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A Cryptogram in the Compass Roses of the Majorcan *Portolan* Charts from the Messina-Naples Mapmakers School

Key words: Majorcan portolans, compass roses, "T(fleur-de-lis)MPLOS+" inscription, cryptogram, compass, mapmakers

Resumen:

El contenido del presente artículo es relativo al hallazgo de la inscripción "T(flor-de-lis)MPLOS+" en las rosas de los vientos de algunos portolanos, principalmente de los siglos XVI y XVII, procedentes de cartógrafos como Bartolommeo dalli Sonetti, Albino de Canepa, Jacopo Russo, Battista Agnese, Mateus Prunes, Diogo Homem, Joan Martínes, Bartolomeu Olives y Juan Oliva. La primera referencia a esta inscripción se encuentra en el Atlas Catalán (1375) en torno a la última circunferencia de la carta de mareas, en la hoja relativa a los diagramas astronómico y cosmográfico, junto al hombre zodiacal. La última referencia a ella está presente en una brújula fabricada en Livorno en 1719. El conjunto de letras considerado (TMPLOS) constituye bien un acrónimo o un criptograma. En el primer caso, es posible atribuir las letras T, M, P, L, O y S a los vientos *Tramontana* (N), *Maestro* (NW), *Ponente* (W), *Libeccio* (SW), *Ostro* (S) y *Sirocco* (SE). En el segundo caso, si se acepta como buena la asignación de la letra E a la flor de lis y se procede a una lectura en sentido contrario a las agujas del reloj (como realmente aparece en las rosas de los vientos), es posible reconstruir la palabra TEMPLOS (un término hispano-portugués) sin ambigüedad alguna. No obstante, el carácter rotario de la disposición de las letras ofrece varias interpretaciones que evocan a la Orden de los caballeros Templarios. Así, LOSTEMP pudiera significar *L(aus) O(rdo) S(upremus) TEMP(li)*.

Abstract:

We report the finding of the "T(fleur-de-lis)MPLOS+" inscription in the compass roses from some *portolans*, mainly of XV and XVI centuries, from map-makers as Bartolommeo dalli Sonetti, Albino de Canepa, Jacopo Russo, Battista Agnese, Mateus Prunes, Diogo Homem, Joan Martínes, Bartolomeu Olives and Juan Oliva. The first reference to this inscription on nautical maps

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appears in the Catalan Atlas (1375) surrounding the last circumference of the tide chart, in the sheet related to the astronomic-cosmographic patterns, together with the zodiacal man. The last reference to it is in a compass built in Livorno in 1719. The set of letters considered (TMPLOS) constitutes either an acronym or a cryptogram. In the first case, it is possible to attribute the letters T, M, P, L, O and S to the winds *Tramontana* (N), *Maestro* (NW), *Ponente* (W), *Libeccio* (SW), *Ostro* (S) and *Sirocco* (SE). In the second interpretation, if our assignment of the letter E to the fleur-de-lis is accepted and the other letters are read counter-clockwise (as they really appear in the compass roses), it is possible to reconstruct the word TEMPLOS (a Spanish-Portuguese term that means Shrines) without ambiguity. Nevertheless, the rotary character of the letter disposal offers various interpretations that evoke the Knights Templar Order. So, LOSTEMP could mean *L(aus) O(rdo) S(upremus) TEMP(li)*.

Zusammenfassung

Wir berichten über die Entdeckung der Inschrift "T(Lilie)MPLOS+" in den Kompassrosen einiger Portolane, hauptsächlich des 15. und 16. Jhs., von Kartenzeichnern wie Bartolommeo dalli Sonetti, Albino de Canepa, Jacopo Russo, Battista Agnese, Mateus Prunes, Diogo Homem, Joan Martínez, Bartolomeu Olives und Juan Oliva. Der erste Nachweis für diese Inschrift auf nautischen Karten erscheint im Katalanischen Atlas von 1375, wo sie im Umfeld der Gezeitentabelle auftaucht; auf dem Blatt, welches den astronomisch-kosmographischen Mustern gewidmet ist, zusammen mit dem "Tierkreis-Mann". Der letzte Nachweis befindet sich in einem Kompass von 1719, gebaut in Livorno. Die Zeichenfolge T, M, P, L, O, S stellt entweder ein Akronym dar oder ein Kryptogramm. Im ersten Fall ist es möglich die Buchstaben den Winden *Tramontana* (N), *Maestro* (NW), *Ponente* (W), *Libeccio* (SW), *Ostro* (S) und *Sirocco* (SE) zuzuordnen. Die zweite Interpretation erlaubt es, das Wort *Templos* (span.-port. "Gotteshäuser") ohne Zweideutigkeit zu lesen, wenn unsere Zuweisung von E zur Lilie akzeptabel ist und wenn die restlichen Zeichen dem Uhrzeigersinn entgegen gelesen werden, wie sie tatsächlich in der Kompassrose erscheinen. Nichtsdestoweniger bietet die rotierende Anordnung der Buchstaben verschiedene Interpretationen, die zum Ritterorden der Templer führen. So könnte LOSTEMP *L(aus) O(rdo) S(upremus) TEMP(li)* bedeuten.

This article concerns the finding and interpretation of the "T(fleur-de-lis)MPLOS+" inscription in the compass roses from some *portolans* of XV and XVI centuries.

Portulano is an Italian term to indicate "nautical description". It is equivalent to the Greek *periplus* (a harbour-book of sailing directions) but including a map showing the coast line and a few places along it. These *portolans* came into use in the XIII-XVII centuries and were made in Majorca, Catalonia and Sicily. Their existence was referred in "*Phoenix of the marvels of the Orb*" by

Raymond Lull in 1286. An order of Pedro III in 1352 made them obligatory in the Catalan-Aragonese ships. They were made in parchment and protected by wood covers. Their most singular element was the compass rose, usually surrounded by another sixteen secondary roses, with straight lines representing the courses. The first compass rose figured on a *portolan* appeared in the Catalan Atlas of 1375 (Fig. 1).

Two common elements in the compass roses are signalling North by a fleur-de-lis or an arrow head, and East by the cross of the Order of Christ. However, only a limited number of compass cards, all belonging to end of the XV c., included letters or additional signs. The analysis of such motives shows the presence of a kind of C, G or T interlaced between the fleur-de-lis and the cross; to the left of the fleur-de-lis, a sign in the form of crab, scissors or letter M; the letter P traced with confusing features and, successively, the letters L, O and S (Fig. 2).

In our opinion, the Spanish denomination "*rosas de los vientos*" to designate these *portolan* course roses came from an unusual rose of 8 winds that we found in the Historical Miscellaneous Codex (XIIc.), a deformation of the Vigiliano. From their initial precedent in the VII c. (a codex of the Capitular Library of the Verona Cathedral and in the St. Isidore's treaty "*Of Nature Rerum*"), wind charts have traditionally consisted of 12 winds and not 8. The oldest and largest "wind rose" is engraved on the market place flagstone paving of the roman town of Thugga, in Tunis. It dates from the beginning of III c. and contains the name of 11 winds.

In this context, it is evident that the set of letters considered (TMPLOS) constitutes either an acronym or a cryptogram. In the first case, it is possible to attribute the letters T, M, P, L, O and S to the winds *Tramontana* (N), *Maestro* (NW), *Ponente* (W), *Libeccio* (SW), *Ostro* (S) and *Sirocco* (SE). The letter G (alternative to T) and the + sign should correspond, respectively, to the winds *Grecco* (NE) and *Levante* (the East, where Christ was born), thus completing the attribution.

In the second interpretation, if our assignment of the letter E to the fleur-de-lis is accepted and the other letters are read counter-clockwise, it is possible to reconstruct the word TEMPLOS (a Spanish-Portuguese term that means Shrines) without ambiguity. Nevertheless, the rotary character of the letter disposal offers various interpretations that evoke the Knights Templar Order. So, LOSTEMP could mean *L(aus) O(rdo) S(upremus) TEMP(li)*.

The first compass rose with the TEMPLOS registration appears in a *portolan* from Bartolomeo dalli Sonetti, 1485 (Fig. 3). This is followed by the ones in maps from Albino de Canepa (1489), Jacopo Russo (1528), Battista Agnese

(1544) and Mateus Prunes (1559). The others were in two *portolans* from 1561 and 1566 attributed to Diogo Homem, a Portuguese cartographer who serviced foreign countries, and in the charts and atlas (Fig 4) made by the Majorcan family Olives (and members of its school) located in Messina and Naples (Table 1).

It is remarkable that in the latest compass roses some mistakes appear. So, in the one from Bartholomew Crescentio (1596) the primitive sign of the T is confused with a G and a spurious T is intruded in place of the E. This same mistake appears in all the geographical charts from Ignazio Danti (1536-1586) in the Vatican Museums (Geographical Map Gallery). We consider that these are simply incorrect transcriptions. The main mistake, using a G instead of a T, remained along the XVII and XVIII c. as it is shown either in the chart from Pietro Cavallini, in a compass built in Livorno in 1719 and other found in Marseille (Fig. 5).

As mentioned above, the TEMPLOS term concerns the Knights Templar Order and their Portuguese heir, the Order of Christ. Actually, the maritime expansion of Portugal emerges with the foundation of the Academy of Sagres by Henri the Navigator (great master of the Order of Christ) after the acceptance in 1307, in the port of Serra d'El Rei, of the Templar fleets and their cartographic legacy (De Mahieu). The idea of associating this hypothetical legacy to the utilization of the TEMPLOS caption by Diogo Homem is somewhat risky, but still tempting. The principal fact supporting such association is the training received by Diego Homem under his father's, Lopo Homem Reineis, tutelage and especially of his father's associates, Pedro and Jorge Reinel. They all were mystical-visionary cartographers in the service of Manuel of Portugal and with Templar-francophile affections. It cannot be by chance that the most important of the maps of Pedro Reinel (that of 1485, gift of Manuel I to Francisco I) appeared, in the 1960s, in the Gironde district (where the Atlantic Templar fleet was stationed).

Several objections to the previous hypothesis may be given: that in the *portolans* of the XIVc the TEMPLOS registration doesn't appear in compass roses, thereby apparently breaking the Templar continuity from the XIII c.; that the TEMPLOS term isn't either not French or Italian; and that the Diogo Homem's connection with the trade school of the Olives isn't known, nor the reason which caused them to adopt such legend.

Firstly, it is accurate to itemize that, though the *portolan* compass roses of the end of the Middle Age don't contain the cryptogram TEMPLOS, this later appears in other elements of the charts. For example, in the Catalan Atlas (1375), we found it surrounding the last circumference of the tide chart (Fig.

6), in the sheet related to the astronomic-cosmographic patterns, together with the zodiacal man. On the other hand, we think that the registration in other *portolans* could be supplied by over-sized church drawings (as those of Paris, Lisbon and Ceuta shown in the *cartulano* from the Pombo Tower of Lisbon). We also believe that Jafuda Cresques (Abraham Cresques brother's), cofounder of the Academy of Sagres, could have been responsible of giving continuity to the mentioned tradition.

In relationship to the second objection, we think that the French TEMPLE was substituted by the Spanish-Portuguese TEMPLOS by reasons of political opportunity. We know that Jorge Reinel wrote in Spanish. He was still very young when he went to Seville in 1519 where he made charts and instructed young men in cartography; among these were the Portuguese Diogo Ribeiro (who was active in Castile between 1520 and 1535) and possibly the Italians Russo and Agnese.

However, the third objection is important, since we don't know Diogo Homen's link with the Olives and the reason for adopting the TEMPLOS legend as a familiar identity element.

Things would be easier if we could show than the Homem and the Olives were, as we believe, all Jews and that the founder of the Olives dynasty, Bartolomeu Olives, was Portuguese. The reality is that the known cartographic production of Bartolomeu starts in Majorca in 1538 and continues in Messina until 1558. Contemporary of Bartolomeu and with an entirely Majorcan name was Jaume Olives. His production extended from 1550 to 1566 with charts successively documented in Majorca, Messina, Naples and Marseille.

The Templar roses representation in *portolans* of Majorcan tradition with Italian influences continues outstanding during the XVI and XVIIc, always under the hand of members of the family Olives or its disciples. Between them can be cited Francisco Oliva, 1562-1615; Domingo Olives, with a chart in Naples of 1568; Joan Riczo Oliva, 1580-1593; Juan Oliva, 1598-1650; and finally, Juan-Bautista Caloiro Oliva (1673). Within this traditional family there were also isolated cartographers, such as Joan Martínez, cosmographer of Philip II. He was son of convert Majorcan Jews and resident of Messina and Naples. His work extended from 1556 to 1596. In addition to various *portolan* charts on the Mediterranean Sea, 33 atlases in which America appears have been attributed to him. A careful examination of his 1578 map of the West Hemisphere leads to a recognition of the seven cities of Cibola, represented in the purer style of the first *portolans*.

Both features the presence of TEMPLOS cryptogram and the absurd persistence of adopting mythical elements (Fig. 7) in the maps onward XVI c.

are hard to explain. We fear that the motive of the incorporation of the cryptogram TEMPLOS in the roses of the last *portolans* may have been simply that of acquiring credit through the Templar secrecy, as the Masonry did years afterwards. At any rate, neither these supposed resources nor the beauty of the *miniados* permitted further delay in the force of the *portolans* within an era in which the Promise-Land hadn't only been discovered but was being exploited. The new navigators were demanding accuracy and progress in the charts, not baroque style and mystery.

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Caption of Figures:

Figure 1: Catalan Atlas. Compass rose.

Figure 2: Compass rose. Cryptogram TEMPLOS

Figure 3: Compass roses by B. Sonetti, A. Canepa, J. Russo & B. Agnese

Figure 4: Compass roses by M. Prunes, D. Homem, J. Martínez & B. Olives

Figure 5: Compass roses by B. Crescentio & P. Cavallini and compass from Livorno and Marsella (XVIIIc)

Figure 6: Catalan Atlas. Tide Chart. Cryptogram TEMPLOS in the last circumference.

Figure 7: Persistence of mythical elements in maps: St. Borondon island in the chart known as "*Plan de las afortunadas yslas del reino de Canarias*". Anonymous. ca. 1765.

It is remarkable the presence, left of Hierro island, of the *Tramontana-Metzodi* line of the portolan of Abraham Cresques, which defines, almost surely, the first meridian.

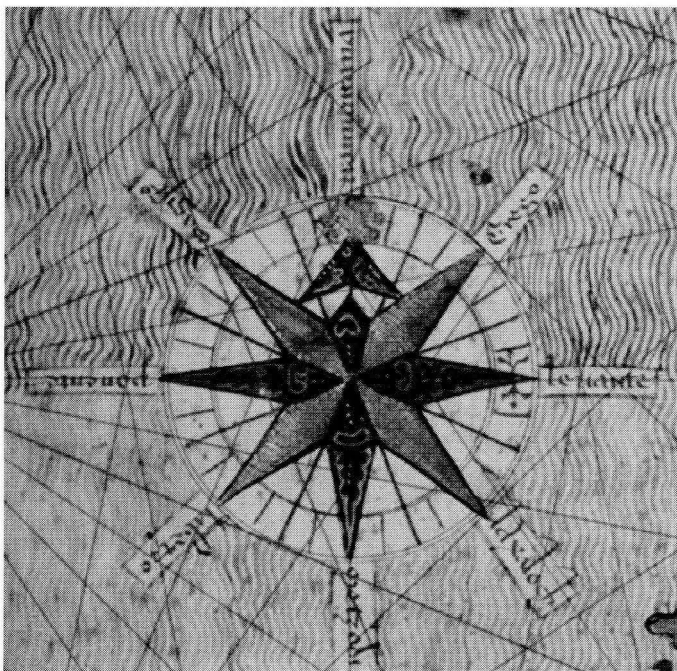


Fig.1

Table 1. <i>Portolan</i> -charts drawn in the XV th and XVI th centuries which include compass roses with the cryptogram TEMPLOS ¹ .	
Bartolommeo dalli Sonetti, 1485 (Bartolommeo Zamberti)	James Ford Bell Library, University of Minnesota
Albino de Canepa, 1489	James Ford Bell Library, University of Minnesota
Jacopo Russo, 1528	See Kathleen Cohen in: http://gallery.sjsu.edu/cartography/maps/maps
Battista Agnese <i>Portolan of The Atlantic Ocean</i> , 1544	U.S. Congress Library (Vellum Chart Collection), Washington
Jacopo Russo, 1549 (<i>referred</i>)	Consiglio Regione Sardegna Library
Mateus Prunes <i>Portolan Chart of Mediterranean World</i> , 1559	U.S. Library of Congress, Washington
Diogo Homem <i>Atlas</i> , 1561	Madrid Naval Museum
Diogo Homem <i>Portolan Chart</i> , 1566	General Library, Coimbra University
Joan Martínes <i>Atlas</i> , 1567	N. L. ²
Diogo Homem <i>World Atlas</i> , 1558/1568	British Library, London
Joan Martínes <i>Atlas</i> , 1570	Madrid Naval Museum (L. Jiménez-Lorente coll.)
Joan Martínes <i>Atlas</i> , 1577	The House of Alba (Casa de Alba), Spain
Joan Martínes <i>Portolan Atlas</i> , 1578	Huntington Library, San Marino, California (HM 33)
Juan Riczo Oliva <i>Portolan Atlas</i> , 1580	Royal Palace Library , Madrid ³
Bartolomeo Olives, <i>Portolan Atlas</i> , after 1580	Huntington Library, San Marino, California (HM32)
Bartolomeu Olives i Prunes <i>Portolan Chart of Mediterranean Region</i> , 1583	Osher Collection ⁴ .
Joan Martínes <i>Portolan Atlas</i> , 1587	National Library, Madrid
Juan (Riczo) Oliva <i>Atlas</i> , 1591	Spanish Geographic Army Service (Servicio Geográfico del Ejército), Madrid
Bartholom Crescentio <i>Chart</i> , 1596	Museo Correr Library. Venezia
Pietro Cavallini, <i>Portolan Atlas</i> , 1677	Huntington Library, San Marino, California (HM 38)

Notes:

- ¹ Also, we have found a compass rose in a map of Tuscani from Stefano Buonsignori (1589) painted on the wall of the called 16-room of maps, in the Uffizi Gallery in Florence.
- ² According to the historians of the Naval Museum in Madrid, the oldest Joan Martines' map is the one kept in this museum. The 1567 map may be wrongly dated or could correspond the one that Guillem and Tato described in 1954 as Benjamin Ventura's property. According to the people in charge of the Library of Congress in Washington, the oldest is the one in their power, dated in Messina, ca. 1560.
- ³ From Conde Gondomar Collection
- ⁴ According to a reference in the web (<http://www.malvinas.com/siglo16.htm>), it is also known a Bartolomé Olives' map of the year 1562, with indication of the Samson islands (Falkland Isles).

Fig. 2

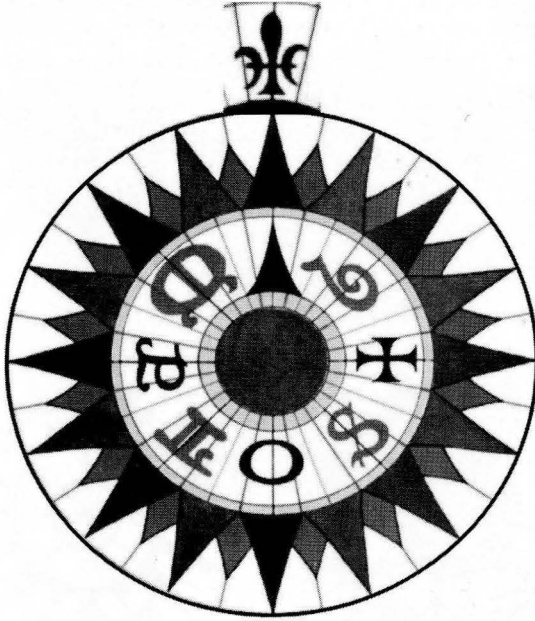


Fig. 3

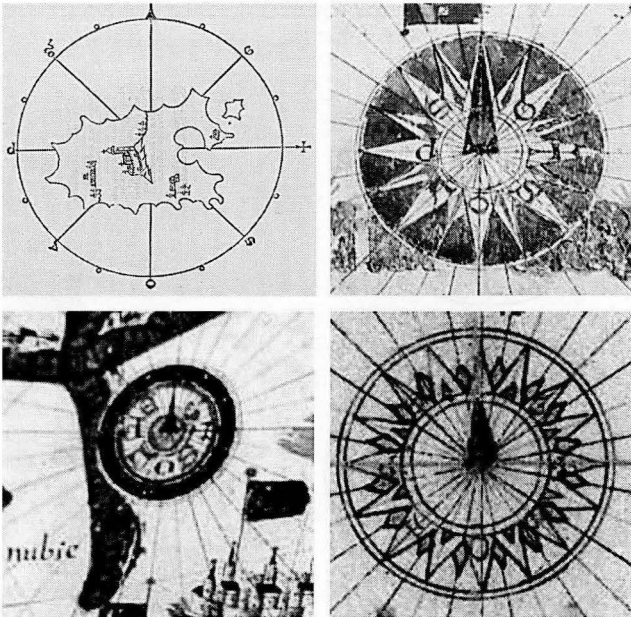


Fig. 4

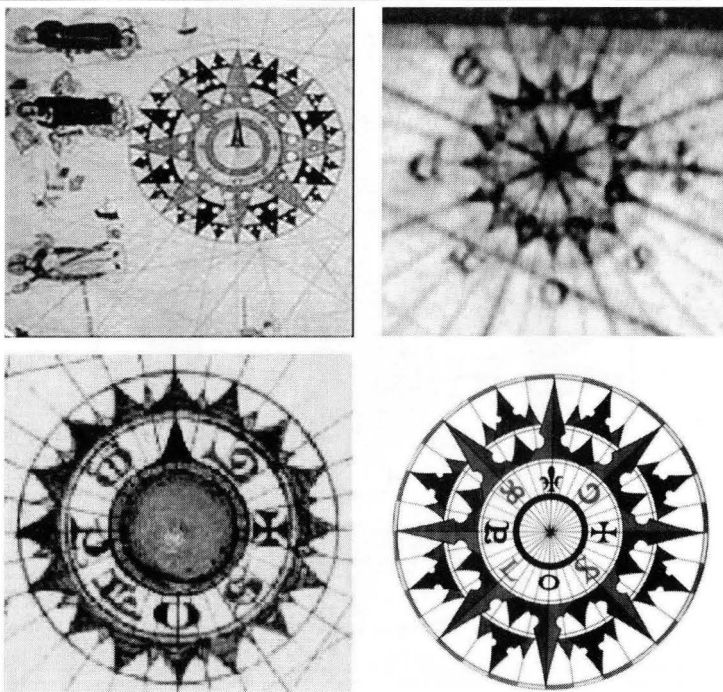


Fig. 5

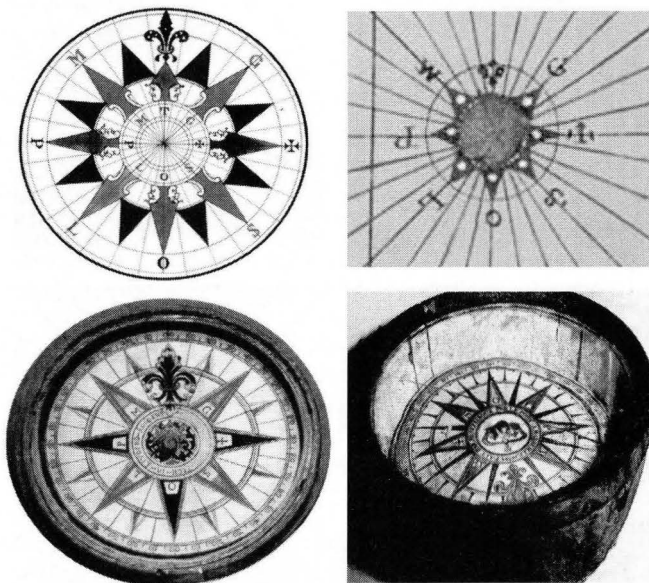


Fig. 6

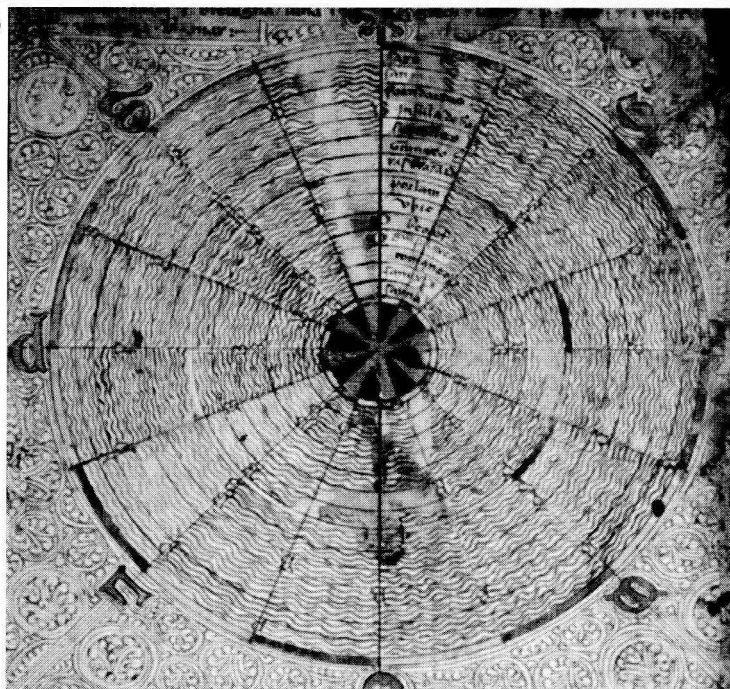


Fig. 7

