

TITLE: *Wieder-Woldan Map*

DATE: 1485

AUTHOR: *unknown*

DESCRIPTION: Printed medieval world maps (*map-incunabula*) can be arranged in three types: (1) schematic copies of maps in manuscripts of the early Middle Ages, the so-called wheel-maps, T-O maps and zonal maps from 1472 (*Book II*, #201 and #205); (2) maps made after the pattern of the so-called monastic maps (in *Rudimentum Novitiorum* (#253) and *Mer des Histoires*, by Rüst and Sporer, from 1475 (#253.2); and (3) copies of Ptolemy's world map, with or without minor corrections in the north of Europe from 1477. None of these types seem to be influenced by the advances in geographical knowledge which set in from the beginning of the 15th century, "the age of discoveries", particularly in regard to knowledge of West Africa, and which are recorded in many manuscript medieval maps; there is thus no group of printed maps based on Spanish, Portuguese, or Italian *portolans*, notwithstanding their proximity in time. The reason for this may be sought in the fact that such *portolan* [nautical] charts were kept secret by the rival powers in the interests of colonial policy. Only one map-incunabulum, however, cannot be included in any of these three above-mentioned groups: an anonymous and undated circular world map engraved on copper, certainly in Italy and at Venice, and to be ascribed to approximately 1485.

The map that is the subject of this monograph (bearing neither title, indication of author, place of execution, or date) is engraved on a circular copper-plate (of a diameter of about 17.5 cm), and measures 17 cm (N-S) by 17.3 cm (W-E). The paper is a fairly thick "incunable" paper with very thin longitudinal lines traced at rather more than one millimeter distance and thicker transverse lines at a distance of about 33 mm, without watermark.

The map-picture presents the eastern hemisphere of the world as it was then known in Europe, in our present-day conception (i.e., North at the top). Its basis is the representation of Ptolemy's world map, although the author does not slavishly adhere to it. Rather he has in mind the medieval Christian belief in an earthly *Paradise* with four rivers flowing from it; but he takes special account of advances in knowledge of the three parts of the world made since Ptolemy. There is no division into degrees or zones. The nomenclature is given in the Latin language, as used in the age of the Roman Empire, and is executed in Roman type, such as the two *Mauritanias* in Africa and the land of the *Colchi* east of the Black Sea (*Pontus Euxinus*). In the northwest, however, the mapmaker has added a Scandinavian peninsula labeled *Norbegia*, *Suetia quae est Gottia*, *Helandia*. Further north, another peninsula is named *Engrovelant*, an error for *Engronelant*, or probably Greenland. Thus, the map is an amalgam of Ptolemy, the sea chart, and a traditional *mappamundi*, reflecting, as Tony Campbell says, "the cartographic bewilderment of the late fifteenth century."

The Mediterranean, Black Sea, and Atlantic coasts show the influence of the sea charts, as does the northern orientation of the map. An interesting feature is that the Caspian Sea is shown for the first time in its correct north-south orientation. The other characteristics of the map are resolutely traditional. From *Paradise* in the Far East stream the four rivers, the Nile following a southern course through an eastward extension of the African continent, to flow through its delta into the Mediterranean. The river is joined by tributaries, which flow, Ptolemy-style, from mountains in central Africa.

The continents, with the islands pertaining to them, almost reach the edges of the map, so that the ocean, as in most of the medieval manuscript maps, is limited to a narrow circle; there is however a large patch of ocean, but without any name, in the Gulf of Guinea.

The ocean is represented by means of numerous lines parallel to the edge of the map, while the inland seas, among which even the Indian Ocean is found, are represented by horizontal, straight (W-E) and dense lines, so that the darker water surfaces stand out clearly on the lighter surface of the land. The contours of the mainland and islands are, besides, stressed by narrow shading.

Rivers are marked by plain lines corresponding to their actual or presumed course; often they flow from mountains, sometimes across them, which is in itself no absurdity though the representation of valleys is lacking. Mountains are represented by conventional signs in perspective, of different length and height, and are mostly drawn as rows of mountains stretching from west to east (they are left white in one copy, but in another they are colored); only the Appenines, Alps, Karst and Balkans are characterized, in conformity with their crooked outline, by a connected chain of mountains. The few towns indicated in the map are represented by towered buildings of different sizes.

Legends are confined to the most important indications, so that the map-picture is not overcrowded with an excessive number of names and legends, as was customary in most medieval maps. From an orthographic point of view, the names are unusually correct; the Latin 'æ' is mostly transcribed, as was then customary in Italy, by 'e'. The cardinal points are indicated in the ocean in their respective places by *Septentrio*, *Oriens*, *Auster* and *Occidens*.

Places in **Europe** that are indicated (in larger type) include the following:

- a) on the Continent: *Ispania Taraconensis*, *Lusitania Isp.*, *Betica Isp.* - *Gallia Lugdunensis* [indicated in its correct place and not, as Destombes says, in the wrong one, for the Roman province comprised also Brittany and Normandy beside other parts of France] - *Gallia Belgica*. - *Germania Magna*, *Retia*, *Vindelitia*. *Italia*, *Venetie*, *Roma* [as a town] - *Dalmatia*, *Macedonia*, *Pelopone[sus]* - *Tanais Fl.*, *Sarmatia Europae*, *Datia*, *Danubius Fl.*, *Tracia* - *Norwegia*, *Suetia q[uae] est Gottia*, *Helandia* [*Halandia*], *Engrovelant*, *Gottia Orientalis*;
- b) Seas and Islands: *Germanicus Oceanus*, *Sarmaticum*, *Egeum Mare*, *Pontus Euxinus* [Black Sea] - *Gotcia* [Gotland], *Albion* [Scotland], *Britanica* [England], *Ibernia*, *Baleares Insule*, *Corsica*, *Sardinia*, *Sicilia*, *Creta*.

Places in **Africa** (in larger type) include the following::

- a) on the Continent: *Mauritania Tingitana*, *Mauritania Cesarensis* [indicated in its correct place and not, as Destombes says, in the wrong one, Algeria of today], *Africa* [as a Roman Province - Tunis of today], *Cartago* [as a town], *Marmarica*, *Egyptus*, *Alexandria* and *Thebe* [as towns], *Getusia* [Getulia], *Libya Interior*, *Aethiopia*, *Nilus Fl.* [named three times at the length of its course], *Meroe Insula*, *Trogloditica Regio*;
- b) Seas and Islands: *Sircis* [Little Syrte], *Sirtis Magna*, *Rubrum Mare*, *Indicum Mare*; *Fortunate Insule*.

Places in **Asia** (in larger type) include the following::

- a) on the continent: *Hyperborei M.*, *Rha Fl.*, *Sarmatia Asiae*, *Iberia*, *Colchias*, *Albania*, *Ilircanum Mare*, *Sogdiana*, *Margiana*, *Hircania*, *Pontus*, *Asia* [as a Roman Province in western Asia Minor], *Licia*, *Paphlilia*, *Cilicia*, *Capadocia* [the name is divided in four parts], *Armenia*, *Armenia Maior*, *Syria*, *Juda*, *Hierusalem* [as a town], *Arabia Petrea*, *Arabia Felix*, *Arabia Deserta*, *Assiria*, *Babylonia*, *Susiana*, *Persia*, *Media*, *Aria*, *Carmania*, *India* [named twice], *Fison Fl.*, *Eufrates Fl.*, *Tigris Fl.*, *Paradisus*;
- b) Seas and Islands: *Persicum Mare*; *Cyprus*, *Taprobana Insula*.

Moreover, many mountains and waters are represented without any names, e.g. in Europe: the Rhine with two branches at its mouth, four branches of the Danube at its mouth, mountains along the length of Scandinavia, imaginary mountains in Central Russia (giving birth to the Don); in Asia: the correct upper course of the Euphrates, an imaginary river taking its sources in the *Elbrooz* and flowing in the direction of the Euphrates, mountains in India and two mountains in easternmost Asia, from the northernmost of which the Oxus flows to the Caspian Sea and another river runs southwards and reaches the *Fison* [Ganges]; the *Lake of Paradise* gives birth to four rivers of *Paradise*; in Africa: the mountains south of the present-day Tunis, from which a river takes its sources and flows to the Mediterranean, southeast of these some other mountains connected with the former by the river *Gir*; in central Africa *Lunae Montes* [Mountains of the Moon] with the sources of the Nile, three of which are quickly united, mountains in eastern Africa (*Garbato Mons?*) with one more source of the Nile, and three mountains in the southern, elongated toward Asia, part of Africa, from the western-most of which run two sources of the Nile which soon unite, while from the central mountain, through which runs the upper course of the main branch of the Nile, a river flows southward to the Ocean.

Regarding the outline of the coasts, a considerable improvement can be observed in respect of Europe in comparison with printed Ptolemaic maps of the 15th century, particularly in regard to the position of Italy which is altered to a more northwesterly and southeasterly direction, instead of the usual excessive west-easterly direction, and also in regard to the better representation of the British Isles, in particular, the omission of the northern part of the main island lying in a west-easterly direction at a right angle to England. Also Scandinavia, which was usually lacking or, as in the *Ulm* edition of Ptolemy (#119, *Book I*) in a special map of the northern countries, was represented as an island, appears here for the first time on a printed map in the shape of a natural peninsula. The representation of Greenland, depicted as a peninsula of the Eurasian continent bearing the name of *Engrovelant* (bearing for the first time a name on a printed map) almost conforms to that in the above cited special map of the North. It is, probably a mutilation of the name due to the copyist's error, a frequent occurrence in the 15th century. In Asia, as mentioned above we are surprised at the correct representation of the Caspian Sea, unlike that in all other manuscript maps. Even in *Fra Mauro's* map of 1450 (#249) only the shape, but not the orientation, of this sea is true to reality. The inclusion of an earthly *Paradise* at the easternmost limit of the explored world and the four rivers taking their sources there conform to the medieval Christian conception of the world and is encountered in nearly all manuscript maps from Cosmas Indicopleustes (sixth century, #202) to Andrea Bianco (1436, #241), as well as in map-incunabula of the monastic type. The representation of the south coast of Asia differs considerably from that in most contemporary medieval maps, especially in Ptolemaic maps; in this respect the author approaches the Arab Idrisi's conception (*Book II*, #219), that of the 1450 *Catalan-Estense* world map (#246), and that of *Fra Mauro's* map (#249), for he represents only the smaller Indian peninsulas and not the big Ptolemaic *Aurea Chersonesus*.



Wieder-Woldan Map map, 1485, 17.5 cm diameter

An obvious and retrograde feature of the map, when compared to earlier maps, is that no consideration is given to the discoveries made in East Asia by medieval Italian explorers. In the representation of Africa the author was evidently guided by two leading principles: on the one hand, adherence to Ptolemy's viewpoint as regards the land connection of South Africa and East Asia, and on the other hand, consideration of the recent discoveries made by the Portuguese on the west coast of Africa, which, however, in no way contradicts Ptolemy's conception. The effort to compare separate bays and points of the West African coast on the map with the actual ones in order to find out how much of the Portuguese discoveries were known to our author would be in vain. The general impression can be gathered, however, that the navigation round the Bay of Biafra (1475: *Cabo de Catarina* 22 degrees south latitude was reached by Ruy Sequeira) was the last achievement in the exploration of the west coast of Africa recorded by the map. Later

discoveries, made by Diogo Cão (1482-85) as far as Cape Cross (approximately 22 degrees south latitude) were certainly unknown to the author of the map. Regarding the sources of the Nile, the author tries to connect Ptolemy's point of view with the medieval one based on a certain interpretation of the Bible (the four rivers of *Paradise*: the *Pison* [*Fison* = Ganges] the *Gihon* [Nile], the *Hiddekce* [Tigris] and the Euphrates), and shows one of them, flowing from the *Lake of Paradise*, running through the whole length of Africa and uniting the other sources coming from the mountains only in the middle of the continent.

Italy can with some certainty be considered to be the land of this map's provenance. Copper-engraved maps were not produced in any other country in the Middle Ages and, besides, at that time Italy was the only country where cartographic style had, under the influence of the Renaissance, developed such clear and classical lines and rejected all Gothic ornaments, as shown in this circular world map. Considering that, on the small space which the map has available for legends, *Venetie* is the only province in Italy bearing a name, it can be assumed with most probability that Venice was the place of its production, especially as this town simultaneously presented the world with another outstanding set of printed maps, i.e., the *Isolario* of Bartolomeo dalli Sonetti, not to mention Fra Mauro's large hand-illuminated world map produced at an earlier date (#249). As the map has neither title nor legends, it can be presumed that it was designed as an appendix to a printed book of average format, e.g., an edition of Ptolemy, Solinus, or the like. Its maker, in contrast to his contemporaries Hanns Rüst and Hanns Sporer (#253), must have been not only a highly educated humanist, but even a person of independent opinions, who, notwithstanding his belief in the tradition of the Bible and his veneration of Ptolemy's authority, was receptive to the progress in knowledge of the late Middle Ages. He had naturally made use of all the data available to him from verbal, literary and cartographic sources, access to which was probably attended with great difficulty considering that many of the maps (*portolans*) extant in those days, particularly manuscript, were kept secret. However, he wholly suppressed those representations which contradicted his Christian conception of the world, e.g., Marco Polo's revelations (especially in respect of the eastward course of the rivers in eastern Asia, as this was incompatible with the Biblical rivers flowing from *Paradise* south and westward). The author did not share the view of some of the medieval cartographers, as known to us, that Africa was separated from Asia by a more or less wide and open ocean, because he probably regarded Ptolemy as more trustworthy than Herodotus or Idrisi; for the rest, the difference between his representation of Africa and that of Idrisi and his adherents, regarding the southern extremity of Africa protruding far out to the east and the chain of islands adjacent to it stretching out in the direction of southeastern Asia, is not so great.

From the latest data recorded on the map, in particular the representation of Guinea, bearing in mind that a certain interval in time had to elapse between the date of a discovery and its recording on a map, and from the technique of the copper-engraving and quality of the paper, the date of the appearance of the map can be fixed at the middle eighties of the 15th century.

Summarizing, it can be said that this map, in spite of many discrepancies, represents an important milestone in the history of cartography. It is the first (and perhaps the only 15th century) printed world map showing a part of the New World (Greenland), though somewhat incorrectly drawn, and the discoveries of the Portuguese on the west coast of Africa. Deviating from the ordinary type of map with the hardly understandable Ptolemaic projection and from the Gothic map of the monastic type overcrowded with ornaments,

this map gives us, on a small scale, an idea of the outline of the world, as it presented itself in the last phase of the Middle Ages.

A work based on a critical and subtle combination of the available source-materials, and not on the copies of antique and medieval maps customary in those days, ought to be appreciated as a real achievement in geographic science. It adds a new leaf to the wreath of fame crowning the Italian art of cartography.

Two examples survive of this map printed from a copper plate, the so-called *Copper Map*. The map is unsigned, though most researchers have guessed that its origin is Venice, since that was the only place where copper-plate printing was being done at the time. It is also untitled and removed from its context, so we do not know what its purpose was.

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Size: 17.5 cm diameter

REFERENCES:

*Safi, A., *Mapping Paradise*, p. 215, Figure 8.11

*Shirley, R.W., *The Mapping of the World*, pp. 13-14, Plate 22.

*Woldan, E., "A circular, copper-engraved, medieval world map", *Imago Mundi*, 1954.

