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MAPS IN HISTORY

Mapping the Ottoman Empire



- In this issue :**
- An overview of Turkish cartographers
 - How old are Portolan charts really? - Follow-up
 - Antwerp under the spell of cartography
 - Map Circle Conference Programme 2015



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EDITORIAL

The summer of cartography...

Dear Map Friends,

2015 is indeed the International Map Year, but it is rare that summertime consumes so much energy dedicated to such a theme. Not only did we witness, at the beginning of summer, the ICHC conference in Antwerp (accompanied by some marvellous exhibitions) but there was also the release of the book '*Vlaanderen in 100 kaarten*' [*Flanders in 100 maps*], a joint venture of the Royal Library of Belgium, the Davidsfonds Uitgeverij and our Circle. You can read more about this in this issue.

Behind the scenes, work for the Circle continued. There is our magazine, new style, which we hope to present in January 2016. I sincerely hope it will deliver on the many hours that were spent this summer in debating the layout, fonts, guidelines for authors etc. And there has been and is of course the preparation of our conference on Turkey: you can read a general introduction to the subject in this issue, as well as the final programme. During the conference day, some of our members will also show (part of) their map collections related to the topic. And even our lunch buffet will have a Turkish twist!

And to help remind us why we do this: the captivating debate on portolans continues in this issue! Both Tony Campbell and Joaquim Alves Gaspar give their comments on the article by Roel Nicolai in our previous issue. Who said the history of cartography is boring?

Cartographically yours,

Caroline De Candt
President
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Cover: İstanbul Miniature, Piri Reis - kitab-i Bahriye (1670)



EXHIBITION I

The City of Antwerp, the centre of the world of mapmaking in the 16th century, was under the spell of cartography again, with the 26th International Conference on the History of Cartography, which took place from 12-17 July 2015 and with four exhibitions, designed to accompany the Conference.

Abraham Ortelius (1527 - 1598), under the spell of classical antiquity

Rockox Museum - 24 April - 16 August 2015

www.rockoxhuis.be

Setting

No wonder the Ortelius' exhibition took place in the prestigious beautiful patrician mansion of Nicolaas Rockox (1560-1640), alderman and mayor of the City of Antwerp, arts patron, and benefactor. Rockox and Ortelius were friends. A portrait of Ortelius on display in the exhibition, hung in Rockox' arts room. They shared a passion for coin collecting, the arts and history.

Rockox and his wife died childless. Rockox set up a fund for the poor and for family members. I met a descendant from Rockox who still today receives money from the fund. Unbelievable.

Exhibition theme

Abraham Ortelius is famous for being the geographer who published the first collection of maps as a single book in 1570, the *Theatrum Orbis Terrarum*. However, he was also the first person to publish historical maps, translating antique history, the history of European countries that were part of the Roman Empire, and biblical history into maps.

In his first edition of the *Theatrum* he already referred to place names in antiquity, resulting in 1578 in *Synonymia geographica*. A collection of his historical maps that he had previously published in various editions of the *Theatrum*, were brought together in *Parergon*.

He had an impressive extensive library, and a rich coin collection, which allowed him to reconstruct the conquests of Caesar in Gaul and the journeys of the antique heroes Odysseus, Aeneas and the Argonauts.

In the texts that accompanied the maps he always listed the sources that he used; his sources are showcased next to the historical maps.

The exhibition opens with *Geographia sacra*, a



Geographia sacra from *Theatrum Orbis Terrarum*

survey map of all the regions that appear in the bible, showing Europe, North Africa to the equinox and the Middle East

Looking at the *Belgii Veteris typus*, a map that appeared in the atlas edition of 1584, *Belgii* being the Latin word for all the 17 Provinces of the Low Countries, I was particularly stunned to see that the *Legia flu* and especially *Corteria* were already known in Roman times (now the river *Leie* and *Kortrijk*, the area where I grew

Lex Antiqua



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up). Ortelius used two typefaces, making it possible to show the old Roman places together with modern towns that didn't exist in Roman times. The Northern Netherlands, mainly unexplored in Roman times, are thus shown without the Zuiderzee, and without the West-Frisian (Wadden) Isles.

Wood engravings for Ortelius' Parergon, and a coin woodcut, together with one of the rare copperplates

not? I happened to read a very interesting novel on that subject that asserted that Paradise was in Australia! The land of Gold was situated in Mozambique.

The map of old Europe or Celtica, dedicated to Nicolaas Rockox, caught my attention. Ortelius following Ptolemaeus preferred the name Celtica for the old European continent. The vast area of woodland, that stretched from the Black Forest to Northern Russia



Tempe valley in Thessaly with the Mount Olympus

that have survived depicting a map of old Italy, are worth admiring.

There is also a beautiful engraving of the Tempe valley in Thessaly, which Ortelius calls a place of rest for the weary traveller (or reader). After all the information of antiquity the reader has absorbed, he is entitled to an idyllic relaxing resting place with a view on Mount Olympus. And this applies also to the visitor of this exhibition, who can rest his eyes on the Tempe valley as the last item of the exhibition. Indeed some intellectual effort is required of the visitor. Although an excellent extensive booklet/brochure provides ample information and context on the various exhibition items, the visitor would have benefited from a short explanation of each item in the showcases.

16th century topics of discussion

I was particularly interested in the antique and medieval discussion on the location of Paradise and the Land of Gold, Ofir. According to some, Paradise was located in the East, in Syria, in Mesopotamia, or India, even under the North Pole, or on the moon, yes, why

is very striking. For Roman authors such as Caesar, Plinius or Tacitus, this primary forest was a frontier that could not be passed, and hence the limit of their knowledge. Beyond that frontier started the lands of legends and myths.

There is also an interesting book by the Antwerp medical doctor Becanus, who wrote linguistic and historical treatises. In his *Origines Antwerpianae* from 1569 he wrote that Adam and Eve spoke the Antwerp dialect in Paradise! He was not always wrong though; his linguistic comparative studies announced the later theories of Indo-European as our underlying common European linguistic roots.

Becanus also studied the origins of the name Europe. According to Becanus Europe stems etymologically from Ver and Op, meaning outstanding people! There is of course also the legend that Zeus kidnapped the Phoenician princess Europe to Crete.



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EXHIBITION II

Drawing the City

Museum Plantin Moretus

www.museumplantinmoretus.be

The exhibition at the Plantin Moretus Museum takes the visitor into a tour of maps, city plans and historical prints of Antwerp in the 16th century.

A timeline and some explanatory panels sketch the urban development and the history of the city in that turbulent period of religious upheaval. Each item in the exhibition is well covered in the catalogue .

The first city maps came into being in Antwerp's Golden Age. City views from a bird's-eye perspective became popular. The earliest maps show the city from the harbour and emphasise the flourishing trade and shipping on the Scheldt. From 1542 onwards the focus is on the newly built fortifications from the east. When the Citadel was built in 1567 the view from the south portrayed the Spanish authority over the town.

Antwerp being the financial and commercial centre of Europe, wealthy families from all over Europe settled in the town and set up their businesses. The population grew from 40 000 in 1500 to 100 000 in 1565. Antwerp expanded from a medieval town into the city that we know now. New houses had to be built, new streets designed and complete new quarters emerged. The City was the construction yard of the century.

The first big expansion came about in 1542 with the construction of the Spanish ramparts/fortifications and the extension of an area of 25 ha northwards, the Nieuwstad, which was integrated inside the fortifications. As a reaction against the Iconoclastic Fury in 1566 the Spanish added a citadel to the fortifications, extending the city 60 ha towards the south.

Many places in Antwerp are reminders of the urban transformation that took place in the Golden Age, the Meat house, the City Hall, the Cathedral, the Stock Exchange (Meir), the Hanse House (the site of the MAS museum), the Hessen building. etc.

Antwerp was also the centre of the art of printing. A major showpiece of the exhibition is the woodcut of Virgilius Bononiensis of 1565, 120 x 265 cm. Only skilled woodcutters could have cut and assembled the 20 woodcut blocks pieced together. Virgilius Bononiensis or Boloniensis, probably came from Bologna to the rich metropolis. The map shows in bird's-eye view a very detailed view of Antwerp at the peak of its economic prosperity. The prestigious buildings and the defence walls catch the eye and are drawn bigger than they actually are. Antwerp is represented as a very safe city and a rich trading centre, a first form of city marketing sending merchants the message: "you are very welcome here to do business, you are safe here in this very attractive city".

One of the oldest anonymous maps in the exhibition is a map of 1525, Antwerpia in Brabantia, a bird's eye-view from the west, at a time when Antwerp was still a medieval city; it is rather difficult to find the



Detail of the Bononiensis map with the Cathedral and Marketplace

whereabouts on the map to-day, since the town so drastically expanded in the 16th century.

Another anonymous manuscript map dated late 16th century and recently restored is probably a compilation of copies of earlier maps on one sheet, spanning the entire 16th century and possibly earlier. The Spanish and medieval ramparts for instance are drawn parallel to each other, whereas they are actually built on top of the foundations of the other. The map is still an enigma to historians, it looks as if the map combined the consecutive city expansions that were planned and never executed together with the actual realisations.

The map measures 123 x 209 cm and is beautifully hand coloured, but still remains, even after restoration, badly damaged.



The map was the topic of a presentation by Marc Muylle at the ICHC and Piet Lombaerde published an extensive study in Caert Thresoor 2015-2.

The exhibition 'Drawing the city' follows Antwerp's varying fortunes during this turbulent period.

Following the Iconoclastic Fury Philip II starts the building of the Citadel in 1566. A Spanish garrison represses Calvinist heresy and the uprising against Spain. However, unpaid officers and ordinary soldiers start a mutinous looting campaign, known as the Spanish Fury, or the sack of Antwerp. Hundreds of men, women and children were murdered; many tried to escape and drowned in the moat.

Two historical prints of the Spanish Fury (1576) by Frans Hogenberg sketch the dramatic situation in Antwerp. Looking at these pictures, the boat refugees in the Mediterranean and the atrocities of IS come to mind. There is nothing new under the sun.

The good life in the City

Antwerp is a bustling port city along the river Scheldt: ice skating in winter, fishing, swimming, walking along the ramparts in summer, with a splendid open view on the vast green plain beyond the city.

Research programme of the University of Antwerp.

The University of Antwerp has designed computer software to compare Virgilius Bononiensis' bird's-eye view and the anonymous hand drawn city plan from 1600 with the present situation. They have come to some extraordinary findings which they presented at the ICHC.



Frans Hogenberg - copper engraving.
Citizens flee from the City during the Spanish Fury - after 1576

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EXHIBITION III

The Seven Seas

Erfgoedbibliotheek Hendrik Conscience, 17 June - 13 September 2015

www.consciencebibliotheek.be

Setting

The Seven Seas exhibition is on at the Nottebohm Library room at the Hendrik Conscience Erfgoedbibliotheek, on the Conscience Square in Antwerp, previously known as the Jesuit Square.



The Nottebohm Room

Theme of the exhibition

Navigation books, maritime maps, atlases, and instruments are on display, used by explorers from the 15th century onwards for sailing on the Seven Seas in search of new lands.

The newly discovered continents, and the way to them, were carefully charted by the pilots at sea. These guides were written by them and for them. Seafarers needed practical information to get from home to another place and back again safely.

A typical navigation map shows coastal contours and the location of harbours and ports, indications of shoals, reefs, water depths and islands along coastlines, recognition points, and warning notices. Ignoring virtually all inland features they are criss-crossed by straight lines, connecting opposite shores by any of the 32 directions of the mariner's compass. Some maps are complete in themselves; other are maps that illuminate a text.

The exhibition

Each showpiece is well covered in the accompanying brochure, but it would be more convenient if each item had a label with a name and date and possibly a short

explanation.

The items in the exhibition follow a chronological, historical line.

Since the Middle Ages the ports of the Netherlands were part of the hanseatic network, from Bruges, to Novgorod in Russia.

The Seabook is an anonymous navigational manuscript book from the end of the 16th century. It is beautifully hand coloured and full of handwriting showing an illustrated description of the European coastline from Helgoland to Lisbon. It can also be browsed through digitally.

A pioneer among the maritime cartographers was Lucas Jansz Wagheenaer from Enkhuizen. He gained



Zeeboek - anonymous manuscript end 16th century

experience as a helmsman on Dutch ships and he knew exactly what mariners needed. In 1584 he published *Spiegel der Zeevaart* (mirror of sea navigation) with Christopher Plantin. His book is the first printed mariner's guide in the world and it has remained the standard publication for centuries; in English it became known as the 'waggoner.'

In 1623 Willem Jansz Blaeu published his own *Zeespiegel*, a very successful book reprinted until 1666 and also translated into English.

Wagheenaer and Blaeu were trendsetters. *Le petit flambeau de la mer* (the small sea torch) by the French René Bougard was written on the same pattern and described a voyage from Calais via Dublin to Bombay. The book continued to be published until 1817.

With the fall of Antwerp in 1584, a brain drain of southern Netherlanders occurred, among them mathematicians, engravers and cartographers, who helped the VOC to fulfil its maritime and colonial ambitions.



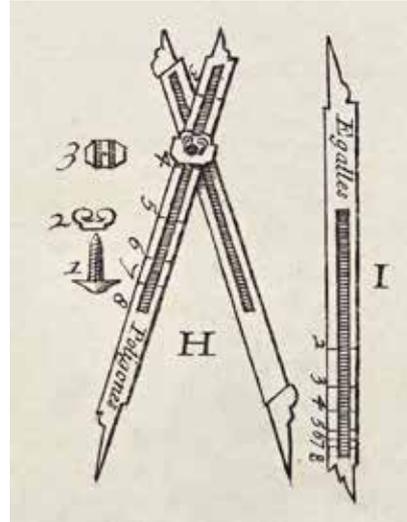
During the Dutch Golden Age cartographers produced better and more accurate seafarers' guides and sea atlases. From 1650 onwards, the books became more and more luxurious and expensive and some of them were meant for wealthy scientists and bibliophiles, or for those who stayed at home full of wonder for and in awe of the heroic mariners and these remote pristine areas. To arouse their fantasy the seemingly endless oceans were filled with ships and sea monsters, centaurs, cannibals and phantom islands that appeared and disappeared again. Compasses and course lines stirred the imagination.

Johannes van Loon's *Klaer-lichtende noort-star ofte zee* (Bright north star over the sea)-atlas from 1666 was a key book for 40 years. The editor Johannes van Keulen became the dominant publishing firm on the Dutch market for sea guides and atlases. Claes Jansz Vooght published *De nieuwe groote lichtende zee-fackel* (The new bright sea beacon). In five parts the book depicts the coasts and seas of the whole world.

By the end of the 17th century, the Golden Age of the Dutch Netherlands was virtually over. The *Neptune françois*, commissioned in 1660 by Colbert, is another highlight of maritime cartography. The *Neptune françois* mapped the Atlantic coastline of the whole of Europe and used the Mercator projection consistently. In 1693 a pirate edition was published in Amsterdam by the renowned map-publishing house Mortier, and bought by the rich bibliophiles. A second edition was the *Neptune oriental*, first published in 1745. The *Neptune* maps were used until 1847.

In parallel to the books and maps a number of navigational instruments are showcased and their usage is explained.

The Antwerp engineer Michiel Coignet developed/improved various measuring instruments such as the proportional divider. Hour glasses to measure time, the log to measure the speed of a ship, the magnetic compass, pairs of compasses, the sea-astrolabe, the sea-quadrant and the sextant are stunning in their simplicity but are at the same time smart navigational devices.



Proportional divider

The visit ends with two renowned globes by Blaeu, the terrestrial and the celestial globe, 68 cm in diameter, recently restored to their former glory, and part of the permanent collection of the Hendrik Conscience Erfgoedbibliotheek in the beautiful Nottebohm library, where the Seven Seas exhibition is on display.

The globes can be examined in detail digitally. The restoration process is also on video.



Le Neptune François - frontispiece

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LOOKS AT BOOKS I

The World in a Mirror

World maps from the Middle Ages to the present day

by Jan Parmentier (ed.)

BAI (Kontich) for the MAS, Museum aan de Stroom, Antwerpen, 2015,
Hardcover, 28.5 × 21 cm, 192 pages, 175 illustrations, Dutch and English versions
ISBN: 9789085866930

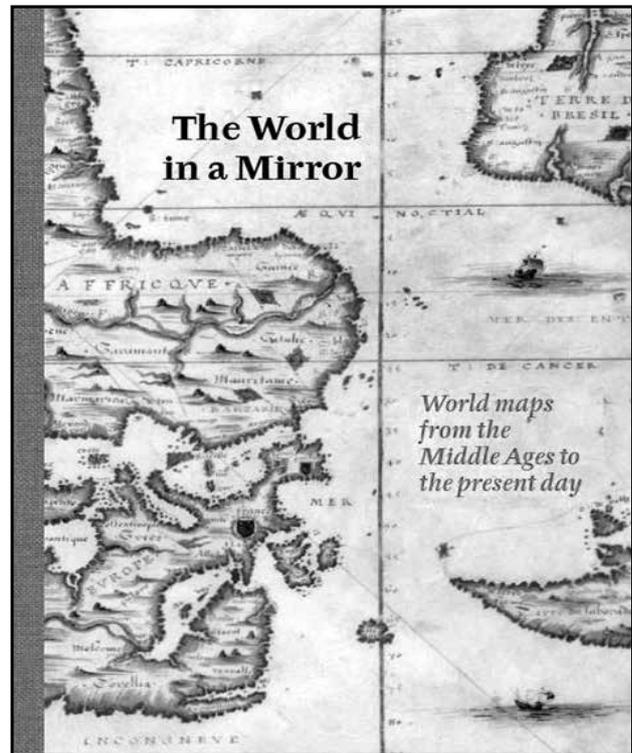
This book is the catalogue of an exhibition, recently held in the MAS Museum in Antwerp, Belgium, which we visited during the Circle's yearly excursion (see report on page 34). It has now ended, but for our readers who missed it, this catalogue makes a very nice 'consolation'. As more than two thirds of the objects shown are maps, this book is of course about cartography and so deserves a review here. Moreover, quite a few of the authors are members of our Circle, not in the least curator and chief editor Jan Parmentier, who has been an appreciated speaker on some of our conferences.

Both the exhibition and the book endeavour to show how – mostly westerners – conceived and saw the world through the ages. Because of this objective the book is largely a narrative of man's successive explorations of this planet and their reflection in (world)maps and globes.

The book first of all makes a very nice read, independently of the exhibition. It is fascinating to see how a man like Stanley – to give just this example – evolved from an ill prepared adventurer-journalist to a well read and documented (and equipped) 'mapmaker'. How a sixty-two year old Dutch Jacob Roggeveen (early 18th century!), out of sheer stubbornness did get 'his' voyage of discovery after all and even if it was no big success, managed to discover 'Paaseiland' (Easter Island), as Cook later acknowledged.

The idiosyncrasy of this book consists in the fact that it often focuses on less known explorers and mapmakers, mainly from the Netherlands, South as well as North. This is of course due to its origin: an exhibition in Antwerp, for so long the hub of international travel and trade and along the way the world centre of cartography in the last quarter of the 16th century. So, as pointed out with Roggeveen above, justice is done to quite a few less known intrepid voyagers of the Era of the Great Discoveries. The book also highlights the role of the then young state of Belgium in the 19th century exploring and mapping of Africa and Antarctica. The former through controversial characters such as King Leopold II of Belgium and Henry Morton Stanley, the latter through Adrien de Gerlache with his ship the *Belgica*.

The final chapter brings an essential link to the cartography of today and to whole new ways of mapping, with the iconic first schematic map of the



London underground: although no 'world view', one can understand why the curator added this to his exhibition and thus to the catalogue: a revolutionary way of visualizing geographical information. And finally, contemporary artistic views of the world are added, far echoes of Ortelius' map of More's Utopia and the many imaginary islands and creatures commented on earlier in the book.

Although the worldview referred to in the book is admittedly a western one, an article on Chinese and Korean cartography as well as one on Arab cartography are added, bringing more balance.

Many catalogues – even some of the best - hesitate between being a catalogue and a comprehensive story. This book is no exception: as the exhibition tells 'a' story but is obviously limited by practical constraints (not every object of the curator's desire is available!), a book of this nature is often expected to bring 'the whole' story. Certainly when it is conceived like this one, with less emphasis on the objects shown at the exhibition than on the story they tell. And although it does bring articles by international authors on many topics from all corners of the earth, there are some

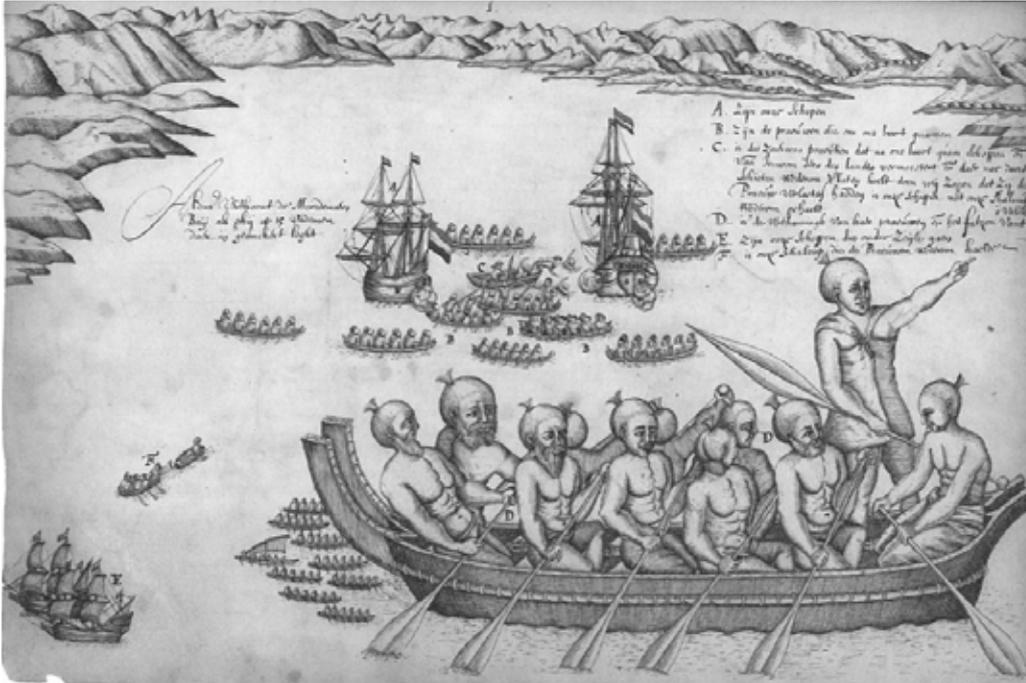


Image of the first Maoris encountered by Abel Tasman in 1642.

gaps. It is clear that the ambition of this book is neither to bring an exhaustive narrative of the Discoveries nor a comprehensive history of cartography, but to give the reader a highly readable and stylish account of the evolution in the way man saw and sees his world,

with some emphasis on the 'local' contribution to this great story, while highlighting the splendid, often unique exhibition items pictured.

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LOOKS AT BOOKS II

Maps: their untold stories: *Map Treasures from the National Archives*

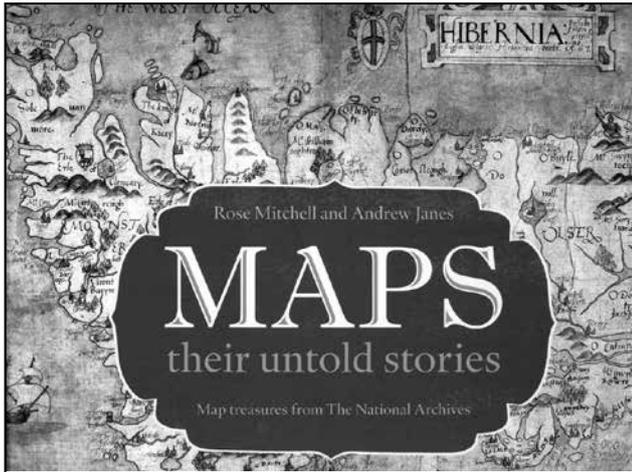
Seven centuries of magnificent and intriguing maps and the stories behind their creation

By Rose Mitchell and Andrew Janes

Published by Bloomsbury Publishing Plc.: 255 pages – black and white, with over 100 colour reproductions of maps and colour map details – hard cover, 290 x 290 mm

Price: £20.40 (Amazon)

ISBN 978-1408-1-8967-2



This book which tells us about some of the Archives' treasures is a treasure in itself. It dusts off any old-fashioned image one might have of 'National Archives' and tells some fascinating stories about the best the United Kingdom's National Archives, located in Kew (of Botanic Gardens fame) in leafy west London, has to offer. The preface states that the authors' aim in writing the book 'was to share more widely some of the remarkable maps' there, and indeed it feels exactly like that; a more interesting, entertaining yet pedagogical – with a light touch – book would be hard to find.

But first things first. We are talking about the United Kingdom's National Archives, so if you are British, the content is 'as it should be'. If you are not, you would of course need to be drawn by the British interest in all the maps shown. Not that all of them were made in the UK, or by British cartographers – far from it. They have come into the Archives from a wide range of sources, geographies and draughtsmen, from all over the world. And that is really the point of the book; to tell the untold stories.

The book is divided into eight chapters: Early Maps: Mapping the Metropolis: The Countryside, Landscapes in Time: Theatres of War, Military Maps: Charting the Seas, New Worlds: Exploration and the Colonies: Maps that Witnessed History: and Worlds of Imagination. The chapter headings demonstrate the huge variety of maps portrayed. Two examples will give a flavour of what is in store for the reader.

In the 'Mapping the Metropolis' section, we have a story entitled 'I saw three ships'. It is a map of New York

City, 1765. The authors explain that under the Stamp Act of 1765 residents of the British colonies in North America had to pay a tax on many printed materials, including legal documents. The money earned from the tax was to pay for the British troops stationed there. The tax was very unpopular – 'no taxation without representation' was the cry – as those in the colonies could not elect representatives to Parliament in London. A riot ensued in New York City which lasted four days. The topographical view shows the city at the time of the riot. It was drawn on behalf of the Royal Navy Commander Archibald Kennedy whose job it was to protect Fort George, i.e., the colonial administrative headquarters. The first line reads, in the language of the time: 'The Position of his Majesty's ships as they were stationed on the 1st day of November 1765'. A key underneath explains various buildings, islands, and gives the names of the ships. The riot ended with the governor handing over the Fort's stock of stamped paper to the Corporation of New York, who destroyed it. The view was one of the documents sent by Kennedy to the Admiralty in London to explain what



'I saw three ships', New York City, 1765

he had done to defend the fort, and to show that he had placed his three ships at places which would best defend it. Kennedy's efforts seem to have worked; his justification of his actions allowed him to continue his career in the navy. In the colony resistance steadily gained ground over the following years, and the rest, as they say, is history...

The authors explain the view which is reproduced on the facing page so that the reader can follow the story easily, and mentions of places that are still there today make the image really come alive.



Now let's take a second, perhaps more topical example. One of the maps in the 'Maps that Witnessed History' chapter, with the story entitled 'An emperor in exile', shows St. Helena, in 1815. We are told that it is a printed map and given a short history of how Napoleon came to be exiled there. At the time the island was controlled by the British East India Company, and

on the designer and dedication, and more...all in a light pedagogical style that is a pleasure to read and easy to digest. As in almost every example, there is a colour plate of the map, together with a couple of detailed inserts, in this case the first edition with the mistake and a later version showing the correct inhabitant of Longwood House, plus a detail showing facsimiles of



An emperor in exile', St. Helena, 1815

already fortified and relatively easy to defend. It lies 1 200 miles west of the African Coast in the Atlantic Ocean; clearly Elba as an exile destination had been too close to civilisation. During Napoleon's exile the British Government administered the island directly, appointing an army officer as Governor. The map was sold as a souvenir in the UK to commemorate the defeat of Napoleon at Waterloo, and is dedicated to the Duke of Kent whose daughter later became Queen Victoria. It was cut up and mounted on cloth so that it could be folded and stored. We are told that the first edition, illustrated here, was rushed out, and contains a mistake. Middle left we see Longwood House incorrectly labelled as the Governor's residence; on later editions this is corrected as being Napoleon's home. The Governor's home was in fact Plantation House, which was it seems much more comfortable; Napoleon complained about the damp at Longwood. St Helena today remains a British Overseas Territory, but Longwood House is owned by the French government and has become a museum dedicated to Napoleon.

In one very nicely laid-out page the reader has learnt about the history/context of the map, the route it took to end up in the Archives, how it was made, what's on it – front and back, about first and later editions, information

Napoleon's signature.

The book ends with a list of references of the maps and any related papers ordered by page number, followed by an index. Both are very user-friendly.

Whether you are an academic working in the field of cartography, or someone who simply enjoys maps, or anything in between, you will enjoy this book, both as a read and as reference. In short it is very informative and attractive and an excellent advertisement both for the National Archives themselves, and for the book's authors. I was lucky enough recently to be on a group visit to the Archives hosted by Rose Mitchell who is as entertaining and informative in real life as she and Andrew Janes are in print. Thank you both.

My next task is to discover the National Archives here in Belgium and its neighbouring countries to compare how they share their treasures with their countrymen.



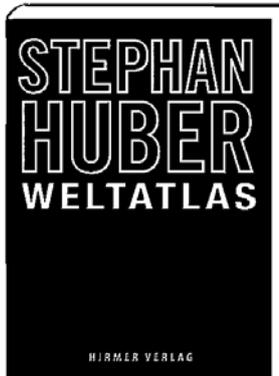
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LOOKS AT BOOKS III

WELTATLAS [World Atlas]

by Stephan Huber



Hirmer Verlag, Munich, 186 pages, including 18 folding plates, 100 illustrations
26 x 35 cm, linen with gold-embossing, EUR 50.00, ISBN: 978-3-7774-2387-6

This new world atlas by the Bavarian artist Stephan Huber has, indeed, all it needs to baffle the reader. It not only looks astonishingly like the old and gold-embossed Diercke Schulatlas [school atlas], it

even eclipses the latter in size and splendour. The shining letters imprinted in brown linen literally impose the reader to love and esteem the new folio edition. In the land of poets and thinkers in particular, hardly anyone will be able to elude the emotional attraction of the effectively charged format. The attachment to the old Diercke, however, is grown. Already the first name 'Stephan' on the front cover reveals that the Huber Weltatlas still has to prove its worth. The question remains: in which field?

The Huber Weltatlas is probably the largest compendium of fictional maps that has ever been published. A demiurge seems at work, who makes himself the master over an overwhelming cartographic universe whose readability inexorably reaches its limits. This impression is due, above all, to the enormous impact of uncoded visual information. Still the map format is at its maximum capacity since the maps are no usual atlas maps, but reproductions

The maps in the Huber atlas are not so much conceived or imagined as mechanically processed. They are not mental maps, properly speaking, which would reflect human thinking in some way, but rather seem to be the implementation of a certain programme or the mix or remix of already digitalised cartographic media. Huber's primary material, 'American military maps', whatever this may be, does not lend itself to normal private use. From where and in which form Huber has procured his highly specialised map materials, and how exactly he continues processing it to a cartographical artwork, is not passed on to the reader. Who may properly assess Huber's artistic performance, however, as long as these questions hang in the air?

The title list at the beginning of the book neither offers reliable orientation except for the fact that it helps us to see in the Huber Weltatlas less a systematic atlas than a cartographic compendium in the sense of an 'atlas factice'. In this context, the end papers are particularly revealing. They are noticeably less complex than the old Diercke where all the maps were linked to a geographic body: the world's totality, in which relative position and dimension of all cartographic formats and sections were inscribed. The familiar outline of the earth in the end papers of the Huber Weltatlas seems to suggest that the maps



Fictional City map of Baden-Baden ('Das XIX. Jahrhundert mitsamt Stadtplan Baden-Baden')

of monumental wall maps reduced in size down to illegibility. The zoomability of the folding plates in the Web does not console us to the fact that these do not lend themselves to the folio format of the book.

would further on relate to it, and yet contrary to earlier examples of literary cartography, it remains completely unclear, how this relation could ever be conceived. Huber opens the cartographic image up to other

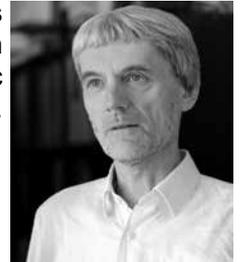


artistic methods until the understanding of what a map would do and would be all about teeters on the brink, and the notion 'atlas' eventually becomes intelligible only in the broad sense of a more or less synergistic blend of images. He furthermore unlocks the floodgates of the sayable and subjects the map to an uncontrolled naming process. In vain, one looks out for elastic language, intellectual wit and subtle irony. In every imaginable variation instead, the 'Allgäu' permeates the cartographic image as the homeland of the author and the ultimate guiding theme, and confers to the semantic landscapes of the Huber World atlas a profound southern German sounding. The hidden utopian potential of this 'omnipresent' Gau, or country, instead, stays untapped.

Huber's cartography is wholly unaware and free of any allusion, not only concerning the long history of cartography, but also the slightly shorter history of those meaning-engendering maps often referred to as 'allegorical'. The dropping of a name like Thomas Morus is, as it seems, an exception, and yet the question remains why of all things it is a plain ('Ebene') that had to be named after Utopia's inventor, and not, for example, an island. Ultimately, the many proper names in the hawkers' tray of the Huber world-map brain-areal ('Weltkarten-Hirnareal') only serve one purpose, that is, the ornamentation of a map artist's ultimate ego. And indeed, the reference to 'Stephan'

and 'Huber' in the place index at the end of the book surpasses everything in frequency that has appeared before. Whereas the last pages of the Diercke Atlas led the attention towards other worlds, the readers of the Huber Weltatlas are set back to those 'I', 'Ich', occasionally 'Du-Ichs' that make the atlas a weird combination of auto diagnostic sensitivity chronograms. There is no Your- or His-Story which would face the growing privatisation of the public map sphere in the possessive form of 'My Space' and 'My Timeline'.

From today's perspective, it seems difficult to say whether these preliminary observations clear the way from the severest impediments that hinder future readers to lift the treasure trove for new insights and findings, possibly slumbering somewhere in the data jungle of an impenetrable map environment. Knowing about the peculiarities and imponderabilities of the Huber Weltatlas, they can at least try to engage with the adventure of its exploration, without suffering greater damage from the geysers of nature identical chaos production and the sirens of media pluralistic confusion, than to waste time.



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HISTORY ON CARTOGRAPHY

The Map of the 1542 Franco-Habsburg War by Enea Vico



By Peter H. Meurer
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In current cartohistorical literature Enea Vico (1523–1567) is regarded as an only minor figure in the early history of map publishing in Italy. A new appraisal gives him a prominent place within the founding circle of that what has become known as the ‘*Lafreri-School*’. Moreover, his first known map is a rare early example of maps published to illustrate contemporary theatres of war.

The map

The cartobibliographical data are:

- Title in a scrollwork frame in the upper right corner: *La uera descrittione di tutta la Francia et la Spagna et | Fiandra doue si ueggono Le' Citta, confini, Mare, | Fiumi, et Porti che In esse si contengono L'altre | Parti ad essi circostanti ui son' poste solo per dimostrare | I Termin di esse con ogni diligentia fatte, et misurate | L'ano. M. D. XLII.*
- At the bottom of the title frame the initials E. V.
- Surrounded by double borderline including the cardinal directions in Italian.
- No scale given (ca. 1:5 000 000).
- Engraving; 48 x 37.5 cm.

The map is fairly rare. It is mentioned only in passing in the 1939 reference work by Ronald V. Tooley, without an entry of its own and referring to a copy on the contemporary market.¹ Meanwhile, a few copies could be traced in public libraries.² A further copy was recently acquired by the collector Pierre Dumolin (Kortrijk/Belgium).³

According to the title, we here have a “true description of France and Spain and Flanders, in which are seen the towns, borders, seas, rivers and harbours therein. The surrounding countries are depicted only to show their borders with them, made and measured with all care.” The map extends from the Strait of Gibraltar to the mouth of the Rhine and from the Portuguese coast to Rome. The major towns are marked with individual miniatures. A particular detail are the town symbols of *Anuersa* (Antwerp) and *P[er]pignann* (Perpignan) with armies laying siege.

This detail is missing on an otherwise very true copy of 1554.

¹ Tooley, Ronald V.: Maps in Italian Atlases of the Sixteenth Century. Being a Comparative List of the Italian Maps, issued by Lafreri, Forlani, Duchetti, Bertelli and Others, found in Atlases. In: *Imago Mundi* 3, 1939, 12–47, mentioned under no. 207.

² Newberry Library, Chicago (Novacco Collection 4F 131); Mercatormuseum, Sint-Niklaas (KOKW 9). Three copies are in the Bibliothèque nationale de France, Paris (Rés. Ge D.8003, Rés. Ge.D.14823, Rés. Ge.D.17092). They can be studied – together with all other maps by Enea Vico – via the online portal ‘Gallica’ (<http://gallica.bnf.fr>).

³ I would like to express my thanks to Pierre Dumolin for his suggestion and support of the present study. Pierre Dumolin is a faithful member of the Brussels Map Circle.

- Title unframed in the upper right corner: *La uera descriptione, di tutta la Francia, et la Spagna, | et la Fiandra, doue si ueggono Le, Citta, confini | Mari, Fiumi, et Porti che in esse si contengono | Le altre | Parti de essi circostanti ui son' poste | solo per dimostrare I termini di esse con ogni | diligentia fatte, et misurate. M. D. LIIII.*
- No engraved borderlines, with the cardinal directions in Italian near the border.
- No scale given (c. 1:5 000 000)
- Engraving; 47 x 37 cm.

This version is much more common.⁴ It can be attributed to one of the workshops in Venice in the second quarter of the 16th century.

The publishing background

The date *MDXLII* = 1542 and the emphasis on Antwerp and Perpignan are definite clues to a concrete occasion for the publication of this map. This had its roots in the political and personal rivalry over more than 25 years between two leading figures in contemporary European history:

- a) Francis I (1494–1547), King of France from 1515 until his death;
- b) Charles V (1500–1558), from the House of Habsburg. Charles became King of Spain in 1516 and ruler of the Holy Roman Empire (including northern Italy and Burgundy with the Netherlands) from 1519 until his abdication in 1556.

This encirclement of France by Habsburg hegemony resulted in a nearly permanent series of wars. They were mainly fought in Italy. But also the frontiers of France with Spain and the Burgundian Netherlands remained unstable areas.

The situation between the two enemies became volatile anew in 1538 after the death of Charles of Egmont (1467–1538), the last independent ruler of the Duchy of Guelders on the lower Rhine.⁵ The succession was rather confusing.

- Guelders had been a fief of Burgundy since 1472, and Charles V reclaimed the Duchy to be incorporated in the Burgundian Netherlands.

⁴ Tooley (1939), no. 207.

⁵ Useful first steps into the multilateral and complex historical background are provided by the article “Italian War of 1542–46” in the English Wikipedia



Fig. 1 - The war map by Enea Vico (Rome 1542).

- In a secret treaty of 1534, Charles of Egmont had transferred the overlordship of Guelders to France.
- The Guelderian estates elected Duke William V of Jülich-Cleves-Berg (1516–1592) as the new ruler in 1538.

In 1541 William married Jeanne d'Albret (1528–1572), heiress of independent Navarre north of the Pyrenees and a niece of Francis I. In 1540, his sister Anne of Cleves (1515–1557) became the fourth wife of the English King Henry VIII (1491–1547).

In the run-up to the foreseeable war, surprising alliances were made: Habsburg with England and France with the Ottoman Empire. In a parallel conflict, an Ottoman campaign against the Habsburg ambitions in Hungary ended with the capture of Buda in summer 1541. An Habsburg attempt to recover Buda in late summer 1542 failed.

Francis I declared war on Charles V on 12 July 1542. He launched a series of parallel offensives, of which three should be mentioned.

- Troops of the Cleves-Gueldrian allies under field marshal Maarten van Rossum (c. 1478 – 1555) started a campaign in the Habsburg province of Brabant and besieged Antwerp in mid-July 1542

without success.

- A French army under the Dauphin Henry (1519–1559) invaded Roussillon, the Spanish province north of the Pyrenees. They laid siege to the corner fortress of Perpignan from mid-August until the end of September 1542 when a Spanish auxiliary army arrived.
- An army commanded by Francis' third son Charles of Orléans (1522–1545) marched towards the southern parts of the Habsburg Netherlands. They captured the fortress of Luxembourg on 30 August 1542, but could only hold it for one week.

This multilateral conflict had many other spectacular events. Defeated by an Imperial army, William of Jülich-Cleves-Berg had to submit himself to Charles V in the Treaty of Venlo (7 September 1543). A Franco-Ottoman fleet attacked Nice, a fortress of Charles' ally Savoy, in summer 1543 without a final success. In a counter offensive, English and Imperial troops invaded the northern part of France by May 1544. A preliminary peace was concluded in the Treaty of Crépy on 18 September 1544.

The publication of the present map illustrates the great sensation of this conflict in contemporary Europe



still in its very first phase. The inclusion of the sieges of Antwerp and Perpignan and the omission of the siege of Luxembourg suggest a date around the end of August 1542 for the completion of the draft.

Contents and sources

Subject of the map are the territories of the participating powers in the 1542 theatre of war: Burgundian Netherlands, France, Spain and Northern Italy. As there was no suitable model, Enea Vico had to create an innovative spatial design. A detailed analysis reveals his work as complex compilation from various models.

A comparison of the coastlines, the mountain ranges and the main rivers in France and Spain shows that some 'Tabulae modernae' from the second Strasbourg edition of Ptolemy's Geography have served as the basic sources.

- The image of the Iberian peninsula is copied from the *Tabula nova Hispaniae* without noteworthy alterations.
- The outlines of France are taken from the *Tabula moderna Galliae*. A distinctive evidence is the gravely distorted course of the river Rhine.
- Singular details are added from the untitled map of Lorraine, such as the tributary Seille (wrongly labelled as *Mosella fl.*) to the river Moselle and the *Linder lacus*.

From the perspective of Vico, these were very topical sources. He most probably took these from an edition which was printed in 1541 in Vienne by Caspar Trechsel. But the woodblocks were cut for an edition which was first printed in 1522 in Strasbourg by Johannes Grüninger.⁶

A second major model for Vico was the *Nova totius Galliae descriptio*, the highly innovative map of France by the mathematician and cartographer Oronce Fine (1494–1553). It was first published in 1525 in Paris. Vico used this source for a basic update of the map image of France as it appears on the Strasbourg woodcut map. Many tributaries are added, and the entries of towns have been essentially revised. This may be shown by examples from the area northeast of Paris.⁷

- The tributaries Yonne and Oise are added to the river Seine, and in Belgium the river Scheldt is added.
- The 1522 Strasbourg map of France has place names like *Amiens*, *Aras*, *Betune*, *Remis* and *Tornacū*. They are missing in the present map, which has instead *Canbray*, *Lill*, *Perone*, *S. Omer* and *S. Quintino*.

However, Fine's entries of *Cleues* and *Gueldres* – origins of the great contemporary conflict – are left out.

West of the river Rhine there are only few entries.

⁶ Standard work on the Strasbourg editions of Ptolemy is Pas-toureaux, Mireille: *Les atlas français XVIe–XVIIe siècles. Répertoire bibliographique et étude*. Paris 1984, pp. 371–85. For a summary in English see Karrow, Robert W.: *Mapmakers of the Sixteenth Century and Their Maps*, Chicago, 1993, pp. 191–204.

⁷ The 1525 first edition of Fine's map of France (woodcut, 4 sheets, 95 x 68 cm) is lost. There exist later editions with the same wood-blocks in 1538 and 1553 (accessible via "Gallica"). For an English summary on Oronce Fine and his maps see Karrow (1993), pp. 168–190.

There are the rivers *Lahn*, *Main* (with *Norunberg*) and *Neckar*. In Swabia are depicted two non-existing islands on the river Danube near *Ulma*. Contemporary maps show islands on the Danube in that form in Hungary near



Fig. 2 - Detail of the Vico map, showing the siege of Antwerp.

Budapest. This may be seen as a miscarried attempt to regard the siege of Buda by Habsburg troops in 1542.

The map image of Northern Italy is taken from any contemporary model. A detail which is obviously mistaken is the position of *Monti d San Bernardo* rather close to the Ligurian coast.

Interesting is the depiction of the southern coast of England, with an emphasized entry of *Antona* (Andover) and *Huic* as the name for the Isle of Wight. This distinctive combination of names is found only on the road map of Europe by Martin Waldseemüller (c.1470–1520), which was published in 1511 in Strasbourg.⁸

The sources for a few singular entries are difficult to trace back to any printed model. Among them is *S Ant' d Viena* in Dauphiné. This is Saint-Antoine-en-Viennois (today Saint-Antoine-l'Abbaye). There was a hospital and the shrine of St. Anthony the Great, the medieval patron against St. Anthony's fire (ergotism).

A strange phenomenon of this Vico map are the two entirely different styles of lettering. Almost all names in the rectangular area between *rocella* (La Rochelle) – *besanson* (Besançon) – *baiona* (Bayonne) – *auignone* (Avignon) are engraved in rather strongly slanted Italics. The other parts show a normal Roman lettering. There is no historical context or constellation for such a differentiation. The reasons may originate from the organisation of work in the engraver's workshop in Rome.

Enea Vico

The initials *E. V.* in the title frame refer to Enea Vico (1523–1567)⁹. He was born in Parma, the son of a noble family. He came to Rome as a very young man, where he was apprenticed as an engraver to various masters. Among them was Antonio de Salamanca (1479–1562), who was active as a printer, publisher and engraver in

⁸ Karrow (1993), no. 80/4.1 with the further details.

⁹ Standard work on his life and general work (but neglecting the cartographic aspects) is Bordon, Giulio: *Enea Vico fra memoria e miraggio della classicità*. Rome, 1997.



Rome from c. 1519. Another apprentice and collaborator of Salamanca at the same time was Antonio Lafreri (1512–1577). Salamanca and Lafreri became partners in 1553. A main branch of their firm – mainly from the late 1540s – published broadsheet maps. Here we have the actual origins of the later ‘Lafreri School’.

Enea Vico's first dated works as an engraver are grotesque ornaments, published by Salamanca in 1541. One year later appeared his first topographical works. They all have the engraver's signature *E. V.* with the date 1542, but no imprint.

There are:

- the present 1542 map of western Europa with the first stage of the Franco-Habsburg war;
- a bird's eye map of *PERPIGNIA* with surroundings, showing the siege of Perpignan by the French in August 1542 (33 x 22 cm);¹⁰
- a bird's eye map of twin towns *BUDA* and *PESTE* on the Danube occupied by the Ottomans, with the siege by Austro-Habsburg troops in September 1542 (40 x 29 cm).¹⁰

There followed a bird's eye map of the siege of *NIZZA* in August 1543, dated *M.D.XLIII* and signed *Æ.V.* (40 x 24 cm).¹⁰



Fig. 3 - Detail of the Vico map, showing the siege of Perpignan.

These four Vico maps were surely published by Antonio de Salamanca. His initials *A. S.* appear also on a bird's eye map showing the Algiers expedition under the personal command of Charles V in autumn 1541.¹⁰ Common subject of these engravings is the heroic fight of the Habsburg against enemies on all fronts and especially against the French attacks. The collaboration on this 1542 set of engravings makes the young Enea Vico a highly remarkable figure at the cradle of the Lafreri School.

Enea Vico left Rome in 1545 for a short stay at the court of Cosimo I de Medici (1517–1574) in Florence. In this milieu, his personal involvement in the pro-Habsburg propaganda increased significantly. By order of Cosimo he engraved a portrait of Charles V on a golden plate. In 1548 Vico travelled to the Imperial Diet in Augsburg to show this portrait to the Emperor and to explain the allegorical decoration. After that the portrait was engraved on copper and printed around 1550 (36,5

x 51 cm).¹¹ At the same time Vico planned a series of prints to glorify the victories and other actions of Charles V. In 1549 he asked Cosimo de Medici to sponsor this project. However, only one sheet of the series (38 x 54 cm) appeared in 1551. It shows the crossing of Charles V of the river Elbe in the Battle of Mühlberg (23 April 1547), the decisive victory of the Imperial Catholic party over the Protestant Schmalkaldic League in Germany.¹²

Vico moved in the late 1540s to Venice where he established a prolific and prestigious atelier. Among his engravings should be mentioned some contributions to the multi-sheet project *Speculum Romanae magnificentiae* by Antonio Lafreri. Vico also cultivated his own numismatic interests, especially in Roman coins and their interpretations. The result were basic reference books like *Imagini con tutti i reversi trovati et le vite degli imperatori* (1548), *Omnium Caesarum verissimae imagines ex antiquis numismantis desumptae* (1553), *Discorsi sopra le medaglie de gli antichi* (1555) and *Commentarii in vetera imperatorum Romanorum numismata* (1560–62). For their production he worked together with Gabriele Giolito de Ferrari († 1578), who was active as a printer and publisher in Venice since c. 1536.

We know of only two cartographical works by Enea Vico from this Venetian phase. In 1552 appeared another map related to Charles V: *Il vero ritratto di tutta l'Alamagna*, a general map of the Holy Roman Empire (36 x 26 cm). It was designed by the leading cartographer Giacomo Gastaldi (c.1500–1566) from Venice and published by Giolito.¹³ A singular later work is an undated pair of globes (diam. 8 cm). It is an engraved but otherwise very true copy of the 1552 original woodcut edition of the celestial and the terrestrial globes by the French physician François Demongenet (exact dates unknown) from Vesoul.¹⁴

Enea Vico left Venice in 1563 for Ferrara, where he became antiquarian to Duke Alfonso II d'Este Ferrara (1533–1597). In this honorable position he remained until his death on 18 August 1567 in Ferrara.

Vico was succeeded in Ferrara in 1568 by the architect Pirro Ligorio (1513–1583), who is also known as the author of some maps published in Rome in the late 1550s.

¹¹ Hagenow, Elisabeth von: *Bildniskommentare. Allegorisch gerahmte Herrscherbildnisse in der Graphik des Barock*. (Studien zur Kunstgeschichte 79), Zürich-NewYork 1999, pp.159–167.

¹² Mulcahy, Rosemary: Enea Vico's Proposed Triumphs of Charles V. In: *Print Quarterly* 19/4, 2002, pp.131–140.

¹³ Tooley (1939), no. 250. For a detailed study see Meurer, Peter H.: *Corpus der älteren Germania-Karten*. Alphen aan den Rijn 2001, Section 3 with no. 3.2.2.

¹⁴ Shirley, Rodney W.: *The mapping of the world*. Early printed World Maps 1472–1700. London 1983. nos. 93 and 105; Dekker, Elly: *Globes at Greenwich*. Oxford 1999, pp. 69–72. A perfect and complete copy of the Vico version is in the Bibliothèque nationale de France, Paris (Rés. Ge. D.3283). The sheet (28 x 44 cm) shows the 12 segments of the terrestrial and the celestial globes with a meridian ring and a horizontal. At the lower left is a note *Cum privilegio Pon. Max. S.que Ven.* This mentioning of privileges by the papal court and the Senate of Venice suggests that this Vico edition is the archetype of the various engraved versions of the Demongenet globes.

¹⁰ Tooley (1939), no. 445-150-419-96



HISTORY ON CARTOGRAPHY

How old are portolan charts really?

That question was asked in our last issue in an article by Roel Nicolai, summarising his Ph. D. Thesis. His challenging conclusions on the origin of portolans ('their construction in the Middle Ages [is] impossible') triggered some reactions. We have the privilege to publish below reviews of this article by two specialists who took up the challenge: Tony Campbell (former Map Librarian at the British Library, chair of Imago Mundi Ltd) and Joaquim Alves Gaspar (Researcher at the University of Lisbon Centre for the History of Science and Technology).

No doubt that this interesting debate will continue at the First International Workshop on the 'Origin and evolution of portolan charts' (Lisbon, 5-6 June 2016). To be followed...

Jean-Louis Renteux

Review of Roel Nicolai's article by Joaquim Alves Gaspar



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Of all the classical themes in the History of Cartography, the origin of the nautical chart is among the most popular and the one which has inspired a larger variety of theories. Emerging suddenly at an uncertain date of the thirteenth century, the portolan chart predated by about two centuries the translation and dissemination of Ptolemy's Geography, which marked the re-birth of scientific cartography in Europe. That happened at a time when the cartographic representation of the world was mostly symbolic and had no practical intent other than illustrating the Christian conception of the world. The research on the portolan chart of the Mediterranean is dominated by two major works:

- Tony Campbell's '*Portolan Charts from the Late Thirteenth Century to 1500*' (1987)¹, where an extensive review is made of the various theories pertaining to the birth and construction of the first charts, and
- Ramón Pujades's '*Les Cartes Portolanes*' (2007)² where a detailed study is presented about the historical context in which the medieval nautical cartography was born, as well as about the main questions concerning the when, where, who and how the first charts were made. As for the when, it is shown that the first nautical charts could not have appeared before the beginning of the 13th century, when some specific developments in mathematics took place. A rediscovered manuscript portolano from c.1200, the '*Liber de existencia riveriarum*', providing distances and directions between places in

the Mediterranean and explicitly referring to a chart, is a strong confirmation of the close relationship between the *portolani* (the rutters) and the charts, as well as of the involvement of pilots in their making (Gautier-Dalché, 1995)³.

The possibility of a precise match between the sailing directions recorded in the *portolani* and the geometry of the nautical chart, hypothetically based on them, was investigated by Lanman (1987)⁴. This is the earliest work where a systematic analysis of a sample of charts was made using cartometric techniques. Although the theory proposed by Lanman - who tried to reproduce the geometry of the charts by transferring to the plane the courses and distances registered in the early *portolani* - is clearly an oversimplification, his research was a pioneering step in the right direction. A new quantitative approach was introduced some twenty years later by myself (Gaspar, 2008; 2010)⁵, where novel analytical tools and numerical modelling techniques were proposed. In these works a meaningful connection between the geometry of the old portolan charts and the underlying navigational methods was first established.

³ Gautier-Dalché Patrick. *Carte marine et portolan au XIIe siècle. Le 'Liber de existencia riveriarum et forma maris nostri Mediterranei' (Pise, circa 1200)* Rome: École Française de Rome, 1995, 326 p. (Publications de l'École française de Rome, 203). The interpretations of Gautier-Dalché and Pujades on whether the portolano was made from an existing chart or a chart was made from a portolano are irrelevant in the present context. The important points to stress are the connection between charts and *portolani* and the use of information collected by mariners.

⁴ Lanman, Jonathan, *On the Origin of Portolan Charts*. The Hermon Dunlap Smith Center for the History of Cartography. Occasional Publication No 2, 1987.

⁵ Gaspar, Joaquim Alves, 'Dead reckoning and magnetic declination: unveiling the mystery of portolan charts'. *e-Perimtron*, Vol. 3 No. 4, 2008, pp. 191-203; *From the Portolan Chart of the Mediterranean to the Latitude Chart of the Atlantic: Cartometric Analysis and Modeling*. Doctoral thesis, ISEGI - UNL, 2010.

¹ Campbell, Tony, 'Portolan Charts from the Late Thirteenth Century to 1500', in David Woodward & J.B. Harley (ed.), *The History of Cartography, Volume One: Cartography in Prehistoric, Ancient and Medieval Europe and the Mediterranean*. Chicago & London: The University of Chicago Press, 1987, pp.371-463.

² Pujades, Ramón, *Les Cartes Portolanes. La representació medieval d'una mar solcada*. Barcelona: Institut Cartogràfic de Catalunya, 2007.



More recently Roel Nicolai (2014)⁶ completed a cartometric study of a series of portolan charts in his PhD dissertation, using geodetic techniques, and concluded: first, that the earliest charts were made by assembling five or six regional representations; second, that those representations were constructed on the basis of geodetic surveys and using the Mercator projection; and, third, that medieval navigational methods cannot explain the high level of accuracy of the charts. Having demonstrated that portolan charts could not have been conceived in the Middle Ages, Roel Nicolai postulates that earlier geodetic surveys must have been carried out, probably in Greco-Roman times, and that was where the medieval charts were constructed. The article that is commented here by Tony Campbell and myself is a summary of the most important arguments and conclusions of Nicolai's dissertation.

The medieval theory

Two main facts support the hypothesis that the first portolan charts were constructed near the beginning of the thirteenth century, using information collected by mariners at sea: the text of the manuscript '*Liber de existencia riveriarum*' (c. 1200), which explicitly refers to a nautical chart and to the involvement of pilots in its making; and the average tilt of the Mediterranean basin, as shown in all charts up to 1600, which matches the average value of the magnetic declination in the region, during the first half of the thirteenth century. Assuming that the portolan chart is indeed a medieval creation, an additional circumstance suggests that its birth may have occurred well before the drawing of the oldest extant charts (all made around 1300), namely the fact that the geometry of most of the Mediterranean basin on these charts remained approximately invariant up to about 1600. One would expect some relatively long period of development to have taken place before 1300, during which the accuracy and detail of the charts progressively improved. The absence of such on work charts is invoked by Nicolai as evidence that they never existed.

According to Nicolai's thesis, 'the accuracy of [the early] portolan charts is much higher than that of any contemporary or earlier map and is even higher than maps made in the centuries that followed'. However the idea that portolan charts didn't improve over time is not accurate and needs clarification. Although the initial outline for the Mediterranean was adopted in all subsequent nautical charts up to 1600, some developments did occur. Not only during the earliest phases (up to about 1330), when the depictions of the Black Sea, Western Europe and the British Islands were much improved, but also from the fifteenth century on, as a result of the exploration voyages made by the Portuguese, along the coast of Africa. These were

reflected in contemporary portolan charts, such as the one by Andrea Bianco of 1448, where a long stretch of coast beyond Cape Bojador is represented for the first time. If Nicolai's interpretation is to be accepted, how can one explain the improvements made at the beginning of the thirteenth century and the additions introduced before the advent of astronomical navigation?

An additional element reinforcing Nicolai's thesis that the portolan chart could not have been created using data collected by pilots at sea, is the lack of textual evidence, prior to the fourteenth century, referring to the use of the magnetic compass in navigation. However other examples exist in the history of cartography and navigation where new developments remained absent in textual sources until they were already in force for a long time. Inverting Nicolai's argument, we could well support the thesis of an early introduction of the magnetic compass in the Mediterranean by citing the very existence of portolan charts.

How charts were made

According to Nicolai's article, the only way to explain the accuracy of the extant charts is to consider that they result from joining together several regional surveys, each of them represented in the Mercator projection. Nicolai's approach to the problem is the following. First he shows that there are spatial variations in the overall accuracy of the charts which can be explained by the assembling of regional representations. After identifying those regions he then proceeds by adjusting a Mercator projection to each of them. As part of the adjustment, a previous correction is made to the counterclockwise tilt of the pieces, and some control points, considered as outliers, are eliminated. The claim about the extraordinary accuracy of the charts is based on the comparison of these regional parts with the corresponding Mercator representations, after having been corrected for tilt and outliers. Incidentally no reference is made to the navigational accuracy of the resulting composite chart. Neither is it explained how the joining of the various pieces resulted in a representation whose counterclockwise tilt matched the average value of the magnetic declination in the area: a happy coincidence? Moreover nothing is said about the surveying methods supposedly used to determine latitudes and longitudes in each of the regions, so that a Mercator projection could be applied to their representations. In this respect it should be stressed that only after the longitude problem was solved, well into the eighteenth century, was it possible to construct accurate Mercator charts.

As explained in early modern textual sources, portolan charts were constructed by transferring directly to the plane the directions and distances measured on the curved surface of the Earth, as if it were flat. The resulting geometric inconsistencies, which were relatively minor when representing small regions like the Mediterranean, tended to be further minimized over time. Not by making arithmetic averages of distances

⁶ Nicolai, Roel, *A critical review of the hypothesis of a medieval origin for portolan charts*. Doctoral thesis. Uitgeverij Educatieve Media, Houten, 2013.





Carte Pisane

c. (1258 - 1291)

1045 mm x 502 mm

Paris, Bibliotheque Nationale





and courses, as suggested by Nicolai, but by a graphical optimization process in which the relative positions of the places were gradually adjusted over time using the superabundant information. That is probably what happened during the earliest phases of the portolan chart development, of which no physical evidence has survived to our days.

Many researchers before Roel Nicolai have tried to adjust various map projections to the old portolan charts, especially the Mercator projection. And all have concluded that a very good match could be achieved, after the average tilt of the charts was eliminated. What none of those researchers has mentioned is that such result is to be expected. In a previous work, I have shown how a set of rhumb-line courses defined on the curved surface of the Earth and plotted on the plane as straight segments produces an exact Mercator projection⁷. If rhumb-line distances are also included, a hybrid representation results whose geometry depends on the relative weight given to courses and distances. According to my own numerical simulations, which took into account the

importance to measured directions than to estimated distances. Indeed, my results have clearly shown that the main geometric features of portolan charts, including the counterclockwise tilt and the slight convergence of meridians, are well explained by the use of uncorrected magnetic courses and distances in their construction⁸ (Fig. 1).

Nicolai assigns great relevance to the errors made by the pilots in the determination of distances and goes to the point of considering that it would have been impossible to make estimates better than one third of the distance travelled⁹. From this assumption he further concludes that the only way to get close to the accuracy of the actual portolan charts would be by averaging a large number of measurements of the same courses and distances. However, he notes, that would be impossible because 'the calculation of the arithmetic mean of a series of measurements of the same variable with the intention of improving its accuracy was not known in the Middle Ages: it was not introduced into scientific practice until the end of the seventeenth century!'. This is an extraordinary claim considering, for example, the testimonies of Portuguese pilots, from the beginning of the sixteenth century on, where references to similar procedures in astronomical observations are made.

Final remarks

The author's approach to the subject appears to be negatively affected by a strong preconception about the origin of the portolan charts. Such prejudice is manifested in various assumptions and partial conclusions, where historical evidence and the relevance of previous works are often minimized or distorted, in order to support his claim that the first charts were based on surveys produced by a higher and older technology. By making this suggestion Nicolai is replacing a respected theory – supported by some strong pieces of historical evidence – with a bizarre one, without providing a single piece of positive evidence. I have shown above how fragile some of Nicolai's arguments are, especially those concerning the accuracy of navigational methods, the accuracy of the charts and the alleged use of the Mercator projection in their construction.

This kind of quantitative approach to the study of old charts is to be encouraged, as it has proven to contain an enormous potential for improving our knowledge on the origin of portolan charts. However mathematical methods are not magical boxes from which historical truth can be read, and conclusions derived from quantitative modelling techniques have to be carefully scrutinized and validated by historical reasoning and evidence. That doesn't seem to be always the case here, where some of Nicolai's hasty assumptions and conclusions are detrimental to an otherwise thorough and careful work.

⁸ Gaspar, 'Dead reckoning and magnetic declination' (note 5).

⁹ By suggesting such a conservative value he was probably unaware that a significant proportion of the ships navigating in the Mediterranean during the Middle Ages were oar-propelled galleys.

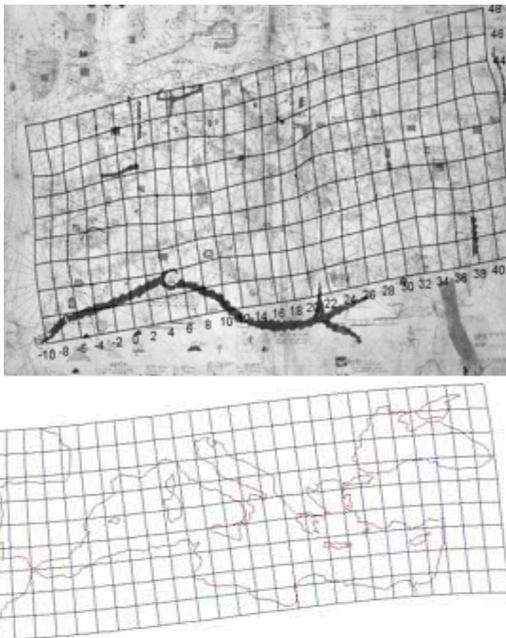


Fig. 1 - On top: geographical grid of meridians and parallels implicit in Angelino Dulceti chart of 1339 (Bibliothèque nationale de France), interpolated on the basis of a sample of control points of known latitudes and longitudes.

On the bottom: output of a numerical model, in which the geometry of a portolan chart was simulated using a sample of courses and distances between places, under the influence of magnetic declination, as of 1300. In the present case, weights of 80% and 20% were given, respectively, to courses and distances between places.

Results reproduced from Gaspar, 2008 (note 5).

navigational methods described in the textual sources and the influence of magnetic declination, the best matches are obtained when a larger weight is given to directions. This outcome is not surprising because pilots have always attributed, for navigational reasons, more

⁷ See Gaspar, *From the Portolan Chart of the Mediterranean to the Latitude Chart of the Atlantic* (note 5), pp. 76-81.



How old are portolan charts really?

Review of Roel Nicolai's article by Tony Campbell



Tony Campbell

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I have been invited to comment on the article by Roel Nicolai, 'How old are portolan charts really?' (BIMCC Newsletter 52, pp. 16-24). I am happy to leave to Dr Joaquim Alves Gaspar a parallel critique of the technical aspects of that article, which constitutes a summary of Dr Nicolai's forthcoming book, itself based on his recent PhD thesis. Instead, I will try to place the Nicolai arguments - that the earliest marine charts appeared fully formed, and that they betray a hydrographic sophistication beyond anything that could have been achieved in the Middle Ages - into the context of what little we *do* know about the history of these remarkable documents.

In terms of any theory about their origin, the identity of the earliest surviving portolan chart is clearly crucial, and I will therefore confine my comments to the formative period. Even there, the issues are many and complex and can only be selectively reviewed here. I will endeavour to avoid both speculation and assertion.

A portolan chart historian is now faced with a major problem. Until recently, there was broad agreement that the Carte Pisane, acquired in 1839 by what is now the Bibliothèque nationale de France, should be dated to the late 13th century. However, in December 2012, Ramon Pujades presented a paper (at the BnF) arguing strongly that it was a poor quality copy datable no earlier than about 1380 and possibly as late as the 1430s¹. Given the undisputed link between the Carte Pisane and the supposedly very early anonymous charts surviving in Cortona and Lucca, the Pujades 'earthquake' (if it is generally endorsed) removed the entire first chapter of the accepted portolan chart history. With those unsigned works out of the way, the story would begin with the dated charts of Pietro Vesconte (from 1311 to around 1330).

If the broadly plausible Vescontian outlines did indeed provide our earliest glimpse of a portolan chart, that might, as Nicolai claims, indicate that they emerged almost fully formed. However, that would not explain the obvious further developments up to about 1340,

even if from that point onwards there was no significant general improvement - check, for example, the coastal outlines of the seven largest Mediterranean islands up to at least the 1460s.

Because this issue is so important - arguably the most dramatic development in some two centuries of research into these charts by numerous commentators - I spent a year examining the evidence. Published online in March, this concludes, without hesitation, that the Carte Pisane is much the oldest extant chart. [For the detailed evidence, please see that extended essay².]

With the original first chapter of the portolan chart story confidently restated (in my supported opinion) and the Carte Pisane restored to a date of c.1290 (since it is evidently considerably older than the work of Vesconte), and the Cortona and Lucca charts placed a little later, it is possible to see its lack of sophistication, not as evidence of a late copy by an ignorant amateur, but as confirmation of its pathfinder status.

The Carte Pisane's toponymy alone marks it out from Vesconte and all who followed him, in terms of its significant omissions and rare or even unique place-names. It also contradicts Nicolai's statement that "hardly any development appears to have taken place after [the charts'] first appearance." It is generally true that the charts' "key characteristics do not change", but a number of elements were added in the formative period, by Pietro Vesconte and his immediate successors, such as the provision of schematic island shapes for easy recognition and their differential colouring. These clearly demonstrate the innovative abilities of the first named chartmaker.

The clumsy construction of both the Carte Pisane, and the Cortona chart whose network of 32 differently-coloured compass directions failed to provide any assistance to mariners sailing in the Adriatic, betrays 'works in progress'. But it is the hydrographic development that reveals most clearly an evolutionary pattern of growing experience and knowledge in the period before 1320. This can be seen on those two works, along with the Lucca chart, as well as the very

¹ Ramon Pujades, 'The Pisana Chart: really a primitive portolan chart made in the 13th century?' *Cartes et géomatique*, 216 (June 2013): 17-32 (paper delivered at the international conference, 'D'une technique à une culture: les cartes marines du XIII^e au XVIII^e siècle', Paris, 3 December 2012): <http://www.lefcf.fr/new/articles/216-article-3.pdf>

² Tony Campbell. 'A detailed reassessment of the Carte Pisane: A late and inferior copy, or the lone survivor from the portolan charts' formative period?' (2 March 2015): <http://www.maphistory.info/CartePisaneMenu.html>



early chart in the Biblioteca Riccardiana in Florence (considered by Nicolai), which in some respects seems to anticipate Vesconte.

Most of the Carte Pisane's coastal outlines are fully recognisable but they are far from perfect. The misplacement of Italy (too wide and thus shrinking the Adriatic) could seem to fit into the Nicolai hypothesis about separately surveyed basins, which would confirm David Woodward's suggestion in 1987. But a number of other, less immediately visible Mediterranean details

difference between the first and last of those provides clear evidence of informants (he would never have travelled himself) capable of steadily revising the first sketchy attempt. Might we be seeing here a similar process to that which had already produced the assured Mediterranean and Black Sea outlines of the Carte Pisane?

How can that be bolted on to the Nicolai thesis that the portolan charts represent a rediscovered survey from an unidentified, but much earlier period, or that

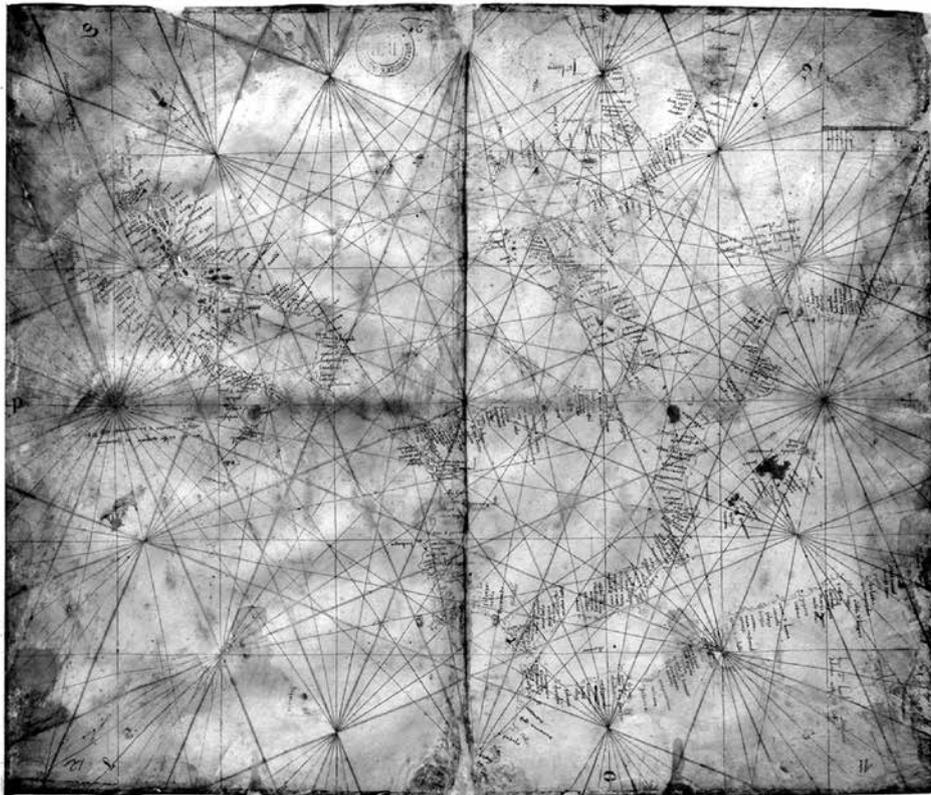


Fig. 1: Sheet covering the Atlantic coasts from early Pietro Vesconte's 1313 atlas, with the Adriatic separately to the left (BnF Rés. Ge. DD687). It is the earliest dated depiction of those shores, whose sophistication provides a very clear contrast to the Carte Pisane, and demonstrates the progress made during the formative period.

Source: <http://gallica.bnf.fr/ark:/12148/btv1b5901108m> - (image 12)

confirm that Vesconte had access to more detailed information than that used by the Carte Pisane's unknown author.

However, it is the Atlantic coasts that supply the clearest evidence of the minimal knowledge available to the Carte Pisane's creator and give us a close-up view of the way that those coastlines, at least, were actually surveyed over the period c.1290-1330. The Carte Pisane's Britain, no more than a rectangle, and a continental European coastline that fails to recognise the Bay of Biscay, must have been based on vague verbal descriptions, coupled with a sparse and erratic selection of toponyms. By the time of the Lucca chart, a linear descendant of the Carte Pisane, semi-recognisable coastlines can now be seen, before Vesconte embarks on a process of improvement, over a series of five surviving iterations (1313-c.30). The

they fell into the hands of those who were incapable of creating such a work themselves? Even if that might seem (though at first glance only) to be applicable to the Mediterranean, how can it be denied that, in the early years of the 13th century, the capacity existed, *de novo*, to create a reasonably adequate survey of the Atlantic coasts, since there are no known models for those?

The alternative, traditional view of portolan chart origin is that they were initially constructed with the use of the magnetic needle, probably in the early 13th century, somewhere in Italy. Nicolai's assertions about the late development of the magnetic needle in Mediterranean navigation rely on the supposed lack of evidence, which, like the charts themselves, are not likely to be mentioned in official archival records until they had already become commonplace.



Nor does the hydrographical and mathematical analysis in the Nicolai thesis take adequate account of the *portolani* (or, more confusingly, 'portolans'), the written sailing directions which document, in the form of a coastal itinerary, the names of the headlands, gulfs, estuaries, towns and harbours encountered, giving the distance and direction from one to the next. The earliest survivor, the '*Liber de existencia riveriarum*', probably dates from the early 13th century and is hence considerably older than any surviving chart, or indeed the confirmed existence of one, though in the opinion of its editor, Patrick Gautier Dalché, the text implies that there was already some kind of marine chart then³.

It is natural to assume a close connection between the toponymy of the *portolani* and the charts but the evidence contradicts that. Anyone proceeding along a coastline, whether to write in at the appropriate point on a chart the name of what they saw or to make a purely textual record, would have a similar experience. It is therefore surprising that the overlap between the two *portolani* that survive from the 13th century, the '*Liber*' and '*Lo compasso de navegare*' (1295/6), is less than half, and that the Carte Pisane repeats only about 60% of the toponyms from either text.

Not only must there have been at least three separate information-gathering exercises taking place during the 13th century, but both of those *portolani*, and by implication the early charts, devote considerable space in their respective coastal itineraries to open-sea, sometimes long-distance voyages (*pelagi*) between the headlands or ports in question. From Tripoli (Libya) to Crete's prominent Cape Ákra Spátha, for example, was about 1000 km. See Gautier Dalché (1995) for comparison between the two texts and diagrams of those *pelagi*⁴. Why would such information have been included if it was not a reflection both of past experience and of potential future use?

Two strands argue against the likelihood of a portolan chart origin outside Italy and earlier than say 1200. First is the entire lack of any documentary evidence (and Nicolai agrees that the charts 'contain no trace of a possible antique origin'). Second, more speculatively, extrapolating backwards from the successive stages of visible progress between, say, 1290 and 1311, and taking into account the elements of rawness in the construction of the Carte Pisane and Cortona chart, it is hard to envisage a century's worth of hypothetical development over the 13th century or, conversely, 100 years of stasis. Which is not to deny that the issue of portolan chart origin remains unresolved.

I fully appreciate the potential benefits of cartometric and mathematical analysis. However, for those, like me without the adequate skills, such findings have to

be taken on trust. Contrast that with the differences between myself and Ramon Pujades, which any generalist should be able to understand and evaluate. Our disagreements stem from different assumptions and perhaps different selections of evidence; there are almost no disputes about the facts themselves.

Given that there are a number of people studying the portolan charts from a cartometric angle, and apparently using different methodologies, can I urge consideration of a collaborative attempt to unravel the charts' continuing mysteries, in which different techniques are applied and their results compared?

With good timing, Joaquim Alves Gaspar, Evangelos Livieratos and myself are collaborating over an international meeting on the 'Origin and evolution of portolan charts' (Lisbon, 6-7 June 2016)⁵. This is designed to bring together the traditional historians of cartography and the 'cartometricians' and to seek common ground within, and between, the two groups.

Asked to provide a commentary on an article whose conclusions appear to contradict the best historical and chart-based evidence currently available to us, I am unable to endorse the author's statement that the charts' 'high accuracy and underlying map projection make their construction in the Middle Ages impossible'.

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³ Patrick Gautier Dalché. *Carte marine et portulan au XIIe siècle: le "Liber de existencia riveriarum et forma maris nostri Mediterranei" (Pise, circa 1200)* (Rome: École française de Rome: distributor, Paris: Bocard, 1995). Collection de l'École Française de Rome 203, pp.36-7. Access online via:

<https://cnrs-gif.academia.edu/PatrickGautierDalch%C3%A9>

⁴ *ibid.* pp.205-219 & 304-305

⁵ 'On the Origin and Evolution of Portolan Charts. First International Workshop'. Lisbon, 5-6 June 2016: <http://ciuhct.org/events/portmeeting/>



INTERVIEW

How I Got Into Cartography

Aksel De Meester

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Biography

Graduated in 1998 from the University of Leuven (Belgium) as an electrical engineer, started work at Tele Atlas, a digital mapping company, which was then acquired in 2008 by TomTom. Worked in New Delhi for TomTom 2002-2005, and in Bangkok 2008-2010; now and in between these periods in Ghent. Married with three children who sometimes look at maps!

What does ‘cartography’ mean to you?

It’s a double pleasure for me. I enjoy – and always have enjoyed – looking at maps. Actually ever since I can remember I have been fascinated by them, the way they combine being a knowledge container together with their aesthetics (the colours, the accurate/fine lines, etc). For me this turns maps into attractive pieces of art. And equally for that reason, I’m not only interested in the old material, I can also be attracted to a well-designed modern map.

Professionally though it’s quite different: I work in the maps division of TomTom, a company making products focused on position and destination, i.e. navigation and mapping, but also sports watches and action cameras. We build up and maintain digital road maps which can be integrated into navigation systems, on websites, for example. This means that the map is ‘reduced’ to a database, and the aesthetic aspect is not relevant for us; other companies use and publish our data, using their own design. This doesn’t make it less interesting. Rather the opposite, it is a complex process of combining sources to keep the maps continuously up-to-date, for the entire world!

How did you get to where you are today?

I graduated in 1998, which was a golden age for young engineers. We could almost choose where we wanted to work; all companies were looking for computer skills. Since I was very much into maps (my student room was completely wallpapered with maps), I spontaneously applied to Tele Atlas, a Ghent-based digital map making company with ambitions to map the world. I started out writing software for our operators to edit the maps. Three years later I moved to New Delhi to support the development of automated production. After more than three years I moved back to Ghent to support expansion of our map in the Asia Pacific region, and this took me and my family to Bangkok for two years. Now I’m back in Belgium, where TomTom still has the operational headquarters of the maps division.

You talk about a global map, are there any specific challenges to this global aspect?

Definitely, making a map globally uniform is not easy. We need to harmonise features across countries, to align with a single global specification which our customers can use. Take for example the huge variety of addressing systems – e.g. in India ‘next to the temple’ can replace a house number – or pedestrian features, which take on a different dimension in Asian cities – where the pedestrian network is much more connected to buildings. Similarly for points of interest: before expansion into Asia and Africa we didn’t have a specification for karaoke bars or waterholes. When we provide these new features our customers who want to publish the map will have then to decide how it will be symbolised.



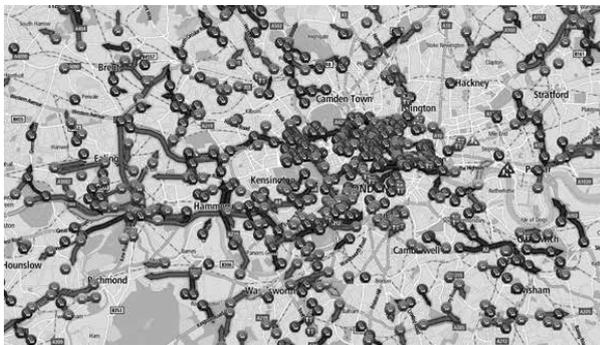
Laser point map as input for the future map needed for self-driving cars

Another challenge is the legal aspect. Many countries require special permits for maintaining a map, and some, e.g. China or South Korea, don’t even allow map data to leave the country. This then forces us to operate entirely locally. And some countries also have strict surveying conditions; even with the necessary paperwork in place our surveyors have more than once found themselves in prison, for example in Turkey or India.



What exactly does your current job and research involve?

I am still in close touch with the actual maps: my team supports our operational mapping units (over 2,000 people) across the world. This means for example that we analyse external content – roads, points of interest, traffic information, area information, and so on – and design processes for integrating them into our database-map. Another domain is the one of the ‘voice maps’. We create a database of pronunciations of geographic names, enabling proper text-to-speech, but also better speech recognition. But in our maps division the most challenging area is the current revolution we’re going through in the map making industry: we are converting our mapping environment to enable real-time maps.

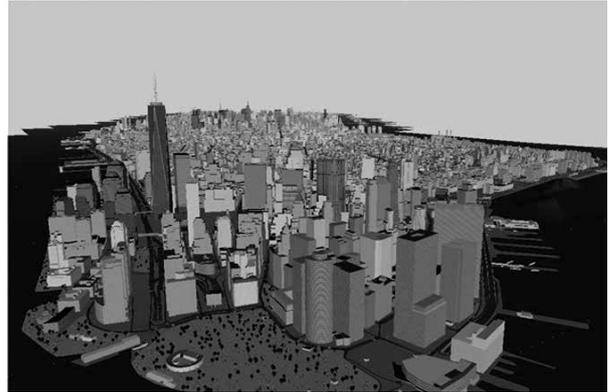


Londoners’ nightmare drive home - 9 July - when the Underground was on strike

Today we can already combine multiple sources, from community input, probe traces, surveyors, imagery, mobile mapping vans and authoritative content. To make that process real-time, a real-world change needs to be detected, the edit is made in our database, and then instantaneously brought to the customer. (In the past this was only done on a quarterly basis). We’re now working hard to make the ‘closed loop’ complete. Here we’re talking about the interaction between navigation devices (with their sensors) and our map. Cars send us data about their environment (position, pictures etc), we process them to update our map, and immediately we send through the updates to all TomTom devices. Big data. As I said, this is already happening today, but it needs to evolve further to automate and speed up our map making process. The highly fresh and accurate map will be an important component in the self-driving car, less futuristic than one would think!

Are there any careers to be made in cartography?

In modern map making definitely yes. But I need to add that it is much more technical than a layman would think, very engineering oriented. In our Ghent office I took on two new people last year, and both had just graduated in geography. Though they are working in a deeply technical area, spatial awareness is key.



3D map of New York built by the TomTom Team

What is the ‘best thing’ about your cartographical life right now?

The combination of professionally working with maps without getting an overdose...this means I can still appreciate any “normal” paper map. I’m not an old map collector, but I particularly like school atlases (old ones are hard to find), and I enjoy looking for one when I’m visiting a country for the first time. The nice thing about a school atlas is that you get a lot of information on the country itself, and it’s also fun to see other countries labelled in different languages – Russian or Polish for example.



Interview by Nicola Boothby
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**Cartographica Neerlandica
The Ortelius Specialist**

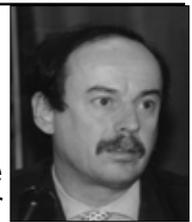
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HISTORY ON CARTOGRAPHY (CONT.)

Mapping the Ottoman Empire

An overview of Turkish cartographers



By Alain Servantie
alainservantie@yahoo.fr

It is now a well established tradition: the theme of the Brussels Map Circle Conference is, once again, aligned on that of Europalia, the Belgian cultural festival devoted every other year to one particular country. After China, Brazil and India, this year, it is Turkey, a country at the juncture between Europe and the Orient, with a rich and varied culture.

Alain Servantie has played a key role in the organisation of the Conference, thanks to his many contacts in Turkey. As an appetizer to our Conference on 12 December, he offers us a general introduction on Turkish cartographers who may be not so well known by some of us. But the Conference will also deal with European contributions to the mapping of the Ottoman Empire.

The first detailed maps known of the Eastern Mediterranean can be found in the *Liber insularum* of Buondelmonti (15th century), a copy of which is kept in the library of the Topkapı Palace among old maps of the Mediterranean. The conqueror of Constantinople, Mehmed II, was fond of maps: he asked the Greek geographer of Trabzon, George Amirutzes, for a translation of Ptolemy's Geography into Ottoman Turkish, as well as of some world maps¹. The translation, was ready in 1482. Gentile Bellini, a Venetian painter invited to Istanbul by Mehmet, is supposed to be the author of a map of Venice now in Topkapı². According to the chronicler Zorzo Dolphin, Mehmet II 'possesses a map of Europe with the countries and provinces. He learns of nothing with greater interest and enthusiasm than the geography of the world and military affairs'. Mehmet II asked for an update of the Arabic classical *Kitab al-masalik wa'l-mamalik* (Book of the roads and countries), by al-Istakhrî (11th century).

Cartography ateliers existed in Istanbul at the end of the 15th century. According to Evliya Çelebi's description of Istanbul mid-17th century, there were eight shops where 15 people were working on cartography; these people knew foreign languages such as Latin or Italian, and would translate maps and western atlases into Turkish, some for sailors, some showing mountains, forests, paths or landscapes³. As printing had not been introduced yet in the Ottoman empire, the market for maps was limited. Very few can be found in public libraries and archives.

Maps of the Black Sea were drafted by Kulağuz Moralı İlyas in 1495-1506 describing the fortresses and harbours for military purposes. Anonymous maps of besieged cities such as Belgrade, Malta, Szegedvár, and Vienna may be found in Turkish archives.

Sixteenth century.

As early as 1513, Piri Reis a sailor who had grown up in Gallipoli, and eventually led the imperial fleet, drafted maps of the African and American coasts inspired from Portuguese and Italian portolans; he benefitted from the work of Venetian travellers. The *Kitab-i Bahriye* (Book of the Sea) was drafted in several copies between 1521 and 1526 by the sailor Piri Reis, inspired from



Fig. 1 - The observatory of Takiyyeddin

Italian *Isolari* giving a wealth of details in 240 maps on harbours, coasts, rocks, fresh water resources, mainly of the Mediterranean and Black Seas. His work aimed at informing political leaders – it was offered to Suleyman the Magnificent-- and commanders of the Navy. This book inspired Turkish cartographers till the second half of the 17th century. Forty two copies can be found in libraries over the world⁴. Piri Reis was beheaded in

⁴ S. Soucek, 'Islamic charting in the Mediterranean', *The History of Cartography* vol. 2, book 1 *Cartography in the Traditional Islamic and South Asian Societies*, Chicago & London 1992, pp. 263-292

¹ The Turkish word for map – harita- is borrowed from Greek χάρτα.

² Asst Prof Pinar Emiralioğlu *Geographical Knowledge and Imperial Culture in the Early Modern Ottoman Empire*. Karen Pinto "The Maps Are the Message: Mehmet II's Patronage of an 'Ottoman Cluster'", *Imago Mundi: The International Journal for the History of Cartography*, 2011, vol. 63/2, pages 155-179.

³ *Seyahatname*: 'My travels'



1554 after he commanded an unsuccessful expedition to India.

Suleyman the Magnificent is also known for his interest in geography; in 1540 the French ambassador Rincon offered him a beautiful globe made in Venice accompanied by an explanatory book. In 1554-55, the Tunesian Hajji Ahmed drafted a world map for Suleyman's son prince Bayezit. A map of Ahmed was printed in Venice in 1568.

An Atlas was drafted by another sailor, Ali Macar Reis (Hungarian Ali Captain) in 1567⁵; he also used

(1608-1657), educated in classical Arab and Persian literature on geography, was a treasury official, who followed several military campaigns, and attended the conquest of Crete by the Turks. Fond of old books and geography, he updated Piri Reis' maps with more recent data, and translated into Turkish the *Atlas Minor* of Mercator and the *Theatrum Orbis Terrarum* of Ortelius in 1654 (Fig.2), and he also used Cluverius *Introductio geographica vetera quam nova* and Giovanni Lorenzo, *L'universale fabbrica del mondo ovvero cosmografia* (Venice, 1582), with the help of a young French renegade



Fig. 2 - The Turkish Empire, in Ortelius' *Theatrum Orbis Terrarum*

western, particularly Italian, sources. The observatory founded by astrologer Takiyyeddin in 1575-1580 also covered geographical observation (Fig.1). In those years two silver globes were ordered from Antwerp but never delivered, as the observatory was destroyed upon the pressure of religious leaders (see globe on a miniature below)⁶. In 1590, Menemenli Mehmed Reis drafted a map of the Aegean and Ionian seas.

Seventeenth century.

Under Sultan Murad IV (1623-1640) a map of the Ottoman Empire was ordered from the Dutch cartographer Jacobus Grolius.

In the 17th century, the encyclopaedist Kâtib Çelebi

Ihlasi Şeyh Mehmet. Kâtib Çelebi published his major book under the title of *Cihannüma* (Cosmography) with 161 maps⁷ (Fig.3).

Sultan Mehmed IV (1648-1687) ordered a translation of Mercator's *Atlas major* into Turkish from the chief 'drogman' (head of the foreign office) Mavorcordato; it

⁷ See: http://www.ii.umich.edu/isp/aboutus/people/faculty/ci.hagen-gottfried_ci.detail: *Ein osmanischer Geograph bei der Arbeit. Entstehung und Gedankenwelt von Katib Çelebis Gihannüma* (2003), Klaus Schwarz Verlag, Berlin, 2003. ghagen@umich.edu. The Ottoman Empire: Contexts for Cartography," forthcoming in *The History of Cartography, Volume Four, Cartography in the European Enlightenment*, ed. Mary Pedley and Matthew Edney. Kâtib Çelebi's Maps and the Representation of space in Ottoman visual culture," *Osmanlı Araştırmaları* 40 (2012): Other Places: Ottomans travelling, seeing, writing, drawing the world. Essays in honor of Thomas D. Goodrich, ed. Gottfried Hagen and Baki Tezcan), 283-293.

⁵ See also *Atlas-i Humayun* studied by Thomas Goodrich

⁶ Intervention of Jan de Graaf in seminar on Piri Reis.



Fig. 3 - Kâtib Çelebi's Atlas, 1654

was completed by Ebu Bekir Efendi Behrâm ed-Dimeşki (died 1691), who included maps of Anatolian cities.

Eighteenth century.

Turkish maps of the Black Sea, Iran, Egypt, etc. were finally printed in Istanbul by Ibrahim Müteferrika after the 1721 visit to Paris of the Turkish Ambassador Mehmet Çelebi, who had been impressed by French maps and printing activities. He also printed the *Cihannümâ* of Kâtib Çelebi. Few of his works are available these days.

Between 1768 and 1773, Enderunlu Ressâm Mustafa, an Englishman who converted to Islam, drew Turkish maps of the world, of the frontiers with Austria and Poland, and of the Russian-Turkish wars, which were printed in Austria.

Founded in 1795, the Imperial Technical High School, the successor to a Naval Technical School launched in 1773 with French help, was given the task of developing and teaching cartography. The school printed translations of Western Atlases and maps. In the wake of the modernisation of the country under the sultans Mahmud II and Abdulmejid, western officers such as von Moltke collaborated with the Turkish army for the mapping of the country. By 1880 a directorate of the War Ministry was asked to take care of mapping and scientific affairs.

Over the centuries, the most detailed maps on Turkey and the Ottoman Empire were produced in

western countries and Russia: in Italy in the 15th and 16th centuries, in Venetian productions which inspired atlases by Ortelius and Hondius. In the 18th century mapping of Turkey was promoted by French ambassador Choiseul-Gouffier, by the British Admiralty and in the 19th century also by German cartographers such as von Moltke and by the Russian army. Western production exceeds by far the local production of maps.

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international arts festival
europalia.turkey




Yunus Emre Enstitüsü
Turkish Cultural Centre
Brussels

INTERNATIONAL CONFERENCE :
MAPPING THE OTTOMAN EMPIRE
Saturday 12 December 2015, 9.30 - 16.30
WITH THE HELP OF THE YUNUS EMRE TURKISH CULTURAL CENTRE IN BRUSSELS

PROGRAMME

- 9.45 Welcome by the president
- 10.00 - 10.40 General introduction: 'The history of Ottoman Cartography'
Prof. Dr. Mehmet Kalpakli, Bilkent University, Ankara
- 11.00 - 11.40 Illustrated Ottoman Maps as Records of History
Prof. Dr. Günsel Renda, Koç University, Istanbul
- 11.40 - 12.20 Piri Reis and Mercator
Dr. Jan Parmentier, scientific advisor MAS-museum, Antwerp
- **12.20 - 14.00: lunch (aperitif, lunch, dessert & coffee)**
- 14.00 - 14.40 Hispanic and Mediterranean sources of the Kitab-i Bahriye
Prof. Dejanirah Couto, Ecole Pratique des Hautes Etudes, France
- 14.40 - 15.20 Humanist culture and diplomatic issues : French Ambassador Choiseul-Gouffier at the Ottoman Court, and the French cartography of the Straits and the Black Sea
Dr. Emmanuelle Vagnon, Centre National de la Recherche scientifique, France
- **15.20 - 15.30 short break**
- 15.30 - 16:10 Beyond Kiepert: German mapmakers in the Ottoman Empire (1835-1895)
Dr. Ségolène Débarre, Centre d'Etudes Turques, Ottomanes, Balkaniques et Centrasiatiques, France

Venue: Royal Library Meeting Centre,
Boulevard de l'Empereur 2 / Keizerslaan 2
1000 Brussels.

Admission is free for Map Circle's members, non-members pay EUR 10 at entrance.
Lunch (optional) is being arranged in the Library's cafeteria, with catering services. Price: about EUR 35.

REGISTRATION ON OUR WEBSITE www.bimcc.org



MAP CIRCLE NEWS

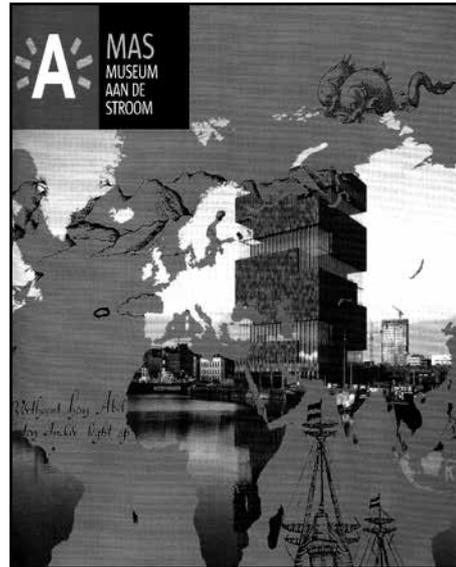
Map Circle's excursion to Antwerp, 9 May 2015 'The World in a Mirror'

www.mas.be

On Saturday 9 May, members of the Brussels Map Circle gathered in Antwerp's MAS (Museum aan de Stroom, on the river Scheldt) to visit the exhibition 'The world in a mirror's. While outside the river was reflecting the heaven and clouds, inside Map Circle members were offered a guided tour through the proverbial exhibition curated by Jan Parmentier (well known to our members, as speaker at our last Conference). In a nutshell: from the entrance hall till the end of the exhibition, maps tell the story of a world view changing throughout the course of history. At the same time these maps have inspired present-day artists to create contemporary art. Free to join all this artistic creativity, Jan invited the player-visitor to fold a paper airplane so that we could fly across a changing world.

The evolving world view and the expanding knowledge of the world's territories is summarised on a few square meters of wall showing what Ptolemy, Marco Polo, Peter Plancius or Henry Morton Stanley knew about the world. From then on the MAS floor presents the great idiomatic cartographic masterpieces. World maps decorate the stage for a real cartographical beauty pageant. To name the key players present is simply impossible, such as the collection of medieval mappae mundi, portolan charts, Renaissance atlases, printed commercial maps, discovery maps, globes, instruments, flight route maps, etc.

'The world in a Mirror' instructs us in the western conception of the world, but does not miss Arab, Japanese or Polynesian views. Even the visionary world of Jules Verne comes into the picture. However, this visually attractive exhibition of nicely composed authentic maps remains mostly focused on the discoveries and the expanding world view. A must for map lovers!



MAS or Museum aan de Stroom



Jan Parmentier, curator of the exhibition, with the President of the Map Circle



Members of the Circle with Jan Parmentier



Karen De Coene
karen.decoene@ugent.be



**BOOK PRESENTATION IN THE ROYAL LIBRARY
WEDNESDAY 7 OCTOBER 2015, 19.30**

Palace of Charles of Lorraine, Museumplein 1, Brussels



The book – in Dutch- is a feast for the eyes, with its multitude of illustrations. It aims at a broad public, explaining how maps were and are made, right up until the 21st century, how they can be read and understood, and how they provide a unique perspective on the history of Flanders, one of the cradles of modern cartography.

Our members are all kindly invited to the official presentation in the Royal Library. They will shortly receive an official invitation, requiring them to register. The venue will be the elegant salons of the former palace of Charles of Lorraine, where the Map Department is currently located. Wouter Bracke will give a lecture and some of the maps will be exhibited.

In 2012 the publisher Davidsfonds Uitgeverij concluded an agreement with the Royal Library of Belgium to publish a book, relating through 100 maps how Flanders has been depicted since the start of modern cartography. The project was to be led by Professor Wouter Bracke, our Scientific Advisor, currently head of the Academia Belgica in Rome and previously head of the Department of Maps at the Royal Library of Belgium. He chose the maps, mainly from the Library's rich collection. He also revised the many contributions of other authors, besides himself and his staff. This was done in close cooperation with Eric Leenders, our Honorary President, who gathered some 15 of our members to join in the project and write comments on many of the maps. This is why the logo of the Circle features proudly on the title page.



The river Scheldt - from Bouchain (some 50 km north from its origin) to Antwerp and the sea...
Matthias Koops - 1797



Leo Belgicus - Nicolaas Claes Jansz Visscher 1650



Caroline De Candt
carolinedecandt@gmail.com



NEWS

The tenth international Atlas Days (Atlas Tage)

Esslingen am Neckar (near Stuttgart), 17-19 April 2015

By Jürgen Espenhorst
panverlag@t-online.de

Every year since 2006, collectors have come together during the Atlas Tage to share their passion for atlases. This year the meeting was in the beautiful old town of Esslingen near Stuttgart, so it was hardly surprising that it was not only the atlas-freaks themselves that made the trip there. Several were accompanied by their wives for whom, while often sceptical about their husbands' hobby, Esslingen was a real delight.



Tabletops devoted to cartography were the highlights of the Carto Market

Right from the beginning, the Atlas Tage have never resembled a traditional conference, with a lot of more or less interesting presentations. They do not target just researchers and academics, but reach out to all people with an interest in atlases; you can see a dentist in discussion with a chemist, while a physicist swaps ideas with the curator of a major map collection.

Enthusiasts from all walks of life are united in their interest in atlases published in the period since the beginning of the 19th century. While the accent is mainly laid on atlases from German-speaking countries, the field of interest is in fact much wider, covering also the many foreign editions (from as far away as Australia). This considerably broadens the interest of the subject matter, thus explaining the presence among us of collectors from Belgium, Russia, Sweden, England, France, Switzerland and, in particular, from the Netherlands.

Since the beginning we have always tried to include hands-on experience in the programme and this year it involved a visit to a lithographic workshop. Reinhard Urbanke who, along with his wife, organised the event in Esslingen, was kind enough to provide a lithographic stone plate from which our presenter, a trained lithographer, then produced clear, clean copies before our astonished eyes. Although everyone knew what lithography is, few had actually seen how a lithographed map is produced.

During a previous Atlas Tage weekend a few years ago, the only surviving German map engraver had shown us the art of engraving on copper. A DVD of this has subsequently been issued, where he shows the whole engraving process through to producing a printed coloured map (see review in *Maps in History* No 50, p. 15).

The Atlas Tage have also been the starting point for a major project that is soon to go public. An atlas collector well versed in computer programming has been working with Jürgen Espenhorst, using the latter's handbook of German atlases entitled *Petermann's Planet*, in order to create the foundations for an on-line Atlas Database. This is currently in its trial phase with the Staatsbibliothek in Berlin, exploiting the data and scans uploaded by a large number of individual collectors. The map department of the library is now working on opening the database website to the public, but this first requires resolving several questions of copyright. Once the website is accessible, its existence and contents will be made public.

Another important and unusual aspect of the Atlas Tage is its 'Carto Market', for which half a day is usually reserved. Here participants can show off their cartographical treasures for all to see and one or two may then be sold to other collectors. It is an ideal moment for discussions to take place and informal groups form in which participants often display unsuspected specialist knowledge.

An Atlas Tage weekend is completed by one or two presentation sessions. For example, in Esslingen it was our specialist Reiner Urbanke who summarised for us the main elements that need to be taken into account when collecting atlases. Professor Joachim Neumann then gave us an overview of atlases produced in Württemberg and this was followed by a discussion with the collectors present as to which if any of these works can still be found on the market.

All in all, the meeting in Esslingen was a very pleasant event for all concerned, and the fact that there are more participants each year shows that the formula works well. Interest is already high for next year's Atlas Tage which will take place from 1 to 3 April in Schwerte and which will mark the 200th anniversary of the launch of the subscription for *Stieler's Handatlas*.



Lithography printing demonstration by Mr. Ulrich



NEWS

ICHC 2015 Conference Antwerp 11-17 July 2015

The 26th of the biennial International Conferences on the History of Cartography was recently (11 – 17 July) held in Antwerp. This time, the City of Antwerp, in collaboration with the University of Antwerp, joined forces with initiator Imago Mundi Ltd.

Scholars, both academic and lay, got together to discuss the latest research results in the field, under the title 'THEATRE OF THE WORLD in Four Dimensions', of course a reference to Antwerp's famous son Abraham Ortelius and his *Theatrum Orbis terrarum*.



The conference proper was flanked by no less than five fine exhibitions, largely or exclusively aiming at historical cartography, mostly set in one of the many splendid historical buildings that the city boasts (for more detailed comment on these exhibitions, see elsewhere in this magazine)

Of course, many of our members were present and active, both in presenting papers and in taking part in

the academic and social programme.

It is impossible here to give an elaborate account of this whole week, which was very well organised and timed by Joost Depuydt, conference director and member of our Circle. We can only congratulate him and his team for the excellent work! Have a look at <http://www.ichc2015.be/>, where you will find the programme and abstracts online, as well as pictures of the participants.



Our readers might also be interested in the ICHC special the Dutch magazine *Caert Thresoor* issued, with articles on Antwerp and the Scheldt, the Liber Floridus, Ferraris and Vandermaelen, both in the usual Dutch but also – for the occasion – in English.

More details: <http://www.caert-thresoor.nl/englishtext.html>

Caroline De Candt
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Sixth Imago Mundi Price awarded

The sixth Imago Mundi Prize has been awarded to Robert Batchelor for 'The Selden Map Rediscovered: A Chinese Map of the East Asian Shipping Routes, c.1619', which appeared in *Imago Mundi* 65:1 (2013): 37–63. Robert Batchelor is an associate professor of history at Georgia Southern University.

This is the first scholarly article on what seems to be a unique type of map: a Chinese nautical chart with shipping routes, made for a private individual. The analysis of provenance, content, Chinese and Western sources, and background richly and amply demonstrates the importance of the map, especially as regards its depiction of 'the economic dynamism of seventeenth-century East Asia' and the cross-cultural exchanges with Europe. The possible connections of the map to the Chinese merchant Li Dan (suggested as the person for whom the map was made) and to the chartmaker Gabriel Tatton and the English ship *Elizabeth* are convincingly established, and the suggested link to contemporary theories of the 'law of the sea' (Hugo Grotius and John Selden) is intriguing.

Technical aspects, such as the construction of the compass rose, scale-bar and route-line network, are well explained and the use of a wide range of sources, published and archival, including many in Chinese, are impressive.

The prize is offered every two years. This award covers volumes 65 (2013) and 66 (2014). The winning article is the one judged 'to have made the most significant contribution to the discipline'. Only full-length articles, which are automatically subjected to the (anonymous) external refereeing process before acceptance for publication, are eligible for the prize.

The prize is USD 1000.00 and qualified the recipient for a J. B. Harley Travel Award to the biennial International Conference on the History of Cartography (Antwerp, 12–17 July 2015).

By courtesy of Routledge Journals (Taylor & Francis), Robert Batchelor's article is being made available free of charge at www.tandfonline.com/imagomundi (select 'About this journal', 'Featured articles').



NEWS

In memoriam: Prof. Dr.-Ing. Kurt Brunner (1945–2015)

By Thomas Horst
CIUHCT, Lisbon

It is my painful duty to inform the map community, that my mentor in map history, Dr.-Ing. Kurt Brunner, Professor Emeritus for Cartography and Topography at the 'Universität der Bundeswehr München' (University of the Federal Armed Forces in Munich, Germany), died unexpectedly at the age of 69 on 15 March 2015. Accompanied by a large number of friends and former colleagues, he was laid to rest at the Munich Ostfriedhof



on 14 April 2015.

Kurt Brunner was born on 17 September 1945 in Markt Schwaben, Bavaria. After his apprenticeship as 'Landkartentechniker', which he completed in Munich at the Bavarian Land Survey Administration in 1964, and where he learnt the technical skills of mapmaking, Kurt studied cartography at the 'Staatsbauschule' as well as surveying and mapping at the Technical University in Munich. He later became scientific assistant to Prof. Dr.-Ing. Rüdiger Finsterwalder, who published a monumental study about the development of Bavarian Cartography from its beginnings until the initiation of public geological surveying ('Zur Entwicklung der bayerischen Kartographie von ihren Anfängen bis zum Beginn der amtlichen Landesaufnahme') in 1967. It is most probably thanks to his multifaceted cartographic mentor that Kurt got more interested in the history of cartography.

But as cartographer he first worked on topographical maps of alpine glaciers, especially of the 'Vernagtferner' in Tyrol, where he visualised the glacier recession map. In 1977 Kurt completed his doctoral studies ('Darstellung alpiner Gletscher in großmaßstäblichen Karten') on the representation of alpine glaciers on large-scale maps.

From 1979 onwards Kurt Brunner worked as professor for Cartography at the 'Fachhochschule' in Karlsruhe, where he was active in the field of modern cartography.

In 1988 he was appointed professor for Cartography and Topography at the Bundeswehr University in Munich, where he taught until his retirement in 2012.

Besides the updating of maps of the German Alpine Association, Kurt Brunner now spent a lot of time working on map history; in fact approximately half of his 120 publications deal with this topic, particularly with regard to Bavarian and Tyrolean cartography. In this connection, Prof. Brunner was very interested in early maps, which were based on original surveying, as well as in the first cartographic representations of the alpine glaciers. This is why he arranged that some of these thematic maps, which were made in the late 19th century (Vernagtferner, Gepatschferner, Karlseisfeld, Suldenferner) were also published in facsimile.

Kurt Brunner also focussed on regional maps of the early modern period with various analyses of their accuracy – a new topic, on which also interdisciplinary doctoral theses were written under his supervision.

In the winter semester 1999/2000 he was visiting professor at the Institute for Geography and Regional Research in Vienna, Austria. From 2002 on he worked intensively on the documentation of cold spells in landscape pictures, maps and graphic reproduction, and he also prepared two exhibitions about 'Kartographie und Kunst als bunte Klimazeugen' – a subject area, which was studied only marginally by historians of climatology until then.

Kurt Brunner was member of the German Association of Cartography for more than 50 years and was a demanded speaker at national congresses, because he always tried to work in an interdisciplinary way. From 2005 he was a member of the Commission for Glaciology of the Bavarian Academy of Sciences and Humanities. In 2010 he succeeded in having the 15th 'Kartographiehistorisches Colloquium' take place in Munich (with more than 120 international participants). Although he already had serious heart problems at that time, this event was surely one of the highlights of his career.

When he retired in 2012 a Festschrift was dedicated to him, edited by Dieter Beineke, Otto Heunecke, Thomas Horst and Uwe G. F. Kleim as vol. 87 of the 'Schriftenreihe des Instituts für Geodäsie' at the Bundeswehr University in Munich¹. There one can find a complete list of his 100 papers and 120 publications in total, as well as 22 interdisciplinary articles written by his colleagues, students and friends, which demonstrate his various interests in the field of cartography. His broadly based knowledge will be greatly missed – not only in the German-speaking lands.

¹ online: <http://www.unibw.de/bauv9/Org/schriftenreihe/heft-87-2012>



EVENTS CALENDAR

All our readers are invited to send announcements of cartographic events and exhibitions to webmaster@bimcc.org
For up-to-date News and Events, see : www.bimcc.org/bimcc-newsevents.htm

13th Symposium of the International Coronelli Society for the Study of Globes

23 – 26 September 2015

Dresden, Germany

The symposium will take place in cooperation with the Mathematisch-Physikalischer Salon in Dresden (Germany). Themes: all aspects of the study of globes— especially the history of globes and globes in their historical and socio-cultural context, as well as globe related instruments such as armillary spheres, planetaria, telluria and lunaria.

Language: German and English Telephone: +43 1 53410 298

E-mail: vincenzo@coronelli.org

URL: <http://www.coronelli.org>

Gerard Mercator, Belgisch-Deutsches Universalgenie [Belgo-German universal genius] (1512-1594)

****** Advance Notice – subject to confirmation ******

15 October 2015

Brussels, Belgium

Conference and reception organised by the Belgisch-Deutsche Gesellschaft. Speakers Roland Wolf (Kultur- und Stadthistorisches (Mercator) Museum, Duisburg) and Jan De Graeve (Brussels Map Circle) will talk about this remarkable cartographer, cosmographer, maker of instruments and globes and his library, an example of European culture and erudition in the Renaissance. This will take place in cooperation with Eddy Maes (Mercator Museum, Sint-Niklaas).

On the premises of the EU-Representation of the Land Nordrhein-Westfalen, Rue Montoyer 46, 1000 Brussels, at 19.00. In French and German. Admission free, but registration will be required. Confirmation of this event, with registration details, will be posted on our web-site www.bimcc.org in due course.

33rd IMCoS International Symposium

19 – 21 October 2015

Cape Town, South Africa

The theme of the symposium is the 400 Years of cartography of travels to and in Southern Africa, from the Portuguese explorers (c. 1500) to the Boer War (c. 1900). Presentations will include Early Charts of European travel to the Far East and Antarctic; The stars of Southern African cartography; Mauritius and the first accurate map in the Southern Hemisphere; David Livingstone's

maps of exploring the Zambezi River and beyond; Monomotapa, Myth, Money and Miniature Maps; A raconteur's map of travels in Southern Africa; Mapping 'The Hitherto Unknown'; Bitter rivalry in mapping the Cape of Good Hope.

In particular, Wulf Bodenstein, Honorary President of the Brussels Map Circle, will talk about the Cartographic Highlights from the Map Collection of the Royal Museum for Central Africa, Tervuren, Belgium.

<http://www.2015imcos.com/>

14th Paris Map & Travel Book Fair

7 November 2015

Paris, France

A cocktail reception will be held open for visitors and participating dealers. The reception will feature a premium open bar. The reception starts at 19.30 and will last for one hour. This is a great opportunity to meet all of the dealers and clients in an informal atmosphere. Please invite any client in town for this reception. Reservation is needed, but participation is free of charge.

Afterward, dinner can be arranged individually at one of the many delightful restaurants that the district has to offer.

Béatrice Loeb-Larocque / Pierre Joppen, Librairie Loeb-Larocque, 31 rue de Tolbiac, 75013 Paris Venue: Hotel Ambassador, 16 Boulevard Haussmann, Paris E-mail: info@loeb-larocque.com

Time schedule: 11.00 - 18.00 ; Free catalogue.

URL: <http://map-fair.com/index.php>

'Maps and Society' Lectures

London, UK

• Ordinary Radicals: Archiving English Renaissance Pocket Maps

19 November 2015

London, U.K.

Lecture by Professor Kat Lecky (Assistant Professor of Renaissance Literature, Department of English, Bucknell University, Lewisburg, Pennsylvania, USA).

• Experiencing Lunar Maps: Collections in England, France and Spain, 1638–c.1700

14 January 2016

Lecture by Nydia Pineda De Avila (PhD Candidate, Queen Mary, University of London).

note: the events are listed in chronological order (in case of series or events, according to the first event in series).



• **Construction and Reconstruction: Investigating How Portolan Maps Were Produced by Reproducing a Fifteenth-Century Chart of the Mediterranean.**

4 February 2016.

Lecture by Dr Kevin Sheehan (Librarian & independent scholar, Durham University).

Lectures in the history of cartography convened by Catherine Delano-Smith (Institute of Historical Research, University of London), Tony Campbell (formerly Map Library, British Library), and Alessandro Scafi (Warburg Institute).

Meetings are held at 17.00 on selected Thursdays. Admission is free and each meeting is followed by refreshments. All are most welcome.

Venue: Warburg Institute, School of Advanced Study, University of London, Woburn Square, London WC1H 0AB Language: English

Contact: +44 20 8346 5112

E-mail: tony@tonycampbell.info

Time schedule: 17.00 Entry fee: Free entry.

URL: <http://www.maphistory.info/warburgprog.html>

Cartographie des traités [Cartography of treaties]

19 - 20 november 2015

La Courneuve, France

This one and a half day colloquium is organised by the commission 'Histoire' of the Comité Français de Cartographie (CFC); it will be held (in French) at the 'Archives diplomatiques' in La Courneuve near Paris. It will deal with the role of cartography in preparing and implementing diplomatic treaties.

Our Vice-President, Jean-Louis Renteux will make a presentation on a practical case of border modification in the north of France in 1779.

Information: <http://cartogallica.hypotheses.org/1235>

The Brussels Map Circle International Conference – Mapping the Ottoman Empire

12 December 2015

Brussels, Belgium

The Ottoman Empire, so important in Europe's history, will no doubt allow us to show splendid cartographic specimen. Don't miss our contribution to Europalia-Turkey this year!

See the detailed programme in this issue.

Venue: Royal Library of Belgium, Boulevard de l'Empereur / Keizerslaan 2, 1000 Brussels

Language: English

E-mail: info@bimcc.org

Time schedule: 09.30 - 16.30

'On the Origin and Evolution of Portolan Charts. First International Workshop'

5-6 June 2016

Lisbon, Portugal

The workshop is organised by the Interuniversity Centre for the History of Science and Technology, University of Lisbon (CIUHCT) and the National Library of Portugal (BNP).

The objectives of the workshop are:

- To assess the current state of knowledge and the range of opinion about the following aspects of research into the medieval portolan chart:

- When, where, how and why were the earliest portolan charts constructed?

- How did the portolan charts evolve over time?

- Were the portolan charts used in marine navigation and, if so, how; if not, what was their likely function?

- To clarify the role of cartometric analytical techniques in the study of portolan charts.

- To bring any other method to bear on these problems, such as the analysis of inks and parchments, special lighting to detect marks of use and to decipher illegible elements, and any other relevant approaches.

Venue: National Library of Portugal (BNP).

The event will be free of charges.

<http://ciuhct.org/events/portmeeting/>



The Ottoman Empire



EXHIBITION CALENDAR

De Zeven Zeeën [The Seven Seas]

13 June 2015 – 13 September 2015

Antwerp, Belgium

You may still have an opportunity to visit this small but fascinating exhibition, the last of the many exhibitions organised in Antwerp to accompany the ICHC2015 event. See our review above in this issue.

Venue: Erfgoedbibliotheek Hendrik Conscience
Hendrik, Conscienceplein 4, 2000 Antwerpen
Telephone: +32 3 338 87 10
E-mail: consciencebibliotheek@stad.antwerpen.be
Time schedule: Tuesday - Sunday 13.00 - 17.00
[http://www.consciencebibliotheek.be/Museum_Erfgoedbibliotheek\[...\]](http://www.consciencebibliotheek.be/Museum_Erfgoedbibliotheek[...])



The Atlases at the Maritime Museum in Amsterdam

Weltvermesser – Das Goldene Zeitalter der Kartographie [World surveyor - The Golden Age of Cartography]

13 September 2015 – 6 December 2015

Lemgo, Germany

This exhibition provides an overview of European cartography of the 16th to the 18th century. The focus is on the development of the modern world-view, which developed in the light of new geographical discoveries and astronomical knowledge. On display are maps, atlases and globes, and tools used for land surveying, astronomy, and map-making. Many pieces are borrowed from the Berlin State Library. There is an accompanying richly illustrated catalogue.

The exhibition can be seen at the Weserrenaissance-Museum Schloß Brake, Schloßstraße 18.

The Atlases

Until 2 April 2016

Amsterdam

The exhibition includes the top pieces from The National Maritime Museum's extensive collection of maps and atlases. Get acquainted with the four pioneers of cartography: Ptolemy, Mercator, Claesz, and Blaeu. These mapmakers and publishers produced maps and atlases that forever changed how we see the world. Your journey shows you the first maps of America, via the 'Unknown land of the South,' to a detailed city map of Amsterdam. The maps and atlases, produced between 1482 and 1665, are unique historical documents, and a feast for the eye with their rich decorations.

Venue: Het Scheepvaartmuseum [The National Maritime Museum], Kattenburgerplein 1- Amsterdam

TERRARVM ORBIS 10

Guenièvre Fournier-Antonini

**BARCELONE, GÈNES ET MARSEILLE
CARTOGRAPHIES ET IMAGES
(XVI^E-XIX^E SIÈCLE)**



863 p., 40 ill. n/b, 19 ill. couleur,
210 x 270 mm., 2012, cartonné,
ISBN 978-2-503-54492-2, € 180
(prix hors TVA et frais de port)

Pour la première fois, une histoire comparée est appliquée à la cartographie urbaine. En collectant méticuleusement les vues et plans de Barcelone, Gènes et Marseille conservés dans les principaux fonds cartographiques européens, l'auteur analyse l'évolution des productions et des usages des images, depuis leur apparition dans la littérature humaniste jusqu'à l'émergence de la photographie.

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AUCTION CALENDAR

This calendar is limited to those antiquarians and map dealers who support the BIMCC.

For details please contact: president@bimcc.org

De Eland
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tel. +31 20 623 03 43
www.deeland.nl, info@deeland.nl
14 September
23 Nov. 2015

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tel. +31 23 532 39 86
www.bubbkuyper.com
info@bubbkuyper.com
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paulus@swaen.com
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17-24 Nov. 2015

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info@loeb-larocque.com
7 November 2015

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fax +32 (0)50 34 64 57
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van.de.wiele@skynet.be
9-10 Oktober 2015

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D-75172 Pforzheim
tel. +49 7231 92 320
www.kiefer.de, info@kiefer.de
October 2015

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fax +32 (0)2 544 10 57
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auction@romanticagony.com
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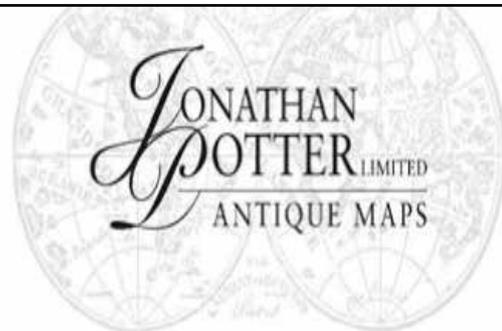
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THE BRUSSELS MAP CIRCLE

(asbl/vzw)

<http://www.bimcc.org> - info@bimcc.org

Aims and functions

The Circle was created, as the Brussels International Map Collectors' Circle (BIMCC), in 1998 by Wulf Bodenstein.

Now known as the Brussels Map Circle, it is a non-profit making association under Belgian law (asbl/vzw 0464 423 627).

Its aims are to:

1. Provide an informal and convivial forum for all those with a specialist interest in maps, atlases, town views and books with maps, be they collectors, academics, antiquarians, or simply interested in the subject
2. Organise lectures on various aspects of historical cartography, on regions of cartographical interest, on documentation, paper conservation and related subjects
3. Organise visits to exhibitions, and to libraries and institutions holding important map and atlas collections.

In order to achieve these aims, the Circle organises the following annual events:

- A MAP Afternoon in March or April, bringing together all those interested in maps and atlases for an informal chat about an item from their collection – an ideal opportunity to get to know the Circle.
- An EXCURSION to a map collection or exhibition.
- AN INTERNATIONAL CONFERENCE on a specific major topic in December.

The Brussels Map Circle also publishes *Maps in History* formerly known as '*BIMCC Newsletter*', three times a year and maintains a website.

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Becoming (and staying) a Member

Members receive three Maps in History per annum and have free admission to most of the Circle's events.

Non-members pay full rates.

Annual membership: EUR 30.00,
Students and Juniors
under 25: EUR 12.00.

To become (and stay!) a member, please pay the membership dues EXCLUSIVELY by bank transfer (no cheques please) to our bank account:

IBAN: BE52 0682 4754 2209

BIC: GKCCBEBB

and notify the Membership Secretary (treasurer@bimcc.org) indicating your name and address.

Maps in History

The Brussels Map Circle currently publishes three issues per year. It is distributed, not only to members of the Circle, but also to key institutions (universities, libraries) and to personalities active in the field of the history of cartography, located in 26 different countries.

Please submit calendar items and other contributions to the editor (e-mail: editor@bimcc.org) by the following deadlines:

- 15 **March** for the May edition.
- 15 **July** for the Sept. edition.
- 15 **Nov.** for the January edition.

Items presented for publication are submitted to the approval of the Editorial Committee.

Signed articles and reviews reflect solely the opinions of the author.

Books for review should be sent to Nicola Boothby (Uwenberg 13, B-1650 Beersel, Belgium, nicola.boothby@telenet.be) who will arrange for their review by a member of the Circle.



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