

The John W. Galiardo Collection of World Maps

Daniel Crouch Rare Books is a specialist dealer in antique atlases, maps, plans, sea charts, globes, scientific instruments, and voyages dating from the fifteenth to the nineteenth centuries. Our particular passions include rare atlases, wall maps, and separately published maps and charts.



The John W. Galiardo Collection of World Maps

Daniel Crouch Rare Books LLP 4 Bury Street, St James's London SW1Y 6AB

+44 (0)20 7042 0240 info@crouchrarebooks.com crouchrarebooks.com Daniel Crouch Rare Books New York LLC 24 East 64th Street New York NY 10065

+1 (212) 602 1779 info@crouchrarebooks.com crouchrarebooks.com



Printed by Park Communications on FSC® certified paper. Park is an EMAS certified company and its Environmental Management System is certified to ISO14001. 100% of the inks used are vegetable oil based, 95% of press chemicals are recycled for further use and, on average 99% of any waste associated with this production will be recycled. This document is printed on Galerie Matt with all fibres sourced from well managed, sustainable, FSC® certified forests. The pulp used in this product is bleached without the use of chlorine (ECF).



ISBN 978-0-9957558-1-9

Catalogue edited by Daniel Crouch, Lucy Garrett, Noah Goldrach, Kate Hunter, Elena Napoleone, and Nick Trimming Design by Ivone Chao Photography by Louie Fasciolo Cover: item 5

Terms and conditions: The condition of all books has been described. Each item may be assumed to be in good condition, unless otherwise stated. Dimensions are given height by width. All prices are net and do not include postage and packing. Invoices will be rendered in £ sterling. The title of goods does not pass to the purchaser until the invoice is paid in full.

erd in medio torri nodrat coli Eram onn chie q p numu om a guene A phr eredian uerig: ave cum us q adoc upromel i fact of il ta ad copieronen nel tumber tonen te ücemer. Cüttla concurat as revor abunit occommende tere recero mare fathe accorn Somtithe Soccumer St Heledatas tuden. 100. 10 ploced vector r Alu dur oranner chin Villine. en toddern hoza coa danten ward fir reflur orcia occurat ats i ur lain fred d funena alle pueño a lourar ule adme medeancii futrenoa reamin, nortac ion a officiant lette by recomming of them: Stor Facto without रे. 10 कु. मेर आगार्थ ncia occitat reflere ugen erachaiana nare achal man u igha-y mente dule one ad September

omly ad ut Occider u te ugen aby Eden-Baum + duisa maria nater. 53 15 una doel tacione debuir. q prozendam ivereda! 11 Pupi durita ev vefluriombs occeam uen wi nafer Die g qu in uMaunt D. Qu due vesturiones ut pour i store erllo forte wand humant und ad sepretone alta ad autrum duudancur unar agru leparaicide aer mour. fand fuerir ipul fut q ulq not puente genat uend. q ze phiruf no cacur Due u qui ouente di urdune fuo moas gnane uencu dour nocarun: Eun occinat y orientat fead for wincomen ugener un medio septement ocer une errepchone mour derfreq; tien Simumional gbozen or. g op I frigida ma nator muo frigio di Suce u. op aber & anglo terre ad medul fugar. n g phuolist - torridam zonam . vn ".m. Or neil velie una rura terent. u vaulte wirdam zonam cale wir anobu friges i ai + alis Thue refitming as and Tout

Introduction

"Give me a map; then let me see how much is left for me to conquer all the world" Christopher Marlowe 'Tamburlaine the Great', 1588.

In the century before Marlowe's Elizabethan drama, Bartolomeu Dias had rounded the Cape of Good Hope (1488), Christopher Columbus had made landfall in Hispaniola (1492), Vasco da Gama had reached India by sea (1498), Pedro Cabral had landed in Brazil (1500), the Portuguese had discovered the Spice Islands (1512), Vasco Núñez de Balboa had reached the Pacific (1513), and the 'Victoria', albeit without its captain, Ferdinand Magellan, had circumnavigated the world for the first time (1521). The area of the world "left to conquer" was steadily shrinking, and as the world map changed so did the dissemination of knowledge about those changes.

That the Age of Discovery and the (first) Information Age ran in tandem was no coincidence: the evolution of scientific cartography in the Middle Ages was impeded by a lack of a common and accessible body of knowledge. The European invention of engraving was as revolutionary, therefore, as the parallel and more widely acclaimed invention of moveable type, enabling information to be transmitted through both word and image. The same map could be seen by citizens in every major town in Europe. This, combined with other advances in technology, such as compass navigation, the lightweight caravel, and the European adoption of Arab navigational tools, paved the way for global exploration and trade. The challenge for mapmakers was, therefore, how to translate these new discoveries from the three-dimensional globe to a two-dimensional surface - a sheet of paper or vellum. The earliest printed maps condensed and edited information

from three "traditions" of map-making: Christian iconography, classical cartography, and contemporary charts.

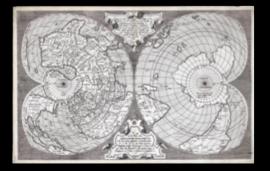
Christian iconography Medieval world maps (or mappae mundi) were not designed with geographical accuracy in mind, but to illustrate Judeo-Christian beliefs and Classical geographical concepts. They ranged from the purely diagrammatic climate zone maps based on the work of Macrobius; and the "T-O" maps (items 1 and 2) designed to illustrate the three land masses (Europe, Asia, and Afica) of the world as it was known from classical texts; to the often monumental maps, such as Hereford's 'Mappa Mundi', which although employing the general layout of a "T-O", provided considerably more geographical content, together with illustrations of biblical events, fabled beasts, and peoples. What such maps have in common is their circular form. This not only reinforced in the viewer the sphericity of the earth, but was also intended to represent the harmonious order of God's creation. Using regular geometric Platonic forms such as circles, triangles, and spheres, which were regarded as divine, they created a coherent planispheric system, which combined both the geographical and the heavenly world. The role of the medieval "mappa mundi" in the evolution

Manuscript Mappa Mundi, after William of Conches, c1200 (item 1)

















of cartography was, in part, therefore, the popularization of this image of the world, but also, perhaps more important, as inspiration for the early voyagers - the received wisdom that Paradise lay in easternmost Asia, reflected in medieval maps being orientated to the East, certainly spurred Columbus to write, on his third voyage, that they were near "the Earthly Paradise... where no man may go, save for by the grace of God".

Classical cartography The earliest recorded Greek map of the "oikoumene", or "known world" was composed by Anaximander of Miletus in the sixth century BC, although little is known of the method of its construction. In c240BC Eratosthenes measured the meridian arc between Alexandria and Syene, and calculated, with remarkable accuracy, that the circumference of the earth was 39,690 km (the true figure is 40,075km), demonstrating the utility of celestial observation for terrestrial cartography. The Phoenician, Marinus of Tyre (c70-130AD), founded mathematical cartography by developing the idea of a network of meridians and parallels on which to plot coordinate locations. Combining these two methods enabled the Alexandrian geographer, Claudius Ptolemy (100-170AD), to explain two methods of projecting the "oikoumene" onto a plane surface, and to compile tables of geographic coordinates of some 8000 localities. Ptolemy's first projection, based on the work of Agathodaimon of Alexandria (c100AD), was constructed on a simple conical projection (see items 3 and 4). His second, in which both meridians and parallels are shown curved to represent the sphericity of the earth, is first illustrated in print by item 5.

1. Ptolemy's first projection, Tadeo Crivelli, c1480 (item 4)

2. Ptolemy's second projection, Francesco Berlinghieri, 1482 (item 5)

3 Scandinavia pushes at the margins Johannes Schnitzer of Armszheim, 1482 (item 6)

4. Extended conical projection, Johann Ruysch, 1507 (item 12)

5. The cordiform projection, Bernadus Sylvanus, 1511 (item 13)

6. The fourth part of the world. Johannes Stobnicza, 1512 (item 14)

7. Double-cordiform projection, Antonio Salamanca, 1564 (item 29)

8.Twin-hemispherical projection, Henricus Hondius, 1633 (item 36)

Contemporary charts

The diagrammatic portrayal of biblical events, and the celestial calculations of classical mathematicians, bumped against, and adapted to, terrestrial reality in contemporary charts. These charts, or "portolans", specified ocean routes guided by observed coastal landmarks following a compass heading. The mapping of Scandinavia literally pushes at the margins of the 1482 Ulm Ptolemy (item 6); Portuguese voyages in the mid fifteenth century are visible on a changing coastline for Ptolemy's West Africa (item 7); and the Ptolemaic world view is abandoned to concede that the Indian Ocean is not landlocked (item 11).

The medium of print allowed the information from these three traditions to be condensed and edited with alarming speed, and new projections were created to accommodate geographic discoveries and advances in mathematics, such as the extended cone of Johann Ruysch (item 12), the cordiform projection of Peter Apian (item 18), the ovals of Benedetto di Bordone (item 21), and Sebastian Münster (item 23), the double-cordiform of Antonio Salamanca (item 29), twin-hemispheres



(such as item 36), and, finally, with the familiar 1569 "Mercator Projection", here exemplified by item 37, the final map in the collection. The extent to which the image of the world map had reached into early modern European culture is evidenced by the fact that Edward Wright's interpretation of Mercator's projection is referenced by Shakespeare, writing some 12 years after Marlowe's 'Tamburlaine':

"He does smile his face into more lines than is in the new map with the augmentation of the Indies" (Maria commenting on Malvolio in 'Twelfth Night').

The power and spread of the printed word in the story of the Age of Discovery can also be seen by the naming of "America". In 1507 Martin Waldseemüller suggested that the newly discovered "fourth part of the world" be named after Amerigo Vespucci, the man he (incorrectly) believed had discovered it. By the time Waldseemüller came to publish his 1513 edition of Ptolemy (items 15 and 16), he realised his mistake and corrected to show the New World "inventa est per Columbu". It was, however, too late: word had spread and the name America had stuck: Columbus had become an early victim of "fake news"!

John W. Galiardo A fascination with the Age of Discovery is what drove John W. Galiardo, known to friends as "Jack", to start collecting maps. Jack was born and raised in Elizabeth, New Jersey. Intellectually driven from a young age, Jack became the first member of his family to attend college, graduating in 1962 from the University of Maryland. After service in the Army, he attended Columbia Law School. Known for a sharp mind and gregarious wit, Jack enjoyed a successful 40-year legal career, which culminated with a Vice Chairmanship at Becton Dickinson & Co., a global medical technology company. Jack has joyfully spent much of his retirement "down the shore" or travelling to new destinations. Jack's passion for rare maps began more than 40 years ago when his wife, Joan, gave him as a bicentennial gift a 1776 map of New Jersey. His collection started modestly, but grew steadily through the years, selected with an eye for quality and condition, to become a source of great pride and pleasure. He is, and we are, very pleased to share that collection now.

Mercator's projection, Willem Janszoon Blaeu, 1631 (item 37)

One of the earliest manuscript maps of the world

1 WILLIAM OF CONCHES, after

[Manuscript Mappemundi and Solar Eclipse].

Publication [France, c1200].

Description

Manuscript world map on vellum (diameter 50mm), and an astronomical diagram of solar eclipses (diameter 50mm), red ink with yellow colour wash, captions in brown ink, Gothic text in two columns, on to conjoined vellum leaves recovered from a binding, remnants of stitching in the gutter, trimmed, one or two worm holes, some staining.

<u>Dimensions</u> 145 by 195mm (5.75 by 7.75 inches).

References Destombes 41.9 A manuscript map from an early copy of William of Conches' 'Dragmaticon philosophiae'. The map depicts the world as a circle with east at the top, the points labelled "Oriens", "Occidens", "Septentrio" and "Auster". The map is surrounded and divided into two hemispheres by the ocean. It is a quadripartite (or Beatus) world map, an unusual variation on the medieval mappamundi form, showing an unknown fourth continent. The fourth continent occupies the southern half of the world and is separated from Europe, Africa and Asia by an unnamed band of ocean. The Indian and Mediterranean Oceans are named, as are Africa, Mount Calpe (the Rock of Gibraltar) and Spain. The latter is unusually prominent: it has been suggested that most quadripartite maps derive from an eighth century prototype by Spanish theologian and geographer, Beatus of Lieban, hence their other name.

William of Conches (1090-c1155) was born by his own account "in a country of mutton-heads" (Dragmaticon VI.i.i.), and left to study under Bernard of Chartres. He taught at the Universities of Paris and Chartres and eventually became tutor to the children of Geoffrey Plantagenet, including the future Henry II of England. He is best known for his early work 'Philosophia mundi' (c1125), and the later modified version, 'Dragmaticon philosophiae' (c1144), from which these leaves derive.

The choice of a quadripartite world map is particularly interesting given the publication history of the works. The 'Philosophia mundi' contained trinitarian ideas, including ridiculing the theory that Eve was made from Adam's rib, and Conches was accused of following the rebel cleric Peter Abelard. The resulting heresy charges forced an unwilling Conches to revise the text before republishing it in extended form in the 'Dragmaticon philosophiae'. Biblical doctrine called for only three habitable continents, each populated by one of Noah's three sons - Ham, Shem and Japhet - making a fourth continent a problematic concept for orthodox medieval theology. Furthermore, his illustrations were based on a cosmological treatise by the Persian scholar Masha'Allah ibn Athari, a heretic in the eyes of Conches' accusers. Although Conches was forced to change his text, the map hints at continued attempts to push the boundaries of contemporary thought.

Provenance:

1. Arkway Catalogue 55, item 1.



omby ad tute Ourder u te ugenaby edendeum + drufa maria mater. Sals una ant tactorio Sobutt or processan inertetil? fer dlar not morgene pfeilar D & rmenn m fur dorth preflucionity ocolum un of natie, Die & om in nateune D. Qu due refigurond ur porum lotene erdle fotte ward humani und as iepertons Hen as aufternin dundancur under agrif leparade der mour ... came fuerer iput fut g utg not puerte schaf uene d ze phrint no annen Due u d mouener di undune fuo moas anime ucura. à our nocirut: Cun occurat y oneunt fead for conconen acoust in medio ferrandis forminant obeest or of i frigoda The mater mus frigit or Sud ur on for Sanglo were as modul fugar. and. Or nen vehe ha run terent. um ürennte miriden zonin alle wing ausbul frigad i en + allid de coue reflurionel ad auterit feit

colorem mer iplendarem. Si jenn coloré hydre é nima in tre des p inglót inter dicendar do canceum deficidar ad otpor min: p inglót inter formarem entart y frug bienni meirif dère cam a ornun icitanna ul ieit ante poly. Cary é jo oline - pplendoue alole ei ingepolo din ritur non iempap not celle Cingeodon ei fole fluttere foi elle figues d'interé intar certain adé-vi amolat non môr O do it doneste aster terip pir folendour ao modi geint corten appère bier moitor d'atter prinder de elle cince per terior dout doneste aster terip pir folendour ao modi geint corten appère dira interé dout doneste aster terip pir folendour ao modi geint corten appère dira mello d'atter prinder fai e y n. donn atter d'atter pir diaga aloie cince per terior dout doneste aster terip pir folendour ao modi geint corten appère dira mello de técnore fai g y n. donn et tre dout doneste aster terip pir folendour ao modi doneste aster terip par folendour ao dont doneste aster terip pir folendour ao dont doneste aster terip pir folendour an dont doneste aster terip pir folendour and dont doneste aster terip pir folendour and dont doneste aster terip et de corte du an teri sam win alters et atendo, weig fole don definite i of partierens e sterium. In menere fole appingre y i thera dor centor, there do appingre y in thera dor centor, there do appingre y i done donester.

Folendes lume 11 alchandrus en theb apparety mdent smuer driete thi pollo culluna. Si u u in tegna uelpe the featuren no bre we a by med to uniter apput octor dborry bir Clevin fun una icclustion trion entipio la crum à fele oute fier umbra ulap n fir o mon lott Seve part eclipti filieter Aserei abilem fiam och una parte edapti titte canane titte M. Cembr und edeptim to run cerum Lacrendend ci four mour lu tora el Laureson Dun tay. de fo cie media Lancus der uch Tfra ern redo modo ad tu a There throw w fermou fica un

The first western printed map of the world

2 HISPALENSIS, Isidorus

[Untitled world map]

Publication [Augsburg, Gunther Zainer, 1472].

Description

Woodcut map of the world (diameter 65mm) on a T-O projection, set within text, three-line manuscript initial 'A' in red ink, early marginal annotations.

<u>Dimensions</u> 270 by 190mm (10.75 by 7.5 inches).

<u>References</u> Campbell 77; Suárez, Shedding the Veil, p7; Shirley 1. From 'Etymologiae sive originum libri XX I', by Isidore of Seville, known also as Isidorus Hispalensis (c560-636). The work circulated in manuscript before this edition was printed in 1482 by Gunther Zainer in Augsburg, with the addition of four woodcut diagrams.

This is the "first expression of geographic knowledge disseminated by the new medium of printing... It is the first printed map of European origin of certain date, and the first in a printed book. The printing of maps appeared earlier in the Orient: e.g. maps printed from woodblocks have been dated to 1155 in China, and 1460 in Korea" (Suarez).

The projection, which can be interpreted either as depicting the world as circular but flat, or as spherical, which is more likely, is described as T-O: the three known continents of Asia, Europe and Africa are shown within a circle divided by the horizontal Mediterranean Sea and the vertical River Nile.

This 1472 example groups all the waters of the 'T' as "Mare magnum sive mediterraneum" ("Great Sea or Mediterranean"). The "MARE OCEANVM", or "Ocean Sea", surrounds the whole of the Earth in accordance with medieval and ancient precepts. Noah's three sons, "the Biblical progenitors of post-deluge humanity" (Suarez), are indicated in their respective continents: Shem in Asia, Ham in Africa, and Japhet in Europe. Outside the circle the four basic directions are marked; Oriens and Occidens are of course East and West (for the rising and setting sun), North is Septentrio (the number seven, for the seven plow-oxen stars of the Great or Little Bear) and South is Meridies (for the position of the sun at midday).

"There is disagreement as to whether the T-O map as a species represented a flat or spherical earth, and indeed it probably represented either, according to the prejudices of the viewer. The medieval propensity to believe the earth was flat has, however, traditionally been far overstated, and Isidore, despite the 'Etymologiae's' contradictions, makes fairly clear that the earth is spherical. This obviously supported Columbus' cause, although skepticism about the sphericity of the earth was not likely a major obstacle to winning royal support for his voyage. Isidore's technical understanding of its principles was sometimes less sophisticated than his Greek sources, for example, he tried to apply the classical idea of climate zones as non-circumscribing circles lying "flat" on a portion of the earth, rather than rings around the earth.

Isidore accepted the common premise that Paradise lay in easternmost Asia, Columbus' destination. The 'Etymologiae' states that "the Lord planted a garden Eastward in Eden... and he placed at the East of the Garden of Eden, Cherubims, and a flaming sword, which turned every way, to keep the way of the Tree of Life". While a member of Columbus' crew typically might have feared stumbling across this sacred ground, Columbus seemed to relish in the possibility of locating it.



Reaching the South American continent on his third voyage, he actually conceded that they were near "the Earthly Paradise... where no man may go, save for by the grace of God".

It has been demonstrated that Columbus' ultimate goal was to reclaim the Holy Land for Christendom. He grew to perceive himself as one with a divine destiny in the preparation for the coming of the Antichrist and the end of the world, events which he believed were not too distant. For example, in 1500 Columbus wrote that God had made him the messenger of the "nuevo cielo y mundo" (i.e., the "new heaven and earth") predicted in the Apocalypse, and that God had shown him where to find it. His log abounds in reflections of divine purpose.

The challenge in understanding Isidore's map is for us to see it as a complete map in its own right, not the esoteric relic which it first appears to us to be. It is arguably the most iconic map ever made" (Suarez).

Isidore of Seville was bishop of Seville from circa 599 until his death in 636. An avid student of both Christian and Roman sources, his 'Etymologiae' (between 622-633) was an indiscriminate and uncritical compilation of diverse texts which Isidore himself sometimes did not appear to understand. It was perhaps because of the book's ambiguities and contradictions, rather than in spite of them, that manuscripts of the work maintained a wide appeal and remained a standard encyclopedic text throughout the Middle Ages. However, "Isidore was deeply admired by his contemporaries for his scholarship and intellectual gifts. Although their praise for his Greek and Hebrew is perhaps unmerited, the breadth of his learning is nonetheless impressive. He was happy to draw on pagan authors as well as Church Fathers, and was familiar with works as various as Martial's 'Epigrams', Tertullian's 'On spectacles', and Pliny the Elder's 'Natural History'. In spite of the demands of his episcopal office, Isidore nevertheless found time to produce a substantial body of writing". (Barney 'The Etymologies of Isidore of Seville', page 7).



Paredija

India

giones quaru breuster nomina et litus expediam-fumpto initio a paradifo Paradifus eft locus in orientis partibus confituu/ tus cuus vocabulum ex greco in latinum vertitur ortus.Porro hemaice Ede hebraice eden dicitur-quod in noftra lingua delicie interpretatquod verumq iunctum facit ortum deliciarum eft enim omni genere ligni & pomiferarum arborum confitus habens- etiam lignum vite. Non ibi frigus non eftus fed perpetua aeris tem/ peries e cuius medio fons prorumpens totum nemus irrigat. di unditurg in quatuor nafcentra flumina. Cuius loci post peccas tum hominis aditus interclusus eft. Septus eft eni vndig rom phea flammea id eft muro igneo accinctus ita ut eius cu caelo pene sungatur incendium. Cherubin quoqi id eft angelorum prefidium arcendis fpiritibus malis fuper romplie flagrantia ordinatum eft-ut bomines flamme-angelos vero malos angeli boni fubmoueatine cui carni vel fpiritui tranfgreffionis aditus paradifi pateat. India vocata ab indo flumine quo ex parte occidentali clauditur. Maec a meridiano mari porrecta vígi ad ortum folis. & a feptentrione vlqiad montem caucafum peruet nit babens gentes multas & oppida infulam quoq taprobane gemmis & elephantibus refertam. Crifam & argiram auro ar/ gentog fecundas vulem quog arboribus folis nungm caren tibus Plabet & flumina gangen & nidan & idafpen illuftran/ tes indos. Terra indie fauonio fpiritu faluberrima. In anno bis

MIO DIAMA Causpartibus | Ca.m. Sia ex noie cusuida mu/ heriseft ap/ (Dellata · que apud anti/ quos imperiu orientis tenuit. Mec in tercia or bis parte disposita- ab oriente ortu folis a me ndie occao ab occiduo noftro mari finitur. a feptentrione meotbide lacu & tanai fluino ter minatur Habet autem protuncias multas et re

"Superb testimonial to Italian craftsmanship"

3 PTOLEMAEUS, Claudius

[Untitled world map]

Publication [Rome, Domitius Calderinus, 1478].

Description

Engraved map of the world on two halfsheets, joined, each sheet watermarked with two crossed arrows in each sheet (Briquet 6277, listed as "Rome 1474").

<u>Dimensions</u> 395 by 550mm (15.5 by 21.75 inches).

References Brown 40; Campbell 121; Shirley 4. The majestic world map from the second printed atlas: 'Claudii Ptolemaei Alexandrini philosophi Geographiam Arnoldus Buckinck e Germania Romae', published in Rome in 1478, and the first use of punched letters in a world map.

Ptolemy's map shows the world as it was understood by the Alexandrine ancients, on Ptolemy's first projection, i.e. a modified cone shape, printed on two plates, extending from Great Britain in the northwest, the Canary Islands in the west, mid-China in the east, and northern Africa in the south, the Indian Ocean features a large island, Taprobana, now Sri Lanka, lettered in Roman capitals.

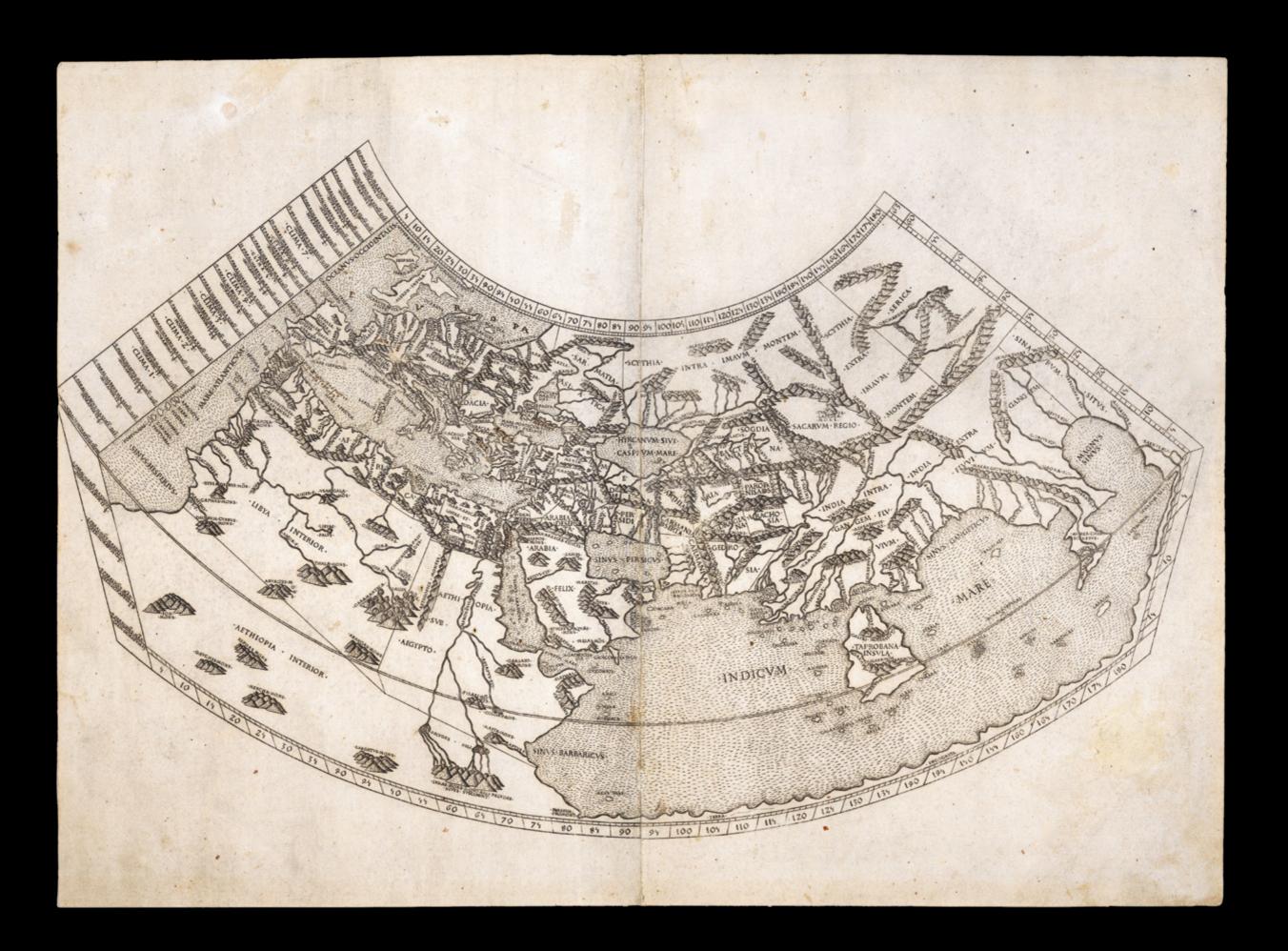
The world map in particular shows the refined level of detail which differentiates the 1478 Rome from the 1477 Bologna edition. The decorative wind heads and co-ordinate lines present in the Bologna edition are omitted, and place names are given more frequently: Shirley notes a dozen extra annotations in Arabia alone.

"The most influential cartographer of the ancient world was Claudius Ptolemy who lived in Alexandria in the second century [100-170 AD]. He was essentially a compiler, not an originator, and openly acknowledged the prior work of predecessors little known to us: principally Marinus of Tyre (who developed the idea of a network of meridians and parallels), Strabo and Hipparchus. The most important work of Ptolemy, his 'Geographia' consists of extensive tables of geographic coordinates of some 8000 localities... The world map stands apart from the regional ones as in the text it is clearly stated to have been originally drawn by one Agathodaimon of Alexandria. It is constructed on a simple conic projection and its earliest printed form [was published in 1477]" (Shirley).

While the Bologna edition of 1477 was the first atlas to use copperplate maps, the present series is generally regarded as superior for its clear captions, accurate projections and overall design. The Rome Ptolemy was certainly a greater commercial success than its predecessor and was reissued using the same copperplates, without change, in 1490, 1507, and 1508.

The early Italian Ptolemys, particularly the Rome editions, are "superb testimonials of Italian craftsmanship without the picturesque but unscientific monsters of the medieval maps or the addition of the adventitious decoration of later work, relying for their beauty solely on the delicacy of their execution and the fineness of the material employed" (Tooley).





"the most visually satisfying of all the incunable maps"

4 [CRIVELLI, Taddeo, attributed to]

[Untitled world map].

Publication

[Italy, Petrus de Nobilis, 1480 but 1590].

Description

Broadsheet engraved map of the world on 2 half sheets, joined, each sheet watermarked with a six-pointed star within a circle beneath an open cross, trimmed, left and right edges with expert repairs.

<u>Dimensions</u>

382 by 560mm (15 by 22 inches).

<u>References</u>

Leo Bagrow, "Essay of a Catalogue of Map-Incunabula", Imago Mundi VII (1950), p108 and fig. 15; Campbell 2; Hind, vol.4, p289-298; JCB Annual Reports, 1957, p19; Wieder, fig. 154; Shirley 5. A Ptolemaic world map drawn on his first, conical, projection. One of four known examples of "the most visually satisfying of all the incunable maps" (Campbell).

The map appears to be an original piece of fifteenth century mapmaking with no obvious cartographic ancestor.

"Although the information conveyed... is traditional, one looks in vain for any printed map which could have served directly as its model. The two most likely candidates, the world maps in the 1477 and 1478 Ptolemy atlases have noticeable differences. Some features appear on this separately published map but not on the other two, for example, additional branches of two Asian rivers, the "Orchardes" and the "Bantisus", both of which flow off the map at its north-eastern extremity" (Campbell).

Both the authorship and the date of the map are, however, something of a puzzle. The map has traditionally been attributed to the miniaturist Taddeo Crivelli, the supposed mapmaker behind the 1477 Bologna Ptolemy. In 1909 Sighinolfi uncovered a contract between Crivelli and Francesco dal Pozzo (Puteolano), dated 22 April 1474, in which Crivelli committed to produce 50 copies of a world map. The great map collector and former owner of the present example, Prince Youssouf Kamal, suggested that this was evidence for the map's authorship, and, indeed, it may be. However, due to stylistic differences between the maps in the Bologna Ptolemy and the present map, it seems unlikely that they were, in fact, the work of the same mapmaker.

Further, at least three of the four known examples appear to be restrikes made by Petrus de Nobilibus, of Rome, from the original plate in the second half of the sixteenth century [possibly 1590?]. Each of the other three known examples bear the imprint of Petrus de Nobilis, and they are housed in the Newberry Library, Chicago (acquired in 1967), with the imprint engraved in the plate just below the border; the John Carter Brown Library (discovered in 1937), with the imprint as a separate label pasted over the lower border; and the Ashmolean, gift of Francis Douce 1834. The present example, described in 1988 as "the lost copy formerly in the collection of Prince Youssouf Kamal", was recorded in Cairo before World War II, and then reappeared at an auction in Sotheby's in 1988. Since the lower border is cut away, there is no imprint to compare with the other two examples. Therefore, dating evidence must rest largely with the watermark of this copy. This is clearly a star surmounted by a cross on both leaves, that most closely corresponds to Briquet 6089, which is datable to the 1580s and a Fabriano paper. However, it is also remarkably similar to Briquet 6080, which is datable to 1479 and a Bologna paper, leaving the attribution of an accurate date of printing unresolved.



"We are [therefore] faced with the alternative possibilities that three [now four] surviving copies were printed at one time, or at points up to a century apart; and we have no definite evidence that any of the survivors reflects the map's appearance before Petrus de Nobilibus acquired the plate. There is one interesting indicator, however, in the condition of the Newberry copy (the only one certainly attributable to the late sixteenth century). Despite extensive scratching, this is still a strong impression. If the fine detail on a late printing like this remains fresh, it seems clear that few copies could have been taken off the copper-plate at the time of its engraving; and the scratch marks would have been consistent with handing over a period of time" (Campbell).

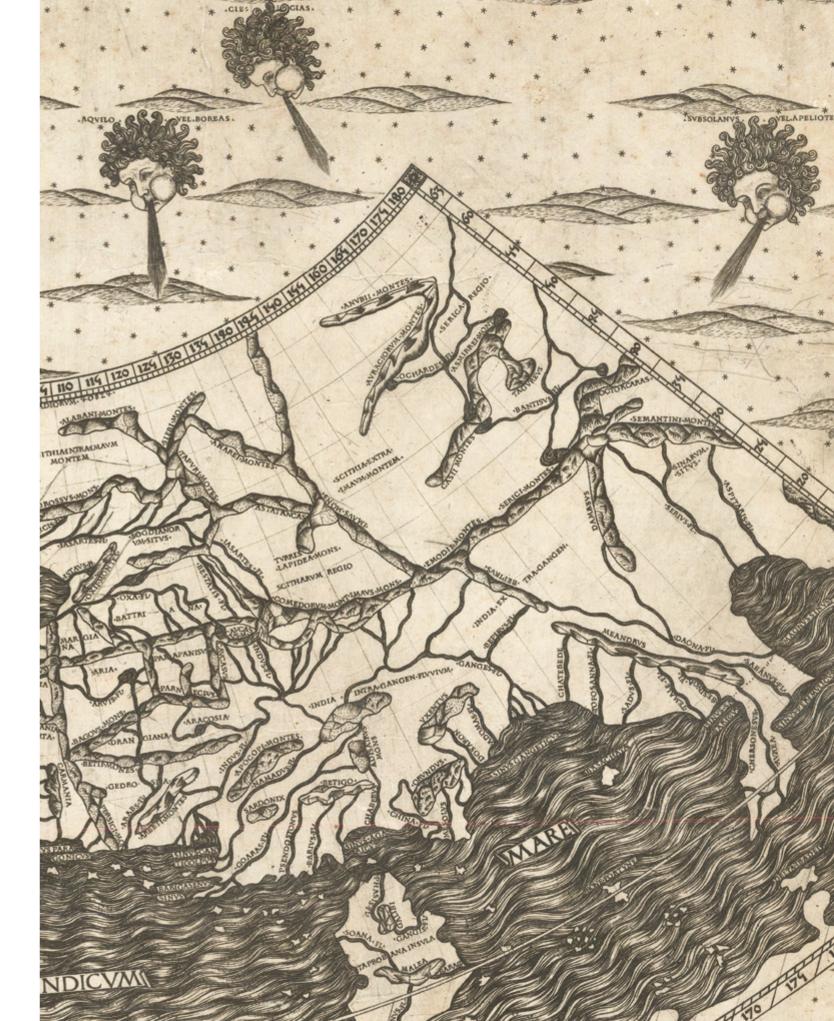
Provenance:

1. Jacques Rosenthal, Münich, 1916.

2. Frederick Caspar Wieder (1874-1943), librarian and director (1924-38) of Leiden University Library. Wieder compiled the 'Monumenta geographica Africae et Aegypti' for Prince Youssouf Kamal of Egypt (1926-51).

3. Prince Youssouf Kamal (1882-1965), collector and member of the Egyptian royal family, principal of the University and founder of the School of Fine Arts in Cairo.

4. Sotheby's, London, 24th June 1988.





"An image of remarkable visual clarity and geographical precision, which surpassed previous attempts to re-create the Ptolemaic 'oikoumene""

5 PTOLEMAEUS, Claudius; BERLINGHIERI, Francesco

Caelestem Hic Terram Inspicias Terrestre Que Caelum.

<u>Publication</u> [Florence, Nicolaus Laurentii, Alemanus, 1482].

Description Engraved map of the world, on two sheets with wide margins, joined, with superb contemporary hand-colour.

Dimensions 420 by 580mm (16.5 by 22.75 inches).

References Brotton, Trading Territories, pp87-90; Campbell 148; Shirley 9. A magnificent example of Berlinghieri's world map with very fine contemporary hand colour, each sheet with full margins on all sides, and rare as such. We are not aware of another example of this map with contemporary colour.

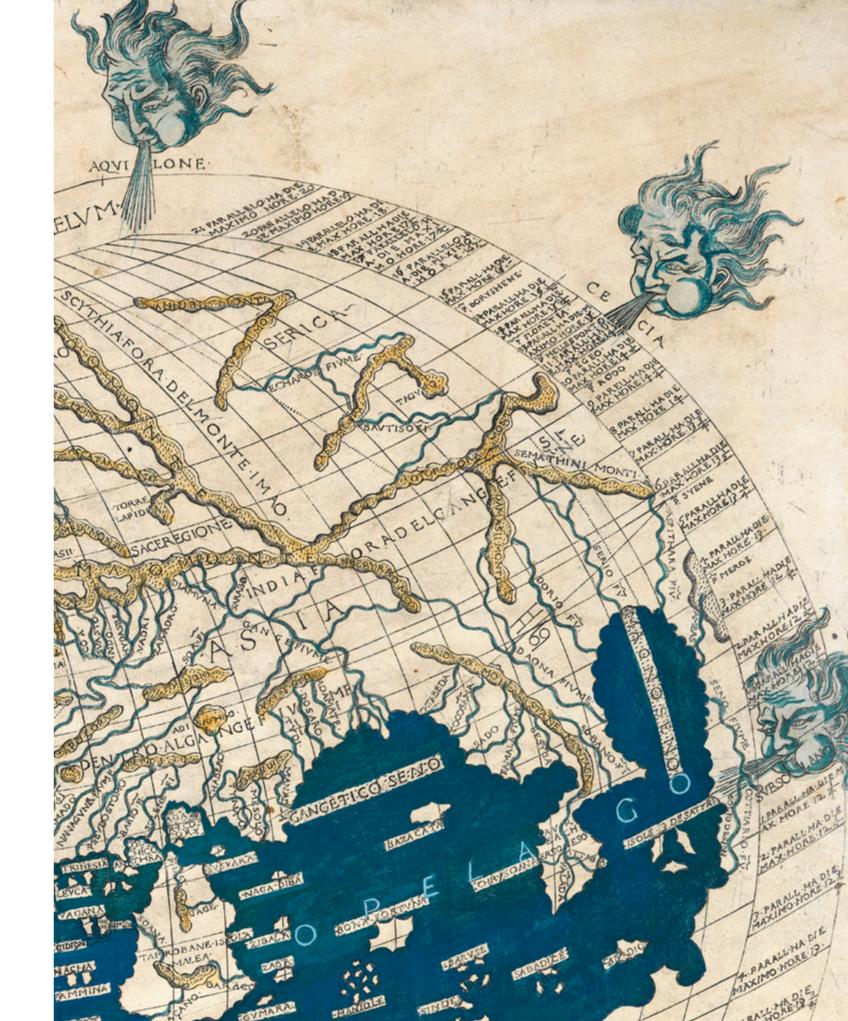
The map appeared in Francesco Berlinghieri's edition of Ptolemy's 'Geographia', published in Florence in 1482: the third printed atlas, and the first in Italian. It is the first printed map to be based on Ptolemy's second projection, in which both parallels and meridians are shown curved to convey the sphericity of the earth.

"Although the world map which adorned the first pages of the section of maps in Berlinghieri's 'Geographia' remained tied to the Ptolemaic conception of the "oikoumene" [i.e. the world known to the Ancient Greeks], its utilisation of the new techniques of print culture produced an image of remarkable visual clarity and geographical precision, which surpassed previous attempts to re-create the Ptolemaic "oikoumene"" (Brotton).

The map was printed on two copper-plates. It is surrounded by 12 finely engraved windheads denoting the direction of the 12 classical winds. For the projection Berlinghieri employed, for the first time in an edition of the 'Geographia', Ptolemy's original projection of equidistant parallels and meridians, giving the map a much fuller and pleasing appearance.

The engraving of the map has been attributed by Boorsch to the Florentine engraver and map seller Francesco Rosselli, via the study of the engraved letters, which, much like handwriting, is an indicator of individuality in cartographic style. Rosselli (1445-1513) was one of the leading engravers and painters of miniatures of his day. His engraving style was heavily influenced by the great Renaissance artist Sandro Botticelli. The windheads on the present map are redolent of Zephyr depicted on Botticelli's 'The Birth of Venus'.

Francesco Berlinghieri was a Florentine humanist, pupil of Argyropoulos and Landino, and a member of the Academia Platonica of Marsilio Ficino, who added a short paragraph in Latin to his 'Geographia', addressed to Fedrigo de Montefeltro (1422–1482), to whom Berlinghieri dedicated the work (f. *2 verso). Berlinghieri had originally intended to dedicate it to the Turkish Sultan Mehmet II (see Firenze e la scoperta dell'America, Florence, 1992, no. 112).





The earliest printed world map to show Scandinavia

6 PTOLEMAEUS, Claudius; Johannes SCHNITZER OF ARMSZHEIM

[Untitled world map].

Publication [Ulm, Lienhart Holl, 1482].

Description Double-page woodcut map, with fine contemporary hand-colour in full.

Dimensions 420 by 580mm (16.5 by 22.75 inches).

References Campbell 179; Shirley 10. The first woodcut map of the world on a Ptolemaic projection, by Johannes Schnitzer ("woodcutter" in German) of Armszheim, signed in the block by him along the top edge "Insculptum est per Johane Schnitzer de Armszheim", the map depicts a Ptolemaic projection extending from Great Britain in the northwest, the Canary islands in the west, mid-China in the east, and northern Africa in the south, the Indian Ocean features a large island, Taprobana, now Sri Lanka, with the new addition of a rudimentary Scandinavia within an extension of the map above the neatline, the whole surrounded by a broad decorative border including 12 windheads.

Issued by Holl of Ulm in 1482, and showing Greenland and Scandinavia in a Ptolemaic map for the first time. Holl's atlas was the first to be printed outside Italy, the first to contain maps made from woodcut blocks, the first to be issued with hand-coloured maps, and the first to name the cartographer of the maps.

The world map is the first to be signed, by Johannes Schnitzer, who, in trademark fashion has reversed every capital N, and inadvertently provided two Tropics of Cancer. Further, the mapmaker updated the Ptolemaic world picture by incorporating improvements that were probably based on a manuscript of the 1470s by Nicolaus Germanus (c1420-1490), a Benedictine monk of Reichenbach Abbey in Bavaria, who is depicted in the first illuminated letter of the atlas presenting his book to the dedicatee Pope Paul II.

This is also the earliest printed map to show the northernmost reaches of the Atlantic Ocean. The world map, moreover, embodies what is perhaps the most readily apparent feature of the Ulm Ptolemy: its beauty.

The Ulm edition, moreover, was the first to depart from the classical prototype by expanding the atlas to reflect post-antique discoveries about the size and shape of the earth. To the canonical twenty-seven Ptolemaic maps were added five "modern maps" of Spain, France, Italy, the Holy Land and northern Europe.

Though printed outside Italy, the paper that delivery of this magnificent atlas was printed on was imported from Italy, and payment made in part by complete copies of the finished atlas.





The Portuguese explore the west coast of Africa

7 MELA, Pomponius

Pomponij Mellæ Cosmographi Geographi Prisciani quo ex dionysio Thessalonicensi de situ orbis interpretation. Pomponij Mellae de orbis situ Liber primus. Prooemium.

Publication [Venice, Erhard Ratdolt, 1482].

Description

Two parts in one volume. Small quarto full-page woodcut map of the world on a Ptolemaic cone-shaped projection surrounded by an architectural border, first page of text with headline printed in red, two 11-line and five five-line floriated initials, early marginal annotations to the first part throughout, mostly noting place names in the text, nineteenth-century calf backed marbled paper boards, vellum corners, black morocco lettering-pieces to spine.

Collation: A-F(8).

Dimensions 190 by 143mm (7.5 by 5.75 inches).

References

BMC V 286; Brown 41; Campbell 91; Hain 11019; Goff M-452; Polain 2661; Shirley 8; Suarez, Shedding the Veil 7; Wilson 115.



This was the first map to depict current Portuguese knowledge of the west coast of Africa which led, only six years later, to the rounding of the Cape of Good Hope. Campbell suggests that the edition's printer, Erhard Ratdolt, may have been the mapmaker, since this and his T-O map of 1480 are the two earliest woodcut maps printed in Italy (Campbell).

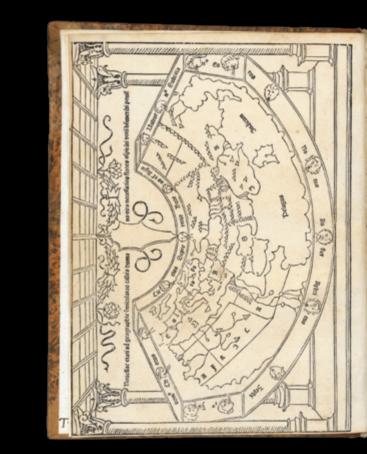
The title of the map "Novelle etati ad geographie vmiculatos calles humano viro necessaries flores aspirati votu bnmreti ponit" translates as: "If, in a new lease of life, a man seeks to attain the worm-like paths of geography, he is bound to find the flowers that belong there, for he deserves them".

Published in the same year as Lienhart Holl's celebrated 'Cosmographia', Mela's world map similarly includes additions to the Ptolemaic model. One of the more obvious changes is the addition of Scandinavia, and for the first time, the Orkney islands, off the northeast coast of Scotland, appear on a map. "In other respects, the map is unsophisticated, taking more care to identify wind heads than geographical features. Only the three continents and the Indian Ocean are named. The remaining lettering forms part of the Latin inscription above the map" (Campbell).

Mela's map was cited with other early texts, including those by Macrobius, Ptolemy, Pliny and Aristotle, as part of the reading background of Christopher Columbus: "In its consideration of the oceans, this work would not have been particularly useful to Columbus, but in his view of the earth, Mela raised the probability that the southern hemisphere was inhabited, a novel idea for Christian believers in the biblical version of the Creation, ..." ('The Manifest', James Ford Bell Library).

Pomponius Mela (fl37-42), born in Spain and one of the earliest Roman geographers, lived during the reign of Emperor Claudius. His 'Cosmographia' was circulated in manuscript, and from the early fifteenth century, sometimes with a map. It was first printed in 1471, without a map. His was the "only formal geographical treatise in classical Latin" (Campbell). The 'Cosmographia' expressed concepts that were similar to those of the leading Greek geographers, yet the map which accompanies this 1482 edition expresses the current school of thought, rather than Mela's own.

According to Wilson, the Mela map was the model for Hartmann Schedel's world map in the 'Nuremberg Chronicle' (see item 9): "The map shows Europe, Asia (including Ceylon, that is drawn with a bay shaped like a keyhole), and a large part of Africa. Notable is the depiction of the Nile, with its sources in the mountains south of two lakes, which correspond in their location to those today called Lakes Albert and Victoria Nyanza. The mountains are also depicted on other maps and are called the Mountains of the Moon".



E Doinponij Dellae Colnographi Beographia: Deifetani quogs er bionyho Zheffalonicenia be firm orbig interpretatio Bomponij Dellac be ozbis litu Liber pzimus. 1Stooemium.



Rbis fitum picere aggredios impe/ datum opus e facundie minime ca/ par. Conftat enim fere ex gentiñ lo numqs nominibua: e comm per/ plexo fatia ordine: quem perfegui longa è magia q5 benigna materia. 23 crum afpici tamen cognoleios oi/ millimum: e quod fi non ope inge/ nti orancia: at ipfa fui cotemplatio/ ne precium opere attendentiñ ab/ folgat. Dican automaliae plura ct

Auditor

attentus

Meridies

exaction . Thunc antem vt queas crunt dariffima e frictim ac pino niden:que fit forma totino:que maxime partes.quo fingale mo do fint: vtos babiterií expediam. Deinde ruríno ozas omnium et littona vi intra extraos funt:atos vi ca fubit ac circumluit pelague: additis que in natura regionum incolarumos memoranda funt. 3d quo facilina feiri poffir atas accipi : paulo altina fumma repe/



ctur. Diandi in quattoo parteo biuflo. Diane igitur boc [quicquid eft : cui muudi cgliqs no/ men indidimus: vnum id eft: e vno ambitu [c cui/ ctags amplectitur. partibus biffert. 23ndc fol ositur Oriers no nuncupatur: aut ostua, quo bemergitur oc/ cidena vel occafua:qua becurrit meridica, ab aduer fa parte feptetrio, buic medio terra fablimis cingitur vndiog mari:

cademos in ouo latera: que bemilpbería noiant ab otiente vioifa Sepretrio B 2 Hemipa

An unusually beautiful example of Reger's re-issue of the Ulm Ptolemy

8 PTOLEMAEUS, Claudius; Johannes SCHNITZER OF ARMSZHEIM

[Untitled world map].

<u>Publication</u> [Ulm, Johan Reger for Justus de Albano, 1486].

Description Double-page woodcut map, with very fine contemporary hand-colour in full, and unusually wide margins.

Dimensions 420 by 590mm (16.5 by 23.25 inches).

References Campbell 179; Shirley 10. The second printing of Johannes Schnitzer of Armszheim's map of the world.

First issued by Holl of Ulm in 1482 (see item 6), and showing Greenland and Scandinavia in a Ptolemaic map for the first time. Unfortunately, the exorbitant cost of publishing such a lavish book resulted in Holl's bankruptcy, and Roger Reger taking on the production in the same city with an edition of "about a thousand copies" (Campbell). Remarkably, about 120 examples of the two editions survive intact today. For the 1482 edition, Holl ordered his paper stock from Italy, and used expensive lapis lazuli for the blue of his oceans. In this later edition Reger economised where he could, and the colouring was generally less extravagant. After more than 500 years, what was once presumably a purple wash in the oceans and seas has faded to a muddy brown, as is typical of nearly all examples of the 1486 edition. The present example is, therefore, noteworthy for its fine colouring, especially the painterly treatment of the cloud formations surrounding the known world.





"Outlandish creatures and beings that were thought to inhabit the furthermost parts of the earth"

9 SCHEDEL, D. Hartmann

Secunda etas mundi.

Publication [Nuremberg, Anton Koberger, June 1493].

<u>Description</u> Double-page woodcut map.

Dimensions 405 by 590mm (16 by 23.25 inches).

References Campbell 219; Füssel; Shirley 19; Wilson, pp98-122. From the famous 'Nuremberg Chronicle', a history of the world, published the year that Columbus returned to Europe after discovering America.

"The world map is a robust woodcut taken from Ptolemy... What gives the map its present-day interest and attraction are the panels representing the outlandish creatures and beings that were thought to inhabit the furthermost parts of the earth. There are seven such scenes to the left of the map and a further fourteen on its reverse" (Shirley).

The map is a copy of the Venetian woodcut added to Pomponius Mela's 'Cosmographia' (see item 7) eleven years earlier, and, like the Mela, shows the Portuguese discoveries off the west coast of Africa. The Schedel, however, also includes an unidentified island of this coast.

The text of the 'Nuremberg Chronicle' is a year-by-year account of notable events in world history from the creation of the world down to the year of publication. It is a mixture of fact and fantasy, recording towns and cities, and events like the invention of printing, but also repeating stories from Herodotus. "In many cases, we find in the Chronicle the first known illustrations of the cities in question" (Füssel). The world map is decorated in three corners with depictions of the sons of Noah responsible for recolonizing the world after the deluge; Shem, Ham, and Japhet. The left hand margin displays seven semi-human creatures. These are printed from a separate woodblock and mark the end of a catalogue of human freaks, starting on the preceding page of the 'Chronicle', which derive from the 'Polyhistor' of Solinus (fl250). They include a cyclops, and a man with four eyes, a man without a nose; a man without a head, whose eyes and mouths are in his chest; a man with a dog's head and talons for fingers; and a man with only one leg, but a foot so large that it doubles as a parasol. 645 woodcuts were used to illustrate the Chronicle, but many were used more than once, so there are a total of 1,809 illustrations, making it the most extensively illustrated book of the fifteenth century.

The publication history of the Nuremberg Chronicle is perhaps the best documented of any book printed in the fifteenth century, owing to the survival of the contract between the publisher Anton Koberger and his financial partners Sebald Schreyer and Sebastian Kammermeister, the contract between Koberger and the artists, and the manuscript exemplars of both the Latin and German editions (Wilson). The cutters for the illustrations were Michael Wolgemut, his stepson, Wilhelm Pleydenwurff, and their workshop. As Albrecht Dürer was the godson of Anton Koberger, and was apprenticed to Wolgemut from 1486 to 1489, it is likely that he was involved in the work.

The world map is widely regarded as the work of Nuremberg physician and humanist Hieronymous Munzer (1437-1508), who also contributed to the book's text.



Becunda etas mundi



The first depiction of spectacles on a map (!)

10 REISCH, Gregor

[Untitled world map]

Publication [Strassburg, Johannes Gruninger, 1503].

<u>Description</u> Woodcut map of the world.

Dimensions 280 by 410mm (11 by 16.25 inches).

References Letocha and Dreyfus, pp1577-1580; Shirley 22, Reisch 1. "Gregor Reisch, confessor to the Emperor Maximilian I, was the author of a popular handbook of moral and natural philosophy which appeared in many editions throughout the sixteenth century. From all accounts it was one of the most widely-read textbooks for university students. The printer of the first edition was J. Schott, publisher of the Waldseemüller Ptolemy (see item 15).

The earlier editions of the 'Margarita' contain a Ptolemaic world map. This rather crudely-drawn woodcut... [is] decoratively enlivened by twelve individually-characterised windheads" (Shirley).

A curiosity of Reisch's map is that the windhead "Vulternus" is seen peering through a pair of spectacles. Spectacles were invented in Pisa, Italy in around 1285. The first known illustration of them occurs in a mural in the chapter house in San Nicolò in Treviso, in 1352, and the first known printed image is a person, variously identified as Philo, Empedocles, Seneca, or Pythagoras, in the 'Rudimentum Novitiorum' of 1475. Glasses may also be found adorning characters in Schedel's 'Liber Chronicarum' (see item 9) and there are no fewer than ten incunable illustrations of people wearing spectacles (Letocha and Dreyfuss).

Gregor Reisch, however, holds the honour of their first depiction on a map.

"Here is not land, but sea, in which there are such islands not conceived of by Ptolemy"

11 REISCH, Gregor

[Untitled world map].

Publication [Strassburg, Johannes Gruninger, 1504].

<u>Description</u> Woodcut map.

Dimensions 285 by 420mm (11.25 by 16.5 inches).

<u>References</u> Shirley 23, Reisch 2. Reisch published his first world map in his 'Margarita Philosophica' of 1503 (see item 10). This map is a reduced version, with four rather than 12 windheads, published in Gruninger's edition of the 'Margarita'

For both the 1503 and 1504 editions of the 'Margarita': "A caption across the traditional spit of land joining Africa to Asia acknowledges (in Latin) the disappearance of the classical world concept: "Here is not land, but sea, in which there are such islands not conceived of by Ptolemy". The text of the book contains no further allusion to this piece of information and it is unclear whether the reference is to the discovery of the east route to India, or to the finding of the West Indian islands by Columbus, or both" (Shirley).





The earliest obtainable printed depiction of the Americas

12 RUYSCH, Johann

Universalior Cogniti Orbis Tabula Ex recentibus confecta observationibus.

Publication [Rome, Johann Ruysch, 1507 or 1508].

Description

Engraved map on two sheets, joined, each sheet with two crossed arrow watermarks (Briquet 6280), early annotations to the map in Latin, included in the title banner: "Permitted in this map, images for understanding the world".

Dimensions

420 by 550mm (16.5 by 21.75 inches).

<u>References</u>

McGuirk, plates III and C, state V; Shirley 25, state 5; Suárez, Southeast Asia, pp103-109.

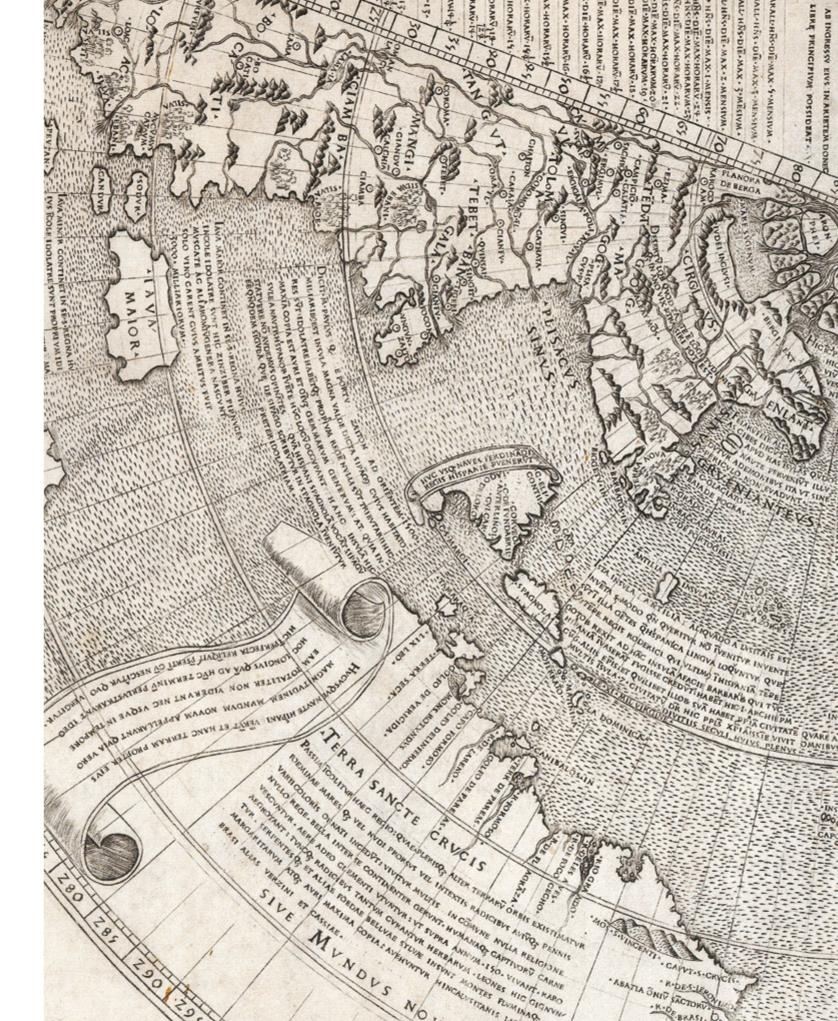
Ruysch's world map is the earliest obtainable printed depiction of the Americas. It was created for the 1507 Rome edition of Ptolemy's 'Geographia', but also issued separately.

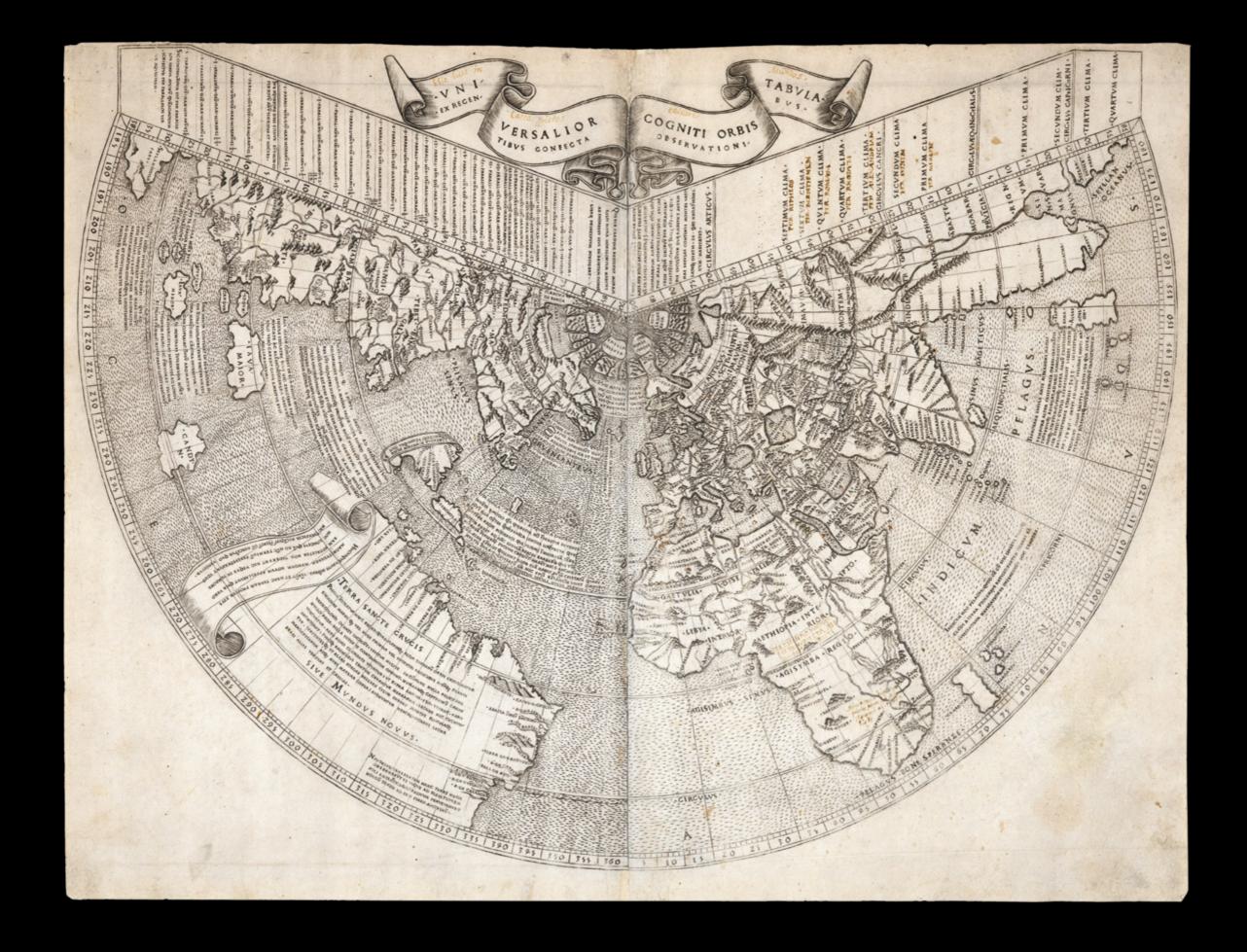
Johann Ruysch (1460-1533) was an artist and cartographer from the Low Countries, most probably from Utrecht. He became a Benedictine monk around 1505 and was given an office in the papal palace by Julius II; this is presumably when he made his world map. It has been suggested that he was friends with Raphael. In the introduction to the Rome Ptolemy, Marcus Beneventanus says that Ruysch claimed to have sailed from England to the North Pole and then through to Asia - he may have been a member of John Cabot's expedition from Bristol trying to reach China.

Ruysch's membership of the expedition has been debated, as his map does not show much new surveying. He uses mainly Portuguese sources, in particular the Contarini-Rosselli map of 1506. He draws most of the northern American coastline from Contarini, using a similar folding conical projection. The inscription 'Baccalauras', meaning codfish, also shows Portuguese influence, as Portuguese fisherman caught vast quantities of cod in the area at the time. South America appears as a large distinct continent, called 'Terra Sancte Crucis sive Mondus Novus', with an inscription where Ruysch notes that he knows very little about the new continent. North of South America appears 'Spagnola' (Hispaniola), the site of Christopher Columbus' landing. Although Columbus thought that this island was Japan ('Sipangu'), and it is identified as such on the Contarini-Rosselli map, Ruysch chooses not to do so. To the west of Hispaniola there is a peninsula, probably Cuba, which bears a text scroll explaining that this was the limit of the Spanish explorations. Although the Contarini-Rosselli map showed Cuba as an island, Ruysch appears to have accepted Columbus' theory that it was an Asian peninsula.

Greenland, Labrador Newfoundland and Nova Scotia are all shown as part of the Asian land mass. Even if Ruysch did not explore the New World himself, it seems that he was in communication with those who had, as there is a note next to Greenland explaining that compasses do not work in that area, suggesting that he had information from mariners who had observed magnetic variation there. His depiction of Madagascar, India and Sri Lanka in their correct proportions must be taken from Portuguese sources, as evidenced by the nearby note about Portuguese activities in the area in 1507. His depiction of the Arctic region, with multiple islands circling the north pole, was original and influenced the work of Gerard Mercator.

The present example is the fifth state, identifiable by the labels of "PLISACVS SINVS" added near the Chinese coast, and "SINVS GRVENLANTEVS" added farthereast, between Greenland and Newfoundland; "PELAGVS BONE SPERANZE" added off Cape of Good Hope; and "SEYLLAN OCEANVS" added near Sinus Magnus in upper right corner.





The first world map printed in colours, the second map in an atlas to show America, and the first map to show Japan

13 PTOLEMAEUS, Claudius; Bernadus SYLVANUS

[Untitled world map].

<u>Publication</u> [Venice, Jacobus Pentius de Lencho, 1511].

Description

Double-page woodcut map, printed in red and black, with unusually wide margins, short closed tear in the left-hand margin.

Dimensions 440 by 565mm (17.25 by 22.25 inches).

References Shirley 32. A beautiful example of Bernardus Sylvanus' map of the world on a cordiform projection, which was subsequently adapted by Apianus and Vavassore. In this projection, the degrees on the central meridian were in correct proportion to those of the parallels. Whereas every other map in the atlas is printed on the reverse of other maps or texts, this is blank on the reverse. This map was Sylvanus' attempt to update the picture of the world presented by Ptolemy.

It is only the second map in a Ptolemaic atlas to show America, but Sylvanus' attempt is less sophisticated than his immediate predecessors. The Americas are shown in three unconnected parts: "terra laboratorum", "terrae Sancta Crucis" (South America) and "terra cube". "Terra laboratorum", or North America was supposedly named after the labourer who saw it first, according to an inscription on Wolfenbüttel's 1534 world map. The projection used distorts the coastline of South America almost unrecognisably; the words "canibalum romon" appear in the north, a product of common contemporary belief about native cannibalism.

The outline of eastern Asia follows Ptolemy and retains the "tiger leg" outline used by Waldseemüller and Contarini, and the Ptolemaic name "Catigara". Japan appears named and shown correctly as an island for the first time "Zampagu ins". Previously, Ruysch identified Japan with one of the islands discovered by the Spanish in the Caribbean in an inscription. Asia's coastline is left open to the east, as is the western coast of the Americas, allowing for the possibility that they were contiguous.

The map is labelled in the style of Ptolemy; rivers and mountain ranged are shown and named, but very few place names appear. The entire continent of Europe contains only "magna Germa", "Italia" and "dalma".

The Sylvanus is the first map of the world printed in colours, the registration of the two colours being aligned on the word "come" in the Himalayas, which is printed in both red and black.





The first map of the Western Hemisphere

14 STOBNICZA, Johannes

[Pair of Untitled Maps of the East and West Hemispheres of the World].

<u>Publication</u> [Kracow, Florianum Ungleriam, 1512].

Description A pair of Western and Eastern hemispherical woodcut maps.

Dimensions 270 by 380mm (10.75 by 15 inches), each.

<u>References</u>

Burden 2; cf. Burden II vii; Harrisse, Discovery of North America 92, pp279 and pp472-473; Nordenskiöld, plate XXXIVI; Shirley 33; Winsor, vol.II, pp116-117. Burden 2 (citing three known examples - JCB, Munich, and Vienna), but with the following note to the corrigenda in Burden II that refers to the present examples: "A further example was discovered in 2003 bound inside an example of Ptolemaeus' 'Geographicae' published in Lyons in 1535. It now resides in a private American collection" (Burden II vii). A striking pair of maps after the inset maps of Waldseemüller's famous 1507 wall map of the world - the "Birth certificate of America" - the first of which is the first map of the Western hemisphere.

The maps are constructed using a partial and sub-spherical projection truncated at the poles; that, according to the historian Henry Harrisse, may be considered a forebear of the invention of Mercator's projection.

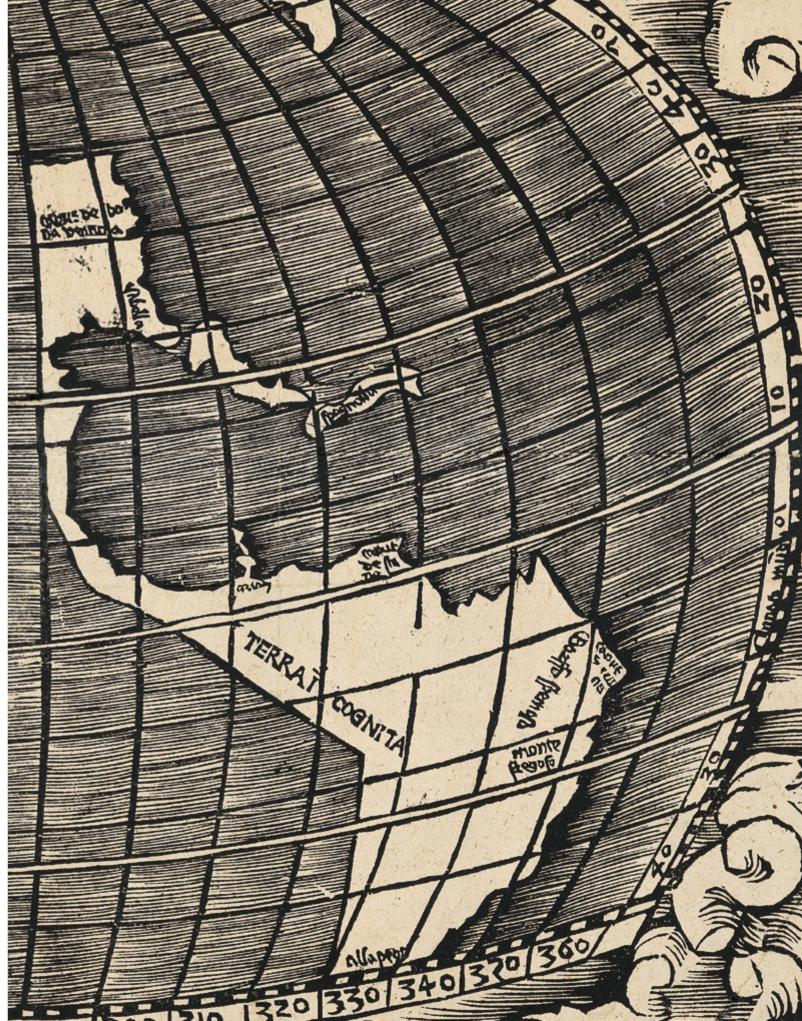
Stobnicza shows the two large masses of North and South America, with a continuous coastline from 50° north to 40° south latitude, connected by a narrow strip of land dividing the ocean between Asia and Europe. This, therefore, created the area we know of as the Pacific Ocean the year before Balboa was the first European to see it.

"The Asiatic coast is very similar to that found on Martin Behaim's famous globe of 1492, thus not incorporating the improvements found in Cantino's and Waldseemüller's maps.

The names inscribed on the map appear to have been derived from a map from the Lusitano-Germanic cartography of Waldseemüller, et al. They include, on the north coast: Cabo de bona ventura; and on the southern coast: Arcay [Arcaybacoa], Caput de sado [deseado], Gorffo spemoso [fremoso], Caput S. crucis, Monte fregoso, Abba[tia omnium Sanctorum], and Allapego [Pagus S. pauli]. These place-names are also seen on Cantino, Caverio and Waldseemüller maps. On the western borders Stobnicza uses Terra incognita indicating, according to Harrisse, that he possessed only hypothetical reasons for delineating the Pacific coast. Stobnicza recorded Cuba under its traditional name Isabella as part of the American mainland, but otherwise only a few small details have been added, such as an elephant in South Africa and a bird in Madagascar" (Cartographic images online).

"During the nineteenth century this map had great status and encouraged many questions, including how such an advanced map came to be produced in Poland, well away from the centres of cartographic knowledge. When, in 1901, Professor J. Fischer discovered the great twelve sheet world map of 1507 by Martin Waldseemüller, it became clear that Stobnicza had drawn from the two small insets at the top. In 1892 Harrisse showed that Stobnicza was acquainted with the geographical work of the St Dié Gymnasium in Lorraine...; this was before the discovery of the Waldsemüller map which was produced there" (Burden).

Stobnicza (c1470-1530?), a specialist in metaphysics, held the chair of cosmography at Cracow and later entered the Franciscan order there. His 'Introductio' is one of the most important early items of Americana, and contains several passages on Amerigo Vespucci and his discoveries (especially chapter 9, folio 7, but also in chapters 7, 3, and the dedication). The work is notable for its early description of the Isthmus of Panama, seemingly a year before its official "discovery" by Vasco Núñez de Balboa.

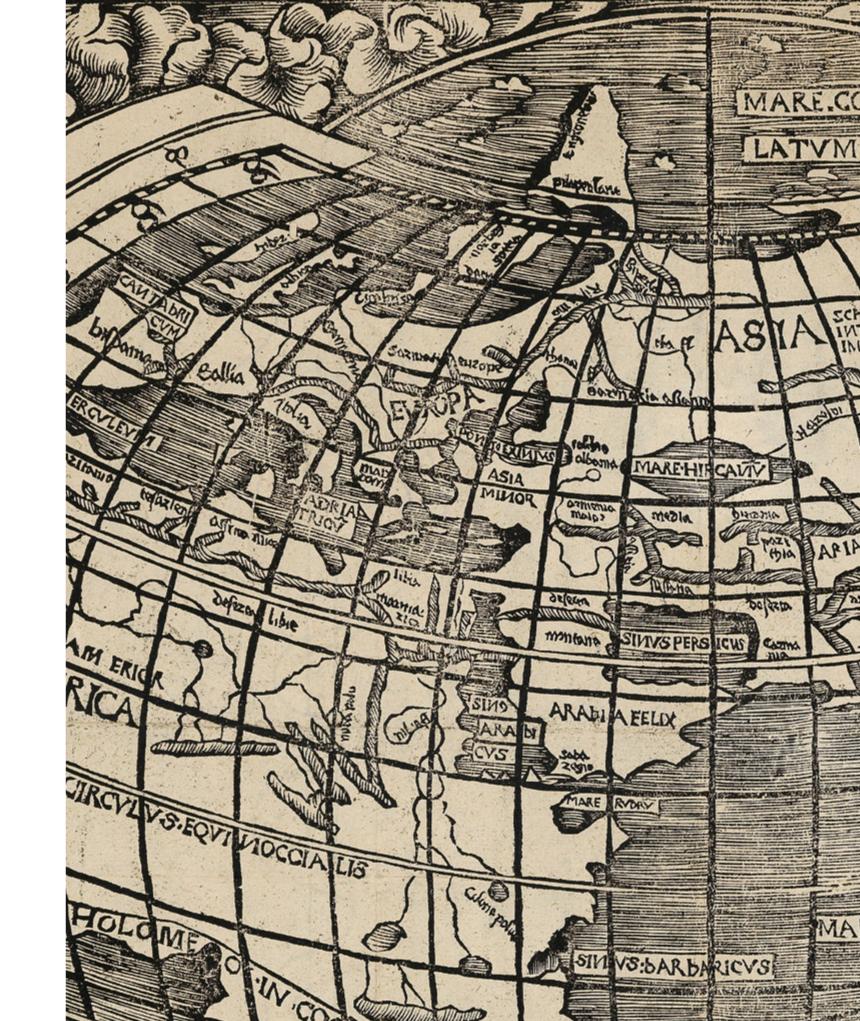


Two different issues of the edition exist, without priority. One foliated to folio 36 with an undated colophon; the other foliated to 40 and is dated 1512. The texts of both issues are identical, though the setting of the last four leaves differs. The two hemispheres appear to have been published for inclusion in a very small number of copies of work.

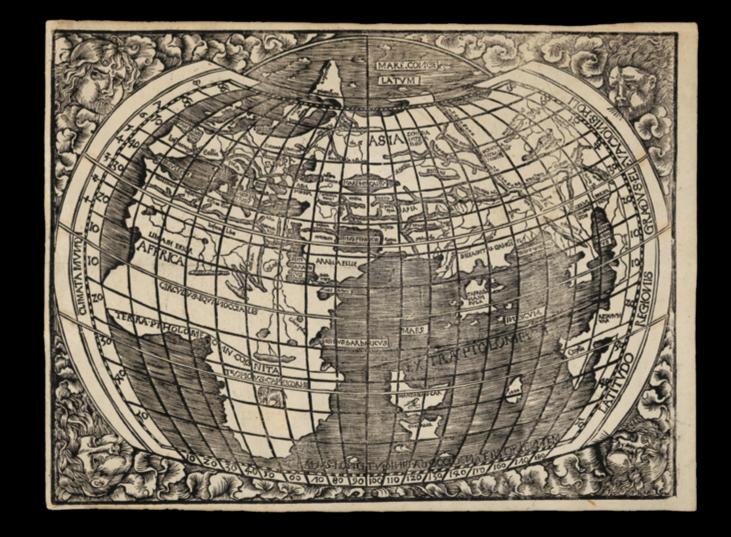
Locations:

The pair is one of only six known examples. The others are located at: The Bodleian B.1.c.12, Oxford; Breslau; John Carter Brown Library, Providence, R.I.; Munich; and Vienna.

Yarmolinsky, Early Polish Americana (1937), traces just 21 known examples of the book; six undated, and fifteen dated. There is no consensus as to whether the map is an integral part of the book, but according to Yarmolinsky, only four copies (Vienna, Munich, Breslau, John Carter Brown) of the twenty-one known of both issues include the map. To this we can add the present example, first recorded by Burden in the corrigenda to Burden II, and the example at the Bodleian noted by Shirley.







"One of the most attractive ptolemaic world maps produced"

15 PTOLEMAEUS, Claudius; Martin WALDESEEMÜLLER

Generale Ptholemei.

<u>Publication</u> [Strassburg, Johannes Schott, 12th March, 1513].

Description Double-page woodcut map.

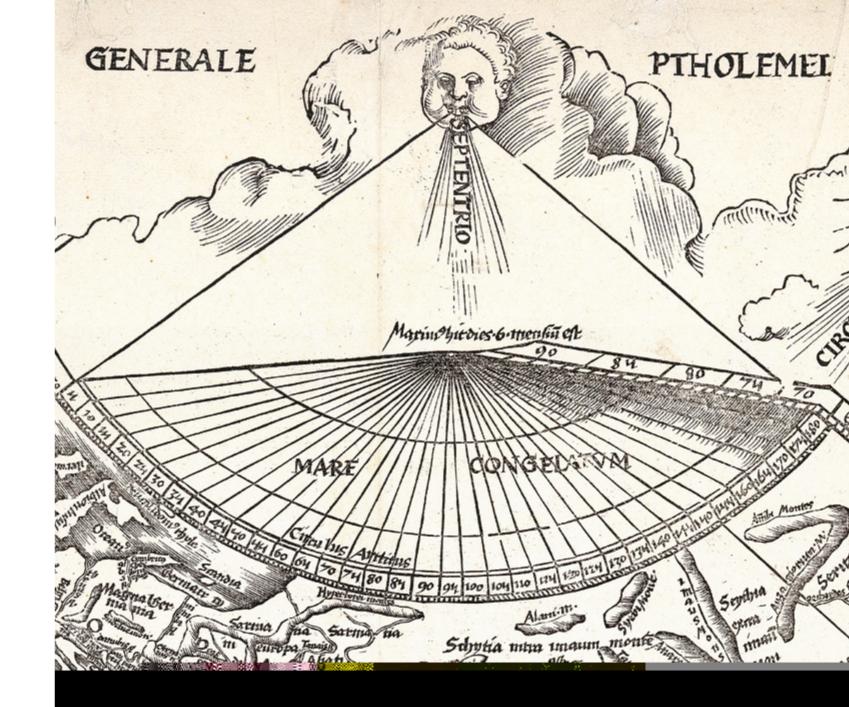
Dimensions 446 by 605mm (17.5 by 23.75 inches).

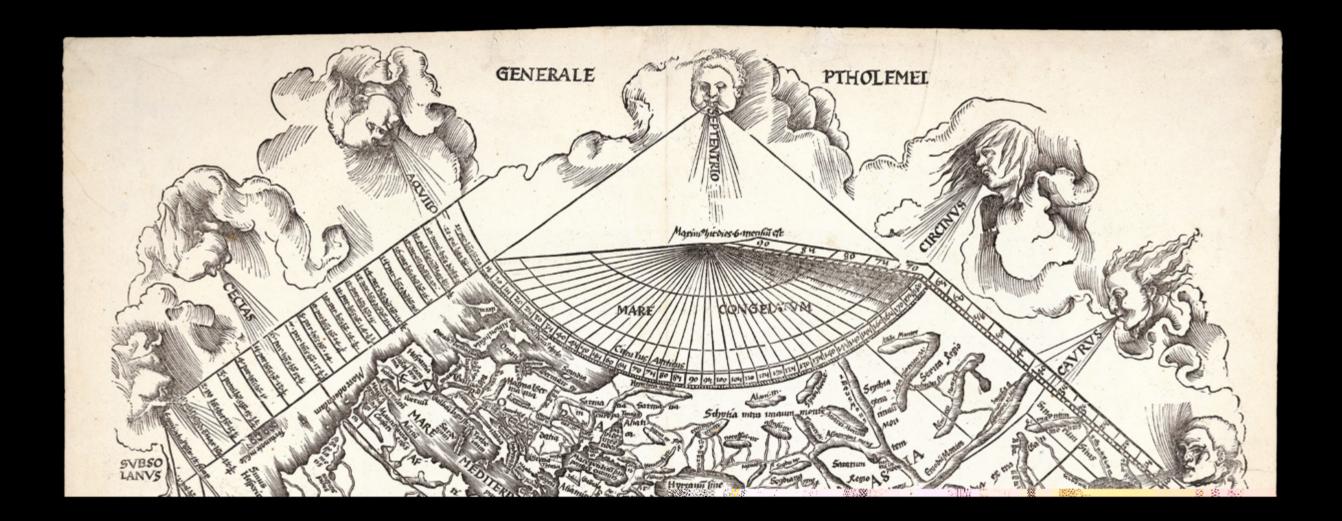
References Sabin 66478; Shirley 34. Waldseemüller's Ptolemaic map of the world from the "most important of all the Ptolemy editions" (Streeter). A "bold woodcut on the traditional modified conical projection with all regions above 65 degrees north (just north of the British Isles) covered by the inscription "Mare Congelatum" or "Frozen sea". The continents represented follow the Ptolemaic outline, although the woodcutter has not felt he could sustain the concept of a land-locked Indian Ocean, and so has omitted the strip of land normally linking southern Africa to Asia. The map itself is bordered by the usual markings of latitude and longitude and the climates. Outside this is a vigorous surround of clouds with twelve characteristic windheads representing the classical winds blowing from each direction. Visually, it is one of the most attractive Ptolemaic world maps produced" (Shirley).

The 1513 edition of Ptolemy's 'Geographia' was prepared by Martin Waldseemüller using the translation of Mathias Ringmann, and twenty new regional maps based on contemporary knowledge "unlike many of the alleged "new" maps produced by earlier editors, [they] contained a great deal of new information, and in nearly every case they were decided improvements over anything that had been previously offered..." ('The World Encompassed', 56). These were included in addition to the traditional body of twenty-seven Ptolemaic maps derived from the 1482 Ulm edition.

Martin Waldseemüller (1470-1521) was a German scholar and cartographer. He studied under Gregor Reisch (see items 10, 11 & 17) at the University of Freiburg, and then moved to Basel in the late 1490s, where he met the printer Johannes Amerbach. In 1506 he moved to Saint-Dié in Lorraine, where Duke René II had established a humanist academy, the 'Gymnasium Vosagense'. There he read about Amerigo Vespucci's voyage to the Americas, and Portuguese accounts of circumnavigating Africa. Together they proved that the Indian Ocean was not landlocked. He and his colleagues decided to create a map which compared Vespucci's geographical information with Ptolemy's, along with an explanation of why they had deviated from Ptolemy's precepts.

That work, 'Cosmographia introductio', was published in 1507. It contains the first printed instance of the name "America" being applied to the discoveries over the Atlantic: "The fourth part of the earth, we have decided to call Amerige, the land of Amerigo we might even say, or America because it was discovered by Amerigo". The book was accompanied by a set of small woodcut map gores, the first known printed gores for a terrestrial globe ever made, which showed a landmass meant to represent South America labelled as "America". The globe gores were a companion to the 'Universalis cosmographia', the great world map in twelve sheets by Waldseemüller. It was unusually large for a woodcut map, and drawn using an adaptation of the second method of projection advocated by Ptolemy. It shows the Americas as one contiguous continent, and was the first map to give this name to the new discoveries.





The Admiral's map

16 PTOLEMAEUS, Claudius; Martin WALDESEEMÜLLER

Orbis Typus Universalis Iuxta Hydrographorum Traditionem.

Publication [Strassburg, Johannes Schott, 12th March, 1513].

Description Double-page woodcut map, lower margin extended.

Dimensions 465 by 608mm (18.25 by 24 inches).

References Sabin 66478; Shirley 35. The so-called Admiral's Map; the first of two maps in Waldseemüller's atlas that relate New World discoveries, and is referred to in the index as the 'Hydrographia sive Charta marina...', and in the 'Ad Lectorem' as the 'Charta Marina', where it is clearly stated that the geographical facts have been made known "through the most authentic voyages of a former Admiral of the most serene King of Portugal, Ferdinand, and those of other explorers" (The Admiral's Map What Was It? And Who the Admiral? Samuel Mc Coskry Stanton, Isis, Vol. 22, No. 2. (Feb., 1935), pp511-515).

The map was created for inclusion in the Strassburg edition of Ptolemy's 'Geographia', signaling the beginning of the section of twenty modern maps which were added to the twenty-seven Ptolemaic originals. This world map gives a more accurate outline of eastern Asia than Ptolemy. It contains Greenland, which is attached to Europe, but only a tiny section of North America, meant to represent either Newfoundland or Labrador. The coastline of South America is left unfinished, and only five place names are given.

Waldseemüller himself was reluctant to identify America as a continent, and would never use the name America in any of his later work. When he finally published his edition of Ptolemy in Strasbourg in 1513, he labelled South America "Terra Incognita". However, nearly every significant mapmaker for the next quarter of a century relied on his work, popularising his geography and terminology.





Reisch's third world map

17 REISCH, Gregor

Typus Universalis Terrae, luxta Modernorum Distinctionem Et Extensionem Per Regna Et Provincias.

Publication [Strassburg, 1513].

<u>Description</u> Double-page woodcut map.

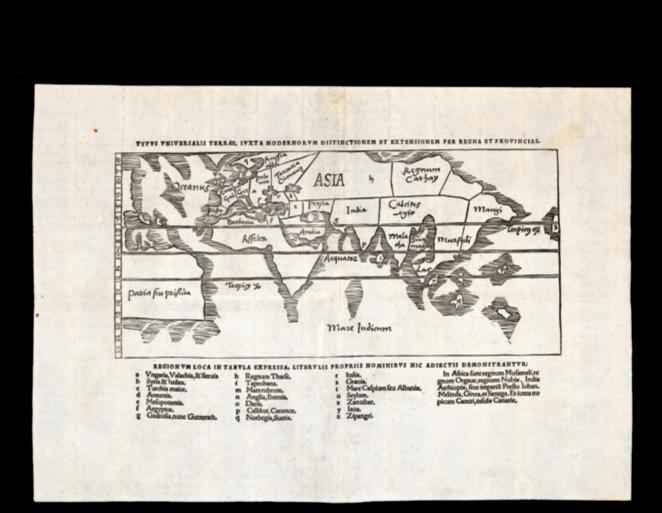
<u>Dimensions</u> 135 by 285mm (5.25 by 11.25 inches)

References Bagrow and Skelton, p126 and fig. 31; Nordenskiöld, p92; Shirley 36, Reisch 3. Reisch published his first world map in his 'Margarita Philosophica' of 1503. The current issue includes a key to place-names in the lower margin.

"Bagrow... illustrates a new map which purportedly appears in the 1513 edition of Gregor Reisch's 'Margarita Philosophica', although I have not yet located a copy of this edition" (Shirley).

We have been unable to trace another example of this edition of the map.

"The new world map is a simplified woodcut derivative of Waldseemüller's, now placed in an elongated rectangular frame. Parts of both north and south America are shown (unnamed except for the words "paria seu prisilia" on the southern part) and without any dividing strait. The countries in the other continents are either named on the map or listed by alphabetical letters according to a textual key printed below. A peculiarity of the map is the way in which the woodcutter has divided the countries in Europe and Asia by straight lines" (Shirley).



The earliest obtainable map to name America

18 APIANUS, Petrus

Tipus Orbis Universalis iuxta Ptolemei Cosmographi Traditionem et Americi Vespucii Aliorque Lustrationes a Petro Apiano Leysnico Elucbrat An. Do. MDXX.

<u>Publication</u> [Vienna, Johannes Camertius, 1520].

Description Double-page woodcut map.

Dimensions 304 by 430mm (12 by 17 inches).

<u>References</u>

Burden, p.xxv and plate XII; Church 45; Harrisse, Discovery of North America, 126; Harrisse, Americana Vetustissima, 108; Sabin 86390; Shirley 45; Stevens 615. Petrus Apianus's 1520 world map is one of the most important early maps of the world, and the earliest map available on the market to name America. The only printed map to use the name 'America' before Apianus' work is Martin Waldseemüller's 12-sheet map of the world, the sole surviving example of which was discovered in 1901 and purchased by the Library of Congress in 2001 for ten million dollars.

Apianus drew heavily on Waldseemüller's map to create this work, with "a close geographic correspondence, a similarity of woodcutting style, and the same truncated cordiform" (Shirley). He also possibly used the globes of Johannes Schöner. It is one of the earliest maps to show the Americas as separate from Asia. However, Apian made one significant addition of his own: a passage between the Atlantic and Pacific Oceans at the tip of South America, which is not present in Waldseemüller's map. Ferdinand Magellan began his voyage to find such a passage in 1519, the year before Apianus' map was published but the expedition would not return until September 1522. This map has been used in support of the theory that Magellan was aware of prior voyages that had reached the Pacific, of which we have no record.

Apianus' map, made thirteen years after Waldseemüller's map, shows the effects of Waldseemüller's map. Vespucci is referenced in the title and there is an inscription in South America reading "Anno d[omini] 1497 hec terra cum adiacetibo insulis inuenta est per Columbum Ianuensem ex mandato Regis Castello america princia".

However, although the name America is retained, it is Columbus' discovery of the "adiaceti[bus] insulis" or adjacent islands to America which is brought to the fore. This is possibly due to contemporary controversy over Waldseemüller's championing of Vespucci, seemingly at the expense of Columbus: a historical debate which continues to this day. Apianus' use of the name "America" here and in 'Cosmographicus Liber' would continue to popularize it, and before the rediscovery of Waldseemüller's work in 1901 it was thought to be the source" (Stevens).

"The map appeared in a 1520 edition of Julius Caius Solinus' 'Polyhistor', a third century compilation of history and geography, based largely on the works of Pliny and Pomponius Mela (see item 7). It may also have been issued separately. It was published by Johannus Camertius, whose initials appear in the lower left corner, on either side of a garland containing the monogram of Luca Alantses, who paid for its production" (Shirley). The engraver of the map was almost certainly Laurent Fries, whose initials appear on either side of the garland at the lower right corner. In 1522, Fries would complete an updated edition of Ptolemy's 'Geographiae', including two world maps derived from Waldseemüller (see item 20).





The ptolemaic world map from the first issue of Laurent Fries''Geographia'

19 PTOLEMAEUS, Claudius; Laurent FRIES

Generale Ptho.

<u>Publication</u> [Strassburg, Johannes Gruninger, 1522].

<u>Description</u> Double-page woodcut map of the world.

<u>Dimensions</u> 230 by 370 mm (9 by 14.5 inches).

References Shirley 47. First issue, distinguished by the lack of decoration in the border, which only contains the names of the winds. A reduced version of the old map of the world first published by Waldseemüller in 1513. In 1522 Fries published a new edition of Ptolemy's 'Geographia', in which nearly all the maps were similarly drawn from Waldseemüller's atlas.

Fries was born in Alsace in about 1490, he studied medicine at the universities of Pavia, Piacenza, Montpellier and then established himself as a physician in the Alsace region and Switzerland, before settling in Strasbourg, in about 1519. By this time, "he had established a reputation as a writer on medical topics, with several publications already to his credit. Indeed, it was thus that Fries met the Strasbourg printer and publisher Johann Grüninger, an associate of the St. Die group of scholars formed by, among others, Walter Lud, Martin Ringmann and Martin Waldseemüller. It would seem that Gruninger was responsible for printing several of the maps prepared by Waldseemüller, and for supervising the cutting of the maps for the 1513 edition of Ptolemy, edited by the group.

This meeting was to introduce an important digression into Fries' life, and for the next five years, from about 1520 to about 1525, he worked in some capacity as a cartographic editor for or with Grüninger, exploiting the corpus of material that Waldseemüller had created" (Ashley Bayntun-Williams, Map Forum online).

The first printed atlas map to name 'America'

20 PTOLEMAEUS, Claudius; Laurent FRIES

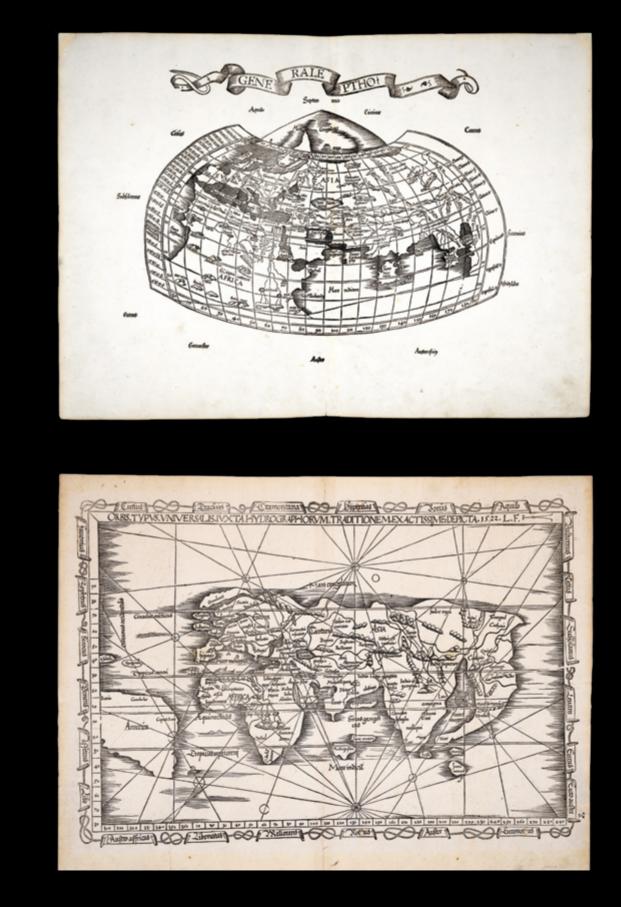
Orbis typus universalis iuxta hydrographorum traditionem Exactissime Depicta. 1522. L.F.

Publication [Strassburg, Johannes Gruninger, 1522].

<u>Description</u> Double-page woodcut map of the world.

<u>Dimensions</u> 380 by 505mm (15 by 20 inches).

References Shirley 48. In this modern map of the world "Europe is very crudely drawn with England and Scotland reverting to separate islands. India, which was well defined on Waldseemüller's great 'Carta Marina' of 1515 – to be re-issued by Fries himself in 1525 – has become confusing double peninsula, with the largest southward-extending land mass being east of the Ganges delta. South America is shown in part, with the shape of its western coastline inserted more by intuition than by factual report. Magellan had indeed reached the Pacific via Tierra del Fuego in 1519 but his surviving ship did not reach the ports of Europe until September 1522, several months after publication of Fries' work" (Shirley).



The first widely circulated map showing the world on an oval projection

21 BORDONE, Benedetto di

[Untitled world map].

Publication Venice, Nicolo Zoppino, 1522.

Description Woodcut map.

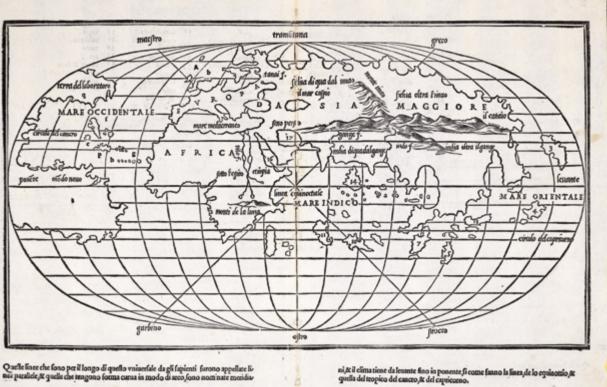
Dimensions 215 by 380 mm (8.5 by 15 inches).

<u>References</u> Shirley 59.

Bordone's world map was the first widely circulated map showing the world on an oval projection (after Franco Rosselli's 1508 version) and the first to appear in an "Isolario". Bordone's rendering of the Americas and Africa are modern. The Americas (Novo Mondo) appear on the left, but in drastically reduced form. Unlike Rosselli's map, Bordone shows open water between the two continents and does not join North America and Asia. India and Ceylon remain Ptolemaic. Southeast Asia is modelled after the typical thinking of the time, a large subcontinent offsetting the Austronesian islands to the south. The outline of Japan is hypothetical, based on Marco Polo's textual account.

Bordone's was the first printed isolario to encompass the entire world, and arguably is therefore the first atlas to completely shed Ptolemy's classical bonds. The only isolario to precede it was the little book of Bartolomeo dalli Sonetti, 1485, which covered only the Aegean islands. Waldseemüller's 1513 edition of Ptolemy's geography did include modern maps of the new modern world, but is still essentially a Ptolemaic work.

Bordone's isolario boasts many cornerstone maps, and is the first atlas ever to contain separate maps of North and South America, and the first to contain regional maps of America.



The world upon a polar double-cordiform projection: designed by aliens?

22 FINE, Oronce

Nova, Et Integra Universi Orbis Descriptio.

<u>Publication</u> [Paris], Orontius F. Delph, 1531.

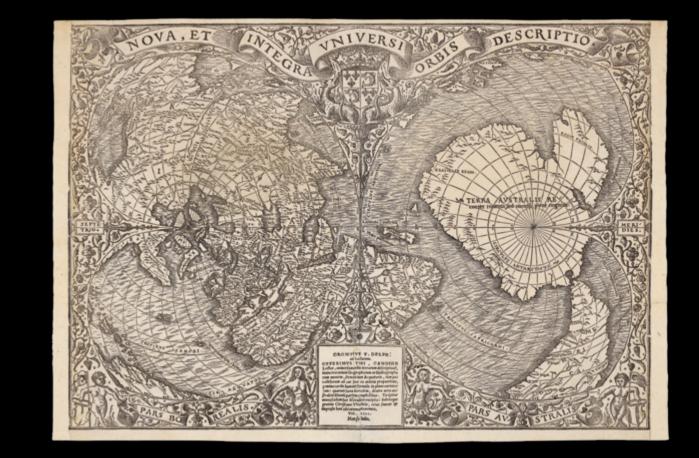
Description Double-page woodcut map, left- and righthand margins extended, closed tear at foot of vertical fold.

<u>Dimensions</u> 300 by 440mm (11.75 by 17.25 inches).

References Shirley 66. Oronce Fine's double cordiform map of the world is one of the most striking and influential maps of the world published in the sixteenth century. First issued in 1531, it appeared in the 1532 Paris edition of Johann Huttich and Simon Grynaeus's 'Novus orbis regionum', a collection of travel accounts that had also been published in Basel several months before.

The map is not only a visual delight but is also noteworthy for its cartographic content. It is the first printed world map based upon a double-cordiform polar projection, a form that would be much imitated by the likes of Mercator in 1538 and Salamanca and Lafreri a decade or so later (see item 29). The right-hand or southern cordum shows the great southern land mass which Fine labels "Terra Australis recenter inventa, sed nondu[m] plene cognita" (literally "southern land recently found, but not yet fully known"). Since Antarctica was not discovered until 1820 by the Russian Fabian Gottlieb von Bellingshausen, its inclusion has led more fanciful writers to suggest that Fine received information from residents of the lost city of Atlantis, or even aliens. The cordum also contains the Pacific, which Fine names "Mare magellanicum", one of the first appearances of the explorer's name upon a map. To the left-hand, or northern, cordum, America is resolutely attached to the easternmost part of Asia with the north pole being made up of four islands. The map is surrounded by beautiful and elaborate floral work with depictions of dragons, putti and mermaids.

The present example is the first state of the map, retaining Fine's name in the lower cartouche. The second state, also dated 1531, includes the imprint of Hermannus Venraed, in place of Fine's name, but retains the 1531 dating. In all there are six states of the map, dated 1536, 1540, 1541 and 1555 respectively. While all states are rare, the first edition of the map is especially desirable.



Angels make the world go round

23 MUNSTER, Sebastian; Hans HOLBEIN, the Younger

Typus Cosmographicus Universalis.

<u>Publication</u> [Basel, Johannes Hervagius, 1532].

Description Woodcut map on two sheets, joined, lower left-hand margin extended.

Dimensions 420 by 600mm (16.5 by 23.5 inches).

References Brown 65; Shirley 67. First edition, published in Johann Huttich (c1480-1544) and Simon Grynaeus's (1493-1541) 'Novus orbis regionum ac insularum veteribus incognitarum', 1532; the issue with "ASIA" in small letters and "Tropicus Capricorni" printed below the tropical line.

An extraordinary map, which intricately combines old world suspicions with contemporary geographical discoveries, and dangerous modern ideas. Munster's map on an oval projection, engraved by German artist Hans Holbein the Younger, contains within it a startling modern allegory: an impish angel appears at each pole, working a crank to turn the world on its axis, as a visual representation of the controversial Copernican theory, predating by 11 years publication of his 'De revolutionibus orbium coelestium', a book so controversial, that Copernicus did not publish it until he knew his death was imminent.

No less sensational are the decorative additions to the map's border designed by Hans Holbein (1497-1543), one of the foremost artists of the Northern Renaissance. The display of exotic flora and fauna, as well as vivid and often grisly vignettes, reflect a very medieval sensibility to contemporary discoveries in the New World. Within the map itself, enormous mythical sea monsters, fanciful mermaids, and modern sailing ships are found together in the oceans.

Sebastian Munster (1488-1552) was to become one of "the most influential cartographers in the sixteenth century" (Burden). His edition of Ptolemy's 'Geography' contained a "further section of modern, more up to date maps. He included for the first time a set of continental maps, the America was the earliest of any note. He was one of the first to create space in the woodblock for insertion of place-names in metal type. The book proved to be very popular, there being nearly forty editions during the following 100 years" (Burden).



Septempiolis



TYPVS COSMOGRAPHICVS VNIVERSALIS. RS -28 SEPTENTRIO Cizcia Aquilo Pen Bozeas MARE CONGELATION AIHTYSE -Illandiz-Mag Regna Calliz 0 Scythia extra Scythia intra Imaum Ibernia Tomite Deletan Belgies Regnuin Cu matia maniad Ino flatica TARTANIA MAGNA mont TerraMongal OCCANAL Regimes. Corafine MAGAKE Muc Calpin ASIA Territor G 3.45 AME -Emoli moto States Tharfa made OP-2 AB -00 tatas Chozus Drighma Infula Partial Traffert Barbaria Perfia Turqueftre Antight AND ALANDE CONDER Moint -Arabia PA A Betrofie TROPICYI CANCRI ine Perfice Betz TROPICVSCANCRE Gerulia India extra Ganyeu AND AND 5 they 0 51-0 INDIA UDIA GRITAR Acthiopi Gangem timbe gnun Cizre Opt ouincia 350 APHRICA befite boi afet Ganbrasegna #14284 ragoin Situs ATHIOPIA tipl ahala. 600 eg2 = 270 280 interior 310 ASCTATOR Sin' Barbarie 2010 GAT OTTOOCTIALLY Cosifuli Fanonia regio arias AMERICA Set: Melli 82 Lelin Nebcot TERRANOVA Roman INDIA do tado far, far oppellata, oppidir adeo accelta dicitar, ut quidan 5000, in ea offe dicant. Terra efi falohorrina, ior in actoo marii frager. Fert epseumoni, piper, de calantes aromanian. Ebonan achorea foia producti. I flacam atem di monocer os beficios habes, terrifir, adamaniber. calantariti. C. in constitutiones in consoli -1 cenii Pot Torupile TROPICYS CAPRICORNI Becco. Regal Zelan monocer on befinen babet, nerglin, adamentiber, earbanealis, nergeritis, d'alig gennnit previeft abandat. Constant og reiginen annen ob tropperstem exclose golden agent, cultur previe pars cam generisally lanest alig linit peptir me-ficioner pars nadit pars obferes, sommer anisar las. Niger udge corporis obler, ere natures atro-fic nati, resus ex rijo of bordeross fisient. Antai forum percognital sullar orbunat, till proders-tas excluters, som sames tedoross make gotte herefar forum ellerens medlem utster ane B CVTHARV 56 mais prima paras Cr cen-tempis fait, foi polfes in magnan imperius G glarian personi 1. egres amplant alfore al Ta-nein flanti, è quo scytici cipis longo iesti unve fai chen scythas dialiter. Tertara qua Cr Mengel, naison a cychia cetapata param regio di plainiñ mantifa, cr abicantefra eff, alante es glares berminifa, mini paras ut dife tis, aer C celtun intemperatur, tont ras Cr fab gur en aflate alco borrinda fapo finst a prese incore boscione intercer. Las calcolar gur eff, man friges Cr des filmes nines celtur. C454260 ips HAUS OCEANYS MERIDIONALIS ANIBA discerfa forma Glingua, nec esidem utaentes mor robas. Aphzica) Euzo anstez 6



Fries' rendering of the Admiral's map

24 PTOLEMAEUS, Claudius; Laurent FRIES

Tabu Nova Orbis.

<u>Publication</u> [Strassburg, Johannes Gruninger, 1535].

<u>Description</u> Double-page woodcut map.

Dimensions 400 by 530mm (15.75 by 20.75 inches).

References Shirley 49.

25 MUNSTER, Sebastian

Typus Orbis Universalis.

<u>Publication</u> Basel, Heinrich Petri, 1540.

Description Double-page woodcut map, with fine early hand-colour.

Dimensions 305 by 380mm (12 by 15 inches).

References Shirley 77. The second modern world map in Fries' Ptolemaic atlas, first published in 1522. A reduced version of Waldseemüller's map of 1513, this is a later issue with the title in the banner corrected. On Fries' version of the map, only a sliver of the Americas is shown. Fries has added images of Russian, Egyptian, Etheopian, Trapobanan and Mursulian kings, and an elephant off the coast of Greenland.

When this map was first publshed in Waldseemüller's atlas of 1513, it was one of two that related New World discoveries, and was referred to in the index as the 'Hydrographia sive Charta marina...', and in the 'Ad Lectorem' as the 'Charta Marina', where it is clearly stated that the geographical facts have been made known "through the most authentic voyages of a former Admiral of the most serene King of Portugal, Ferdinand, and those of other explorers" (The Admiral's Map What Was It? And Who the Admiral? Samuel Mc Coskry Stanton, Isis, Vol. 22, No. 2. (Feb., 1935), pp511-515). Henceforth, it was known as the Admiral's Map.

Munster's modern map of the world

Munster's modern map of the world, on an oval projection, was first published in his 'Geographia' of 1540. This early issue is distinguished by the absence of the woodcutter David Kandel's initials from the border lower left, which appeared in maps printed from the second block onwards.

The border of the map is highly decorative, including roiling clouds and "lusty" windheads. This is in sharp contrast to the rather sketchy geography: the continents are shown in rough outline only, but is still clearly based on a "combination of information derived from Verrazzano's explorations of 1522-1524, when the waters of the Chesapeake Bay were mistaken for the Indian Ocean, and reports of Carter's voyages of 1534-1535 up the St. Lawrence seaway into the Great Lakes vainly searching for the north-west passage" (Shirley).

Sebastian Munster was to become one of "the most influential cartographers in the sixteenth century" (Burden). Essentially he published Ptolemy's 'Geography' with a "further section of modern, more up-to-date maps. He included for the first time a set of continental maps, the America was the earliest of any note. He was one of the first to create space in the woodblock for insertion of place-names in metal type. The book proved to be very popular, there being nearly forty editions during the following 100 years" (Burden).



A reduction of the world map of "one of the greatest cartographers of the sixteenth century" from the first atlas to contain maps of the American continent

26 GASTALDI, Giacomo

Universale Novo.

<u>Publication</u> [Venice, Nicolo Bascarini, 1548].

Description Copper-engraved map of the world.

Dimensions 165 by 205mm (6.5 by 8 inches).

References Shirley 87. One of two modern world maps from Gastaldi's "pocket" edition of Ptolemy's 'Geographia', and a reduction of Gastaldi's world map of 1546.

"Cosmographer to the Venetian Republic, then a powerhouse of commerce and trade. He sought the most up to date geographical information available, and became one of the greatest cartographers of the sixteenth century" (Burden). Gastaldi's was the first edition of the 'Geographia' in Italian: the text was translated by the celebrated botanist Pietro Andrea Mattioli. It was the most comprehensive atlas produced between Martin Waldseemüller's 'Geographiae' of 1513 and Abraham Ortelius' 'Theatrum' of 1570. It was the first atlas to contain maps of the American continent, the first of which is this one.

Giacomo Gastaldi (c1500-1566) was, and styled himself, 'Piemontese', and this epithet appears often after his name. Born at the end of the fifteenth or the beginning of the sixteenth century, he does not appear in any records until 1539, when the Venetian Senate granted him a privilege for the printing of a perpetual calendar. His first dated map appeared in 1544, by which time he had become an accomplished engineer and cartographer. Karrow has argued that Gastaldi's early contact with the celebrated geographical editor, Giovanni Battista Ramusio, and his involvement with the latter's work, 'Navigationi et Viaggi', prompted him to take to cartography as a full-time occupation. In any case Gastaldi was helped by Ramusio's connections with the Senate, to which he was secretary, and the favourable attitude towards geography and geographers in Venice at the time.

The navigator's chart from Gastaldi's great "pocket" atlas

27 GASTALDI, Giacomo

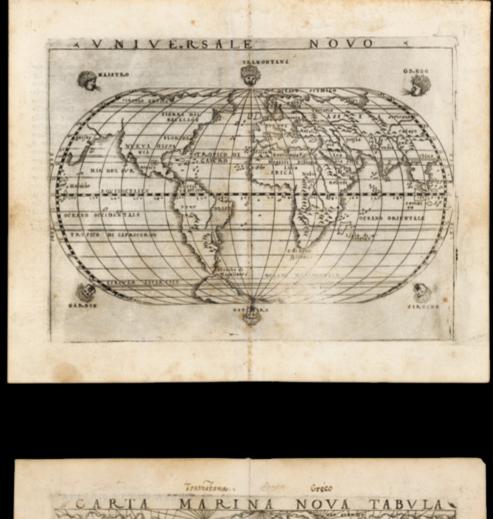
Carta marina Nova Tabula.

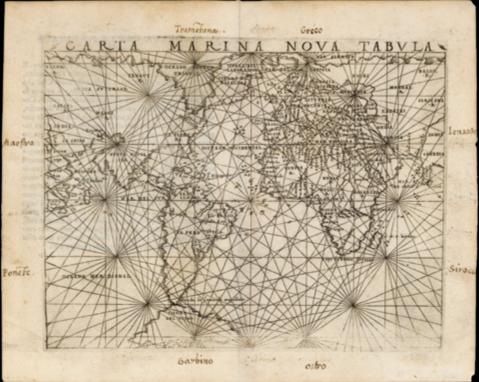
<u>Publication</u> [Venice, Nicolo Bascarini, 1548].

Description Engraved map.

Dimensions 160 by 200mm (6.25 by 7.75 inches).

References Shirley 88. The second of two modern world maps from Gastaldi's "pocket" edition of Ptolemy's 'Geographia'. This is the navigator's chart, with no interior land detail, and with the addition of coast place names and rhumb lines.





The world according to Charles V's cartographer

28 DE GIRAVA, Gerónimo

Typo De La Carta Cosmographica De Gaspar Vopellio Medeburgense...

Publication [Milan, G.A. Castiglione and C. Carron, 1556].

Description Double-page woodcut map on a cordiform projection.

<u>Dimensions</u> 355 by 440mm (14 by 17.25 inches).

<u>References</u> Shirley 101. Published in Milan as part of Girava's 'Cosmographia...' on a cordiform projection, and based on the, now lost, large 12-sheet map by Vopell. With lines of latitude and longitude based on Ferro meridian, surrounded by a broad border of windheads, including southern windheads represented as skulls, men holding a globe and armillary sphere, and two smaller projections of a celestial and astrological sphere.

The heart-shaped projection follows Waldseemüller's world map of 1507, but the geography is very different: North America / "Nueva Espana" shares a land mass with Asia and Labrador is connected to "Grutlandia". Girava acknowledges Vopell's influence, particularly in his rendering of the conjoining of the Asian and New World landmasses. He notes Balboa's discovery of the Pacific Ocean in 1513, and intriguingly mentions that the great southern landmass "Terra incognita" had been sighted in 1499.



Salamanca and Lafreri's double-cordiform world map

29 SALAMANCA, Antonio

Untitled world map.

Publication [Rome, Antonio Lafreri, 1564].

Description Double-page engraved map on a cordiform projection.

<u>Dimensions</u> 340 by 520mm (13.5 by 20.5 inches).

References Shirley 91. First published by Salamanca in about 1550, and based on the doublecordiform world map by Gerard Mercator of 1538. This issue, with Lafreri's imprint, dates from after Lafreri had taken control of their joint publishing business in 1563.

Like its predecessors, Salamanca's striking map "bisects the world on the Equator, with the southern hemisphere featuring a mysterious continent centred on the South Pole, centuries before the discovery of Antarctica. Following Mercator, Salamanca showed the Americas as being two continents, labelled north and south, and being entirely separate from Asia. A large ice-mass is shown covering the world's Arctic regions. Salamanca's rendering is distinguished from Mercator's by his use of stipple engraving for the seas. Beyond being a most elegant artistic concept, cordiform maps were considered to be imbued with great emblematic significance by contemporary humanists, in that they linked the human heart, the innate source of reason, with the grander theatre of the world of human action" (Giorgio Mangani: Imago Mundi 50, 1998).

Lafreri, arguably Italy's most influential and successful commissioner and publisher of maps, was in fact a Frenchman from Burgundy, born Antoine du Pérac Lefréry of Besançon, who settled in Rome in 1540 and in 1544 established his business as an engraver and print seller in the Via del Perione.

From 1553 onwards, Lafreri partnered with an established dealer, Antonio Salamanca, until the latter's death in 1562. Lafreri was primarily a dealer and publisher, rather than an artisan in his own right. He carried in stock the prints made not only by his own establishment, but by others, and his own name appears comparatively seldom in the atlases attributed to him.



The insignificance of humanity's pursuit of earthly ambitions

30 JODE, Gerard de

Universi Orbis Seu Terreni Globi In Plano Effigies Cum privilegio.

Publication [Antwerp, 1578].

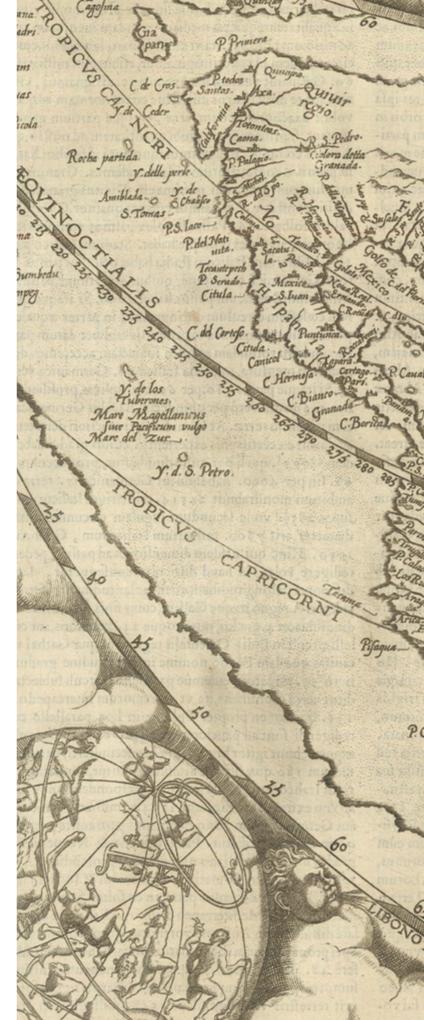
<u>Description</u> Double-page engraved map.

<u>Dimensions</u> 415 by 450mm (16.25 by 17.75 inches).

References Brotton, History of the World, pp235-7; Shirley 124. De Jode's world map was first published separately as 'Nova Totius Terrarum Orbis Descriptio' in 1571. This example was prepared for his atlas, 'Speculum Orbis Terrae', in 1578.

De Jode's map is drawn on a cordiform (or heart-shaped) projection, which was developed at the beginning of the sixteenth century as a reaction to the European discovery of the Americas, and the need for a more effective method of showing the surface of the newly enlarged world on a flat surface. The projection had symbolic as well as practical uses. De Jode was a Calvinist in Antwerp, at a time when the city and the Low Countries were caught in a violent struggle between the Spanish Catholic monarchy and the Protestant uprisings of the Reformation (Veldman). The world as heart was a Renaissance emblem embodying the effect of inner emotions on the physical world, but in the early sixteenth century it developed into a distinctly reformist symbol. Lutheran theologians saw the heart as the seat of human emotion, and thus central to understanding scripture. It also demonstrated the insignificance of humanity's pursuit of earthly ambitions compared to the world (Brotton).

Gerard de Jode (1509-1591) was a cartographer and publisher. The 'Speculum Orbis Terrarum' was intended as competition for Abraham Ortelius''Theatrum Orbis Terrarum'. The two, who made their living partly as map-sellers, were competitors and apparently not always on good terms. It has been suggested that Ortelius was responsible for delaying the publication of de Jode's work, by using his extensive contacts to prevent de Jode's atlas being granted the necessary approbations (or privileges), as Ortelius wished to protect his own work. De Jode did not gain all the necessary approbations until 1577, some seven years after the publication of the 'Theatrum', the first copies of the 'Speculum' being sold at Plantin's shop in 1579. Ortelius' cunning plan would seem to have worked, as Plantin's records suggest that very few copies were actually sold. Although sales of de Jode's work were less than ideal, the work was evidently held in high regard, with several contemporary works citing its importance alongside the atlases of Mercator and Ortelius.



3 CIRCULVS ARCTICVS 63 Cuoua Francia Grace. Infule de la Acore La Catholica Sombrero Infu S.Bertholomco Cana S. Oincente. La Guano .a Trinita Infule de de Canoas capoverd ahas marmos V. Visto de Bimo C. Difederal C.S. Croßo. C. Adla Dictoria



On of the most beautiful of Mercator's maps with spectacular "Fuerstenkolorit" colour

31 PTOLEMAEUS, Claudius; Gerard MERCATOR

Universalis Tabula Iuxta Ptolemaeum.

<u>Publication</u> [Cologne, Godefridi Kempensis, 1578].

Description Double-page engraved map with magnificent contemporary hand-colour in full.

Dimensions 410 by 505mm (16.25 by 20 inches).

<u>References</u> Shirley 139. From Mercator's first atlas 'Tabulae geographicae Cl. Ptolomei'. "His general Ptolemaic map is one of the finest available. Engraved by Mercator himself" (Shirley). The twenty-eight maps of his first atlas, are some of the most beautiful that Mercator ever produced, and the world map is no exception, surrounded as it is by an elaborate strapwork border with twelve named wind-heads. The present example is coloured in a style known as "Fuerstenkolorit" - the name given to very few examples coloured by a master colourist and displaying exceptional luminance with cities, sea monsters, and ships painted with the finest brushes and heightened with gold.

Mercator (1512-1593) was born in Rupelmonde in East Flanders. He studied in Louvain under Gemma Frisius, a Dutch astronomer and mathematician, and began his career as a cartographer in that city, where the excellence of his work eventually won him the patronage of Charles V. In order to escape religious persecution, he moved to Duisburg in 1552. There he continued to produce maps, globes and instruments, including his most celebrated work; a world map on eighteen sheets drawn to his new projection (1569). In later life he devoted himself to the preparation of his three-volume collection of maps to which, for the first time, the word "atlas" was applied. The word was chosen, he wrote, "to honor the Titan, Atlas, King of Mauritania, a learned philosopher, mathematician, and astronomer". Mercator's sons and grandsons were all cartographers and made their contributions in various ways to the great atlas. His son Rumold, in particular, was responsible for the complete edition of 1595.

There were seven further editions of Mercator's Ptolemy, with the plates issued up to 1730.





The world in clover

32 BUNTING, Heinrich

Die gantze Welt in ein Kleberblat, Welches ist de Stadt Hannover meines liben Vaterlandes Wapen.

<u>Publication</u> [Magdeburg, Heinrich Bunting, 1581].

Description Hand-coloured wood-engraved map in the form of a three-leafed clover.

Dimensions 270 by 380mm (10.75 by 15 inches).

References Shirley 142. Published in Bunting's 'Itinerarium Sacrae Scriptura', this iconic map shows the world as three principal continents: Europe, Asia and Africa, in the form of a three-leafed clover with Jerusalem at the centre, in homage to the arms of the city of Hanover. Heathen countries, most notably America, lie outside the trefoil. Two other maps in the 'Itinerarium' also present their subject countries in an usual way: Asia as Pegusus, and Europe as a woman.

Pre-empting the discovery of Australia

33 BUNTING, Heinrich

Die eigentliche und warhafftige gestalt der Erden und des Meers -Cosmographia Universalis.

<u>Publication</u> [Magdeburg, Heinrich Bunting, 1581].

<u>Description</u> Wood-engraved map of the world.

<u>Dimensions</u> 300 by 370mm (11.75 by 14.5 inches).

References Shirley 143. Published in Bunting's 'Itinerarium Sacrae Scriptura'. When compared to Bunting's world map on a clover-leaf projection from the same book (see item 32), his 'Die eigentliche...' seems far more realistic, even pre-empting the discovery of Australia by incorporating a landmass lower right that conforms to coastline of Western Australia, as we now understand it, giving rise to "speculation that it reflects knowledge of an early discovery, perhaps by Portuguese navigators. The placement of Africa and India Meridionalis on the same parallel is remarkably accurate... [but] India Meridionalis is better explained as a survival from Ptolemy's 'Geography''' (Granville Allen Mawer for 'Mapping our World: Terra Incognita to Australia', National Library of Australia, page 87).





"One of the supreme examples of the map maker's art"

37 BLAEU, Willem Janszoon

Nova totius terrarum orbis geographica ac hydrographica tabula.

<u>Publication</u> [Amsterdam, 1631, or later].

Description Double-page engraved map, on a Mercator projection, with superb contemporary hand-colour.

Dimensions 485 by 600mm (19 by 23.5 inches).

<u>References</u> Shirley 255. Blaeu's world map was first published separately in 1606 as a reduced version of his large world map of 1605. Its clarity, detail, and striking classical ornamentation makes it "one of the supreme examples of the map maker's art" (Shirley).

The map is shown on Mercator's projection with a massive southern continent attached to New Guinea, with the toponyms "Beach" and "Psittacorum region" taken from Marco Polo's travel memoirs. North America has the westward bulge characteristic of the time, with the "Strait of Anian" noted. Korea is shown as an island and Japan is in a kite-like shape.

The border of vignettes provide information on terrestrial and celestial cycles. The vertical borders contain allegorical representations of the four elements and the four seasons - they are linked by the zodiac symbols in each of the vignettes showing the seasons. The zodiac signs are arranged in their seasonal triplicities, which represent one element giving way to another: for example, the spring triplicity of Aries, Taurus and Gemini represents water becoming fire.

The upper border, as is fitting for its content, shows the "septem planeta", including the sun and moon, as classical deities with their planetary symbols riding in chariots, suggesting their orbit. At the bottom are the seven wonders of the world: the Hanging Gardens of Babylon, the Colossus straddling the harbour at Rhodes, the Pyramids, the Mausoleum of Halicarnassus at Cairo, the Temple of Diana, the Statue of Jupiter and the lighthouse at Alexandria. Two small projections of the poles appear in each corner, there are three decorative cartouches, one concerning the discovery of North America.

The present example is the fourth state: "Terra del Fuego" is shown as an island; "Fretum le Maire" added to the bottom of South America; and the title changed to conclude "auct: Guiljelmo Blaeuw".





Select Bibliography

Bagrow, Leo and Skelton, Robert. History of Cartography. New Brunswick: Transaction Publishing, 2010.

Brotton, Jerry. A History of the World in Twelve Maps. London: Penguin, 2012.

Brotton, Jerry. *Trading Territories: Mapping the Early World.* London: Reaktion Books, 1997.

Brown, Lloyd Arnold. The World Encompassed: An exhibition of the history of maps held at the Baltimore Museum of Art, exh. cat. Baltimore: Trustees of the Walters Art Gallery, 1952.

Burden, Philip. The Mapping of North America: 1511-1670. Rickmansworth: Raleigh, 1996.

Burden, Philip. The Mapping of North America II: 1671-1700. Rickmansworth: Raleigh, 2007.

Campbell, Tony and Destombes, Marcel. The earliest printed maps, 1472-1500. Berkeley: University of California Press, 1998.

Church, E.D. and Cole, George Watson. A catalogue of books relating to the discovery and early history of North and South America forming a part of the library of E. D. Church. New York: Dodd, Mead and Company, 1907.

Destombes, Marcel.

Mappemondes 1200-1500: Catalogue prepare par la Commission des Cartes Anciennes de l'Union Giographique Internationale. Amsterdam: N. Israel, 1964.

Füssel, Stephan. 'Introduction' in Hartmann Schedel, Chronicle of the World, ed. Stephan Füssel. Taschen, 2001.

Goff, Frederick Richmond.

Incunabula in American libraries: a third census of fifteenth-century books recorded in North American collections. New York: Bibliographical Society of America, 1964.

Hain, Ludwig. *Repertorium bibliographicum*. Stuttgart and Paris: J.G. Cotta and Jules Renouard, 1822.

Harrisse, Henry. Bibliotheca Americana Vetustissima: A Description of Works Relating to America Published Between the Years 1492 and 1551. New York: George P. Philes, 1866.

Harrisse, Henry. *The Discovery of North America*. London and Paris: H. Stevens and Son and H. Welter Rochdale, 1892.

Hind, Arthur M. Early Italian Engraving. London: Bernard Quaritch, 1938-1948.

Letocha, Charles and Dreyfus,

John. "Early prints depicting eyeglasses". Archives of Ophthalmology - American Academy of Ophthalmology 120 (2002): 1577-80.

McGuirk Jr., Donald L. "Ruysch World Map: Census and Commentary". *Imago Mundi 41* (1989): 133-141.

Nordenskiöld, A.E. Facsimile-atlas to the Early History of Cartography, translated by J.A. Ekelof and C.R. Markham. New York: Dover Publications, 1973.

Polain, Marie-Louis. Catalogue général des incunables des bibliothèques publiques de France. Paris: A Picard et Fils, 1897.

Sabin, Joseph. A Dictionary of books relating to America. Amsterdam: Israel, 1962.

Schilder, Günter. Monumenta cartographica Neerlandica. Alphen aan den Rijn: Canaletto/Repro-Holland, 2003.

Stevens, Henry. Rare Americana; a catalogue of historical and geographical books, pamphlets & manuscripts relating to America. London and New York: Henry Stevens, Son and Stiles, 1926-8. Suarez, Thomas. Shedding the Veil: Mapping the European Discovery of America and the World. New York: World Scientific, 1984.

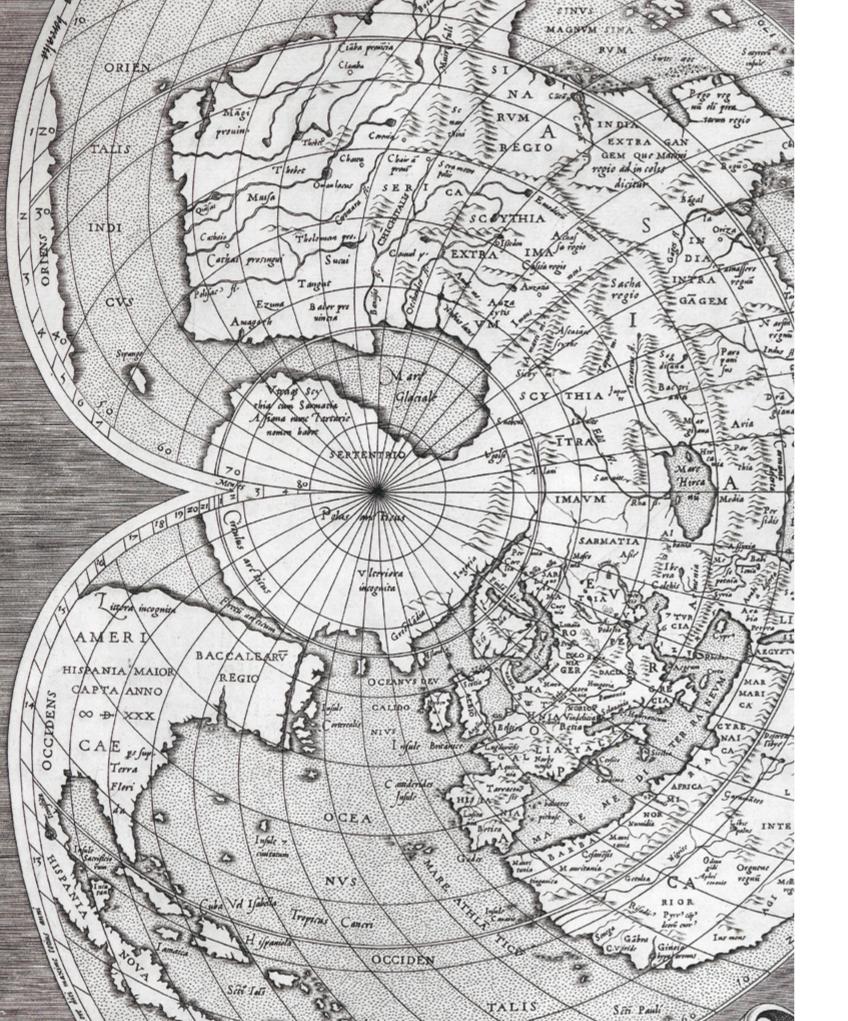
Wagner, Henry Raup.

The cartography of the northwest coast of America to the year 1800. Berkeley: University of California Press, 1937.

Wieder, Frederick Caspar and Kamal, Youssouf. Monumenta Cartographica Africae et Aegypti, 5 vols. The Hague: M. Nijhoff, 1925-33.

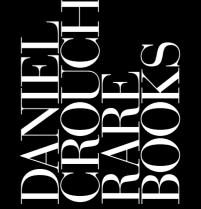
Wilson, Adrian. The Making of the Nuremberg Chronicle. Amsterdam: N. Israel, 1976.

Winsor, Justin. Narrative and critical history of America, 8 vols. Boston and New York: Houghton Mifflin, 1884–89.



Daniel Crouch Rare Books LLP 4 Bury Street, St James's London SW1Y 6AB

+44 (0)20 7042 0240 info@crouchrarebooks.com crouchrarebooks.com



Daniel Crouch Rare Books New York LLC 24 East 64th Street New York NY 10065

+1 (212) 602 1779 info@crouchrarebooks.com crouchrarebooks.com