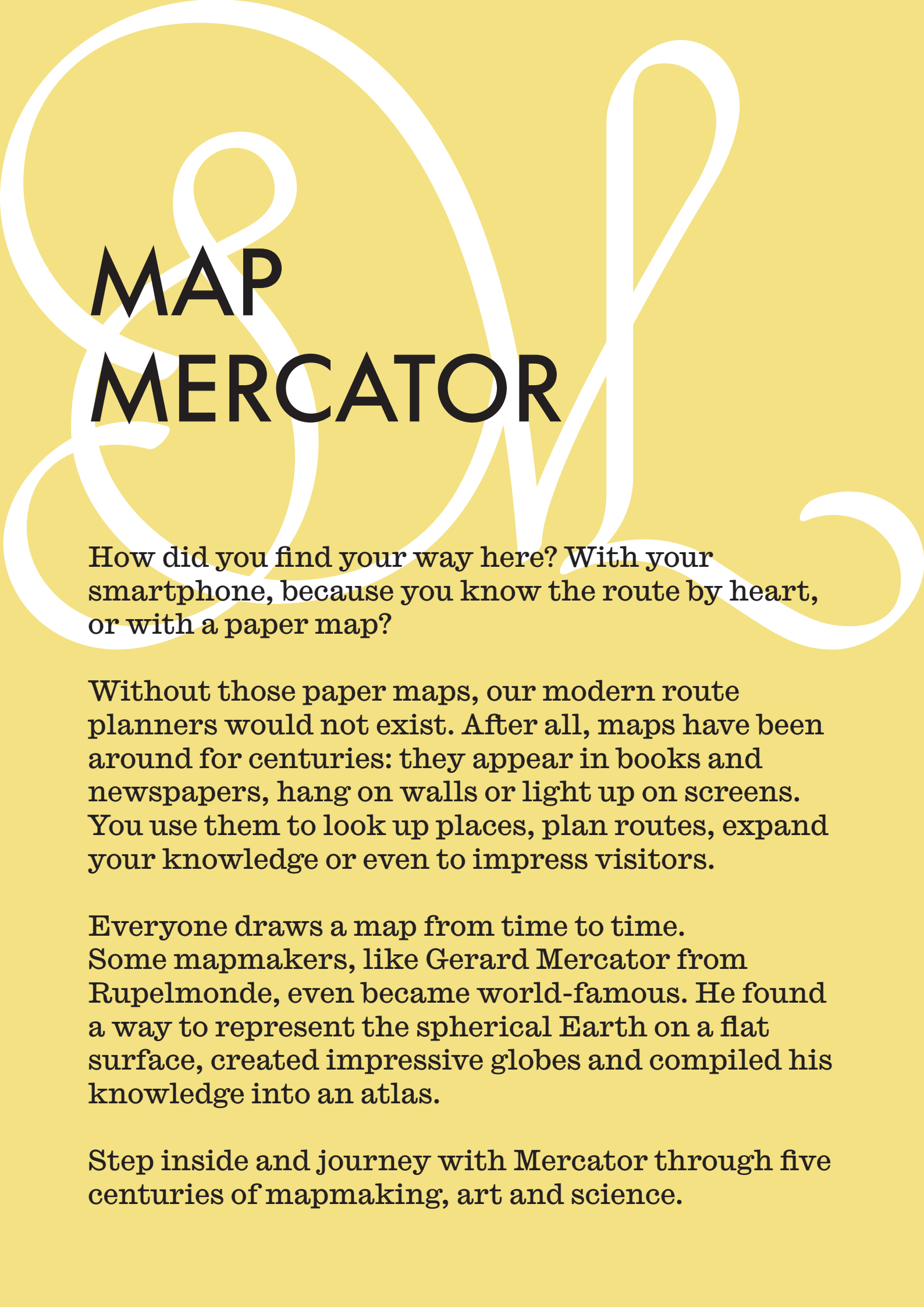




MAP MERCATOR

How did you find your way here? With your smartphone, because you know the route by heart, or with a paper map?

Without those paper maps, our modern route planners would not exist. After all, maps have been around for centuries: they appear in books and newspapers, hang on walls or light up on screens. You use them to look up places, plan routes, expand your knowledge or even to impress visitors.

Everyone draws a map from time to time. Some mapmakers, like Gerard Mercator from Rupelmonde, even became world-famous. He found a way to represent the spherical Earth on a flat surface, created impressive globes and compiled his knowledge into an atlas.

Step inside and journey with Mercator through five centuries of mapmaking, art and science.

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Map butterfly (*Araschnia levana*)

This is the *map butterfly*. Each map butterfly has a different ‘map’ on the underside of its wings. This butterfly will accompany you throughout the museum.



These maps were used in the living maps animation

Google Maps

Map of the Dutch coast and waterways from North Holland to the river Ems
Jan Huygen van Linschoten
±1600

Map of the County of Zeeland
Jacob van Deventer
± 1570

Atlas sive cosmographicæ meditationes de fabrica mundi et fabricati figura
Gerard Mercator, published in Duisburg by Bernardus Busius, 1602

Planisphaerium Coeleste
18th century

Atlas Novus sive Tabulae Geographicae
Matthäus Seutter

Atlas with the topographic map of the Austrian Netherlands
Count de Ferraris
published in Brussels by Joseph Jean François, 1777–1778

General map of the Russian Empire
Johann Trescot & Jacob Schmid
1784

New map of Japan
originally by Engelbert Kaempfer, revised by Matthäus Seutter
18th century

Map of the city of Middelburg
Cornelis Goliath
17th-18th century

Map Stories

Every map holds many stories. Their patrons and makers want to persuade you to see the world as they do. Yet maps do more than just inform: they evoke memories and guide you from place to place. They lead you through history, reveal where places are situated and mark ownership and borders. In short, they help us make sense of our surroundings. Still, no map is ever complete. Something is always left out, deliberately or unintentionally. And before you know it, a map can lead you astray.

Mercator and the North Pole

Gerard Mercator intended to publish an atlas of the entire cosmos. A map of the North Pole could not be omitted, even though no European had ever been there. Mercator was therefore forced to rely on the knowledge and stories circulating at the time. In a fourteenth-century book he read about four polar islands surrounding a high mountain, separated by four rivers and inhabited by pygmies four feet tall. This ‘knowledge’ later proved to be entirely erroneous, yet Mercator’s map of the North Pole continued to circulate. In the 1630s a new Arctic map appears in reissues of Mercator’s atlas. The errors have been corrected, and what remains unknown is left blank.

T.1

Map of the North Pole, in Gerard Mercator’s *L’Atlas ou meditations cosmographiques de la fabrique du monde et figure diceluy. De nouveau reveu et augmenté*

Gerard Mercator

Published in Amsterdam, Jodocus II Hondius, 1613

T.2

Map of the North Pole, in Gerard Mercator’s *Atlas novus, Sive descriptio geographica Totius Orbis Terrarum [...]*

Published in Amsterdam, Henricus Hondius and Johannes Janssonius, 1638

Horror Vacui

How can you map a region about which hardly anything is known? Mapmakers are often affected by fear of these empty spaces, the *horror vacui*. Some filled the blank areas with symbols, arrows, compass roses, decorations and titles. Others depict the tales told about such places, each more fantastical than the last. For the polar regions and the heart of Africa, imagination sometimes ran wild.

1.1 Map of part of the Arctic Ocean

Jan Huygen van Linschoten
1599

Although several expeditions to the region took place by the late sixteenth century, information about the Arctic Ocean was scarce. As a result, decorative elements were given ample space on this map.

1.2 - 1.3 World map in the northern and southern hemispheres

Antonio Floriani
1555–1556

In sixteenth-century Europe, no factual knowledge of the polar regions was available. Nevertheless, this Italian mapmaker prominently places both the North and South Poles on the map.

1.4 Map of the Russian Empire from the *Atlas élémentaire simplifié*

Published in Paris, J. Andriveau-Goujon, third quarter of the nineteenth century

The North Pole presents mapmakers with a dilemma: to fill it in or to leave it blank. In the eighteenth and nineteenth centuries, the second option is often chosen.

1.5 Map of the North Pole

Published in London, *The Geographical Magazine*, second half of the twentieth century

On this map, the North Pole is at the centre. The white haze suggests the presence of ice; the black lines indicate the expeditions of polar explorers.

1.6 Map of the seabed of the Arctic Ocean

Melville Bell Grosvenor et al.

Published in Washington, National Geographic Society, 1971

A map of the North Pole need not be empty: this spectacular map shows what the seabed beneath the polar ice looks like.

1.7 Map of Africa from an Italian collector's atlas

Published in Venice, Paolo Forlani, 1562

In the sixteenth and seventeenth centuries, *horror vacui* is omnipresent. On this map, the interior of Africa is crammed with mountains, rivers and lakes.

1.8 Map of Africa from the *Atlas élémentaire simplifié*

Published in Paris, J. Andriveau-Goujon, third quarter of the nineteenth century

From the eighteenth century onwards, the fear of emptiness disappears. On this nineteenth-century atlas map, the interior of Africa is therefore largely left blank.

Fact and fiction

We tend to believe maps easily. Don't they just show 'reality'? Not quite. Maps, atlases and globes are shaped by countless choices. Each is made with a purpose and reflects the visions of its makers and patrons. Maps can colour history, glorify victors, enlarge countries, twist election results or rename bays. Fact and fiction merge. And what appears on the map soon becomes 'the truth'.

2.1 Map of the Belgian Congo

Published in Brussels, A. Bielefeld, 1929

Do not be (mis)led by this factual and businesslike map of the Belgian Congo. It is unadulterated propaganda intended to lure Belgian youth to the former colony.

2.2 Map of the southern and eastern part of Hungary

Vincenzo Maria Coronelli and Jean-Nicolas de Tralage

Published in Paris, Mondhare et Jean, 1788

Which place name is correct? Here the mapmakers play it safe by listing multiple variants and translations for each location.

2.3 Humorous map of Europe in September 1939

André Vlaanderen

Published in Bruges, Léon Burghgraeve, 1939

Maps are sometimes full of humour, especially in dark times. At the outbreak of the Second World War, this map depicts all European countries in a cartoon-like manner.

2.4 - 2.13 Ten maps of the border region between Flanders, France and Hainaut

Published in Deventer and Almelo, Jan de Lat and Jacob Keizer, eighteenth century

These ten maps provide factual information, nothing more. An anonymous owner added accounts of battles in the margins.

2.14 Atlas with biblical maps

Pierre Moulart-Sanson

1716

Biblical maps offer a combination of fact and fiction: stories from the Old and New Testaments are projected onto geographical maps.

2.15 Plan and print of the Vatican

Jan van Viaezen

Late seventeenth century

Even a papal election gives rise to the making of maps. This plan was produced for a book on Vatican conclaves since the early fourteenth century.

Battles and sieges are very often mapped. These maps are not only useful for the training of soldiers; they also keep the memory of events alive. Victors want to trumpet their victory, losers attempt to conceal their defeat, and (newspaper) publishers wish to report and maximise profits. The event is the same, but the maps of the Battle of Kallo each present a different perspective.

2.16 Painting of the Battle of Kallo, June 1638

±1650

2.17 Sketch map of the Battle of Kallo, June 1638, after the painting from ±1650

Nineteenth or twentieth century

2.18 Map of the Siege of the city of Antwerp, 1584–1585

Jan Luyken

Amsterdam, ± 1680–1684

2.19 German print and map of the Battle of Kallo, June 1638

In or after 1638

This is mine

Borders on maps show where one territory ends and another begins. At school we memorise those lines as if they are fixed forever. Yet borders often spark debate and conflict. Mapmakers must take sides, so boundary lines can differ from one map to another. Are borders really as permanent as they seem?

3.1 The bailiff and aldermen of Düsseldorf declare that Catharina Putz, widow of the geographer Johannes Mercator, grandson of Gerard Mercator, has sold a piece of woodland in Flingern near Düsseldorf

6 October 1626

Maps are useful for visualising boundaries and property, but the legal force of texts is far greater. Real estate transactions are therefore usually recorded in writing.

3.2 Land and valuation register of the lordship of Beveren and of the lordships of Puiembeke, Paddeschoot and Aarschot

Jeremias Semeelen

5 February 1642

City Archives Sint-Niklaas

Sworn surveyor Semeelen describes all properties in four lordships near Sint-Niklaas in this register. The text apparently suffices, as no maps are involved.

3.3 Map of the lordship of Leughenage with Het Blauwhof castle in Steendorp

Judocus Vande Velde

1725

Since the sixteenth century, owners increasingly send surveyors into the field to map their possessions accurately.

3.4 Parcel map of the nineteenth, twenty-first and twenty-second sections in the parish of Moerbeke, on which the Abbey of Nieuwenbos in Ghent levies ground rent

J.B. Manderschaidt

Moerbeke, 23 December 1756

Surveyors do not always go into the field. The abbess of the Nieuwenbos Abbey in Ghent has an existing map copied in order to gain an overview of the parcels on which she levies taxes.

3.5 Map book of the city of Sint-Niklaas

Jacobus Johannes Du Caju

Melsele, 23 June 1806

Map or land books provide both a textual and cartographic overview of all parcels belonging to a specific owner or within a particular parish, in this case Sint-Niklaas.

In the mid-nineteenth century, Philippe Chrétien Popp, a former cadastral inspector, publishes the cadastral data of thousands of Belgian parcels. For each municipality he issues an index table and the corresponding parcel maps, under the approving eye of the Minister of Finance.

3.6 Index table and cadastral register accompanying the parcel map of the municipality of Bazel

Published in Bruges, Philippe Chrétien Popp, nineteenth century

3.7 - 3.8 Parcel map of the municipality of Bazel

Published in Bruges, Philippe Chrétien Popp, ±1860

3.9 Map of the modified Barrier boundaries between Flanders and States Flanders, from the North Sea to Ghent

Pieter Fehr

Eighteenth century

When borders change, maps follow. Many maps show how the boundaries between Flanders and States Flanders change because of the Barrier Treaties (1698–1782).

3.10 Map of Poland and Lithuania

Giovanni Antonio Bartolomeo Rizzi Zannoni

1772

Colours accentuate borders, but that does not make them hard facts. Here, colours show the possessions of Prussia and Austria in Poland, Russian claims, and what ultimately remains.

3.11 World map in the western and eastern hemispheres

Jean-Baptiste Poirson

Published in Paris, Chez Jean, 1826

Borders exist at all levels. On this world map, the boundaries of the continents are hand coloured.

3.12 Cartographic jigsaw puzzle of Europe

Published by Amway (Europe) Ltd., before 1990

National borders are depicted very clearly on maps. They can therefore easily serve as the edges of puzzle pieces.

3.13 Globe

Published in Chicago Heights, USA, Weber Costello Co., ± 1939

Thick red lines distinguish the countries on the dark blue continents. The Second World War would alter many of these borders.

Ways to go

Which way should you go? What's the quickest route? On foot, by bike, car or bus? Route maps for planning trips, finding rest stops or recalling travel memories have existed since the Middle Ages. In the 19th century, travel and transport cartography truly flourished with the introduction of new means of transport: trains, bicycles, trams, cars, buses and planes. Today, digital route planners combine everything on one screen, while paper maps end up as souvenirs in a closet... Forever?

4.1 Distance table for the Low Countries

Published in Deventer, Jan de Lat, mid-eighteenth century

According to its maker, this table provides an answer to 5,786 questions. It allows you to calculate travel times in 'hours of walking' between 108 cities in the Low Countries.

Postal route maps emerge in the seventeenth century and come into widespread use in the eighteenth century. Postal coaches then carry thousands of people and letters daily from one European city to another. These maps provide information on roads, travel times, distances, post offices and inns. They are not intended to find one's way, but to prepare a journey.

4.2 Map of the postal routes in the Kingdom of France

Matthäus Seutter

Published in Augsburg, Tobias Conrad Lotter, mid-eighteenth century

4.3 Postal route map of the Austrian Netherlands and its neighbouring regions

Jeanne Catherine and Philippe-Joseph Maillart

Published in Brussels, Jean Baptiste de Bouge, late eighteenth century

4.4 Map of the postal routes between London, Berlin, Venice and Turin

Published in Brussels, Lithographie Royale de Jobard, 1828

4.5 - 4.10 Overview map, route maps and announcement sheet for *L'Indicateur Fidèle ou Guide du Voyageur François*

Claude-Sidonie Michel

Published in Paris, Louis-Charles Desnos, ± 1765–1767

All roads lead to... Paris. Thanks to the detailed maps produced by the publisher Desnos, travellers know exactly how to travel to and from the French capital.

4.11 - 4.14 Map of the transport routes of Belgium

Published in Brussels, Dépôt de la Guerre, 1875

This map was produced during the great transport revolution of the nineteenth century. Many new canals, railway lines and roads are already visible; the bicycle and the car have yet to make their breakthrough.

The introduction of the steam train in the early nineteenth century also has cartographic consequences. Engineers draw up design plans for new railway lines, and once constructed these appear on regular geographical and topographical maps.

4.15 Map of the railways in Belgium in operation and under construction on 31 December 1840, produced on the orders of the Minister of Public Works Charles Rogier

J. Collon

Published in Brussels, Lith. de J. Collon, 1841

4.16 Map of the railway lines in Central Europe, indicating the project to establish a direct rail connection between London, Trieste and Venice

Published in Brussels, Guillaume François Louis Mols-Marchal, 1854

Nautical charts differ greatly from land maps because navigation at sea is fundamentally different. They provide information on depths, bays, harbours, cliffs, tides, courses and the appearance of coastlines. The stick charts of the Marshall Islands are more abstract and inform canoe navigators about the currents and swells of the sea between the islands, which are represented as shells.

4.17 Nautical chart of the Portuguese coast from Nazaré to Sesimbra, including the mouth of the Tagus

W.J.L. Wharton

Published in London, Admiralty, 16 November 1956

4.18 Stick chart of the Marshall Islands in the Pacific Ocean

2014

NavigArte Collection

4.19 Map of the Waasland with cycling and walking routes along breweries and pubs

Steven De Backer (ed.)

Published in Sint-Niklaas, Toerisme Waasland vzw, ± 2016–2017

In the late 1980s, Belgian mining engineer Hugo Bollen devised the junction system. Since then, countless junction maps have been produced and cycling and walking routes mapped out.

4.20 Low Air map of Belgium

Published in Brussels, National Geographic Institute of Belgium, July 1987

This overview map of the Belgian Flight Information Region provides an overview of the Restricted and Danger Areas that pilots must take into account up to an altitude of 4,500 feet above sea level.

Transport revolutions and the steady increase in leisure time in the nineteenth and twentieth centuries lead to a drastic rise in the number of journeys. To manage this (and to profit from it), commercial publishers and companies bring countless transport and route maps onto the market. Apparently they are not very valuable, as we discard them once we no longer need them.

4.21 Map of the Paris metro and bus lines

Published by RATP, June 2009

Private collection

4.22 Travel guide to Ypres and the battlefields of the First World War

Published in Clermont-Ferrand, Michelin & Cie, 1921

4.23 Touristic road atlas France, edition of 2026

Published in Paris, Michelin Editions, 2026

4.24 Road map of the Midi-Pyrénées region in France

Published in Clermont-Ferrand, Michelin et Cie, 1992

4.25 TomTom-Start, GPS-receiver for cars

TomTom N.V., 2010

4.26 Fold-out map and programme of the music festival *Down the Rabbit Hole*

Published by BooQi Media Solutions BV, 2025

Learning and Knowing

Count the objects on a map and you'll be busy for hours. Some maps and atlases present so much information they become almost unreadable. Maps reveal far more than locations and routes: they show what mountains look like, how deep rivers run, how many people live in your province, where the largest farms are situated and even how a town propagates itself as a shopping centre. No wonder maps and atlases are widely used in education, government, the military and intelligence services. Measuring means knowing!

5.1 Map of the Kingdom of Bohemia

Published in Amsterdam, Pieter II Schenk, mid-eighteenth century

Maps often contain a great deal of information. When they present too much data at once, they become illegible and unusable. Content and form must remain in balance.

5.2 Map of the Western Scheldt from Antwerp to Vlissingen, indicating depth soundings

Published in London, James Stratford, 24 March 1810

This is a perfectly legible map. Superfluous information has been omitted so that attention is directed towards what matters most: the depths of the Western Scheldt.

Representing differences in elevation is not straightforward. Today this is done using contour lines and height indicators, but in the past mountains and hills were simply drawn. Some mapmakers reproduce the relief three-dimensionally, allowing you literally to feel the differences in height.

5.3 Map of the canton of Uri in Switzerland

Gabriel Walser and Sebastian Dorn

Published in Nuremberg, Homann Heirs, 1768

5.4 Relief map of Palestine

Published in Chur, Reliefftechnik, second half of the twentieth century

5.5 - 5.9 Relief maps of the surroundings of Antwerp, Brussels, Mechelen, Dendermonde and Wavre

Published in Brussels, Prosper Louis Michelot, 1850

Thematic maps link spatial data with information about a specific theme, for example agriculture, public services or businesses. This can be done in various ways. The map showing the size of agricultural holdings presents statistical data and almost resembles an abstract diagram. On the arrondissement maps, the thematic information is conveyed in text, while the poster map of Terneuzen depicts the businesses.

5.10 Map showing the size of agricultural holdings in Belgium in 1950

Published in Brussels, Institut Géographique Militaire, 1956

5.11 Maps of the arrondissements of Antwerp, Turnhout and Mechelen

J.D.B. and J. Deleu

Published in Antwerp, Pietro Tessaro, Maison d'Estampes, before 1815

5.12 Map of the municipality of Terneuzen indicating the various businesses

Published in Zele, Art & Design N.V., second half of the twentieth century

5.13 Topographical map of southern Guyana, southern Suriname and northern Brazil

S.M. Kucev

1985

Knowledge is power. During the Cold War (1945–1991), the major powers collect not only topographical information about their own territory, but also about many other countries.

In the nineteenth century, geography becomes part of the school curriculum and maps appear in classrooms. Many publishers bring school atlases, wall maps and globes onto the market, which are used—sometimes compulsorily—by pupils and teachers. Schoolchildren also learn to draw or complete maps themselves. Geographical and cartographic knowledge is further developed in leisure time, for example through cartographic jigsaw puzzles, board games and treasure hunts.

5.14 School Globe

Nystrom & Co.
Chicago (US), ± 1960

5.15 Map of Africa made by a fourth-year Latin pupil

Marcel Peremans
Enghien, 26 April 1920
Private collection

5.16 School Atlas Belgium – the World

F. Lauwers, A. Van Hulsel, V. Verbruggen and J. Willems
Published in Lier, Uitgeverij J. Van In, 1989

5.17 Atlas of Belgium. 1. Political Geography

Pierre Marissal, Pablo Medina Lockhart, Gilles Van Hamme and Christian Vandermotten
Published in Ghent, Academia Press, 2007

5.18 Map of the city of Middelburg

Cornelis Goliath and Anthony van Meyren
Published by Johannes Meertens, ± 1696

5.19 Cartographic jigsaw puzzle of the city plan of Middelburg by Cornelis Goliath from ± 1696

Twentieth century

5.20 Cartographic jigsaw puzzle of the Netherlands from the series *Learning Geography Through Play*

Twentieth century

The Business of Mapmaking

Maps don't just appear by themselves. They are created by people and are the result of knowledge, skill and artistry. A simple sketch on paper may take minutes, but producing a globe, wall map or GPS system can take months. It is a complex and costly process, and those who invest in it would like to make profit: irrespective of whether it involves hugely expensive wall maps, tourist city plans, hand-coloured atlases or navigation software. The market for cartographic products remains lively as ever.

Mercator Globes

These two handmade globes by Gerard Mercator are absolute masterpieces. Initially, he assists his teacher Gemma Frisius in engraving globe segments, but he soon produces his own versions. His terrestrial globe is completed in 1541, followed ten years later by his celestial globe. They are the result of Mercator's intellectual craftsmanship: new knowledge presented in a new style. The globes are highly sought after by the elite, and Mercator therefore continues to produce them throughout his life. This provides him with the necessary income to devote himself fully to cartography.

T.3

Terrestrial globe

Gerard Mercator
Published in Leuven,
1541

T.4

Celestial globe

Gerard Mercator
Published in Leuven
April 1551

Segments of a terrestrial globe

Franciscus Haraeus

1617

Making a globe requires craftsmanship. The theologian Franciscus Haraeus also ventures into this field, building on the work of Mercator. Of his terrestrial globe, only a sheet with segments has survived. It shows how such a globe was made in the past. The mapmaker divides the earth into a series of elongated strips, called segments or gores, often twelve in total. These are then printed, cut out and pasted onto the globe. For each of the poles a circular piece is provided, and the explanation and information for the metal meridian ring are usually printed separately as well.

Booklore

Most mapmakers work indoors, at their desks. They draw information from existing maps, atlases, books and aerial photographs. Mercator did the same: he collected about a thousand books on history, theology, law, geography, mathematics and philosophy, as well as stories from travellers and adventurers. Ten years after his death, his library was auctioned off. Here you can see a copy of the original catalogue and several books Mercator used to create his globes, maps and atlases.

The auction catalogue of Mercator's book collection lists around a thousand works and is divided into various themes: theology, history, mathematics, medicine and 'learned works'. He owns works by Aristotle, Desiderius Erasmus, John Calvin, Andreas Masius, Nicolaus Copernicus, Abraham Ortelius and his teacher Gemma Frisius. Mercator extracts information from these works to create his globes, maps and atlases. After his death, the books are auctioned and the collection is dispersed. The cabinet displays 25 works of which Mercator once owned a copy.

1.1 Transcription of the auction catalogue of the book collection of Gerard Mercator from 1604

Nineteenth century

1.2 Selection of 25 books of which Gerard Mercator once owned a copy

Private collection

Measured

On 6 April 1813, Jean-Baptiste Marin delivered a detailed map of a plot owned by Mr Arts in Beveren. Marin was both a skilled draftsman and a meticulous surveyor. He used triangulation, a measurement method based on imaginary triangles. The corner points were existing landmarks, such as (church) towers. With two angles and one known length, he could calculate all distances and areas. Described in 1533 by Mercator's teacher Gemma Frisius, this method was used by surveyors for centuries.

2.1 Map of the house and garden of Mr Arts in Kloosterstraat in Beveren

Joannes-Baptista Marin

6 April 1813

The dotted lines in the garden form the imaginary triangles set out by surveyor Marin to map precisely the irregular plot of land belonging to Mr Arts.

From the fifteenth to the eighteenth century, two geometric manuals are particularly popular among surveyors and mapmakers in the Low Countries: the treatise on triangulation by Gemma Frisius and the surveying manual by Johan Sems and Jan Pietersz. Dou.

2.2 *Cosmographia Petri Apiani, per Gemmam Frisium apud Lovanienses Medicum & Mathematicum insigne[m] [...]*

Petrus Apianus

Published in Paris, Vivant Gaultherot, 1551

Libellus de Locorum describendorum ratione [...]

Gemma Frisius

Published in Antwerp, 1533

2.3 *Practijck des landmetens: Leerende alle rechte ende kromzydige Landen, Bosschen, Boomgaerden ende andere velden meten [...]*

Johan Sems, Jan Pietersz. Dou and Sybrandt Hansz. Cardinael

Published in Amsterdam, Willem Jansz. Blaeu, ± 1612

In the field, surveyors measure directions, angles and distances using simple and complex instruments. A measuring chain and a *pied de roi* have a fixed length, which is useful in a period when each region uses its own units of measurement. The needle of a compass points to magnetic north, while a theodolite is used to measure and set out horizontal and vertical angles with great precision.

2.4 Measuring chain

Nineteenth century
Ghent University Museum

2.5 Pair of compasses

Sixteenth century
Private collection

2.6 *Pied de roi*

Seventeenth century
Private collection

2.7 Pocket compass in a round brass case

First half of the twentieth century

2.8 Theodolite

Sixteenth century
Private collection

Today, surveyors carry out measurements using a total station or tachymeter, a combination of a theodolite and a distance meter. The underlying map from around 1930 illustrates how directions and distances to the surrounding villages were determined from Temse.

2.9 Total station and surveyor's tripod

Manufacturer Topcon, ± 1990–2000

2.10 Map of the surroundings of Temse

In or after 1930

Drawn

Anyone wishing to become a surveyor had to pass an exam and swear an oath of office. Peeter Stijnen measured several plots and presented his map in May 1739 as a ‘masterpiece of art and science’. A good surveyor had to measure and map accurately, but also excel in drawing and calligraphy. Yet you don’t need to be a surveyor to make a map: think of your own sketches or the design plans of architects and engineers.

3.1 Map of the Scheirsheide and of the fields, woods and arable land in the Vossekot district in Haasdonk and Temse

Peeter Stijnen

9 May 1739

City Archives Sint-Niklaas

With this map, Peeter Stijnen hopes to be sworn in as a surveyor so that he may in future practise his ‘art of surveying’ on behalf of the authorities.

Hand-drawn maps mainly depict specific and local situations, such as the design of a new building, the properties of a major landowner, or a situation that is the subject of legal proceedings. Sometimes they are attached to other related documents.

3.2 Design plan for a city school with teacher’s residence in the hamlet of Tereken in Sint-Niklaas

Edmond Serrure

17 January 1864

City Archives Sint-Niklaas

3.3 Parcel map of parts of the districts between Melselestraat and Zandstraat and the Gavers in Haasdonk, produced on the orders of Baron de Neve

Jacobus Johannes Du Caju

1 May 1784

3.4 Map in a legal case file concerning a ditch and water conduit of the Driesmolen beneath Plezantstraat in Sint-Niklaas

J.F. Maes and Matthijs Candt

Nieuwkerken, 1 June 1757

City Archives Sint-Niklaas

3.5 Copy of a map of the feudal lands of the lordship of De Moere, part of the lordship of Walburg in Sint-Niklaas

Jan Van Raemdonck

Second half of the nineteenth century

Millions of maps have been produced by copying existing ones. Initially, this was not straightforward. Mapmakers pricked the source documents with needles, attached a blank sheet of paper and traced the map. Later, tracing paper or copying machines were used. Today, one simply takes a digital photograph.

3.6 Parcel map of the area between Hulst, Sint-Janssteen and the Wildelanden and Ferdinandus polders

Probably eighteenth century

3.7 Sketch map of the monastery De Kluize, traced from the map of the properties of the Ghent Abbey of Saint Peter in the parish of Sint-Gillis-Waas by Jan Bale, after 1615

Twentieth century

3.8 Sketch map of the Kluizenhof, traced from the parcel map of Sint-Gillis-Waas published by Philippe Chrétien Popp in 1861

Twentieth century

Impressed

Look closely at these three maps. Do you notice any differences?

From the 16th century onwards, printing and selling maps became big business in Europe. Print runs grew, but competition and plagiarism were never far off. The same maps often circulated for years. Publishers sometimes altered the content, but most variation came from colouring and decoration. These changes reflect new printing techniques: first woodblock printing, later copperplate engraving and finally lithography, which enabled colour printing and mass production.

These three maps show exactly the same area and were published in the same period and in the same place. They are products of the two major cartographic publishing houses of seventeenth-century Amsterdam: Blaeu and Janssonius. They compete fiercely, plagiarise one another and seek cooperation with other publishers in the hope of maximising profits. The Blaeu map appears in atlases from 1634 onwards, that of Janssonius from 1641, and the Janssonius map with Pitt and Swart around 1680.

4.1 Map of State Flanders

Published in Amsterdam, Willem Jansz. and Joan Blaeu, ± 1634

4.2 Map of State Flanders

Published in Amsterdam, Johannes Janssonius, ± 1641

4.3 Map of State Flanders

Published in Amsterdam and London, Johannes Janssonius van Waesberge, Moses Pitt and Stephanus Swart, ± 1680

4.4 *Literarum latinarum, quas Italicas, cursoriasque vocant, scribendarum ratio*

Gerard Mercator

Published in Antwerp, Johannes Richard, 1540

Engraving and etching copper plates is an important aspect of the map trade in the early modern period. For the lettering of these plates, Mercator publishes a manual on cursive script in the mid-sixteenth century.

In the fifteenth and sixteenth centuries, printers use woodblocks from which the map is cut in mirror image. The map of the County of Flanders from Sebastian Münster's chronicle and the maps in Guicciardini's famous *Descrittione di tutti i Paesi Bassi* are produced using the woodcut technique.

4.5 Sheet with a description and map of the County of Flanders, from Sebastian Münster's *Cosmographia universalis*

Published in Basel, Heinrich Petri, ± 1550

4.6 *Descrittione di M. Lodovico Guicciardini patritio Fiorentino, di tutti i Paesi Bassi, altrimenti detti Germania inferiore [...]*

Lodovico Guicciardini

Published in Antwerp, Willem Silvius, 1567

Private collection

From the sixteenth to the nineteenth century, maps are printed mainly from copper plates, into which the map has been engraved or etched in mirror image. The maps of State Flanders and the maps in the Ferraris Atlas, for example, are produced in this way. Copper engraving and etching offer the advantage of allowing map objects, decoration and text to be rendered in far greater detail. However, this is an expensive and labour-intensive production technique that requires considerable resources from publishers.

4.7 Copper plate of sheet VIII of the chorographic map of the Austrian Netherlands, published by Joseph Jean François, Count de Ferraris

Louis André Dupuis

1777

KBR

From the nineteenth century onwards, planographic printing becomes the dominant printing technique in the map trade. Maps are printed on a lithographic press from a greased limestone block on which the map has been drawn in mirror image. In the twentieth century, many new printing techniques are introduced, partly thanks to mechanisation and digitisation. Yet artisanal practices continue to exist as well.

4.8 Relief printing plate of the map of Sint-Niklaas from Antonius Sanderus' *Flandria Illustrata* (1640–1641)

Manufacturer Metalôn, ± 1990

4.9 Reprint of the map of Sint-Niklaas from Antonius Sanderus' *Flandria Illustrata* (1640–1641)

Published in Sint-Niklaas, Drukkerij Suy, second half of the twentieth century

4.10 Lithographic press with crank mechanism and rolling printing table

Manufacturer Achen, Carl Sperling

Twentieth century

4.11 Lithographic stone used to print sheet 7 of the geological map of Belgium, showing the strata of the Condroz and the confluence of the Sambre and Meuse

Published in Brussels, Dépôt de la Guerre, nineteenth century

National Geographic Institute of Belgium

Commercialised

Map lovers treasure beautifully coloured copies by famous mapmakers such as Mercator or Ortelius. Yet most maps looked quite different. Take these four small maps on thin paper: cheaper prints that circulated far more widely than the luxury showpieces. Few have survived. They sometimes appear in books or family papers, but most of them have been thrown away. After all, who keeps all those free tourist or festival maps?

The market for small, low-quality cartographic print material is far larger than that for luxurious globes, atlases and maps. These small maps often appear very sloppy in terms of both content and design. Very little information about them survives, as they are usually not preserved. Nevertheless, they account for a significant share of map publishers' turnover.

5.1 Map of the city of Lisbon

Probably eighteenth century

5.2 Map of the Bijlmermeer polder

Cornelis Danckerts de Ry

Published in Amsterdam, Jacob Aertsz. Colom, 1660

5.3 Map of the city of Lille

Jacob Harrewijn

Late seventeenth or early eighteenth century

5.4 Map of the city of Breda

Probably eighteenth century

5.5 Map of the County of Zeeland

Jacob van Deventer

Published in Antwerp, Abraham Ortelius, ± 1570

Maps are highly sought-after status symbols for the elite, especially when they are richly decorated and finely hand-coloured.

5.6 Catalogue of the maps available for sale at the publishing house of Tobias Conrad Lotter in Augsburg

Published in Augsburg, Tobias Conrad Lotter, mid-eighteenth century

Marketing is a crucial aspect of the map trade. Publishers such as Tobias Conrad Lotter advertise in newspapers or distribute shop catalogues among their customers.

5.7 - 5.9 Three copies of the topographical map of the surroundings of Antwerp, Hulst, Axel, Zandvliet, Lillo, Sint-Niklaas and Sas van Gent

Published in Paris, Guillaume Danet, 1724

Until well into the nineteenth century, printing is limited to a single colour, usually black. Maps therefore have to be hand-coloured afterwards, which explains why copies from the same print run can still differ from one another. Hand-colouring significantly increases the price, and some publishers employ specialised colourists for this purpose.

Unfolded

Sometimes a map is literally hidden inside a book or behind a fold. In the 1770s, Count de Ferraris had the Southern Netherlands mapped in great detail. The result was a huge wall map of 25 sheets, suited for wealthy clients with enough money and space. Those unwilling to puzzle could have the sheets bound into a book. Everyday users made do with small foldable maps. Handy and cheap, but fragile: they wore out quickly or got lost.

6.1 Atlas containing the topographical map of the Austrian Netherlands

Published in Brussels, Joseph Jean François, Count de Ferraris, 1777–1778

Three hand-drawn copies of the famous Ferraris map survive, as well as a printed wall map in 25 sheets. This could be hung on the wall or bound together into a book.

6.2 Parcel map of the parish of Belsele

G. van Landeghem

1701–1703

City Archives Sint-Niklaas

Surveyor G. van Landeghem spends three years measuring all the parcels of the parish of Belsele. He transforms the dull property data into an immense figurative wall map, on which buildings and trees are represented three-dimensionally. A fine title cartouche, a scale with dividers and two compass roses provide additional decoration.

6.3 Chest containing 80 map sheets of the topographical map of the Netherlands at a scale of 1:50,000

Published in The Hague, Ministry of Defence – Topographical Service, first half of the twentieth century

Private collection

The 80 sheets of the detailed topographical map of the Netherlands fit perfectly into this metal chest. Convenient to carry during a military campaign or exercise.

Out of the Blue

Aerial photography brought a revolution in cartography. Cameras at the bottom of aircrafts captured thousands of images of the landscape. On the ground, specialists turned these pictures by hand into detailed topographic maps. Later, satellites and software automated the work. Today we can watch in real time what satellites send back to Earth. For now, people still decide what is and isn't shown. But how long before computers take over completely?

The first successful aerial photograph was taken in 1855, and during the two World Wars aerial photography plays a major strategic role. In cartography, however, the major breakthrough does not occur until the mid-twentieth century, when many cartographic institutes devote themselves to photogrammetry: the production of maps based on aerial photographs. The launch of satellites for Earth observation also makes it possible to collect data via electromagnetic radiation. Thanks to the development of the Global Positioning System (GPS) in 1967, it becomes possible to determine one's position and navigate almost continuously and anywhere.

7.1 Wild Heerbrugg RC5 aerial camera

Manufacturer Heerbrugg Camera Company, ± 1948–1990

7.2 - 7.3 Negatives of aerial photographs of Koekelberg and of the mouth of the Durme into the Scheldt near Hamme

Second half of the twentieth century

7.4 Orthophotoplan of Stekene

Published in Wommel, Eurosense, 1989–1990

7.5 Nautical chart of the Belgian coast from Gravelines in France to Oostkapelle in the Netherlands

Published in Brussels, Agency for Maritime Services and Coast – Flemish Hydrography, April 2021

World views

Only from space you can see the Earth at a glance. On the ground, our view is always incomplete. For centuries, mapmakers have searched for ways to show the globe on a flat surface. They invented projections and coordinates in order to present the most accurate view of the world. Yet no map is neutral. What lies at the centre, which colours are used or what is drawn larger: all of it shapes and distorts our view. Could the East just as well be at the top? Why does the prime meridian run through Greenwich? Is seawater really blue and the Earth truly bounded?

Mercator's Atlases and World Map

Mercator not only makes globes, but also individual maps and atlases. His best-known map is the large wall map of the world in eighteen sheets from 1569. For this, he applies a normal conformal projection, later known as the Mercator projection. In addition, Mercator produces atlases. Like many other sixteenth-century humanists, he republishes the *Geographia* of the Greek scholar Claudius Ptolemy and adds new maps. He also hopes to bring together all his knowledge of the cosmos in a comprehensive book. The project proves too ambitious and remains unfinished. After his death, his son Rumold publishes a final volume, which for the first time bears the word 'atlas' in its title.

T.5

World map in the western and eastern hemispheres, in Gerard Mercator's *Atlas sive cosmographicae meditationes de fabrica mundi et fabricati figura* [...]

Rumold Mercator

Published in Amsterdam, Cornelis Claesz. and Jodocus I Hondius, 1607

T.6

Map of the Old World, in Gerard Mercator's edition of Claudius Ptolemy's *Geographiæ libri octo Græco-Latini*

Gerard Mercator

Published in Amsterdam, Jodocus I Hondius and Cornelis Claesz., 1605

T.7

Reissue of Gerard Mercator's world map of 1569, commissioned by the Archaeological Circle of the Land of Waas

Jan Van Raemdonck

Published in Berlin, Société géographique de Berlin, December 1891

Map projections

How can you show the Earth on a flat surface? Like other scientists, Mercator searched for a solution. He made his famous world map using a conformal cylindrical projection, with meridians and parallels crossing at right angles, allowing sailors to follow a straight line across the sea. The downside is that surface areas are distorted, so the polar regions appear larger than they are. Yet Mercator's projection became the Western standard. Other projections also deform reality. Try it yourself: what would your head look like flattened?

The Mercator projection gains acceptance only gradually. It is not until the nineteenth century that it becomes ubiquitous in Europe and America and profoundly influences the Western world view. The world map offered to its customers by S.A. Teinturia in the mid-twentieth century explicitly refers to Mercator's projection. The world map by Jean Baptiste Nolin from two centuries earlier still depicts the Earth in two separate hemispheres.

1 World map in the western and eastern hemispheres

Jean Baptiste Nolin

Published in Paris, Crépy, 1755

2 World map in Mercator projection, offered by S.A. Teinturia

Jacobus De Duve

Published in Brussels, A. De Visscher, 1951

Mapping the World

The Earth can be mapped in three ways: as a globe, a world map or an atlas. The globe most closely resembles reality, though you never see everything at once. A flat map shows it all in a single view, but distorts distances, angles or shapes. An atlas gathers maps of continents, countries and cities. Its advantage is variation in scale, detail and colour. The drawback: you must leaf through the pages.

3 - 12 Ten maps from an Italian collector's atlas

± 1567

Most atlases are compiled by an editor and brought to market by a publisher. Each buyer therefore owns the same product. In some cases, however, the customer determines the content of the atlas. This is known as a collector's atlas, *atlas factice*, composite atlas, IATO atlas (Italian Atlas Assembled To Order) or Lafreri atlas. These are unique documents that reflect the personal and geographical interests of the client. Displayed here is a selection of ten maps from the Lafreri atlas of the Doctor Van Raemdonck Foundation, which has been taken apart for conservation purposes.

In 1570, the Antwerp publisher Abraham Ortelius prints the first world atlas, the *Theatrum Orbis Terrarum* or 'Theatre of the World'. It is such a success that countless reissues and translations follow. Gerard Mercator harbours greater ambitions: he wishes to encompass the entire cosmos and its history in a single book. The result is ultimately a multi-volume publication, one volume of which bears the title *Atlas sive Cosmographicae Meditationes de Fabrica Mundi et Fabrica Figura*, 'Atlas, or cosmographical meditations on the creation of the world and the form of creation'. From then on, the word 'atlas' becomes established. The Mercator atlas is also a success. In the seventeenth century, numerous reissues and translations appear, including pocket editions, although the maps and texts are regularly updated.

13 *Theatrum oder Schawplatz des erdbodems [...]*

Abraham Ortelius

Published in Antwerp, Gielis Coppens van Diest, 1572

14 *Atlas ou representation du monde universel, et des parties d'icelui, faicte en tables et descriptions tres amples, et exactes [...]*

Gerard Mercator and Jodocus I Hondius

Published in Amsterdam, Henricus Hondius, 1633

15 *Historia Mundi: or Mercator's Atlas. Containing his cosmographical Description of the Fabricke and Figure of the World [...]*

Gerard Mercator, Jodocus I Hondius and Wye Saltonstall

Published in London, Michael Sparke and Samuel Cartwright, 1635

16 *Atlas minor Gerardi Mercatoris à I. Hondio plurimis æneis tabulis auctus atque illustratus*

Gerard Mercator and Jodocus I Hondius

Published in Amsterdam, Cornelis Claesz. and Johannes Janssonius, 1607 [?]

17 *L'Épitome du theatre de l'univers d'Abraham Ortelius. Nouvellement recogneu, augmentè et restaurè de meseure Geographique, par Michel Coignet, Mathemat. d'Anvers*

Abraham Ortelius and Michiel Coignet

Published in Antwerp, Jan van Keerberghen, 1602

Private collection

The Long Hand

In 2023, Sammy Baloji created *The Long Hand*, a sculpture on the Southern quay in Antwerp. The artist based it on the Lukasa, a memory board from the Luba culture in the Democratic Republic of Congo. Decorated with patterns and beads, such a board serves as an aid for telling stories of history, ancestry and cosmology. In the hands of a storyteller, it becomes a map of memories. Baloji enlarged this idea into a monument, linking Congo with Belgium in a shared act of remembrance.

Sammy Baloji
The Long Hand

2022

Collection Kunst in de Stad – Middelheimmuseum, Antwerpen (with the support of the Flemish Government)

The Blue Marble

For centuries, humans have tried to depict the Earth. On 7 December 1972, the crew of Apollo 17 captured the first full image of our planet: the famous *Blue Marble*. The photograph travelled the world and broadened the geographic awareness of millions of people. In the same period, globes were mass-produced as study tools, furniture or decorative objects in bedrooms, classrooms and presidential offices. Discover more than a hundred 20th-century globes donated to the museum by Willem Jan Neutelings.

1. Innovation

The 20th century brought radical change to globe production. Machine-made globes of metal and plastic, produced in vast quantities, replaced the handmade models of plaster and paper. The globe evolved from an exclusive showpiece for the wealthy to an affordable mass product for everyone. New types appeared: children's globes made of printed metal, transparent globes in plexiglass, inflatable vinyl globes and illuminated or raised-relief versions made of plastic.

1.3 Radio Globe

Colonial Radio Corp.
USA 1933

The famous French-American designer Raymond Loewy designed this first globe made entirely of plastic, featuring a built-in radio in Art Deco style. The material is Bakelite, an invention of the Ghent-born chemist Leo Baekeland. The globe symbolizes worldwide radio waves.

2. Style

A globe is not only a scientific instrument but also a decorative object reflecting the culture of its time. Under the motto ‘a globe in every home’, 20th-century globe makers followed interior trends and designed models for the middle class. Styles such as Art Nouveau, Art Deco, Streamline and Modernism succeeded each other rapidly. Oceans turned black or silver, stands became sculptures in aluminium or wire. With their striking looks, globes also became popular gadgets, from puzzles and penny banks to miniature bars.

2.3 Streamline Style Globe

Repogle
USA 1935

This elegant globe in “Streamline Style” is meant to evoke a sense of speed. To enhance this expressive effect, the glass sphere has internal lighting and paper map segments with black-colored oceans. The globe appears to float on a cast aluminum base shaped like a storm wind.

3. Education

Education for all was one of the great aims of the 20th century. The globe became a popular tool for spreading knowledge, so many school globes with simplified maps were developed for children. Cheap miniature globes appeared, one for every pupil, while unbreakable versions could be passed around the classroom. There were black globes to write on and globes for teaching sailors, pilots and astronauts. Demonstration globes displayed new scientific insights such as ocean-floor relief and shifting tectonic plates.

3.17 Ocean Floor Globe

National Geographic Society
USA +- 1970

Mary Tharp, an American geologist, was not allowed to join expeditions in the 1950s to map the ocean floor because she was a woman. In response, she became world-famous by creating an Ocean Floor Globe from collected data, providing evidence for the theory of plate tectonics.

4. Space Exploration

In the mid-20th century, the space race ignited between the Soviet Union and the United States. Astronauts used astro-globes, transparent versions of celestial spheres, as navigation tools. Spacecrafts orbited the Moon and sent back photographs, including images of its far side. These formed the basis for the first lunar globes. The 1969 Moon landing marked the climax, triggering a worldwide ‘moon craze’ and a flood of newly produced globes of the Moon.

4.3 Moon Globe

Paul R  th Nachf. KG
GDR 1961

In 1959, the Soviet Luna 3 successfully flew around the Moon and transmitted images of the unseen “far side.” This formed the basis for the very first Moon Globe, which shows parts of the Moon’s far side. Thanks to images from later lunar missions, the globe was eventually completed.

5. Current Affairs

Globes mirror the political, social and economic realities of their time. The upheavals of the 20th century forced makers to update their models at great speed. Shifting borders and changing colours followed the outcomes of wars and the independency of colonies. Dense networks of sea and air routes illustrated new lines of global trade. Globes also appeared in promotional campaigns by companies, religious movements and NGOs, symbolising connection and progress.

5.13 Air Age Globe

Rand McNally
USA 1944

This white globe, showing only the names of airports, represents the concept of the “Air Age,” the globalized world that emerged in the 1940s under the influence of expanding aviation. It presents a view of the world from an airplane above the clouds, connecting points on Earth unhindered by geography.

Maps for Everyone

With the digital revolution, the world has literally come within reach. Using GPS and map apps, you choose where to go. The map tells you where you are, plots your route and guides you past landmarks. We all drop pins and build maps of our own lives. This is nothing new: people have long created mental maps of their surroundings, reaching into the past, capturing the present and even imagining the future. We will keep making maps, always and everywhere.

Mercator's 'Life Map'

The sixteenth-century Duchy of Brabant, with cities such as Antwerp, Brussels and Leuven, is the most important region of the Low Countries. Yet Gerard Mercator does not create a separate map of Brabant for his atlas. Adjacent regions such as Cleves, Jülich, Limburg, Liège, Flanders, Namur, Zeeland and Guelders are also shown in full or in part. The result is almost an overview map of Mercator's own life. On the far left you see his birthplace Rupelmonde; on the far right the place where he will die in 1594, Gangelt. His places of residence and work—Leuven, Antwerp, 's-Hertogenbosch and Duisburg—also appear on the map.

T.8

Map of Brabant, Jülich and Cleves, in Gerard Mercator's *Atlas sive cosmographicæ meditationes de fabrica mundi et fabricati figura*

Gerard Mercator

Published in Duisburg, Bernardus Busius, 1602

The Future

What happens if sea levels rise by two meters and a severe storm hits? Large parts of the Scheldt Delta could disappear underwater. Luckily, we've learned from the past: after the 1953 North Sea Flood, the Delta Programme and Sigma Plan were created to protect us from a rise of up to one meter by 2100. Explore the interactive model to see how climate change may reshape the landscape. This installation is part of the UNESCO Scheldt Delta Geopark and the Interreg project (Be)leefbare Schelde.

Interreg
Vlaanderen-Nederland



Gefinancierd door
de Europese Unie

(Be)Leefbare Schelde

Wall map of the County of Zeeland

Published in Amsterdam, Nicolaas Visscher and Reinier Ottens, eighth edition,
1725 Interpretation

1.1 Figurative and monumental map of Waas, *het soete land*

Mark F. Severin and W. Melis

Published in Schoten, Regional Association for the Promotion of Tourism in the Land of Waas, 1975

1.2 *The War on Drugs in the Port of Antwerp*

Karl Meersman

2023

1.3 *Untitled*

Jaco De Maesschalck

2019

1.4 *The Invisible Route. As walked by Maarten Inghels on 20 April 2025 in Sint-Niklaas, Belgium*

Maarten Inghels

2025

1.5 *Printplaat One Word Poem Utopia, made while walking in Sint-Niklaas (19K) on 5 March 2025*

Maarten Inghels

2025

1.6 Photograph from the series *Unexpected Lesson in Joy*

Nick Hannes

2020

1.7 *Compendium*

Inge Panneels

2012

1.8 *Madonna and Child*

August De Wilde

1867

1.9 *Bolleke pijl*

Maarten Inghels

2025

Since the second half of the 20th century, maps have appeared everywhere. There are postage stamps featuring maps, pencil sharpeners shaped like globes, and coins and banknotes bearing the portrait of Gerard Mercator. You can find maps on T-shirts, pins, ties, bookmarks, board games, trucks, tote bags, drinking cups, postcards, notebooks, and more.

They should certainly not be regarded as simple gadgets or trivial objects, as the maps on these items often also serve an informative, representational, or educational function. They help shape our geographical awareness and expand our spatial knowledge. For example, with a cartographic jigsaw puzzle, you can learn geography in a playful way.

In the display case, you can see several fine examples from the extensive collection of cartographic jigsaw puzzles donated to MAP - Mercator by Geert and Betsy Bekkering.