From the Editors

Welcome to the Spring edition of Maplines. The daffodils are blooming, lambs fill the fields and in the spirit of new beginnings, Maplines has three new editors to welcome:

Oliver Madgwick is a Geodetic researcher, exploring survey records and archives for information on how maps have been spatially controlled. He then provides advice based on this research to cartographers and other users of geographical data.

Humiun Miah is a recent geography graduate from the University of Edinburgh and has applied cartography throughout his career and studies. Currently he is a Geospatial Analyst within the civil community mapping initiative in Glasgow.

Holly includes an interest in the history and development of cartography. He enjoys a wide range of outdoor activities and exploring different countries and cultures.

Jasmine Walsh studied Geography BSc at Nottingham Trent University, completing a spatial and temporal study of river water quality for her dissertation and graduated with a First in 2014. After university she entered the geospatial industry, joining Sterling Geo. She was involved in a range of projects that utilise the company’s core software. In May 2015, the team at Sterling Geo encouraged Jasmine to get involved with the editors at Maplines, where she has been finding the range of mapping styles thoroughly interesting, particularly maps as art.

Outside of work Jasmine enjoys being active, regularly swimming, cycling and playing badminton.

So, welcome to Olivia, Humiun and Jasmine. We all look forward to receiving articles and content for the next edition of Maplines.

We all hope you enjoy this edition, have a lovely summer and we will be back later in the year.

Louisa, Alice, Olivia, Humiun, Jasmine and Martin

NOTE: The photographs which illustrated Dr John Peat’s article on the Battlefield Tour of France in the Summer 2015 issue of Maplines were taken by Nicholas G. Hutchings. Apologies that this was omitted from the Summer edition.

Advertising in Maplines

Consider this a shop window to promote your company, event, course or publication to the mapping community. To submit editorial, contact the Editors: maplines.editors@gmail.com

For display advertising, contact Sharon Robson: sharon@pvpubs.denovo.co.uk or +44 (0)1438 352617

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

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The views expressed in Maplines are those of the Editors and Contributors and not necessarily those of the BCS.

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Notes from our President

I would be impossible to start my inaugural contribution to Maplines as President without first thanking my predecessor, Pete Jones. As you will know, Pete became President in 2012 for a particularly important three-year phase in the life of the society: before, during and after its 50th anniversary year of 2014. Rising to the challenge of raising the society’s profile, together with unforgiving spotlight, Pete served with a level of dedication and professionalism that has set a very high standard for others to follow. When handing me the Chair of Office at the recent AGM in Oxford, Pete said “I’m sure this is going to be a very safe pair of hands” and, my goodness, I hope his words are proved right. The process of having to fill some big shoes is a daunting one, yet I have the privilege of working with a talented and hard-working team, and I am confident that there is much we will achieve together.

By the way, for those of you who don’t yet know me – or who hadn’t read my pre-election biography – I am a reader in Cartography and Geographic Information Science at Christ Church University, which means I have great fun inspiring new generations of mapmakers and undertaking research in cartography and in other aspects of geography. I have always loved making maps and growing up with my father being in the Royal Marines meant that a map was never far away. I began my formal education in cartography at Oxford Brookes University, where Roger Anson was BCS President, and I joined the society in 2000. The awarding of a BCS bursary in 2002 allowed me to attend my first Annual Symposium, which was in Portsmouth that year. (Some of you will remember that legendary dinner onboard HMS Warrior!)

To achieve this, we need to work together to develop and support our activities and devise new benefits of membership. The Restless Earth programme, for example, continues to go from strength to strength, promoting cartography to over 100 schools and colleges, boosting the number of students choosing geography as their GCSE option, and offering the opportunity for institutions to join the society as Educational Members. Investment in its success has seen the appointment of Alice Gadney as Restless Earth Coordinator to focus on making what we offer even better. Volunteers are always needed to help run workshops around the country and Alice will be very pleased to hear from you. It is an excellent opportunity to get new generations engaging with maps and it really is great fun. To find a Restless Earth workshop nearby, just visit our website.

As for new benefits for members, there is plenty of scope to explore ways in which membership can be enhanced also that support the mapmaking community and industry. So, for starters, I am pleased to announce that Ordnance Survey has kindly granted all BCS members a 25% discount on paper maps, custom made, historical and OS maps in the OS shop, which you can redeem straightaway using the code BCSC51M.

Continued on page 13 . . .
What a Relief!

In 1875 Keswick photographer Henry Mayson and his brother Thomas commissioned one of the largest and most accurate relief models of its time. It was claimed to be mathematically faithful to the recently surveyed Ordnance Survey maps. Although the original model is believed to have been destroyed in the 1980s the discovery of many negative moulds from the model in 2012 has allowed some of the details of this innovative landscape display to be explored.

It’s easy to forget that early visitors to areas like the English Lake District would not have had easy access to detailed maps or the benefit of the vast range of aerial perspectives on landscape we have today.

The Relief Model

An early method of providing privileged views of a landscape was the relief model. Military uses date back to the 16th century, but soon after they became tourist attractions. A classic example was Pfyffer’s model of central Switzerland completed in 1786. In William Wordsworth’s 1810 ‘Guide to the Lakes’ he recalls visiting the Pfyffer model “…the sublime and beautiful region, with all its hidden treasures, and their bearings and relations to each other, is thereby comprehended and understood at once”

In 1834, Joseph Flintoft completed a relief model of the English Lake District which has been displayed in Keswick ever since. By 1865 mass tourism had arrived in Keswick thanks to the railway and in 1875 Henry Mayson saw an opportunity to attract these visitors into his photographic studio. He had seen the popularity of the Flintoft model but also recognised the significance of the detail, and in particular the contour lines, on the new Ordnance Survey (OS) six inches to the mile maps which had recently been completed for the area.

Henry and his brother Thomas embarked upon an ambitious project to create a relief model four times the size of the Flintoft model. Importantly, it would be “constructed mathematically from the Ordnance Survey” maps.

Modern Day Usage

In 2012 it emerged that a set of negative plaster moulds created for ‘future use’ had been commissioned as well as the Mayson model itself and many of these had survived. They were recovered from storage led by a team from the School of Geography at the University of Nottingham.

In order to study the model in more detail a series of digital technologies were used to analyse the surface of the moulds. Firstly, each was captured in 3D using a laser scanner. The resulting ‘digital surface models’ were inverted within a Geographical Information System (GIS). They could then be exported in a format suitable for milling to create positive replicas.

In 2015 an exhibition, ‘The Grandest Views: Models of Lakeland from Victorian Times to the Present Day’ was put on at Keswick Museum & Art Gallery, aiming to raise awareness of the Mayson model including its size, detail, construction and the role it played in the visitor experience.

The centrepiece was a floor map designed to show the original scale of the Mayson model. A grid overlaid onto the map showed the 210 (14x15) 1 foot squares of the individual tiles that made up the model. The intention was also to recreate the colourful relief shading of the early OS ‘tour’ series maps. A custom made backdrop combining coloured relief bands and a hill shading effect was created and then merged by OS with the modern Landranger map. The result was very effective in engaging visitors who used it not only to orientate themselves, but to share stories about their travels.

Raised over the floor map squares which they represent were three digitally reconstructed replica tiles. Surface detail was added to the milled terrain based upon the information present on the original OS maps and ‘coloured to nature’ as the original Mayson model would have been.

During the exhibition, visitors could explore the relief model, which was the only model at Keswick ever to have been on display. Visitors were also able to stand on the model to engage with and explore it. They could also be guided around the model by the exhibition staff or by the voiceover provided in the exhibition.

Alternative forms of technology offer choices in terms of the degree of immersion, interactivity and information content. One specific technique that was demonstrated at the exhibition was the Projection Augmented Relief Model (PARM). Here a relief model made from four unfinished replica Mayson tiles was augmented with projections of maps, aerial photography and animated sequences.

The overall message was that although digital models have certain advantages they can struggle to give the viewer the effortless overview of a landscape as offered by a physical relief model. With more readily available digital data along with milling and 3D printing technologies it is now easier than ever to create physical landscape models and so they could become as relevant today as they were in Victorian times.

By Dr Gary Priestnall, Associate Professor, School of Geography, University of Nottingham.
The book focuses on the first detailed map of Hertfordshire produced in 1766 by London cartographers Andrew Dury and John Andrews. As a social commentary, it’s a fascinating map to study, with details of settlements, roads, woods and parks, etc. at a particular point in the development of the county. The detail is beautifully captured and is fascinating to anyone studying local history.

The book starts by comparing the captured and is fascinating to the county. The detail is beautifully commented on, it’s a fascinating map of Herfordshire. The map has recently been published and marketing.

Survey techniques employed and covered in detail, and describes general. How the map was made performed, which has naturally identified the limitations of the original survey, but the use of modern methods of scientific GIS when applied to a historic map is covering a high-Arctic glacier.

The next section of the book looks at Hertfordshire within its historic and physical context, describing the geology and historic development of the landscape. A chapter is devoted to the situation and growth of settlements. It looks at the whole county and the density of placement and the factors which influenced this.

The main characters that shaped the landscape with their mansions and estates are described, as they have such an influence on the county, as well as the industrial and more urban areas.

The book is illustrated with full colour plates throughout and has clearly been written with a great deal of research and interest in its subject.

The book also includes a DVD with supplementary images as TIFFs, which can be viewed in detail. It is a very interesting insight into map production at a certain period in history and will appeal to those interested in Hertfordshire and county histories, as well as historic mapping in general.

About the Authors:

Andrew Macnair is a Research Fellow in the School of History, University of East Anglia. He read Natural Sciences at Queens’ College, Cambridge prior to becoming a General Practitioner in rural Norfolk. In retirement he has developed an interest in computer-aided analysis of 18th century East Anglian maps.

Anne Rowe is a freelance landscape historian who has coordinated research for the Hertfordshire Gardens Trust since 1999 and lectures in landscape history. Publications include books about Hertfordshire’s Garden History, Medieval Parks of Hertfordshire, chapters for the Historical Atlas of Hertfordshire and Hertfordshire: A landscape history – co-authored with Tom Williamson. She is currently working on a book about Hertfordshire’s parks in the 16th and 17th centuries.

Tom Williamson was born in Hemel Hempstead in Hertfordshire, and was brought up in Bushey, before reading history and archaeology at Jesus College, Cambridge. Since 1984 he has taught at the University of East Anglia. He is now Professor of Landscape History there, and has written widely on landscape archaeology, agricultural history and the history of landscape design. He has a particular interest in the landscape history of Hertfordshire.

Published by Windgather Press (www.windgatherpress.co.uk).


T he Intergovernmental Panel on climate change has highlighted that Arctic regions are likely to warm more rapidly than other regions over the course of the 21st Century. Changes over the last 100 years are very evident and include diminishing glacier extent. Unmanned aerial vehicles have a role in monitoring these changes over time, and can they help us understand how environmental changes are manifested in the physical environment? Equipped with a small multi-rotor unmanned aerial vehicle, we found out.

UAVs for mapping

Unmanned aerial vehicles are now well established as a mapping tool allowing geoscientists a revolutionary insight into our planet and the processes that shape it. These small (typically <5kg) remotely piloted systems can be rapidly deployed and used to create incredibly detailed datasets of areas that are ‘off-the-map’ (e.g. very remote areas with little or no existing geospatial coverage) and are rapidly changing. The coverage area investigated is considerably smaller than that permitted by traditional aerial surveys conducted using piloted aircraft, however, the trade-off is more than compensated for by the cost-effectiveness of the approach and the incredibly high-resolution mapping data which it provides.

The development of unmanned aerial vehicles and their potential for mapping comes simultaneously with the development of the computer-based photogrammetric technique often referred to as ‘Structure-from-Motion’. This technique allows you to feed in imagery derived from consumer-grade cameras alongside surveyed ground-control, and output both high-resolution aerial imagery and elevation datasets suitable for exception high-resolution mapping purposes.

In recent years mapping using this approach has been used for a range of diverse applications including monitoring changing glaciers, assessing flood risk, assisting precision agriculture, and documenting archaeological sites. The ability for scientists to generate their own mapping datasets via this approach is enabling a shift in our ability to collect environmental data (on a smaller spatial scale!) similar to that provided by the development of satellites in the late 20th Century.

UAVs in the high-Arctic

In a recent study we conducted aerial surveys in front of a glacier called Austre Lovénbreen located in the high-Arctic archipelago, Svalbard, for the purpose of mapping environmental change.

The study, which was recently published in the journal Geomorphology used nearly 2000 low-level aerial images collected over 10 flights. These flights enabled us to cover an area of ~676,000 m² in incredibly high detail (down to 2 cm resolution for orthorectified imagery). From these surveys we were not only able to map areas which have been experiencing ice-melt, but also quantify the rate of ice-melt across the landscape by comparing our data to elevation data extracted from archive aerial images taken in 2003.

In terms of the science, we found that some land surface areas where buried ice is found were subject to increased surface lowering over the last 11 years. The rate of ice melt was, however, less than we originally expected. We suspect that the debris cover, microclimate and the relief of the land have all played a part in reducing melt. We are keen to follow up this mapping work and investigate these factors in greater detail.

Outlook

Without the use of an unmanned aerial vehicle and new photogrammetric approaches, such a mapping study would have been difficult to complete and demonstrates how small areas in remote regions can be mapped very accurately and rapidly using UAVs. These technologies are proving to be incredibly useful for geoscientists and are allowing for new insight into the physical environment.

By Toby Tonkin & Nicholas Midgley, Nottingham Trent University
BCS Admin Report

We are extremely grateful to have received a bequest for £2,000 from the estate of Charles Ian Milward, who passed away on 2nd December and have been thrown into the deep end with the renewals and new membership applications flooding in. Luckily Roger was standing by with the life jackets!

If you haven’t already done so, remember to renew your memberships by one of the following methods:

- Through the website: www.cartography.org.uk
- Find “JOIN or RENEW NOW” and follow through selecting the appropriate membership before completing the secure online payment form.

Below: The new BCS admin team - Linda Baron and Ryan Harrow.

BCS Calendar of Events

2016

April
- 7-9 Apr GA Conference, Manchester (Elaine Watts, Alan Grimwade)
- 12-14 Apr London Book Fair Committee Meetings
- 14 Apr Better Mapping I, the Fundamentals, Manchester venue tbc (Alex Kent, Mary Spence)
- 15 Apr Restless Earth Pewsey Vale School, Wiltshire
- 19 Apr 1000 Programme Committee and Membership Committee Meetings
- 19 Apr 1330-1630 BCS Council Meeting, Prospect House
- 21 Apr GeoData Dublin
- 28 Apr GeoData Liverpool

May
- 5 May Restless Earth Hastings High, Hinkley
- 6 May Restless Earth Bedworth
- 12 May 1630 TOSCA, Oxford and cosmopolitan science in Greenland, 1920-1940, Richard Powell, School of Geography, South Parks Rd, Oxford
- 17 May Esri UK Conference Q3II Centre, London (Rob Sharpe, Peter Jolly)
- 19 May Better Mapping I, the Fundamentals, London venue tbc (Alex Kent, Mary Spence)
- 21 May HM MG Visit to Rifles Museum, Winchester (John Peaty)
- 24-25 May GeoBusiness, Design Centre, London (Fiona Cocks)
- 27 May Map Symposium, National Library of Wales, Aberystwyth (Ann Sutherland)

June
- 2 Jun Better Mapping II, Web Mapping, London venue tbc (Alex Kent, Mary Spence)
- 8 Jun Restless Earth Preston
- 12 Jun HHMG, Visit RSMS Hermitage, DSA Annual Historical Seminar (John Peaty)
- 14 Jun Restless Earth, Blessed George Napier School, Banbury
- 15 Jun GeoData Brussels

July
- 6-8 Sep BCS Annual Symposium with SoC, Cheltenham Park Hotel
- 14-16 Sep MCG Meeting, NLS, Edinburgh (Charles Close Society invited) and Richard Powell, School of Geography, South Parks Rd, Oxford
- 14 Sep Evening Lecture, The History of Bartholomews (Charles Close Society invited) and Richard Powell, School of Geography, South Parks Rd, Oxford
- 17-19 Sep Better Mapping II, Web Mapping, London venue tbc (Alex Kent, Mary Spence)
- 21-23 Sep BCS AGM and AGM Lecture
- 28 Sep BCS President’s Golf Day

August
- 7-9 Sep BCS Council Meeting, Edinburgh tbc
- 1330-1630 BCS Council Meeting, Edinburgh tbc

September
- 16 Sep BCS Mapathon prior to Symposium
- 6-8 Sep BCS Annual Symposium with SoC, Cheltenham Park Hotel
- 14-16 Sep MCG Meeting, NLS, Edinburgh (Charles Close Society invited) and Richard Powell, School of Geography, South Parks Rd, Oxford
- 14 Sep Evening Lecture, The History of Bartholomews (Charles Close Society invited) and Richard Powell, School of Geography, South Parks Rd, Oxford
- 17-19 Sep Better Mapping II, Web Mapping, London venue tbc (Alex Kent, Mary Spence)
- 21-23 Sep BCS AGM and Annual Lecture
- 28 Sep BCS President’s Golf Day

October
- 6 Oct GeoData Edinburgh
- 19-21 Oct Frankfurt Book Fair

November
- 15 Nov Lecture on WWII Maps by Peter Chasseaud, British Library (Paul Naylor)
- BCS Membership and Programme Committee Meetings
- BCS AGM and Annual Lecture at BL tbc
- BCS Council Meeting

December
- 1 Dec GeoData London
Taking the Hurtigruten

Robin Evans takes us through his holiday up the coast of Norway, past the Arctic Circle to North Cape, and back again.

For years we had dreamt about taking the Hurtigruten ship up the coast of Norway and back again, and in August 2015 we finally did it!

We had seen one of the ships on holiday in Norway. We were staying with friends in Sarpsborg, south of Oslo, and flew up to Tromso for a couple of days while our friends looked after the children. We saw the midnight sun, but were also amazed by the dramatic landscape, and saw one of the Hurtigruten ships. Wouldn’t it be amazing, we thought, to travel right up the coast, in and out of numerous fjords, past the Arctic Circle to North Cape, the most northerly point in Europe, and back again.

So in August 2015 we flew to Bergen and joined the SS Richard With, named after the founder of Hurtigruten and the man who is understood to have first mapped the route between the multitude of islands, so the post boat could call at the outlying communities that were all but impossible to reach by any other way.

The first mapping project I had worked on had coastline data for the whole world, but also depth contours for the submariners. I did wonder how Richard With had mapped safe routes for his ships without such detailed information.

The Voyage

Fortunately, we had insisted on an outside cabin with a window.

Above: North Cape point (71°10′21″) during summer with no snow!

Despite the advice of the booking agent, we found it so much easier to look out of the window at 3am to see where we had just docked, or departed, rather than having to go on deck!

The voyage did not disappoint. We wove between islands and skerries, up and down fjords, past tiny communities at the foot of vast mountains, and innumerable lighthouses. Even the weather was kind, giving good visibility and generally calm seas. The crossing of the Arctic Circle was marked by a ceremony of “King Neptune” dousing us with ice cubes (down the back of the neck)!

One of the differences from the usual cruise holiday is that we docked at dozens of ports. This meant we had the opportunity to see all sorts of different places with their styles of houses and sizes of community, along with the varying topography, vegetation and geology.

Since it was summer, there was little ice and snow except on the distant mountain tops, but North Cape was nonetheless very impressive. Our map showed that North Cape is not actually the most northerly point, since a small headland to the west extended further, but North Cape had the road and the Visitor Centre. At North Cape we were at Latitude 71°10′21″, so still quite a long way to the Pole!

From there we sailed further east and south again to the Russian border. The border generally followed the river, but had an interesting kink so the Russians could have a church they were particularly fond of, and a matching kink to give Norway a corresponding piece of land in exchange.

Below: The “Atlantic Road” sweeping through a string of small islands near Kristiansund.

Below: One of the many lighthouses spotted.

The voyage back down the coast was also worthwhile, since we revisited the ports at different times of the day (as opposed to night). Tromso was fascinating, despite having been there before. Our midnight concert at the Arctic Cathedral was wonderful, as was the glimpse of the Northern Lights as we arrived.

Tromso Botanical Gardens was a challenge. Thanks to an excellent bus route map, we managed to get a bus to the area, but the garden was nowhere to be seen! After climbing a steep hill we found the building we had spotted was not what we thought, though we did find an outdoor geology display of massive examples of rock type, beautifully labelled in Norwegian. As we followed the path down the hill again, we found the Botanical Gardens (how did we miss it?), structured as a giant rockery, with thousands of plants meticulously labelled.

Another trip was to the “Atlantic Road”, which hopped across a string of islands near to Kristiansund. The elegant sweeps and curves of road were quite stunning.

We arrived back in Bergen 11 days and 2,545 nautical miles after leaving, quite exhausted, but having had an amazing holiday.

The internet access on the ship was intermittent, giving a good excuse to ignore emails! But I was impressed by the GPS on my wife’s tablet being able to show our position much of the time. This did serve to emphasise the amazing achievements of the early navigators in finding a route up the coast and sailing it every day of the year, with far less technology.

By Robin Evans
Entries came in from all over the world. Flags denoted the nation or region of origin, and were used to classify the work. Who knows, they might have been used to help the Awards Officer for it gives an idea of the number of countries that are interested in the work. Whilst that causes a few concerns with the number of total awards, the number of entries in 2015 almost doubled. I would like to thank all our sponsors whose continuous, generous sponsorship the awards would not be possible. The awards are open to all and showcase the cartographic works of members and non-members. I’d like to thank all those who entered the 2015 Awards. Every entry made the Conference Exhibition special. Without them there would have been nothing to admire during the tea and coffee breaks. No doubt they all prompted many a conversation about one aspect or another of their cartographic construction. The record number of entries this year, certainly for the Stanfords Award, made judging them a little more difficult as all the entries were of a very high standard. Not everyone can win and, indeed, not everyone can receive a certificate. Some entries were so close to receiving a certificate and in many ways all the entries deserved to be recognised as being entered for the awards. It takes determination and dedication to submit an entry as it will be closely scrutinised for its merits. And arriving before the deadline is no mean achievement, especially when, in some cases, the entries have to travel half way around the world and survive intact. 

The 2016 Awards have now been open for over six months and I hope that many of you already have cartographic works of art tucked away ready to be submitted by 30th April 2016. I look forward to receiving them all and am always exciting to see someone’s creative ideas and hard work come to fruition.

Results of the 2015 British Cartographic Society Awards

https://www.ordnancesurvey.co.uk/os-maps/os-maps-out-of-this-world.html

Some of those hours can be spent studying maps, atmospheric phenomena and classic cartographic works of art tucked away ready to be submitted by 30th April 2016. I look forward to receiving them all and am always excited to see someone’s creative ideas and hard work come to fruition.

Results of the 2015 British Cartographic Society Awards

British Cartographic Society Award

James Cheshire & Oliver Uberti: London: The Information Capital


Commended: QED Publishing: Children’s Activity Atlas; Ken Field: Breweries of the World; Jane Tsonlimon: Map of Oxfordshire


Highly Commended: Roger Smith: New Zealand; Kirsty Henderson: The Map – Kigali


Avenza Award (15 Entries) Winner: Oliver O’Brien: DataShine


Commended: UK Ordnance Survey: William Smith’s Map – Interactive

Continued on page 18...
To mark the 400th anniversary of the death of William Shakespeare on 23rd April 2016, artist Jane Tomlinson has painted a schematic map in his honour, showing all The Bard’s plays in their approximate locations.

“Love all, trust a few, do wrong to none”

William Shakespeare is a towering figure in my life. I too was born and bred in Stratford-upon-Avon and his influence permeated my childhood. At primary school we got a day off on Shakespeare’s birthday to take part in the town’s celebrations. As a small child, he was as important to me as Father Christmas! Decades on, and now with a much deeper understanding of his genius, it seemed only right that I, a girl from Stratford, lover of the English language, and painter of maps, should attempt to depict all his plays on a single sheet of paper.

It’s a very simple idea: put the plays in their approximate geographic position. In the north there’s Macbeth in Scotland and Hamlet in Denmark. In the south, The Tempest in the Mediterranean and Antony and Cleopatra in Egypt.

“As merry as the day is Long”

There were many questions to be answered before I could even get my brushes wet. I have seen maybe 50% of his plays over the years, and I thought I knew a fair bit about Shakespeare. It turns out I knew very little. So this painting has been a fascinating way of examining each play to discover its essence and themes. But which plays should I include? In the end, I went for all those featured in the First Folio, plus Pericles. Shakespeare aficionados may argue about the lack of Two Noble Kinsmen or no referencing of the ‘lost plays’.

Each play’s title is shown alongside a quotation and an illustration to give something of the play’s essence and themes. The bulk of the plays take place in the British Isles or in Italy, and to squeeze so many in to such a small space on the paper would be impossible. I had to distort the geographic position, so Shakespeare built in a lot of wiggle room for me. Henry V, for example, on my map he’s over in northern France, a nod to Agincourt.

“If music be the food of love, play on”

I tried to not always use the ‘obvious’ or most famous quote, but to find something else that gave a flavour of the main themes of the play or a particularly dramatic moment. For example, in Julius Caesar, it would have been so easy to go for ‘Et tu, Brute’, or ‘Friends, Romans, Countrymen’. But the irony and pathos of ‘Brutus is an honourable man’ is, I think, way more powerful.

“The course of true love never did run smooth”

Shakespeare purists might wonder why Sir John Falstaff is the only character depicted in his own right. He appears in three plays and was a hugely popular character among Elizabethan audiences. The only reason he’s sitting in the Netherlands is that there was a convenient space in my composition to put him there.

Another point of controversy might be putting As You Like It in the heart of England. Some suggest that Shakespeare was referring to the Ardennes Forest in Belgium. I think it is more likely that Shakespeare is referring to the Arden Forest – his and my home turf – which in the 17th century stretched north from Stratford.

“To thine own self be true”

I wasn’t commissioned to make this painting, it was just a bit of fun for me and a way of learning more about my fellow Stratfordian. Including research time, it took me six weeks of my so-called spare time to complete.

“...Something wicked this way comes”

Ben Jonson said of Shakespeare “He is not for an age but for all time”. That a boy from an insignificant market town in leafy Warwickshire was able to observe such deep universal human traits, and convey them with such creativity is remarkable. That’s precisely why I painted this map.

Prints of the Map of the Plays of Shakespeare are available at http://janetomlinson.com/artworks/shakespeare-map/

By Jane Tomlinson
focus on something I was doing on the side and I didn’t think I would have this opportunity again.

Real maps of fake places

I am now focusing on my fictional maps and spending most of my time at Lowe Mill. I still do some consulting in the real world of GIS with public safety customers and work part-time helping at the mill, but I intend to expand the reach and understanding of my maps even further this year. My maps have significantly changed in some ways from my earliest creations, becoming much more accurate and detailed, but in other ways they are actually very similar. I still make up place names that could be real and create maps that are set in the current day. The vast majority of my maps are set when they are drawn, so a map of southern England created in 1899 was set in 1899 and my current work in progress is set in Chile in 2016. The fictional maps are often inspired by real places that I have visited, read about or where something sparked my interest. All my maps have a depth of detail, history and information about them. For the former British colonial city of “Gurdon Ang” on the Malay peninsula, I have written the history back to the 6th Century, created subway and park maps, a sketch view of the city, and an airline route map that would compete with Singapore and Cathay Pacific. I wanted the airline to fly to South America, but discovered that I would need to refuel in Auckland.

In addition to my fictional maps, I offer commissioned fictional maps as a unique art form. These involve consultation with the customer to include significant aspects, people, places and events of their life into a map. All family members, pets and places lived are often included in some form and the map becomes a story of their lives. These are normally set in one location but all the features are named according to the list of names from the customer and there can be hundreds.

My maps are now created on a variety of surfaces. I use paper, clayboard, canvas, birch wood and my newest work is drawn directly on skin. This has evolved from the wood-based maps where the grain of the wood becomes my contours and I have to ensure that the fictional man-made features conform to this natural terrain. In the same way, a fictional map on a body needs to conform to the natural shape of the customer’s body. I have been surprised by how well these have been received and by the people that want me to draw on them. They really do become part of the art. They have a say in the setting for the map and often the colour selection, making it a very personal artwork. I photograph their body with the map drawn on them and they choose the images they would like printed. I also sell canvas prints of these maps in my studio (the model can’t be identified). For me, this is looking at the body differently – viewing as topography/terrain for places to be created. Some of the customers have had significant surgery scars and we incorporate those into the map.

People are more likely to purchase a map when they fully understand what goes into making it, including all the imagination and research. I have a good local following and was honored to be selected to do a TEDx talk in Huntsville September 2015. This helped people understand what I do and why I do it. I am planning to offer more styles of maps and also products based on my maps this year. I would like to thank Maplines and the BCS for this opportunity to explain my art.

By David Nuttall

Links/Contact info:
TEDx talk: www.youtube.com/watch?v=sZMxooFlgSc
Website: www.artimaps.com
Email: david.nuttall@artimaps.com
Instagram: @artinmaps
Facebook: www.facebook.com/artinmaps
Twitter: @Artimaps, DavidVN

Lowe Mill website: www.lowemill.net

Creative Mapping

Hand-drawn plausible fictitious maps

N

o, hand-drawn plausible fictitious maps is not an oxymoron. I draw realistic maps of places that do not exist and I take the plausible part very seriously. I create hand-drawn maps as works of art that are set in the real world and researched to ensure that they do indeed look like they could belong somewhere. I have created maps located in many countries and different parts of the world, but there is still so much more to explore and create.

I work from my studio at Lowe Mill in Huntsville, Alabama. I share studio 308 with my wife Jodi, also an artist. The mill is the largest privately owned arts centre in the United States and has 135 studios with over 200 professional artists in the working studios. This means the public can see the finished art and the process and is encouraged to talk to the artists at work. It is a wonderfully inspiring, collaborative and creative space to work in.

Artimaps, and how I got here

I have been drawing fictional maps pretty much all my life, but did not consider what I was doing to be art until relatively recently. I was born in Aberfan in South Wales, moved to Airdrie before I was 5, then Windsor and Datchet before moving to the United States. I did not create treasure maps or maps inspired by Tolkien or other novels when I was young (in fact the maps in books often annoyed me as they were not detailed enough for me). I always drew fictional places that were very real (in my head). The origin of my maps was most likely a seaside holiday at age five in Rustington, near Littlehampton. Since it was raining I started to draw. I loved realistic maps as well, particularly the Ordnance Survey 1:50,000 series. I would map read whenever I could on family trips. These trips and the maps were often the inspiration for my fictional creations. I would make up all of my place names and sometimes even the language. I started working for the British Government as a cartographer at Feltham at age 16 and remained there in a variety of posts for 11 years before marrying and moving to the U.S. I drew my largest map on tea breaks at Feltham, a full O.S. map, complete with the legend, taking about 1½ hours a day for a year.

I started working with maps for Public Safety, based in Huntsville, but travelling around the U.S. to teach customers how to update their maps for police, fire and ambulance dispatching. I would draw maps in transit and in one airport, I was asked “Is that a known art form?” and for some reason I said “yes”. After that I entered a local art show and found that other people liked my art. I was surprised they liked it and that they wanted to buy it. I set up my own business in 2006 as Artimaps.

In 2014 I re-discovered two folders in my attic with my childhood drawings, mostly maps - hundreds of them. I was looking for some old photographs and stumbled upon my maps in folders containing almost all the maps I had drawn from age 8 onwards. I had not looked at these in over 20 years and some had been hidden away for closer to 30 years. Also in 2014, I was also laid off from my job as Product Manager for Mapping where I was designing GIS software for a small public safety company. I did what you are supposed to do and searched for similar jobs. However, I wondered if I could draw my fictional maps as a “job”? I had essentially been given the time to

Below: Map created using pen and coloured pencil on board - set in the Caribbean Sea.
Corporate Report

The BCS has a packed programme for 2016. The Better Mapping Series is underway and we will be attending several events through the year. The Annual Symposium in September will again have sponsorship opportunities and free exhibition spaces.

Make sure you take advantage of the opportunities to promote your business, interact and meet with fellow members and the wider cartographic community and keep up-to-date with the latest developments.

The BCS along with many of us will be attending or exhibiting at numerous events throughout the year including the London Book Fair and Geographical Association Conference both in April and GeoBusiness in May. I hope we will see you there.

Restless Earth is becoming more and more popular and Alice Gadney the new co-ordinator is always looking for volunteers. If you can help and want to be on the list please let me know and I will pass on your details.

Have you been involved in any interesting or unusual projects recently? The Editors of Maplines would like to know. Use the opportunity you have to advertise the work you are doing at no cost other than the time spent writing the article.

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

Continued from page 12


Commended:
Stoke Bus Map, Lovell Johns

Henry Johns Award: “How to assess visual communication of uncertainty?” by Christoph Kinkeldey, Alan MacEachren and Jochen Schiewe.

Google Award for Mapping of the 2015 General Election Results (6 Entries) Winner: Ken Field: Political Causeway

This article was produced for the Winter 2015 edition but had to be pushed back due to lack of space. Apologies to Jane and all the award winners.

Highly Commended:
Daniel O’Brien: DataShine
Jane Sprague, BA (Hons) FRGS FBCart.S.

LAUNCH OF NEW LOGO & WEBSITE

We will be launching our new logo and website at 2016 GEO Business

24 and 25 May 2016
Business Design Centre
52 Upper Street
Islington, London N1 0QH

We hope to see you there!

Corporate Report

Book Review

Revolution:
Mapping the Road to American Independence 1755 - 1783

By Richard H. Brown and Paul E. Cohen

This book catalogues the mapping used to portray the story of warfare in America. Starting with the French and Indian War in 1755, through to the development of the United States as a nation independent of Britain, this key period in the history of the country is covered using contemporary mapping.

The maps have been gathered from a wide variety of sources including private collections, The Library of Congress and the Lord Percy collection held at Alnwick Castle, Northumberland. Many of the maps in the book are seen here publicly for the first time in modern history.

The book is broken down into chapters on the prominent periods of warfare, as well as specific battles. Full descriptions are given on each of the maps reproduced, discussing the political and propaganda aspects of each. The maps are all full colour, many showing the finer detail rather than the whole map.

As stated in the book, “sometimes maps are the cause of warfare”. This statement causes the reader to consider the power of land ownership and colonial occupancy. Once committed to a hard copy map, it is easy to see how wars can start by the permanent recording of what may only be a perception of occupancy. The importance of maps as political tools is made very clear by the discussion of a wide range of maps contemporary with the period.

The book comments upon a wide range of mapping, including detailed battle plans of Saratoga and Brandywine, where the maps may be either planning documents or records of the actual movement of troops. Other maps show town layouts with camp locations, or coloured maps of the colony to show the British occupation.

All maps are beautifully reproduced and the book is a fascinating record in maps of a crucial part in the growth and development of the modern United States.

Publishers Norton are offering a generous discount to Maplines readers. The website address is www.wwnorton.co.uk and the link to the relevant page on the website is www.wwnorton.co.uk/book.html?id=3864.

Use the promotion code: WN323 when prompted at the checkout to receive a 30% discount. The promotion runs until 1st November 2016.

November 2015 * £45.00
ISBN 978 0 393 06032 4
160pp * 318 x 292mm * 60 maps
to the Eurocarto conference organised by Georg Gartner and his team at the Technical University of Vienna. Part of the reason for organising Eurocarto was the perception that the conference was particularly in central and eastern Europe, in attending the ICC in Brazil. By all accounts it was a great success, with a majority of responding to a post conference questionnaire wishing it to be repeated. Unusual for international conferences, there was a single track covering a wide range of cartographic topics. Some commented they would have preferred parallel sessions to allow speakers slightly longer and more discussion, but most were content with the format and appreciated the goal to encourage people to engage with the breadth of the subject.

The conference and its future were items of discussion at the EC meeting. There are various arguments for and against Eurocarto becoming a regular event. It is challenging to co-ordinate 17 groups producing posters that have to tie together to present a common theme, but progress is being made and some of the draft posters are very promising. It is planned to make them more widely available following the UNGGIM meeting, so hopefully we will have them on display at the next BCS Symposium.

The meeting with the commissions was held in Vienna in the days prior. Below: Poster demonstrating how maps can contribute to understanding the UN’s 17 goals.

The ICA Executive consists of the president, the past-president, the secretary general and seven vice-presidents. The statutes stipulate that all must come from different member countries, so we represent The Netherlands, Austria, Hungary, China, Czech Republic, Germany, Spain, Switzerland, UK and USA. Unfortunately, the way things have worked out, there is no repetition from commissions with a connection to the equator this term. Each of the vice-presidents was given a particular task to prepare for this meeting, agreed in Vienna. This preparation gave a good focus to the meeting, which spread over two full days and into the morning of the third. While some decisions were made, as this was the first occasion for full discussion of many issues, there needs to be reflection on the points raised and those responsible will take things forward to our next meeting in October. Some more urgent items were agreed or will be decided by e-mail correspondence, but for more long term policy making it makes sense to allow people time to reflect on the early stage and come back with more refined proposals, which will lead to clear and effective decisions and still allow them to complete operation during our term of office. Some aspects of organisational change can only be dealt with by a General Assembly, so it looks increasingly likely that there will be a need for an extraordinary general meeting in Washington in 2017, if things are not to be delayed until the next scheduled one in 2019. It’s too early to go into the structure of a General Assembly, but no doubt they will form the basis of future columns.

Conferences were one key area of discussion. Regional conferences were mentioned, but we also reflected on the ICC in Rio and discussed plans for Washington in 2017. Despite some initial concern and some behind the scenes issues, for most delegates Rio was a successful conference. Numbers were quite a bit lower than would be expected for European destinations, with full registrations being a bit under 700 from four or five countries. There were 10 from the UK, which is rather disappointing, especially when compared to some other European nations: France – 20; Czech Republic – 16; Sweden – 14; and Poland – 12. It perhaps says something of the weakness of academic cartography in the UK compared to our European neighbours, despite the UK still being very active in cartographic publishing. We fare better in the presentation stakes, with UK presenters delivering 13 out of 740 papers accepted at the conference, representing 17th on the overall list, but well behind Germany, Switzerland, France and the Czech Republic. Hopefully we will do better in terms of both attendance and presentations in Washington.

The team behind the Washington conference appear well organised and we can expect a smooth operation. A key question raised by the organisers for EC input was the inclusion of lunches or not! It seems there is no way of getting around the hotel cut price, which is $5 per boxed lunch, so in order to hold registration fees at sensible levels, lunches will not be provided. However, the US team have done an excellent job of securing good rates for hotel rooms and conference facilities, but had not expected this curve ball. We are assured there are plenty of eating establishments in the vicinity and a recent much bigger AAG conference at this venue did not provide lunches, which posed no problems, so without lunches, registration rates will be held at a similar level to recent ICs.

Routine business for EC meetings is to expect reports from commissions on their recent activities. This time it was probably a record in that all commissions reported, all being enthusiastic. The final report was received on the 3rd evening of our meetings! Some of the reports are rather superficial and the level of activity very varied, but at least communication is being maintained. Commissions were also asked to follow up from the Vienna meeting in highlighting their flagship project. This was a variable, with some just quoting from their terms of reference, but others giving a much clearer view of what they see as their major contribution. It is now up to the EC to provide feedback on these reports and encourage the weaker commissions to increase their activity.

While the 2½ days were quite intense, a lot of ground was covered with everyone contributing to full and frank discussions on a wide range of issues. Certainly my impression was that the EC gelled together in a very nice way and the feeling I came away with is that the team was full of ideas, enthusiasm and a real sense of purpose.

We all head back to get on with our day jobs, but all have tasks to complete over the next few weeks or months.

David Forrest,
ICA Vice-President & Chair of UKCC

Above: Commission Chairs for the ICA gathered in Vienna.

UKCC Report

write this as I travel back from Madri d the next morning. The EC met between V ienna and November as part of the two day workshop with ICA Commission Chairs, but many had to get to know one another a bit better, for the new President M enno-Jan Kraak to set out his goals for the next four years, and for us to set an agenda for February’s full executive meeting.

The November workshop with commissions was a repeat of the very successful event held four years earlier. It was slightly shorter, perhaps slightly less ambitious than the previous one, but probably more clearly focused. It was again very well attended with the majority of commission chairs present, often backed up by one or more vice-chairs, and virtually all commissions had their chair and full ICA members present, often taking the opportunity for the executive and commission chairs to meet and to know each other better. Apart from an opportunity for the executive and commission chairs to work out, there is no routine business for EC meetings, so we declared our agenda for the V ienna meeting in highlighting their flagship project. This was a variable, with some just quoting from their terms of reference, but others giving a much clearer view of what they see as their major contribution. It is now up to the EC to provide feedback on these reports and encourage the weaker commissions to increase their activity.

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David Forrest,
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Below: The president, the past-president, the secretary general and seven vice-presidents.
Alice Gadney is the new Restless Earth Coordinator for the British Cartographic Society. She organises school visits, the volunteers and helps run the workshops. Promotion of the workshop is done through networking and word of mouth by the volunteers and schools.

The Restless Earth Workshop continues to be a successful initiative by the BCS, largely due to former President Peter Jones’s tireless efforts over the past five years! His thoughts materialised of a workshop encompassing the 2011 earthquake and tsunami, which occurred on 11th March at 5.48am GMT just off the North-East of Honshu, Japan. A workshop was created for Year 10 school children to produce mapping products that would be used in the search and rescue for people.

With seven different scaled basemaps in English and Japanese and a brief presentation, pupils are asked to take geographic information from the basemaps and translate it onto their map bases. Each pupil has a role – Humanitarian: helping people find shelter and food; Military: finding secure areas to land planes and transport equipment to the affected area; Search & Rescue: securing sites for landing helicopters; Medical: securing people’s health before they go to the safe places; Co-ordinator: making sure the team talks to one another and all elements are on the maps. Many of the pupils have never seen such big printed maps or indeed foreign maps.

The workshop runs for 2 to 2½ hours and includes a final judging taking place to find a winner and a commendation. The winning group each get a World Map supplied by Global Mapping. The winners and commendation from each school will go forward to the new BCS Award for Restless Earth 2015-2016. Presentation of the awards will be at the Annual Symposium in September 2016. A ‘Volunteer of the Year’ award will also be presented.

There are still items being washed up on the other side of the Pacific! A project to collect photos has amassed over 30,000 images, which have been meticulously cleaned and restored awaiting their owners.

If you feel you or your company could support Restless Earth – please contact me at the following email address and I would be more than happy to discuss the details.

info@silver7mapping.co.uk

The Restless Earth Timetable (Volunteers needed):
Pewsey: 15th April
Hinckley: 5th May
Bedworth: 6th May
Preston: 8th June
Banbury: 14th June
Walsall: 17th June
Godalming: 21st June
Godalming: 22nd June
Alderton: 28th June

Check the website for updates!
As the membership increases, the BCS wants to ensure it is meeting the aspirations of all its members. Long serving or recently joined, young or old, professional or enthusiast, we think the range of benefits we offer is really good for the annual subscription but we know we can always do more. So we would welcome your input into improving the range of benefits we currently offer and if you have an idea that you think the membership might like, let us know.

World leading publications
*The Cartographic Journal* is one of the top three academic journals published worldwide. It provides a unique insight into the latest developments in cartography and provides a vehicle for BCS members to contribute to the future of mapping.

*Maplines* is the regular magazine of the BCS, published three times a year. It provides a way to catch up on the latest gossip and news from the mapping world. It provides a forum for all and any special interest within the broad world of mapping.

The society has also published a number of books on the subject of mapping including the hugely successful Introduction to Cartography – a starter guide for those just wanting to know a bit more about the subject.

**Professional Status**
Being awarded Fellowship status is a professional recognition of your knowledge and experience that has enhanced many a CV and many people like to use the letters FCartS after their name. Any member can apply if they meet the criteria and we encourage everyone eligible to do so.

**Events, training & awareness**
The BCS runs a range of events. The Annual Symposium is a friendly and very informative mixture of lectures and workshops that are ideal for meeting people with similar interests.

The Better Mapping events provide technical know-how to those just starting to create their own maps from the vast array of spatial data that now exists and the Restless Earth programme takes awareness of mapping into schools through an interactive problem solving activity based on the Japanese earthquake.

**Representing you globally**
BCS is affiliated to the International Cartographic Association and represents the UK at international forums. BCS members play an active part in the development of mapping globally.

**Have a particular interest?**
BCS has a number of special interest groups, including a very active Map Curators group and a group interested in Historical Military Mapping. There is also a Design Group. You can join in with as many as you like or get together with a group of like-minded members and set up your own.

**Web and Social Media**
The BCS is launching a new website at the GeoBusiness event in London this May. It will, we hope, become a focus for contacting and interacting with the membership in the future. We are also planning to be more active on social media, with opportunities for members to contribute to discussion forums and post messages or maps they like. Keep an eye out for the new website!

**BCS Member benefits**
There is much more to the BCS than you may think. Being a member is not expensive and there are lots of opportunities to increase your knowledge of the subject, share experiences and get involved.

Mapping is changing as fast as technology evolves and data becomes available. All of us can access tools that allow us to make maps quickly and easily. Good maps are all about cartography – the art and science of making maps. Join the BCS and you join the experts.

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**Membership Offer – 25% discount on OS maps**
There will be new benefits announced over the coming months and the first of these is being launched in this edition of Maplines. BCS has negotiated a discount of 25% for members on OS maps (see ad below). All you need is the discount code to start making savings at the online OS shop.

25% discount on maps, Custom Made maps, Historical Maps and OS Maps using the code BCS25LM