Appendix - Plates to:

Peter Apianus's "Cosmographia" (1551). Notes on Renaissance Astronomical Book Session at the Marriott Library Special Collections - January 2025

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These plates are author numbered. Page numbering within "Cosmographia" is inconsistent. The plates reproduced here are in the same order as they appear in the source text. Images are used with the permission of Special Collections, J. Willard Marriott Library, The University of Utah.



Plate 1: Cover page of "Cosmographia."

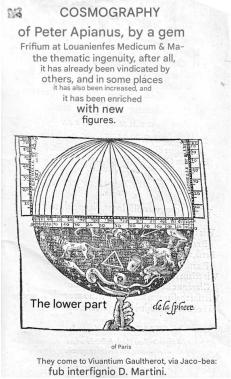


Plate 2: Computer Translation of Cover Page - Latin to English.

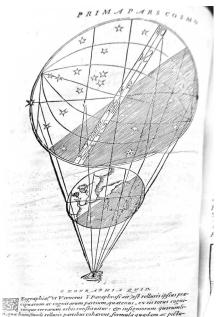


Plate 3: Projection of Earth and the Celestial Sphere.

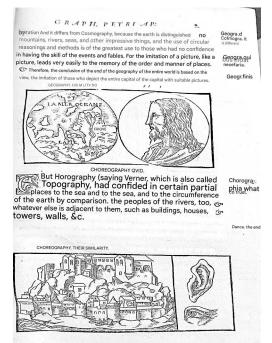


Plate 5: Computer translation of the preceding plate.

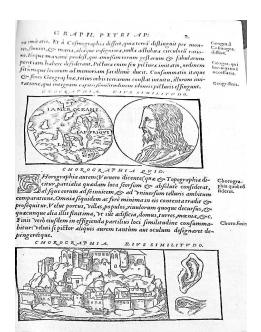


Plate 4: Apianus references Gieogra and topography.



Plate 6: Earth-centered cosmology.

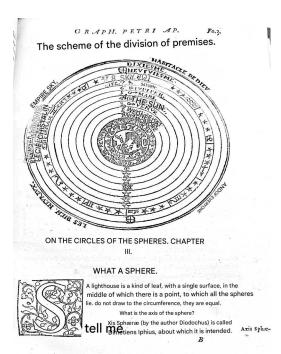


Plate 7: Translation of Earth-centered cosmology plate.



Vndus bifat tarem regio; mentaris q fubiecta,qu Aquam, AEtherea fophi quin elementar inuariabili nens, decen

Quarum major semper proximam minorer Plate 8: Apianus mimicked earlier hand-drawn and colored rubrics in illuminated manuscripts with occasional wood blocks in his printed books.

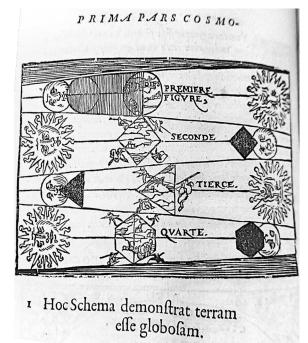


Plate 9: Graphical reasoning that the Earth is circular based on its shadow on the Moon.

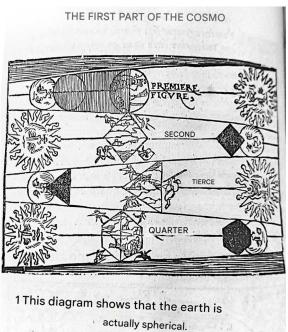


Plate 10: Computer translation of preceding plate.

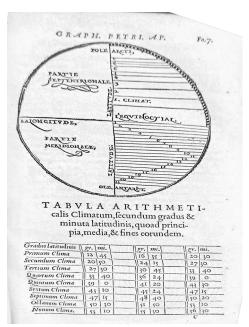


Plate 11: Definition of climate bands with latitudinal data.

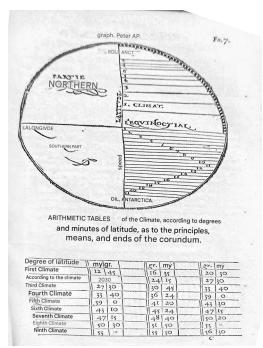


Plate 12: Computer translation of preceding plate.



Plate 13: Armillary sphere with pocket sundial at lower left-hand base.



Plate 14: Moveable paper 3d construction of an astrolabe. What geographic location that this volvelle corresponds to is unclear.

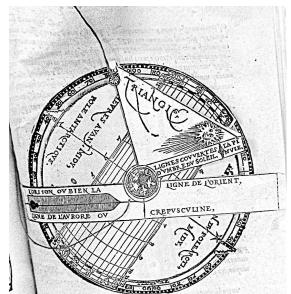


Plate 15: Nautical astroble to determine latitude from use at multiple locations.

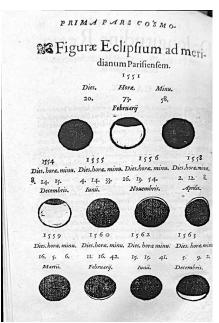


Plate 16: Partial table of predicted eclipses covering 1551 to 1563.

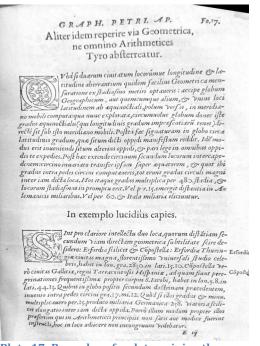


Plate 17: Procedure for determining the distance between two cities. See Plate 20.

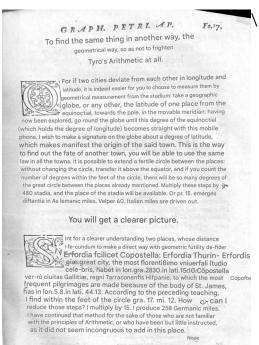


Plate 18: Computer translation of the preceding plate.

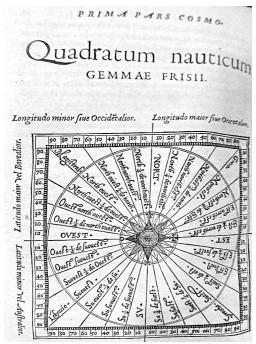


Plate 19: Nautical quadrant of Gemma Frisius for measuring bearings and altitudes at sea with 32 points of a ship's compass rose.

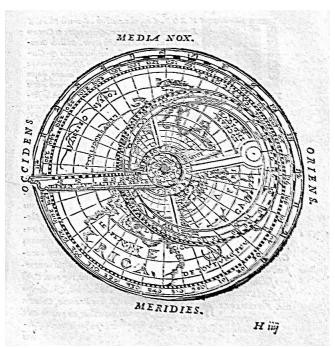


Plate 20: Movable 3D paper astrolabe with a Gemma Frisius world map baseplate. See Plates 17 and 18 on determining geographic distances between two cities.

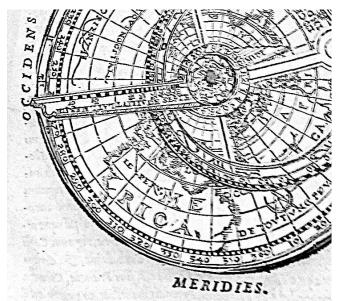


Plate 21: Expanded view of Plate 20.

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Gorlitium, porlitz 32.30 St. O Chemnian V.
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Vratislauia, Piol. Bigordis Slesie Penica metropolu preslau 34-34 51. 10 Cestza, vulgezziaz 2007 Glogania magna, Piol. Lugidunum Dresena, Dresen
Niffa; Vulg.nessfe 35. 0 50.30 Merfeborg
Sagana 32. 8 51.30 se Saxonie ducatur o Ma.
Nissa, vulg.nessse 35. 0 50.30 Mersteburgum vulga Sagana 32. 8 51.30 Susanzaducatus p. 15. Paucinum, bautzen 31.50 51. 0 Vintenberga Prol. Carya
Missa, Meyssen 30.45 51. 5 Halberstadium Prof. Frances Torga, Ptol. Argelia 20.26 51.20 Halberstadium Prof. Frances 20.26 51.20 Halberstad
Torga, Ptol. Argelia 30. 36 51.30 Halberstat
Mons S. Anna. 30.20 50.31 Lunearyum Ptol. Maray
Interioum, Vulgo, Leyptzin, ibi Lunenborg
Claret proceptor meus Volfangus Brunsucum Prol. Tasangar
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ex Boemia promontanis procur-Zangerhusa 29. I3 5L3
vens. 30.20 SI. IO Maleubia, vulgo
Buech 30. 21 51. 7 Essaleuben. 29.20/51.4
Buech 30.21 51. 7 Esfaleuben. 29.20/51.45 Rochlitum, Rochlitz 30. 15/51. 2 50V voftphalia Marchia
Silling 30.32 31. 7 P. G. M. C.
Dobelium, dobeln 30.32 St. 7 Monasterium, Prol. Mediolanium
Mituueida 30.28 51. 3 Vul. Munster, Metropolis V vest- Cholditza, Kolditz, 30.14 51. 8 phatis, ab Anabapristis noualeru- Friburgum 30.39 50.58 salem dicts, qui post long am occu-
Cholanza, Louis Sona Joseph Jes nowaleru-
Friburgum 30.39 50.50 Jalem dicta, que post longam occu-

Plate 22: Excerpt of Tables of Latitudes and Longitudes for Major Germanic Cities. Latitudes are comparable to modern values; longitudes are not based on the Greenwich Prime Meridian. Some easily recognized cities include Bremen, Lubeck, and Colditz.

WARPLE AL TUTTEDINIS Oppidorum aliquot infigniorum. Stiffenia Cinh
Compositifa 44 f
Compositifa 44 f
Common 10 f , f

London 10 f Omflelvedama 92 % Ovoninga 93 % Snollis 92 % (**) Oheldria 91 % Cimbrica Cherfon. fi, Nouergia, Sacuia, Dania 37 Lubecum 94 : Clenha 32 Iuliacii 31 | Brunfuick 33 Aquifgranum 51 | Luneburgum 5 Leodium 50 | Arhufa 77 fe Dauentria 52 | Ropis 66 | Luneburgum 94. Arhufia 97 fere. Salamantice 40 } Cafarengafta 41 Bayfalona 41 } Gallio Cinir. Germanla ma-gna Ciuit. Colonia 31 Lincopia 61 Burligalia 46 Maguntia 50 \\
Argentina 48 \\
Bajilea 47 \\ Coppenhagna 56'-Anglia, Scotta. Medium infula 54'-Nodes 45 2 Amelia 47 -Turonia 47 -Constantia 47 Londonium Vel Erfordia 51 } Londra 52 : Ingolftadium 49 Nurenberga 49 : : Ratis bona 49 : :" Rothomagus 49 Bizantium 47, 1 Etenburgum sco.57 Efaguensis 57 : Lugdunum 45 6 Ratis bona 47. Vlma 47! Augusta 48! Hybernia 571 sadia 60 Vienna 44 Italia Ciuit. Mantua 44 Praga 50 -Segina 44 -Vienna Austria 48 Cremona 44 Venetiæ 44 Ancona 43 Saltzeburgum 48 Tolofa 43 Brabantie, Flan-Iudeburgum 47 Villachum 46 Neapolis 41 drie, Hollan. Brixia 46 1 Antuerpea gr -Florentia 43 Louanium 51 Mediolanum 44 Sarmatia. Mechlinia 51; Dantifcum 55 Genua 43 Mons regius 54 Vracis lauia 51 Bruxella 51 Taurinum 43 Gandanum şi Grecie Bruge 52 -Cales 51 -Craconia 51 Chilia 45. Caschouia 50 Regia 61 Andrianopolis 42 Stridona 44 Renalia 66 Valencines 50 ; 1. itelburg ii 51 ; ; ; ; Tyaieclum infe. 52 ; Nonogaedia 64 Dirachium 44 Constantinopolis 43 Moscouia 59

Plate 23: Excerpt of Table of Latitudes for Various European Locations. Some easily recognized modern cities include London, Venice, Rome, Genoa and Constantinople.



Plate 24: Apian, Peter and Gemma Frisius. 1540. Charta Cosmographica. Frisius's ground breaking map of the globe. South America is labeled "America." Charles V, a patron of Frisius and Apian, appears with double-headed eagle armory of the Holy Roman Emperor as the upper center right character. Apian's nine-part division of temperature climates appears as the left-side legend. The zodiacal constellations appear in the right-hand legend.

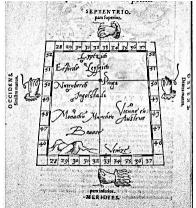


Plate 25: A 2D Cartesian map plot of Central Europe based data in Plate 22. Source: 1564 edition of "Cosmographia."

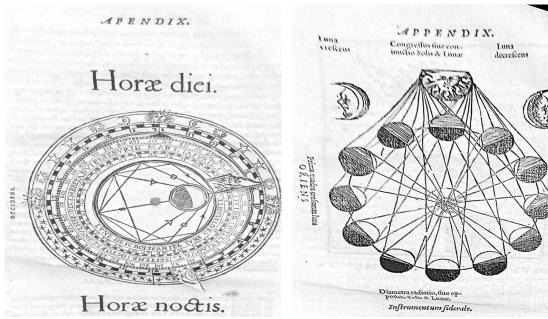


Plate 26: Paper 3D movable analogue dial for Plate 27: Explanation of the phases of the Moon finding the hours of the day (diei) and night (noctis) within an Earth-centric cosmology. with the phases of the Moon.

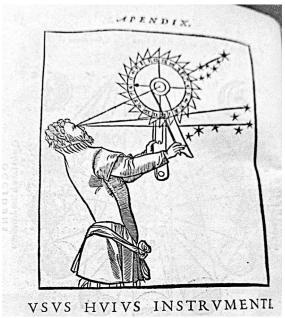


Plate 28: Apianus staff for measuring altitude

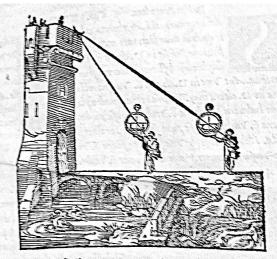


Plate 29: Demonstration of using two altitude (cross) staffs to measure the height and distance to a fortified wall.

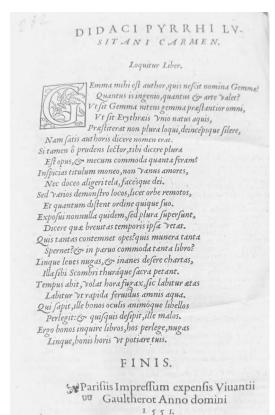


Plate 30: Endpaper of Cosmographia - Apianus's poem.

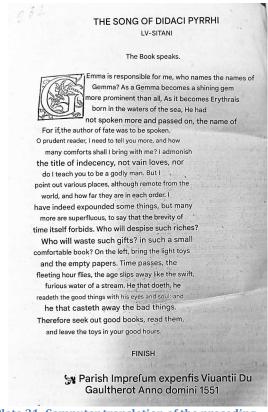


Plate 31: Computer translation of the preceding plate.

Sources:

Apian, Peter and Gemma Frisius. 1540. Charta Cosmographica: Cum Ventorum Propria Natural et Operatione. Print. Special Collections, Marriott Library, University of Utah.

Apian, Peter. 1551. Cosmographia. Paris: D. Martini, 1551. Special Collections, Marriott Library, University of Utah. Print and Microfiche.

Apian, Peter. 1564. Cosmographia. Paris: D. Martini. Web. The Internet Archive. https://archive.org/details/cosmographiaapia00apia/page/n3/mode/2up

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