achieves its stated objective well and has a striking design, particularly in terms of colours. It presents complex geospatial data in a simple, clear way, with a strong emphasis on the route itself and how it can be accessed. Judges liked the various formats in which the map is presented, and the neat combination of a metro-style map with the ground-level POIs.

## Commended

**Californian Snowflakes: the record snowfall of 2022-2023**, entered by Kenneth Field.

**Judges' comments:** A striking, attractive map with innovative use of the heritage snowflake images. The full effect of the professionally printed version makes good use of printing techniques. It was felt that the overall effect did not make clear just how exceptional that year's snowfall was.



# Ordnance Survey Award, for excellence in the application of Ordnance Survey data

**Winner: A walk in the (city) park**, entered by Knight Frank Analytics.

**Judges' comment:** A great map that has used a range of OS data sets, depicting walking distances to public parks and gardens within the TFL 1-3 zones. It has used a complimentary colour palette that clearly highlights the distances via a point grid. Its minimal design ensures the users' attention is drawn to the data itself and is not confused by detailed contextual mapping. The River Thames provides the geography we need to locate ourselves and the composition ensures the map is easy on the eye and easy to use. A great effort and worthy winner.



## Highly commended

**Thames Basin**, entered by Loraine Rutt.

**Judges' comments:** Really nice visual that makes clever design decisions to depict a wide range of OS data in an artistic context. Use of OS data really comes through with this piece. Very innovative and encourages the viewer to think differently about their relationship with the natural world.



# The Stanfords Award for Printed Mapping 2023



**Winner: Californian Snowflakes: The record snowfall of 2022-2023,** entered by Kenneth Field.

**Judges' comment:** This map achieves its stated objective well and has a striking design, particularly in terms of colours. It presents complex geospatial data in a simple, clear way, with a strong emphasis on the route itself and how it can be accessed. Judges liked the various formats in which the map is presented, and the neat combination of a metro-style map with the ground-level POIs.

## Highly commended

**Ukraine, A Year at War: February 2022-February 2023,** entered by National Geographic.

## Highly commended

**National Geographic Stargazer's Atlas, The Ultimate Guide to the Night Sky**

**Judges' comments:** Excellent double-sided current events map. Good level of detail, with diagrammatic information and history timelines, precise printing. Classic National Geographic mapping that is clear to read and contains much useful information.

**National Geographic Stargazer's Atlas, The Ultimate Guide to the Night Sky,** entered by National Geographic.

**Judges' comment:** Comprehensive space and night sky atlas, with high production value and elegant presentation. An attractive and beautifully produced atlas.

**Explore Loch Ness - Map and Visitor Guide,** entered by Helen Stirling.

**Judges' comments:** Fun map of the Loch Ness area. Great level of detail and information provided for the general public or leisure activities, with 'touring map' scale. Practical insets for urban areas.

## Commended

**Wales Coast Path - 'Set of 4 maps',** entered by HARVEY Map Services.

**Judges' comments:** Set of four hiking maps in an inset style format, to cover the full length of the Welsh coast. Precise mapping on polyart, well researched and user-friendly, with a great deal of touristic information.



**Ford and Etal Estates,** entered by Tania Willis.

**Judges' comments:** Charming brochure-style map, for the local visitor centre. Cartoon-like features add an animated feel to what is ultimately a very small area. Stylishly produced, and far better than what is commonly handed out at visitor centres.

**Y17A - Rivers Colne and Blackwater,** entered by Imray, Laurie, Norie & Wilson Ltd.

**Judges' comments:** Maritime chart in Imray's tried and tested format. Good and clear mapping aimed at waterway users.

**Guide to local walks for Black Sheep Hotels, Highland,** entered by Helen Liddle, Our Highland Home.

**Judges' comments:** An attractive and well-composed design. The use of matt recycled paper felt very appropriate for this product. Very pleasing small leaflet size set of maps of local maps.

# Peter Jolly Award Winner 2023



This is voted for by BCS members.

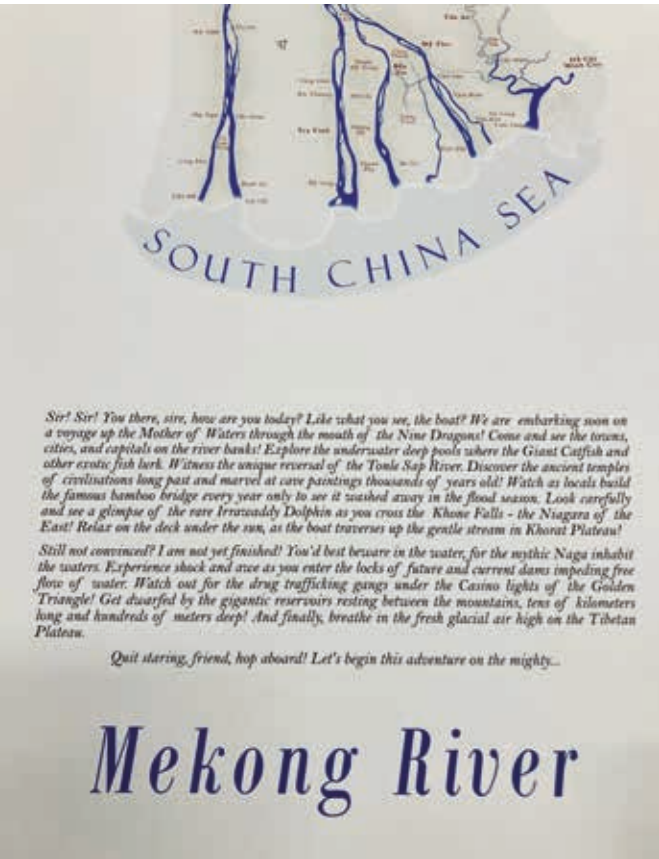
**Winner: Cernica Monastery** entered by Oana Candit, with 19% of the votes.

# BCS Award, best entry from winners of the major design awards



**Winner: Ribbon Mekong,** entered by Marko Kallio.

This entry also won the Avenza Award for Electronic Mapping Products.





# ANTARCTIC ROAD MAPS



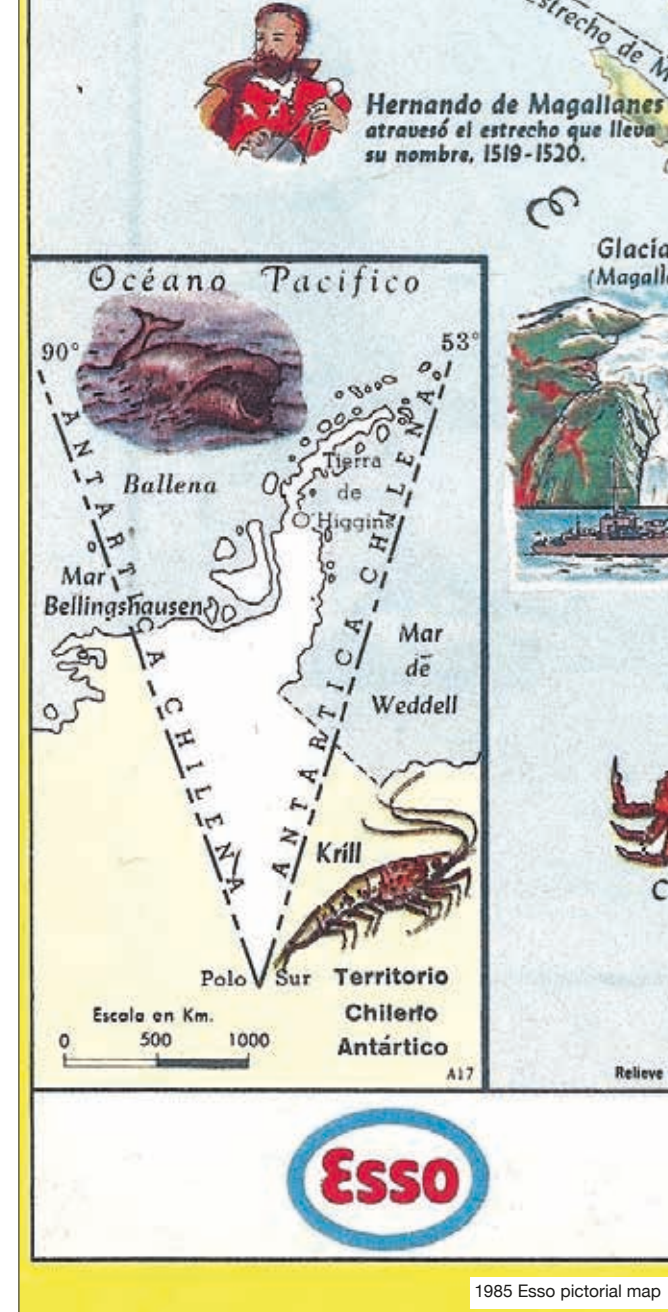
Attending the recent Map Curators' Group meeting at the British Antarctic Survey, I enjoyed seeing some excellent maps of the continent and, in particular, the British sector. However, as a specialist in road maps, I noticed the absence of roads was sometimes matched by an absence of reference to the contested nature of the territory. So back at home, I dug out some 'road maps' of Antarctica. Of course, none show roads, but road maps from Chile and Argentina often feel a need to show Antarctica.

My prize example is a 2013 map for Copec (the largest Chilean petrol company) using base mapping by IGM (Instituto Geográfico Militar de Chile), although acknowledgement is also given to US and British cartography having been used. Section 9 from a *Mapa Turístico* series at a uniform scale of 1:550,000 covers XII Región y Antártica chilena (Tierra del Fuego/ Antarctica), although Antarctica is inevitably at a smaller scale of 1:5,000,000. This still requires a generously proportioned sheet of approximately 970x685mm; the continent is conventionally displayed with 0° at the top so that the Antarctic Peninsula (called here Tierra de O'Higgins) runs toward the upper left.



Contrary to expectations, most of Antarctica is not white but a dull khaki, set in a blue-grey ocean, although ice shelves are in a brilliant white, drawing the eye towards the Chilean claims. This sense of bleakness is underlined by a moody seascape on the cover; it should be noted that the images chosen do vary from year to year. In contrast to the austere Antarctica, Tierra del Fuego comes over as positively inviting with its mountain ranges, as can be seen on the *Isla Navarino* extract. This series of road maps has a dual function, in that they also locate Copec's petrol stations, but with a single location in Puerto Williams, the sheet appears to have a wider purpose.

Copec has not always devoted such a large area to Antarctica on its maps, although all the examples I can find include at the very least a small inset of Chilean Antarctic Territory. All the earlier examples are centred on 70°W, turning the peninsula into a vertical protrusion from the continent. In 1988, a large slice (at 1:4,300,000) was overlaid on a part of Argentina devoid of any information, not even on the southernmost sheet (13/14). As far back as 1970, when there were just four sectional sheets, the bottom third of one sheet was devoted to the *Territorio Chileno Antártico*. And Copec's desire to include Antarctica extends to six pages of description in its 2014 *Chiletur Zona Sur* guidebook (and a basic road map of the *Isla Rey Jorge*).



Copec's multinational competitors seem less convinced; examples from Shell only include a very small inset and it is missing from a Petrobras road atlas, although Esso appears to have consistently shown Antarctica as far back as 1949. Esso often also included pictorial maps and the 1985 inset manages to avoid the cliché of penguins, showing krill and a baleen whale (not to scale) instead; these were drawn by Richard Edes Harrison (1901–1994) of the General Drafting Company in New York.

Chile's claim overlaps with that of the UK and Argentina. So it is no surprise to find a page in a 1998 road atlas published for YPF, the largest Argentine petrol company, covering *Islas Malvinas and Provincia de Tierra del Fuego, Antártida e Islas del Atlántico Sur*. This is centred on 50°W, so it too forms a symmetrical wedge pointing down to the South Pole. In practical terms, it would be no different to a UK Road Atlas devoting a page to the Falkland Islands and British Antarctic territory, in much the same way that the Channel Islands often appear. But viewed from South America, including Antarctica on commonplace road maps is necessary to legitimise unresolved claims.

Ian Byrne, Canterbury Christ Church University





# GIS: A TRANSFORMATIVE TOOL FOR SUSTAINABLE SOLUTIONS

*In the evolving landscape of technology and sustainability, Geographic Information Systems (GIS) have emerged as a pivotal tool with the potential to revolutionise consultancies across various disciplines. This article delves into the versatile world of GIS and how it serves as a driving force behind innovative solutions in design and environmental fields.*

## UNLEASHING THE POWER OF GIS

GIS stands at the forefront of modern data-driven decision-making. It serves as a versatile platform for storing, managing and processing spatial data to create, analyse and map diverse data sets. With access to integrated spatial and descriptive data sources, such as maps, satellite imagery and demographic information, GIS excels at identifying patterns, revealing hidden trends and establishing connections between geographic features. Its applications span a multitude of disciplines, making it an indispensable tool for enhancing management and decision-making processes.

What sets GIS apart is its user-friendly nature. Thanks to technological advancements and intuitive software interfaces, individuals from various backgrounds can swiftly grasp its fundamentals. Intuitive tools and workflows empower users to navigate through data layers, conduct analyses and craft interactive maps with ease, all without demanding extensive technical expertise. Furthermore, the rise of online GIS platforms and cloud-based solutions ensures that users can access applications from virtually anywhere with an internet connection, democratising the power of spatial data and enabling informed decisions across industries.

## GIS ACROSS DISCIPLINES

### ARBORICULTURE

GIS is instrumental in the field of arboriculture, aiding in the efficient management and analysis of spatial data related to trees and vegetation. This proves crucial for tasks like Health and Safety compliance and asset management during the creation of Visual Tree Assessments (VTAs). VTAs involve the systematic inspection and evaluation of trees, assessing their health, stability and potential risks. GIS empowers consultants to seamlessly collect and record VTA data in a spatial database, integrating attributes like tree species, height, condition and maintenance

history. Through GIS, the data becomes a spatial visualisation, allowing for efficient trend identification and areas of concern that can be shared with stakeholders.

GIS also streamlines the production of reports, such as BS5837, which are essential for planning applications that involve measures to protect and preserve trees during development proposals. It accurately maps existing trees, calculates root protection areas, and defines constraints. This spatial representation aids stakeholders in visualising the impact of development on the surrounding tree environment, facilitating informed decisions regarding preservation.

### DESIGN AND PLANNING

In the realm of design and planning, GIS plays a pivotal role in enhancing accuracy and efficiency. It aids in Landscape and Visual Impact Assessments (LVIAs), which evaluate the impact of proposed development projects on the surrounding environment, a critical component of planning applications. By integrating spatial data, such as land use, topography and vegetation cover, GIS enables professionals to create detailed visual simulations and viewshed analyses. These simulations provide stakeholders with a realistic representation of how a development will visually interact with the landscape, aiding understanding and evaluation of potential impacts.

GIS's versatility extends to incorporating factors like lighting, shadowing and view corridors into the assessment process, enabling informed decisions to mitigate development impacts on both natural and built environments.

### ECOLOGY AND BIODIVERSITY

GIS is a powerful tool in ecology and biodiversity studies. It aids ecologists in processing, analysing and visualising ecological data spatially. For instance, ecologists can use GIS to categorise and classify habitats based on their characteristics and ecological significance. Accurate thematic habitat maps can be created by integrating spatial layers like topography, land cover and species distribution. These maps offer valuable insights into the distribution, connectivity and conservation status of different habitats, serving as essential components of ecological appraisals, habitat management planning and conservation strategies.



Moreover, in the context of environmental legislation like Biodiversity Net Gain (BNG), GIS is pivotal. It integrates and analyses spatial data related to biodiversity, habitats and ecosystems. Consultants identify areas of high ecological value, assess the potential impacts of development projects, and design strategies to enhance and protect wildlife habitats all while trying to make the land 10% more biodiverse than before the development.

## THE FUTURE OF GIS

GIS stands as a fundamental tool underpinning the delivery of technical services, ensuring efficient and effective

consultancy with readily accessible analytic and visual spatial data for clients. As technology and data availability continue to evolve, the potential applications of GIS are boundless. It is a dynamic tool that holds promise for even more exciting possibilities in the future. The world of GIS is ever-evolving and is truly a space worth watching.

*Charlie Lawler*



# AGI Releases New Report into Skills Requirement in £Billion Geospatial Sector

The Association for Geographic Information (AGI), the UK membership organisation for companies and individuals working in the geospatial sector and British Cartographic Society partner, has released the results of its first survey of skills. Drawing on feedback from its membership, partners and organisations operating within both the public and private sectors, the report highlights issues and trends relating to recruitment, retention and talent development.

With the UK ranked as second in the global geospatial readiness index and with dedicated geospatial companies in the UK generating over £6 billion in annual turnover, providing employment for over 30,000 people and securing over £1 billion in equity investment since 2016, the results of the survey will be used to inform action taken by the AGI, government and other stakeholders to address skills shortages and promote sustained growth.

"There is some real positivity to be taken from the results of this inaugural survey as it shows a thriving sector that is, on the whole, able to recruit and retain staff with the required skills," commented Ian Maxfield, co-chair of the AGI's Education and Skills Working Group. "However, with the emergence and adoption of new technologies such as artificial intelligence and machine learning it may be harder to attract candidates with these skills as there is greater competition with other sectors."

**NEARLY 80% ORGANISATIONS RECRUITED WITHIN THE LAST SIX MONTHS**  
**77% OF ORGANISATIONS EXPECT TO RECRUIT IN THE NEAR FUTURE, WITH TOP REQUIREMENTS BEING CORE DATA SKILLS (E.G. ANALYSIS, PROCESSING AND MANIPULATIONS)**

**CULTURE AND CAREER PROGRESSION OPPORTUNITIES SEEN AS ATTRACTIVE QUALITIES BY MAJORITY OF ORGANISATIONS**

**POOR STAFF RETENTION AFFECTED BY PAY, ESPECIALLY WITHIN THE PUBLIC SECTOR**



"The results of this report are particularly interesting in the light of a recent study of the Scottish geospatial skills landscape, also supported by AGI. The national picture is clearly not straightforward, and we'll continue to explore and monitor the skills picture across the UK as a whole," added Anne Robertson, co-chair of the AGI Education and Skills Working Group.

The AGI will take the results of this survey to make connections to pathways at all stages of the geospatial sector value chain, for example university course offerings, apprenticeships and wider providers. The AGI will also work to link these results to programmes aiming to professionalise the sector through routes such as competency frameworks.

The AGI Skills Survey report can be downloaded, free of charge, from [www.agi.org.uk/skills-survey](http://www.agi.org.uk/skills-survey) and organisations who are keen to be involved in the next survey are urged to register their interest in participation by emailing [skills@agi.org.uk](mailto:skills@agi.org.uk).

## ABOUT THE ASSOCIATION FOR GEOGRAPHIC INFORMATION

The Association for Geographic Information is an independent and impartial organisation that represents the UK geospatial sector. Working with members and the wider community, the Association successfully influences government policy, delivers the highest quality of education and provides a lead for best practice across the industry. Established in 1990, members of the Association for Geographic Information enjoy unrivalled networking opportunities, a framework to learn new skills and the support to progress professional development.

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

In our professional lives, we take part in activities to support our personal development, to stay relevant, improve skills and advance our careers. Being able to say that you have had this investment independently assessed puts you ahead of the pack.

Accreditation is one way to recognise and demonstrate your professional standing. It also provides a structure and incentive for ongoing professional development and learning.

*"Being able to demonstrate that my expertise has been independently assessed is important to me. This gives me credibility in my organisation and beyond."*

For many cartographers, and those with cartographic expertise, this professional accreditation is Chartered Geographer.

## What is Chartered Geographer?

Chartered Geographer (CGeog) is an internationally recognised accreditation for professionals who demonstrate expertise in applying geographical skills, knowledge and understanding. It requires evidence of innovation, professionalism and influence. Chartered Geographer is awarded by the Royal Geographical Society (with IBG) (RGS-IBG).

## What are the benefits of Chartered Geographer to you?

Chartered Geographer provides independent evidence to employers, clients and the public that you demonstrate the highest standards of professional competence, experience and professionalism. Gaining professional accreditation can differentiate you from others in a competitive employment market and can be invaluable when looking at new opportunities and new organisations. Your status as a Chartered Geographer also opens up opportunities to network with other professionals across a wide range of sectors.

Or, as Ashley Parry-Jones CGeog sums it up: "It's more than just letters after your name, Chartered Geographer demonstrates your professional commitment, and opens up networks and opportunities to engage with the wider geographical community."

## How do I become a Chartered Geographer?

The application process is very straightforward. It involves a current CV, the names of two referees, and a

# PROFESSIONAL ACCREDITATION FOR CARTOGRAPHERS AND GEOGRAPHERS

statement that allows you to demonstrate your application of geographical skills, knowledge and understanding. There are lots of resources online, regular webinars with guidance, and staff from the Society can help you at every stage of the process.

Each application is assessed by an experienced panel of Chartered Geographers. Assessors will be looking to see how you apply your cartographic and geographic knowledge, skills and expertise in your professional work. They will also be interested in how you act professionally and how you have an impact on projects in a range of professional settings.

## How do my cartography skills get recognised?

The accreditation is flexible to accommodate the wide range of geographical careers across sectors. It's based on a broad set of competencies. To recognise specific expertise, applicants can select to apply for specialist CGeog post-nominals GI/GIS, Economic Geography, Geomorphology, or Teaching alongside the broad Chartered Geographer accreditation. We have also just introduced a new post-nominal for those expert in Earth Observation.

## How do I get my employer to support me?

The benefits of accreditation are not just for you, the individual, it's also beneficial

to your employer. A company can profile the professional standing of its staff, with expertise independently recognised through an international, professional accreditation. Accreditation, like Chartered Geographer, demonstrates to clients, stakeholders and the public that the company values professional experience and is invested in long-term development. It also shows that staff are upholding the highest standards of professional practice and keeping up to date with industry trends and best practices.

Chartership is also good for staff motivation and retention. It's widely recognised that employee satisfaction increases when their employer invests in their learning, development and career progression, and supporting Chartered Geographers does just that.

If this makes you curious about gaining professional accreditation, then please get in touch with us through [professional@rgs.org](mailto:professional@rgs.org) and connect via X (@RGS\_IBG) and LinkedIn (Royal Geographical Society (with IBG))

*"Chartered Geographer is a differentiator. There are plenty of geographers out there who have experience and do well at doing their job, but what I wanted when I entered my career was to get that extra recognition from my peers."*





# ICC2023 CAPE TOWN

Dr Alex Kent  
UK National Delegate and Vice President  
International Cartographic Association (ICA)

Photos by Alex Kent and Martin Davis

This year, the 31st International Cartographic Conference (ICC) and 19th General Assembly of the International Cartographic Association (ICA) took place in Cape Town, South Africa, from 11 to 18 August. It became the second time for South Africa to host an ICC and General Assembly, following Durban in 2003. The ICC usually takes place every two years and is run by a local organiser on behalf of the ICA, which is the world body for promoting cartography and GIScience internationally. The ICA was founded in Switzerland in 1959 and is formed of member states (the UK is represented by the British Cartographic Society) and affiliate members (such as mapping organisations and companies that support the ICA's mission).

ICC2023 was a truly outstanding event and attracted some 850 delegates from 87 countries, with over 400 participating from South Africa. The conference theme of 'Smart Cartography for Sustainable Development' encompassed 363 presentations across 120 technical sessions and four keynotes. The venue was the Cape Town International Convention Centre, which combined an excellent assortment of meeting rooms with ample space for exhibitors.

The conference also welcomed the ninth meeting of United Nations Global Geospatial Information Management for Africa

(UN-GGIM: Africa), strengthening links between the ICA and the UN and creating opportunities for new connections. Thankfully, the programme organisers were flexible enough to incorporate a special session dedicated to celebrating the life of Igor Drecki – editor of ICA News from New Zealand and a friend to many within the cartographic community – who had tragically died in a car accident days before. Beyond the huge variety of the conference programme, the gala dinner was a superb evening that treated delegates to a real feast of African food and dance.

One aspect of ICC2023 that did fall short was the map exhibition, which was mostly digital apart from some categories. Although digital exhibitions involve less logistical effort for the contributors, for delegates it was difficult to see the entries by scrolling through images on a workbench of computers. Conversely, the children's maps entered for the Barbara Petchenik Award remained on physical display and attracted many delegates. Although the UK did not win in any age category this year, we had some success in the Maps on Panels category, with 'The World – Great Discoveries' (by Mary Spence) awarded second place (see pages 2–3).

Every four years, the ICC holds a General Assembly. This is a meeting of ICA member states, each represented by a national delegate and their deputy, to vote on changes to the ICA statutes and to elect the new Executive Committee (EC) for the next four-year term. The EC comprises the President, Secretary-General and up to seven Vice Presidents, and is responsible for running the organisation and overseeing the work of its Commissions. These undertake research and hold activities for a range of topics, from art and cartography to planetary cartography.

Having been nominated by the BCS, I was privileged to follow in the footsteps of David Forrest, Chris Board and others before them to be duly elected as one of the new ICA Vice Presidents. It's been quite a journey since I attended my first ICC in Moscow in 2007, which was made possible through an ICA scholarship and inspired me to get involved in the ICA (see

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page 17 in the December edition of *Maplines* that year!). Sixteen years later, I'm glad to be regaining the UK's seat at the table and helping to steer the ICA forward over the next four years.

At the Closing Ceremony, Cindy Brewer became the first woman to be presented with the ICA Carl Mannerfelt Gold Medal, the highest award offered by the organisation. As many readers of *Maplines* and practising cartographers will know, Cindy has taught at Pennsylvania State University ('Penn State') for many years and among her many outstanding achievements is the development of colorbrewer.org, a tool that has made choosing effective colour schemes easier for millions of mapmakers around the globe. Hopefully, Cindy will lead the way for a greater diversity of medal winners in the years to come.

I am sure many will agree that ICC2023 was a great conference and will be a tough act to follow. We will have to find out in Vancouver, where ICC2025 will be held from 28 July to 1 August 2025.





# BOOK REVIEW

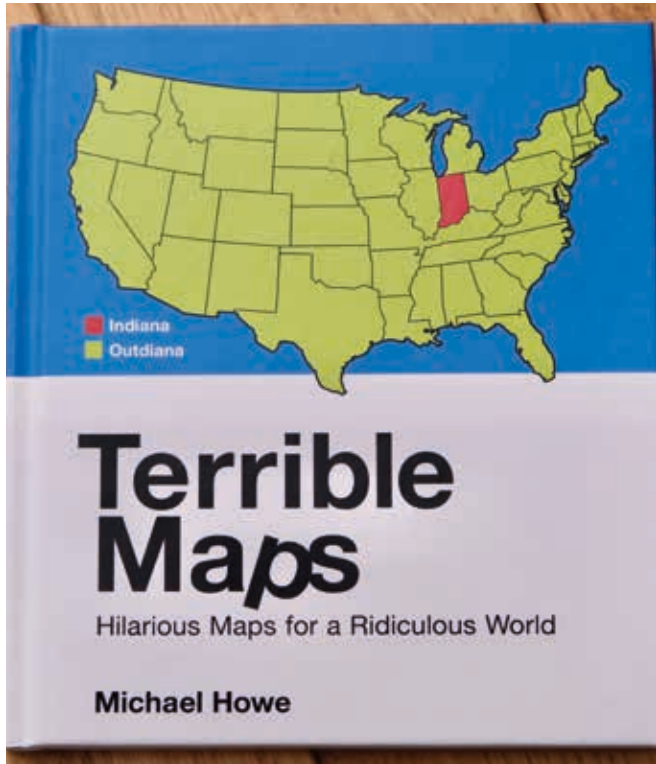
**Terrible Maps:**  
Hilarious maps for  
a ridiculous world  
Michael Howe  
Harper Collins  
Publishers  
£14.99



It may seem a bit odd to write about a book of ‘terrible’ maps in our learned Society’s membership magazine, but it’s nearly Christmas and this book is sure to raise a laugh, even among the most professional and skilled cartographers.

The book is compiled by the person behind the popular social media feed of the same name, and aims to make you look at the world and maps in a different way. Ever wondered how aliens see Earth? Or the link between countries never visited by a sitting US president and those countries that have Domino’s pizza? Have you ever seen Saudi Arabia mapped only by its rivers? Or which countries eat their national animals? These maps, and many more that you didn’t realise you wanted to see, are all in this hilarious book.

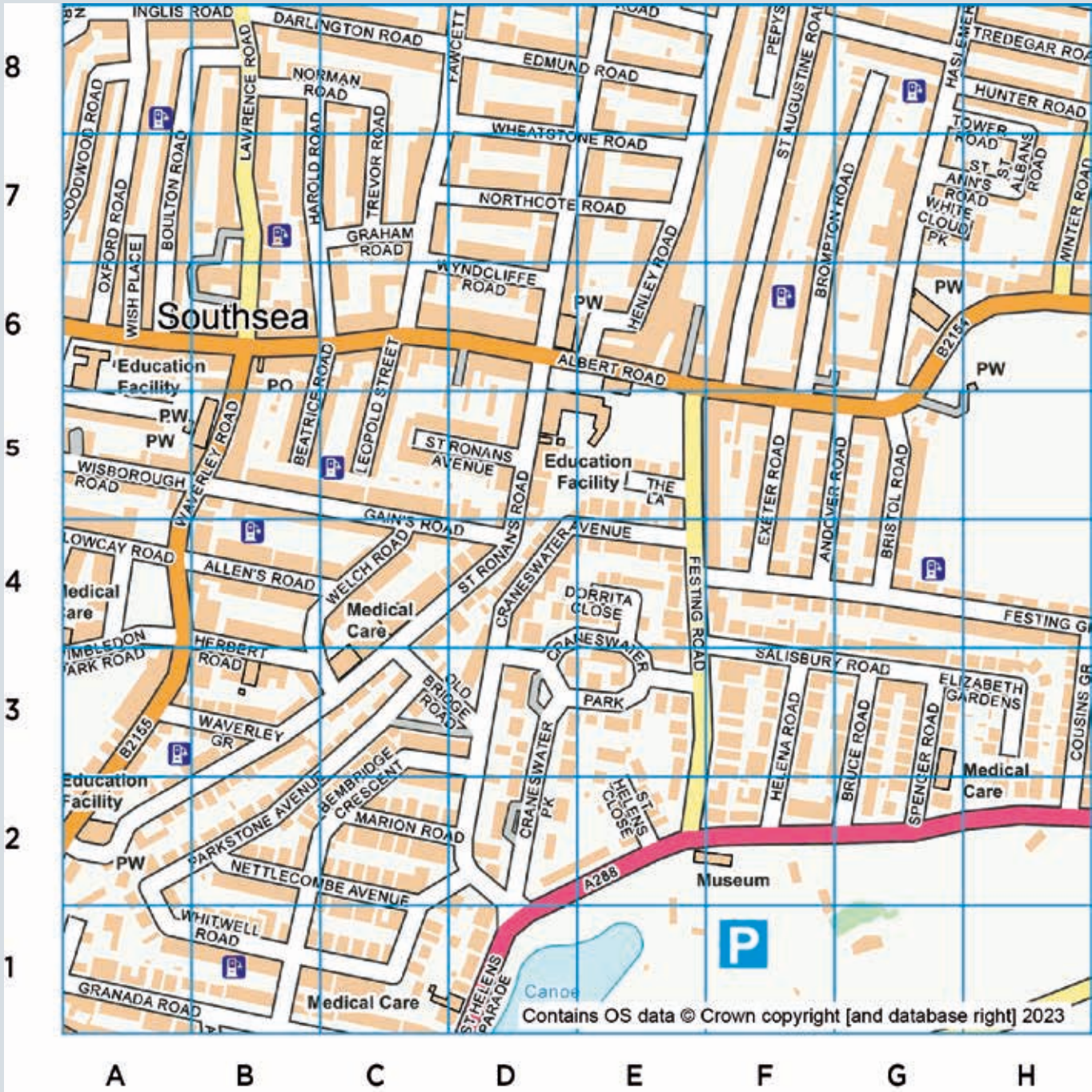
A celebration of pointless cartography!



# DASTARDLY PUZZLE

Here’s a fiendish puzzle, compiled by David Sherren.

David has decided there is not enough car parking in his neighbourhood and has agreed with the local council to build eight new car parks. But weird planning regulations mean that no two car parks shall share the same row, column, or diagonal on the map. Can you work out where the car parks might go? There are 12 fundamental solutions.



OS OpenMap – Local

Answers on inside front cover





## DISCOVER MAPS PROJECT – FOLDING MAPS

Back in the summer of 2022, we presented a short article for *Maplines* detailing the East Grampian Coastal Partnership's (EGCP) Discover Maps Project ([www.egcp.scot/discover-maps](http://www.egcp.scot/discover-maps)).

The four maps in the series – in A0 format – have now been circulated to schools, libraries and care homes in Aberdeen and Aberdeenshire with the help of Aberdeen City Council and Aberdeenshire Council, for community feedback and as the basis to gather more information for the second series of each map. The maps are also available as PDFs for free download on the EGCP website ([www.egcp.scot/discover-maps](http://www.egcp.scot/discover-maps)) and the Visit Aberdeenshire website (<https://www.visitabdn.com/what-to-do/touring/touring-by-foot/view/discover-maps>).

In the meantime, with the help of Dennis Maps Ltd and some commercial sponsorship from OEUK and Serica Energy, we have now printed 5,000 copies of the Aberdeen map as a folding map in the Ordnance Survey (OS) Landranger format.

These are now on sale through some local outlets. See [www.egcp.scot/discover-maps](http://www.egcp.scot/discover-maps) for locations.

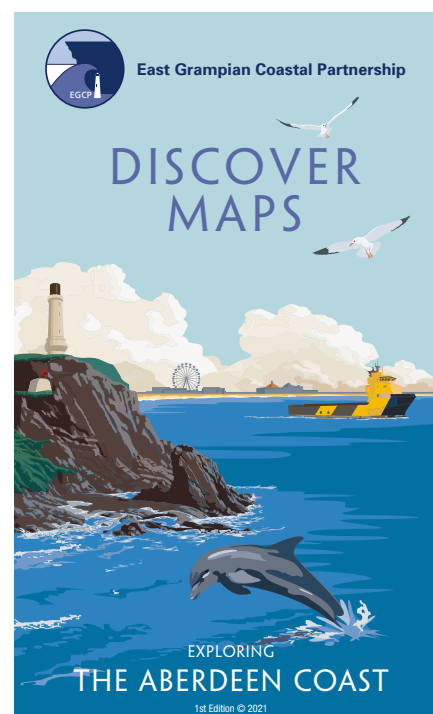
EGCP has also recently received some further commercial sponsorship from Rockrose Energy, Peterhead Port Authority (PPA), and Dennis Maps Ltd to print the remaining three maps in the series – The Mearns Coast, The Formartine Coast and The Buchan Coast – also as folding maps. These will become available soon.

By David R. Green (for EGCP Ltd. on behalf of John Watson, Mike Skitmore, Derek McDonald, and Ian Hay)

### Note:

In addition, EGCP would like to express their sincere thanks to the following organisations for supporting the development of the Discover Maps:

Aberdeen City Council, Aberdeenshire Council, NESFLAG (EMFF Scheme), Shell, University of Aberdeen, Visit Aberdeen, and Visit Scotland.



# The Cartographic Journal – *digital access all year round*

Most members of BCS have digital access to all articles published in *The Cartographic Journal* (all but Affiliate members), as well as printed copies delivered on publication (all but Affiliate and Student members). Digital access allows you to read articles as soon as they are published, rather than waiting for the printed issue.

Here's an abstract from one of the articles published in *The Cartographic Journal*:

### *Objective and Subjective Methods for Evaluating the Usability of Schematic Maps: The Case Against Informal Expert Assessments*

Maxwell J. Roberts

#### ABSTRACT

Schematisation is an established method to improve transit map usability, especially for rail-based modes. However, official designs differ considerably in the application of such methods, leading to the question of whether some designs might be better optimised than others. Objective measurements of performance comparing the use of different versions currently

offers the soundest method of determining usability, especially compared with soliciting subjective evaluations from the general public – which are typically uncorrelated with objective measures. A short-cut to design evaluation might be to consult experts in the domains of cartography or graphic design. However, the research discussed here indicates that informal expert-evaluations are almost indistinguishable from those offered by the general public. In order to be given credence, expert-evaluations of usability must be derived from generalised empirical evidence, or else grounded in clearly stated, falsifiable theories of usability, or at least based upon logically transparent arguments.

You can access the full article at [www.tandfonline.com](http://www.tandfonline.com).

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#### UPCOMING EVENTS

We plan to continue to run the Teatime Talk Series in 2024, but will permanently move the time to 7 pm on the third Thursday of each month.

There will be a talk each month except August and we will have a mix of topics. Six of the talks will have a common theme called 'Mapping My World', where invited speakers from around the globe talk about how their country is mapped and the impact of geospatial technologies in their region. We will also continue to have some Map Memoirs and more general talks.

The current plan is as follows, although may well change depending on the availability of invited speakers:

- 18 January: Mapping My World
- 15 February: Map Memoirs
- 21 March: Mapping My World
- 18 April: Teatime Talk
- 16 May: Mapping My World
- 20 June: Map Memoirs
- 18 July: Mapping My World
- August: Break
- 19 September: Teatime Talk
- 17 October: Mapping My World
- 21 November: Map Memoirs
- 19 December: Mapping My World



# Your 2024 membership – remember to renew!

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

**By renewing your membership you will continue to have access to the many benefits associated with the Society:**

- Access to a wide and diverse cartographic networking community
- *Maplines*, our membership magazine
- *The Cartographic Journal*, our peer-reviewed academic publication
- Monthly talks on a range of cartographic and geovisualisation subjects
- Access to the annual Winter Lecture delivered by industry experts
- Our Annual Conference of presentations, workshops and networking opportunities
- Access to our GeoViz programme and resources
- Discounts at various cartographic-related organisations and retail outlets

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