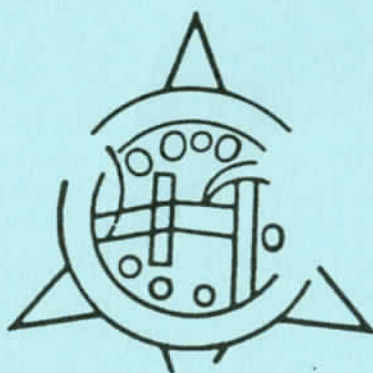


Reprinted from

IMAGO MVNDI

THE INTERNATIONAL JOURNAL
FOR THE
HISTORY OF CARTOGRAPHY

50



IMAGO MUNDI LTD, LONDON, U.K., 1997

ISSN 0308 - 5694

Abraham Ortelius and the Hermetic Meaning of the Cordiform Projection

Giorgio Mangani

ABSTRACT: The cordiform projection employed by Oronce Fine, Gerard Mercator and Abraham Ortelius may have had a hermetic meaning. The focus in this paper is on Ortelius, for recent studies have suggested connections between Ortelius, Christopher Plantin and a clandestine religious sect in Antwerp, called the Family of Love (Family of Charity), whose emblem was the heart, source of divine illumination and of Free Will. It is argued that Ortelius's contemporaries in the radical religious circles of northern Europe would have perceived the *Theatrum orbis terrarum* in such a light. As Guillaume Postel's evaluation of Ortelius's work demonstrates, the atlas was considered a talismanic book based on the power of the images.

KEYWORDS: Low Countries, sixteenth century, Peter Apian, Oronce Fine, Justus Lipsius, Gerard Mercator, Franciscus Monachus, Abraham Ortelius, Guillaume Postel, Michael Servetus, Joachim Vadianus, Johannes Werner, *Theatrum orbis terrarum*, cordiform projection, world map, Fool's Head map, Turkish map, Family of Love, hermeticism, Jesuit symbolism, heart symbolism.

In 1564 Abraham Ortelius published a map of the world on a heart-shaped projection. This projection was not entirely a cartographic novelty. Bernardus Sylvanus's version of Ptolemy's general map of the world, produced in 1511 for the Venice edition of the *Geography*, had already had bent the upward curves of Ptolemy's projection into something approaching a heart shape.¹ A woodcut map by Giovanni Vavassore, made sometime between 1520 and 1540, was based on Sylvanus's, although here the cordiform projection has been so extended laterally as to be almost lost.² More familiar—and more germane to the present discussion—are Oronce Fine's two cordiform projections, one single, one double, which gave rise to a tradition of similar maps throughout the sixteenth century, including the first printed cordiform map (Peter Apian's *Tabula orbis cogniti*, 1530), Gerard Mercator's maps of 1538, and the map by Abraham Ortelius.

The cordiform projection raises a number of

issues, less for the technicalities of its construction than for its symbolic meaning or meanings, the nature of which may have changed over the sixteenth century. By the end of the century the cordiform map had become, together with the heart as symbol, key elements of Jesuit geographical iconology. Its significance for earlier mapmakers, however, is less clear. What is certain is that mapmakers who used the cordiform projection, like Fine, Mercator and Ortelius, their publishers and many of their friends and colleagues, neither worked nor lived in isolation from each other. On the contrary, the cordiform projection evokes certain shared spiritual and intellectual ideas. Surveying what is known of the distribution of these beliefs among sixteenth-century mapmakers not only highlights interconnections and interrelationships but leads to the conclusion that those who used the cordiform projection did so deliberately and for the ideas with which they connected it.

The aim in this paper is to draw together some of the more arcane aspects of the cordiform projection in order to point to a common underlying motivation. We shall introduce briefly the cordiform maps, commenting on Oronce Fine's interests in the symbolism of such a projection and on some of the developments later in the sixteenth century. Then we focus on Abraham Ortelius's intellectual interests and his beliefs. Finally, we attempt to interpret the emblematic role of the cordiform projection and the possible relevance of Familism, a spiritual movement widespread in England and the Low Countries in the sixteenth century, as a specific expression of that tradition. For the Familists, and often for other sixteenth-century religious movements, the heart represented the place of moral choice and the seat of illumination. God's answer to calls from the faithful made in simplicity and good will was to fill the heart with charity, genesis of earthly beatitude and of eternal salvation.

Both Familism and the Neostoic ethic as defined by Justus Lipsius (1547–1606), an antiquarian close to Ortelius, revived the 'theatre of the world' notion as a metaphor for the miserable condition of humanity which can aspire to spiritual salvation only through its behaviour while briefly on earth. It is easy to see how the two images, the earth as a stage and the heart as fount of charity and human spirituality, converged to become places where the dramas of ethical and spiritual choice were located.³ The title Ortelius selected for his atlas—*Theatrum orbis terrarum*, theatre of the world—was probably intended to convey deep meanings.⁴

Since the thirteenth century, medieval artists had been portraying the heart as an attribute of Charity, as in Giotto's paintings in the Arena Chapel, Padua, and in those by Andrea Pisano in the cathedral baptistery and campanile in Florence.⁵ In 1505, Lucas Cranach the elder pictured a heart on which a cross is inscribed (presumably as a reflection of the myth that the hearts of saints sometimes contained impressions of Christian symbols).⁶ By the middle of the sixteenth century, however, the image and its meaning had gained a popularity unknown in the Middle Ages. Apart from the maps, a number of artefacts have survived to bear witness to the significance of the heart as emblem. For instance, a fifteenth-century wooden casket, now in the Kunstgewerbemuseum, Cologne, carries the image of a heart, together with the words 'amor vi[ncit] o[mn]i[a] [love conquers all].'⁷ A tapestry in the Regensburg

municipal museum represents Love receiving a burning heart from an angel, and the Parisian printer Richard Breton's (1550–1571) typographical mark shows a heart burning with the fire of charity. The picture of a heart was also often associated with a cornucopia (a reference to plenty and abundance) or with children (a reference to maternal love). Other typographical marks tied the heart to friendship ('*typus amicitiae*' was written in the emblem of Guillaume Julien, another Parisian printer (1532–1589)).⁸ In the first book of emblems produced in the northern European tradition, the *Theatre des bons engins* (1539), an emblem represents, as a symbol of envy, a man eating his own heart. In another emblem book, *La Morosophie* (1553), the tree of wisdom has its roots in a heart.⁹

The Cordiform Projection

In 1519 Oronce Fine drew for François I, king of France, a manuscript map of the world shaped in the form of a heart. This map is now lost, but Fine himself tells us about it in a note written in 1534 on a later version of the map, printed in 1536 with the title *Recens et integra orbis descriptio* (Fig. 1).¹⁰ Meanwhile, in 1531, Fine produced another map, the *Nova et integra universi orbis descriptio*, where the world is shown on a double cordiform projection.¹¹ The projection is distinguished by the prominence of the two polar regions, connected to each other by the principal meridian, and by the division of the world into two halves along the equator. Fine's double cordiform map had considerable success. It was published in 1532 in a book of voyages, the *Novus orbis regionum ac insularum*, by Johann Huttich (from Simon Grynaeus's material), printed both in Basel and in Paris.¹² It appeared again in the commentary on Pomponius Mela by Joachim Vadianus (Joachim von Watte) in 1540 and in Vadianus's own work, the *Epitome trium terrae partium, Asiae, Africae et Europae* (1534, 1548). Fine's single cordiform map was also copied on at least three other occasions: as the so-called Turkish map (?1559), Giovanni Paolo Cimerlini's copper engraving (1566), and Giacomo Franco's map (?1586–87).¹³

It is probable that Gerard Mercator's *Orbis Imago* (1538) was derived from Fine's double-cordiform map (Fig. 2).¹⁴ Both Fine's and Mercator's maps show northern America close to northern Asia and represent the South Pole by a large unknown land similar to that in Fine's probable source—a globe by Franciscus Monachus which we know about from

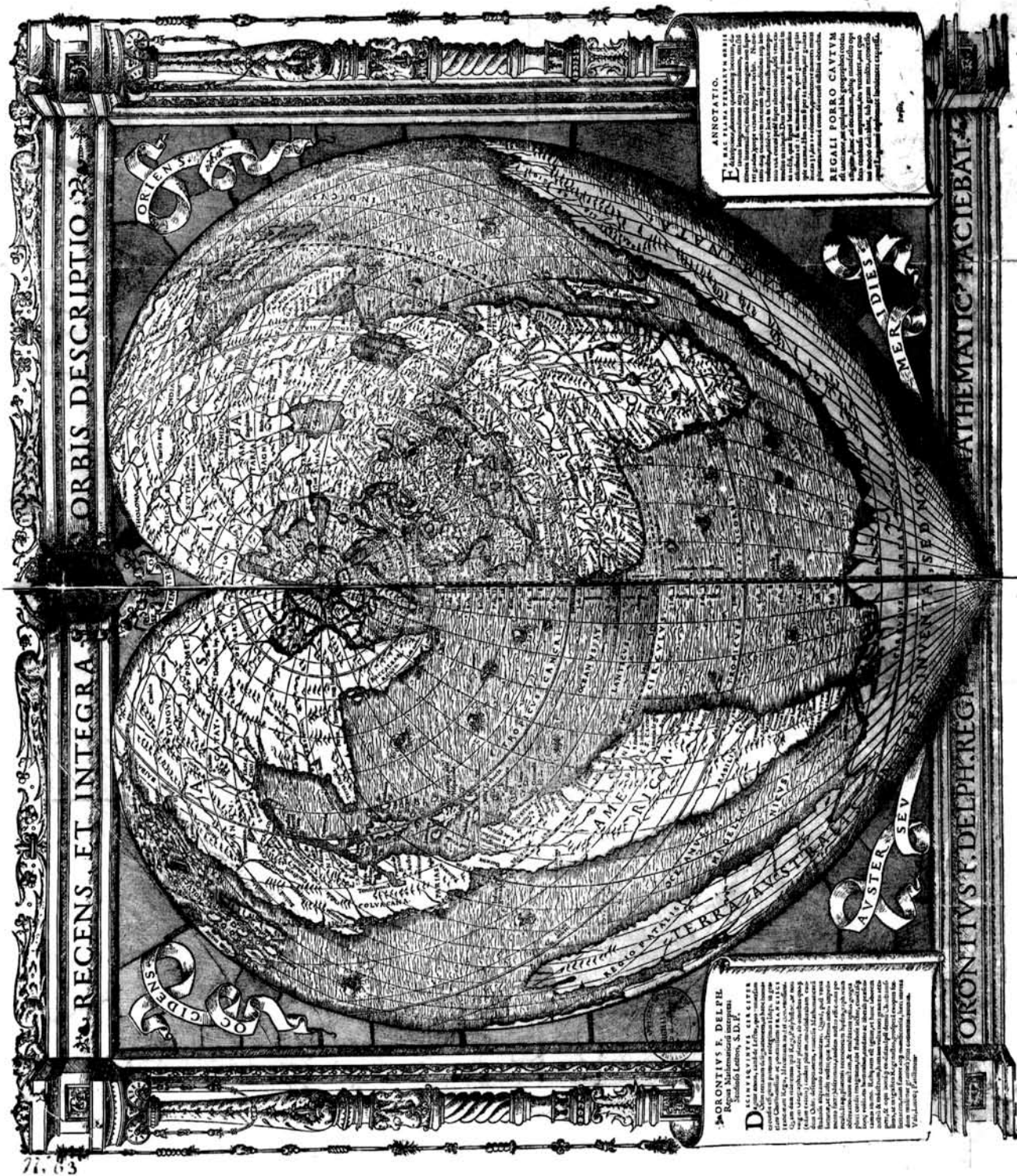


Fig. 1. Orontius Fine's single cordiform map of the world. The only other extant copy (now in Nuremberg) carries dates of both 1534 and 1536, but it is likely that Fine was sketching the map as early as 1519. This copy is undated. (Courtesy of the Bibliothèque Nationale de France, Paris. Rés. Ge. DD. 2987. (63).)

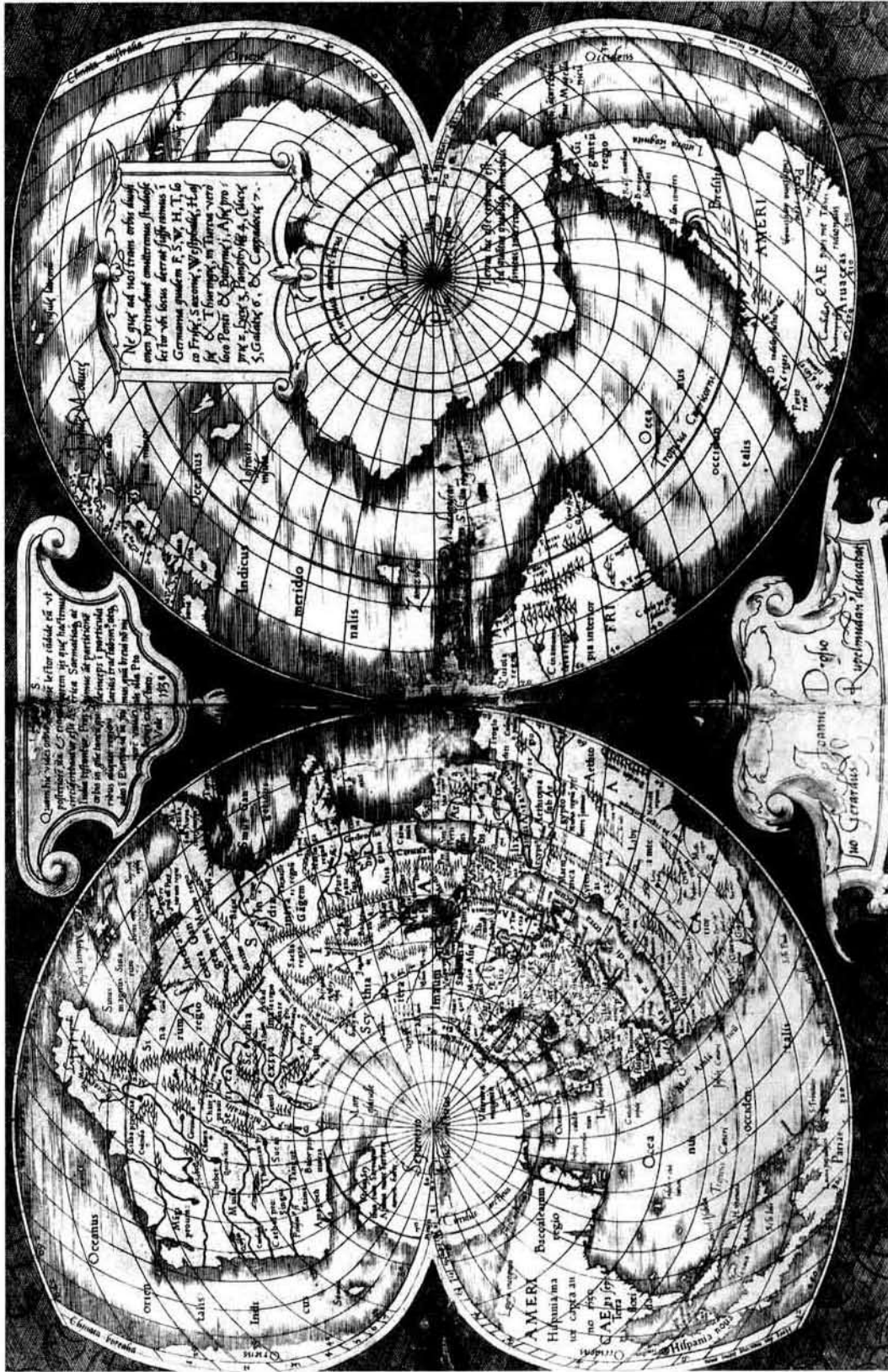


Fig. 2. Gerard Mercator's untitled double-cordiform map of the world, printed in 1538 and modelled on Oronce Fine's double-cordiform map of 1531. The name America is here applied to both the northern and southern continents. (Courtesy of the American Geographical Society Collection, University of Wisconsin-Milwaukee Library.)

Monachus's *De orbis situ ac descriptione* (Antwerp, 1526). Mercator, though, may have used a different source, namely the globe produced in 1536 by his master Gemma Frisius which in turn derived from the world map engraved by Albert Dürer from a drawing by Johannes Stabius. A different light, however, is shed on Fine's sources by a book by Johannes Werner, chaplain to Emperor Maximilian (who was himself much interested in mathematics, geography and astronomy). In his *Libellus de quatuor terrarum orbis in plano figurationibus* (Nuremberg, 1514), Werner describes three forms of heart-shaped projection and attributes the paternity of the projection to Stabius.¹⁵ Peter Apian reprinted Werner's *Libellus* together with a translation of the first book of Ptolemy's *Geography* in 1533 in his *Introductio geographica*.

In 1564, in Antwerp, the publisher Gerard de Jode produced Abraham Ortelius's first cartographic work, a copperplate map of the world on a single cordiform projection. Ortelius had received an education similar to Mercator's and was also probably greatly influenced by him. He shared Mercator's classical and antiquarian interests and many of Mercator's religious beliefs. Mercator was deeply religious. Recent work has underlined how he would have liked to have devoted himself to the study of metaphysics and cosmology from a theological perspective.¹⁶ In his turn, Ortelius came from a religious family actively involved in the reformation. It is thus perhaps no accident that Ortelius's first map-making efforts also involved the cordiform projection, although he stretched the projection laterally to produce a much broader heart shape than that of Fine's original map of 1519/1531.

Ortelius's map was printed in eight sheets under the title *Nova Totius Terrarum Orbis iuxta Neo Tericorum Traditiones Descriptio* (Fig. 3).¹⁷ It is dedicated to Marc Laurin de Watervliet. Laurin had financed Ortelius's friend Hubert Goltzius's numismatic studies (in which Ortelius also participated) and had permitted the setting up of a private printing press for a historical project which Goltzius and Ortelius had based on their particular historical and scientific approach to epigraphical and numismatic evidence. Ortelius's map contains a number of texts listing the precious metals and exotic commodities exported to Europe, with their places of origin, and two urban views from the new Americas, Cuzco in Peru (*Cusco Regionis Peru Metropolis*) and Mexico City (*Messigo Hispaniae*

Novae Metropolis), both taken from Giovanni Battista Ramusio's *Delle Navigazioni et Viaggi* (Venice, 1556). Ortelius had also updated his version of the cordiform map to include the latest information about the Russian lands and to show North America (exaggeratedly narrow in the west) as not clearly separated from Asia. Characteristically, he drew attention to various ethnographic aspects. Near the island of Japan, for instance, a text underlines the fact that Japan's religious rites appear to be similar to some of those in Christianity: 'Haec insula proprium habet regem, incolarum religio et mores in paucis a nostris differt' [This island has its own king; the religion and customs differ little from ours].

Ortelius's single cordiform map was commercially successful but had little impact on later mapmakers, except perhaps on Guillaume Postel. This lack of influence may have been because attention was by then focused on the new world map by Mercator published in 1569 on the projection which has since taken his name.¹⁸ Relations between Ortelius and de Jode appear to have broken down for de Jode published no new maps by Ortelius, although he did reissue the cordiform map in a single sheet version in 1571.¹⁹ Engraved by Johan and Lucas van Deutecum, this map was also included in the first edition of de Jode's *Speculum orbis terrarum* in 1578,²⁰ and other versions are found in later editions (a second edition in 1578 and another in 1593).²¹ The first edition of Ortelius's *Theatrum* (1570), however, opens with a world map on an entirely different projection.²² By now, the cordiform projection seems to have dropped from favour among cartographers. It may even have been considered out of date in 1564.

In other contexts, however, notably the religious, literary and moral, the cordiform map continued to enjoy considerable success as a way of presenting the world. The question to be addressed, therefore, is what prompted first Fine and then others to choose to draw a map on a cordiform projection? To approach an answer, we need to look for what we can discover about the personal leanings of the mapmakers involved, an exercise which takes us into realms of the abstract and touches on some of the more secretive aspects of sixteenth-century thought, such as cabalism, Familism and the occult.

Several reasons may explain why representing the world in the form of a human heart could have

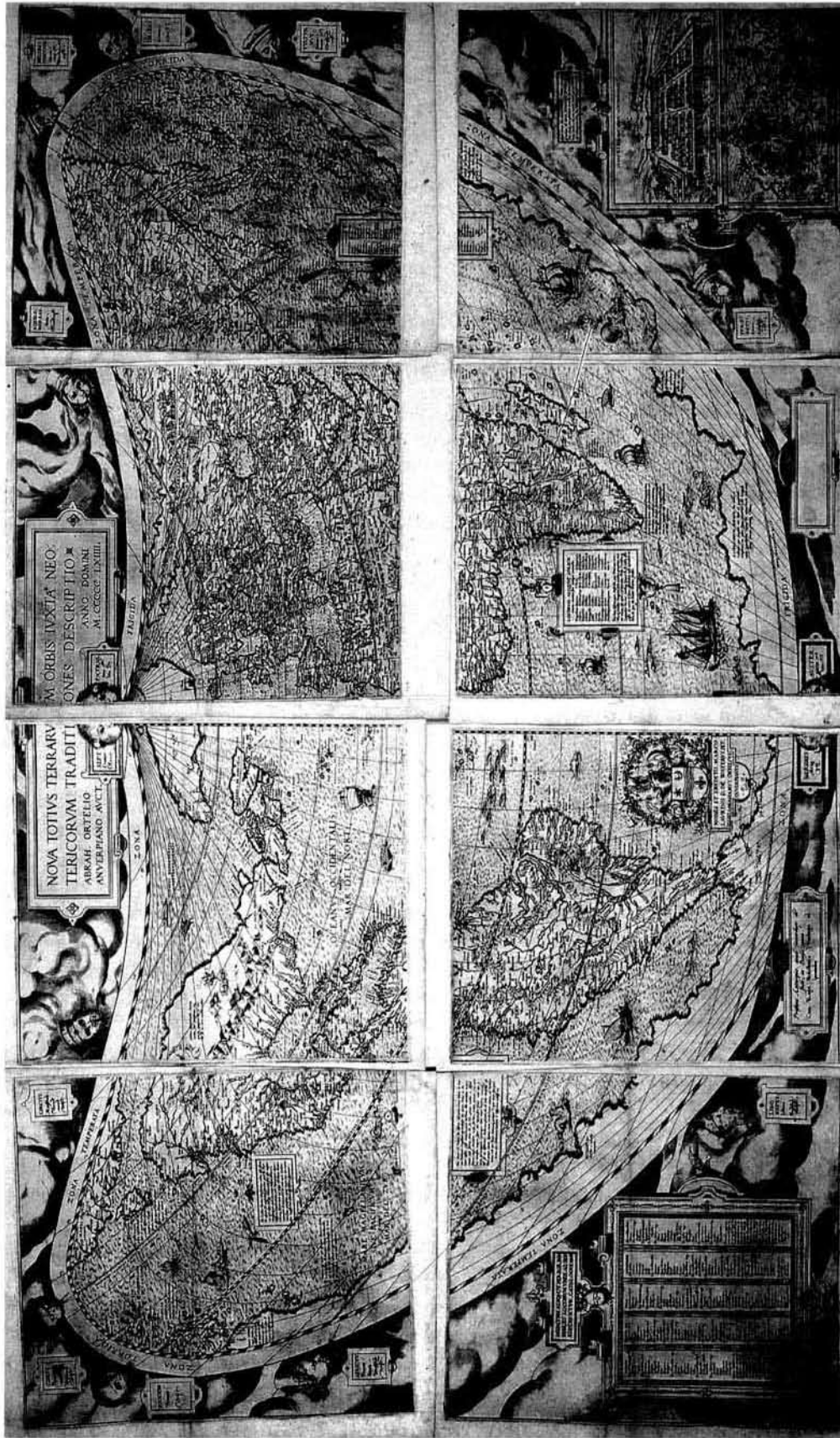


Fig. 3. Abraham Ortelius's eight-sheet map of the world on a cordiform projection (1564). Entitled *Nova Totius Terrarum Orbis Iuxta Neo Tericorum Traditiones Descriptio*, the map was printed in Antwerp by Gerard de Jode. (Courtesy of The British Library. Maps C.2.c.1.)

had deep significance for Fine or, at the very least, could have evoked a meaning linked with the hermetic symbolism to which he was no stranger. All lie in the interconnections of the people involved and in, above all, the beliefs they held in common. An attempt is thus needed to unravel some of these relationships and possible relationships. We turn first to those in Nuremberg and then to individuals like Ortelius in Antwerp and to Postel.

Oronce Fine

Fine was a mathematician, astronomer, astrologer, engraver and teacher. He was a physician's son who had also obtained a degree in medicine in 1522. As Mercator and Ortelius would do in their own time, Fine seems to have produced a map of the peregrinations of Saint Paul and another of the Holy Land (both now lost).²³ His interests took him in other directions too. An expert maker of astronomical instruments, Fine published in 1521 a translation from Hebrew into Latin—*De motu octavae sphaerae*—a work by the Italian astronomer Agostino Ricci, a converted Jew who had become an eminent scholar of Christian cabalism. In France, Fine was a court astrologer, as John Dee would be in the middle of the century in England. Like Dee, Fine ran into problems with religious authority, finding himself in prison sometime after 1523 for his contacts with occult circles in Paris. He was also interested in the problem of the squaring of the circle, publishing *Quadratura circuli* on this popular cabalistic theme in 1544.²⁴

The comparison of Fine with the younger John Dee, the English Elizabethan scholar and astrologer, is not made casually. In 1536, thirty years before Dee, Fine published his own commentary and translation of Euclid's *Elements*. Indeed, it may have been Fine who, in 1550, invited Dee to lecture on geometry at the University of Paris. A few years after Dee's visit, an essay by Fine, *Les canons*, an introduction to judicial astronomy and astrology, was translated into English under the title *The Rules and righte ample Documentes, touchie the use and practise of the common Almanackes whiche are named Ephemerides . . .* (London, Thomas Marshe, 1558), the only work by Fine to receive such treatment. The translator was Humphrey Baker, a scholar and a friend of Dee.²⁵ In Paris, Fine's double cordiform map of 1531 was probably published by Christian Wechel, a printer obliged to flee Paris after the San

Bartholomew massacres of 1572 because of his involvement with radical and spiritual circles.²⁶

A complex web of contacts and relationships thus accounts for the association of various map-makers' names with the cordiform projection. The text accompanying Fine's single cordiform map of 1534–1536 shows that Fine was aware that the image of the heart can be auspicious, a talisman of a world inspired by the values of charity. It reads 'itaq[ue] plurimis recentiorum hydrographorum observationibus auctam, & eme[n]datam ipsius geographici cordis imaginem, tibi studiose lector, cunctis[que] bonae volu[n]tatis hominibus, cordato ac liberali praesentamus animo . . . ' [We offer, with our best wishes to you, studious reader, and to all men of good will, this map enriched with the observations of many hydrographers, correcting its image in the shape of a heart].²⁷ We also find abundant evidence of Fine's interest in the symbolism of the heart shape in other of his writings. For instance, Monique Pelletier has recently pointed out that there are two examples in Fine's book *Protomathesis* (1532): the title page (signed as engraved by Fine) carries a heart-shaped floral motif similar to that used on the double-cordiform map published the year before, while on the verso of page 130 a decorated capital initial contains Fine's portrait within a globe which is suspended from a heart (Fig. 4).²⁸

Gerard Mercator

As Robert Karrow has remarked, a cordiform projection is not a cartographically practical solution to the problem of representing a globe on a flat surface, but it is an elegant way of demonstrating the application of transcendent mathematical principles to terrestrial things.²⁹ This line of argument is supported by a close analysis of ideas expressed by Mercator about Fine's work. Mercator admired Fine, referring to him, in a letter written on the 3rd March 1581 and addressed to Wolfgang Haller in Zurich, as one of the authors of his education in geometry.³⁰

It could even be said that Mercator was merely imitating Fine in using the double-cordiform projection for the *Orbis Imago* but this would be to ignore Pelletier's exposition of Franciscus Monachus as a probable source of both Mercator's and Fine's world geography.³¹ Little is known about Monachus. He is mentioned by Ortelius in the catalogue of authors, and his letter to Joannes Carondelet, formerly archbishop of Palermo but



Fig. 4. Decorated capital initial letter from Orance Fine's *Protomathesis*. (Paris, 1532, page 130^v). The globe containing Fine's portrait is suspended from a heart motif. Woodcut. (Courtesy of Bibliothèque Nationale de France, Paris. Rés. V 120.)

now transferred to Mechlen, Monachus's home town, has survived.³² In 1511 Monachus was a student at the university of Louvain. In 1526, he produced—before any of the other map- and globemakers—a terrestrial globe engraved by Gaspar van der Heyden à Myrica, the same engraver who was responsible, eleven years later, for Gemma Frisius's globe, in the preparation of which Mercator had also had a hand.³³ Monachus's globe has disappeared but it is described in his book *De orbis situ ac descriptione*, from which we can identify the salient characteristics of Monachus's continental geography, namely, the proximity of North America to northern Asia and the application of the name America to the southern continent only. The latter characteristic is found (together with an unknown Austral continent) on Mercator's *Orbis Imago* and globe of 1541, and on Fine's map of 1531 [1536].³⁴

Monachus has also been associated with Mercator's imprisonment for heresy. According to Jean van Raemdonck's interpretation of the documentary evidence, Mercator was imprisoned in 1544 for having written heretical letters to a Minorite friar from Mechelen.³⁵ The Minorite was said to be Franciscus Monachus, with whom Mercator was certainly in contact. On the list of those imprisoned Mercator appears, under his wife's name, as *maitre Gerard Shellekens*. Others on the list included Paul de Roovere, chaplain of Saint Peter's church in

Louvain; Mathieu van Billaert, priest at Heverlé; and Joannes Drosius (Droeshaut), a bourgeois who had graduated with Mercator at the University of Louvain and to whom—alone—Mercator would dedicate his cordiform map of the world.³⁶ Forty-two people were imprisoned and the charges must have been sufficiently serious for three of them to be condemned to death.

Mercator's cordiform map was thus conceived during a period of intensive study of hermetic texts and white magic, preoccupations which may explain his gloomy theology (even his research on the magnetic pole), and which surely must have had a direct connection with his decision to represent the world in the shape of a heart. The portrayal of the 'perfect' solid form of the terrestrial globe on a flat surface in correct proportion had considerable philosophical significance. The human heart, vital centre of human ethical choice, was also the source of the body's blood which describes a circle as it moves around the body. The circulation of the blood coincides with that of the soul or vital spirit and is as perfect in its circularity as is the movement of the heavenly spheres. In this way, the heart is a human microcosm, at the centre of the universe. In the same way that the heart is the seat of divine impulse and the spirit of charity, so the earth, in the centre of the universe, is the place where humanity has to demonstrate ethical choice and witness faith in a constant exchange between spirit and matter. Mercator described and illustrated this metaphysical theory of the universe in his *Typus vel Symbolum Universitatis* in a letter sent in 1573 to Johannes Vivianus. The letter is now lost, but it was published in 1908 by A. Tihon, and from it we can see that Mercator represented the universe as a Pythagorean Y, standing for the ethical struggle between the 'broad road' of vice (which leads nowhere) and the 'narrow road' of spiritual salvation (which leads to heaven), a philosophy pointing to Mercator's embrace of the Familist's belief in Free Will.³⁷

The 'Turkish' Map and Guillaume Postel

In 1559 a large map strikingly similar to Orance Fine's first cordiform map was published, possibly in Venice. Obviously intended for the Middle Eastern market, it is covered with Turkish script and carries a title in Turkish to the effect that this is 'A Complete and Perfect Map Describing the Whole World'.³⁸ The woodcut map has an Arabic date of 967 from the Hegira, that is, 1559–60 (Fig. 5). A

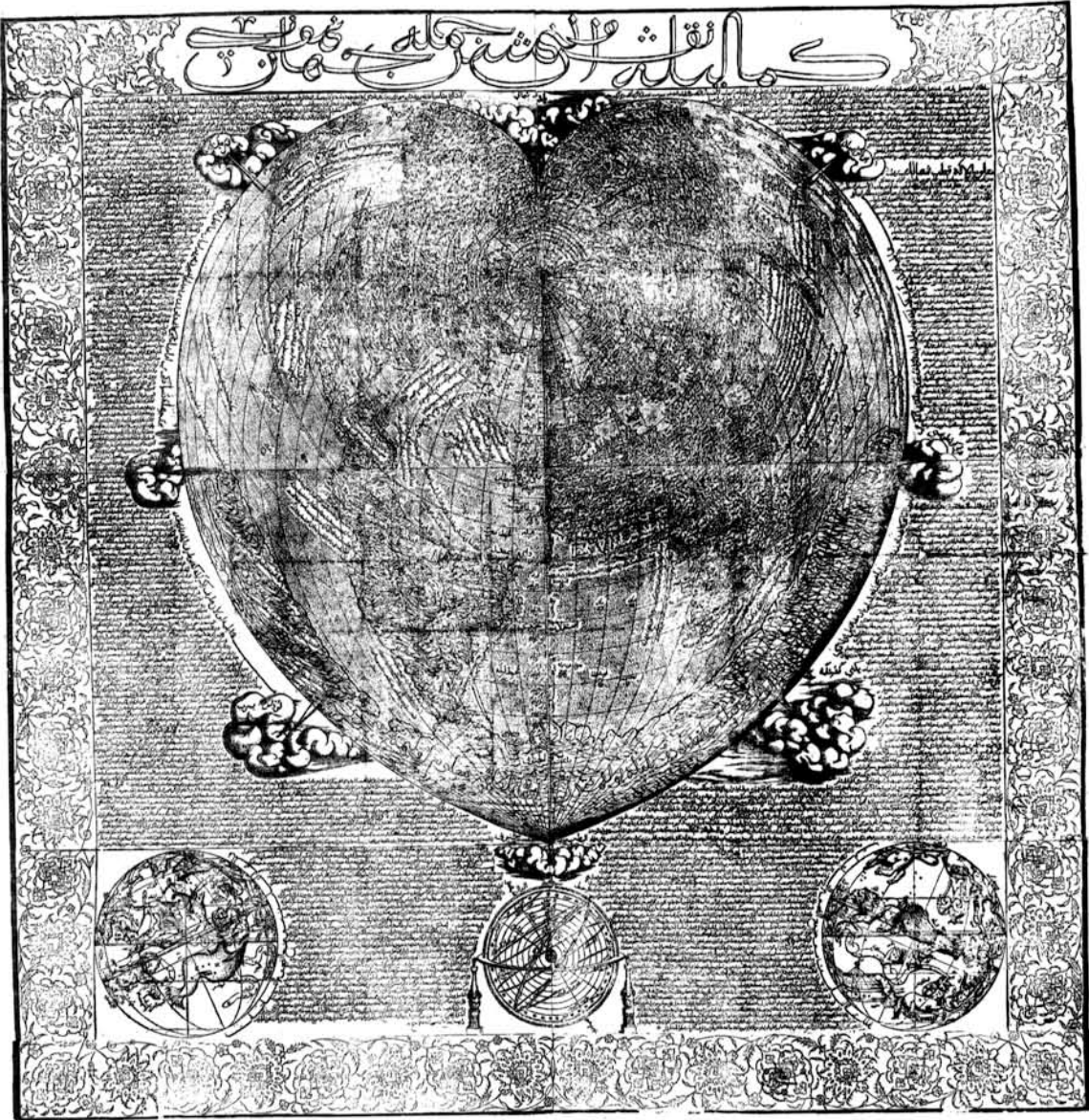


Fig. 5. Cordiform map of the world in Turkish (A Complete and Perfect Map Describing the Whole World), by Hajji Ahmed (Venice, ?1559). Printed in 1795 from the original six woodblocks. (Courtesy of the Biblioteca Nazionale Marciana, Venice. *Rari Veneti* 38–38bis.)

document now in the archives in Venice, written between 1552 and 1554, refers to the printing of a map at the request of Bayazet, one of Suleiman the Magnificent's sons.³⁹ Another document, from 1568, records a request from a Venetian printer, Marc Antonio Giustinian, to be allowed to sell a map of the world by 'Cagi Acmet' (Hajji Ahmed), a request which was eventually denied. On the contrary, both the printed map and the woodblocks were confiscated, to remain unknown until rediscovered in 1795, when twenty-four copies were printed for Simon Assemani, professor of oriental

languages in the University of Padua. Antonio Fabris has suggested that the publisher of the map requested by Bayazet was Giustinian himself and that it was Giustinian who in 1568 was trying to regularize his position by requesting the necessary privilege.⁴⁰

The Turkish map seems to have been one of three maps later copied from what, in 1598, Jacques Severt called 'the first heart of Oronce'.⁴¹ The choice of Fine's map as the source of the Turkish map—a map addressed explicitly to Arabic culture—is significant, for the map would have

conveyed Christian values to the oriental world. The link between the two maps could have been the French orientalist and geographer, Guillaume Postel, who was much involved in projects of a similar nature. If he had had a hand in the production of a map expressly designed for Suleiman's court, the move would have been typical of his constant promotion of his doctrine of *concordia mundi*, a two-way process designed to bring Christian material to the attention of Arabs, Turks and Hebrews while at the same time translating the most important eastern texts for use in the West.

Postel was likely to have met Fine when the latter was teaching mathematics at the Royal College in Paris (founded in 1530) and where Postel himself was employed to teach mathematics and oriental languages ('*mathematicorum et peregrinarum linguarum regius interpres*').⁴² Postel first visited Venice in 1537 on his return from Turkey, lived there from 1547 to 1549, and stayed again on various occasions in 1555, when he published *Le prime nove dell'altro mondo* (Venice, 1555, 'Appresso del Autore'). It is scarcely conceivable that in the course of his two-year stay in Venice Postel had failed to encounter any of the scholars and translators of Arabic and other oriental languages also working there. Among these was Michele Mambré and Nicolò Cambi. Mambré was also for a long time acting on behalf of the Venetian Republic as the official Turkish-language interpreter. Cambi helped in the publication of the Turkish cordiform map just a few years after Postel left for Paris.

Postel certainly had contacts with Daniel Bomberg, the printer specializing in Hebrew books. Bomberg, a native of Antwerp, worked in Venice from 1515 to 1549. Marc Antonio Giustinian, the probable printer of the Turkish map, seems to have envied Bomberg's book-selling activities. When Bomberg's Venetian printing house was formally closed in 1549, a number of Hebrew works (editions of the Rabbinic Bible and the Talmud, for example) continued to appear under the Bomberg imprint in order to prevent Giustinian from printing any pirated editions. It is unlikely that Postel did not show Fine's map to the Venetians. Certainly, in 1566, the Veronese printer Giovanni Paolo Cimerlino (J. Paulus Cimerlinus, one of Titian's circle and thus also associated with people like Giulio Camillo, Alessandro Citolini—cited in Ortelius's *Catalogus Cartographorum*—and the painter Lorenzo Lotto and other spiritualists) was able to

print a beautiful new edition of Fine's single cordiform map.⁴³

Like Fine, Postel had a medical education, was deeply involved in cabalism and astrology and was learned in Middle Eastern languages, interests which made him the ideal candidate for seeing the cordiform map as something which would encourage contact between West and East. Such a mediatory role was emphasized by the Hajji Ahmed supposedly responsible for the introductory text on the Turkish map, in which he refers to the 'real and excellent, and remarkable work, the production of which was of great value and importance for Muslims and their governors, when translated from the French into their language'.⁴⁴ In 1958 V. L. Ménage pointed to the many contemporary western sources mentioned in the text on the maps and to the way these had also a strong influence on the language.⁴⁵ For instance, among his Arabic sources Hajji Ahmed cites Abulfida, who had been introduced to Venetian scientific circles by Postel. The French orientalist had brought from Istanbul the manuscript of Abulfida's *Taqwim al buldan* [lit. 'Delightful Meadow', meaning Book of Mathematics], which was translated into Italian and used by Giovanni Battista Ramusio for a commentary on Marco Polo's travels. Ramusio wrote enthusiastically about Abulfida's text, describing it as a book 'venuto divinamente in luce a nostri tempi' [divinely come to light in our times].⁴⁶ Postel might have seen Fine's map also as a symbol of the deep unity of human thought, proof of the compatibility of different cultures, and have taken the 'divinely' sent opportunity to launch his own symbol of peace to the 'Republic of Turks' (which is the title he gave to his book, published in Poitiers c.1566, in which he celebrated the Turk's 'simplicitas', a highly esteemed Erasmian virtue).

Cordiform Maps at the End of the Century

The Fool's Head Map

In 1589, Josse de Hondt (Jodocus Hondius) the elder (1563–1612) drew a small circular map showing the world on a cordiform projection (Fig. 6) in the *Album amicorum* of one of his relatives, Pieter de Hondt (Hondius).⁴⁷ Although the whole composition measures only 90 cms in circumference, the map itself is sufficiently similar to Ortelius's to suggest the latter was its source. The cordiform world is suspended from a cord held by the hand of God. Above the hand, the name of Yaweh is



Cato:
*Corporis exigui vires contemnere noli:
 Consilio pollet, cui vim natura negavit*

Fig. 6. Map of the world drawn by Josse de Hondt (Jodocus Hondius), in Pieter de Hondt's *Album Amicorum* in 1589. The cordiform world, evidently based on Ortelius's map of 1564, hangs from the hand of God. See text for the inscriptions. (Courtesy of the Bibliothèque Royale Albert Ier, Brussels. MS II 2254.)

represented in Hebrew characters. Within the circular frame of the map are inscribed the words 'Iehova domine noster quam admirabile est nomen tuum in universa terra' [O Lord our Lord, how excellent is thy name in all the earth! Ps. 8:1, King James' Bible]. Below the map is another text: 'Domini est terra et plenitudo eius, orbis terrarum, et universi qui habitant in eo. Psalm 241' [The earth is the Lord's, and the fulness thereof; the world and they that dwell therein. Ps. 24:1]. While the religious sentiment expressed in the map reflects the prevailing Calvinism of the northern Netherlands, it none the less maintains the symbolic relationship between the theatre of terrestrial passions, human action, and the illumination of divine grace, as we see from the motto Hondius wrote below the map in his relative's book: 'Corporis exigui vires contemnere noli: consilio pollet, cui vim natura negavit' [Do not scorn the

force of a little body; he who has been deprived of strength may rely on reason].

Hondius's cordiform map is echoed in an anonymous map printed probably between 1580 and 1590, possibly in Antwerp. This is the so-called Fool's Head map (Fig. 7).⁴⁸ Irrespective of the author's identity (subject of much speculation), the map displays another of the themes so dear to Ortelius and his circle, the comic and grotesque nature of human life. According to the ancient philosophers (and to the Familists), life makes no sense without faith. The contemporary rendering of the ancient Delphic motto 'nosce te ipsum' [know thyself] is engraved at the top of the map in place of a title. In this map, a cordiform world replaces the fool's face. The rest of the head is embellished with the grotesque attributes of his calling—ass ears, little bells and staff. Other texts on the map also fit the theme of 'contemptus mundi'. The longest one

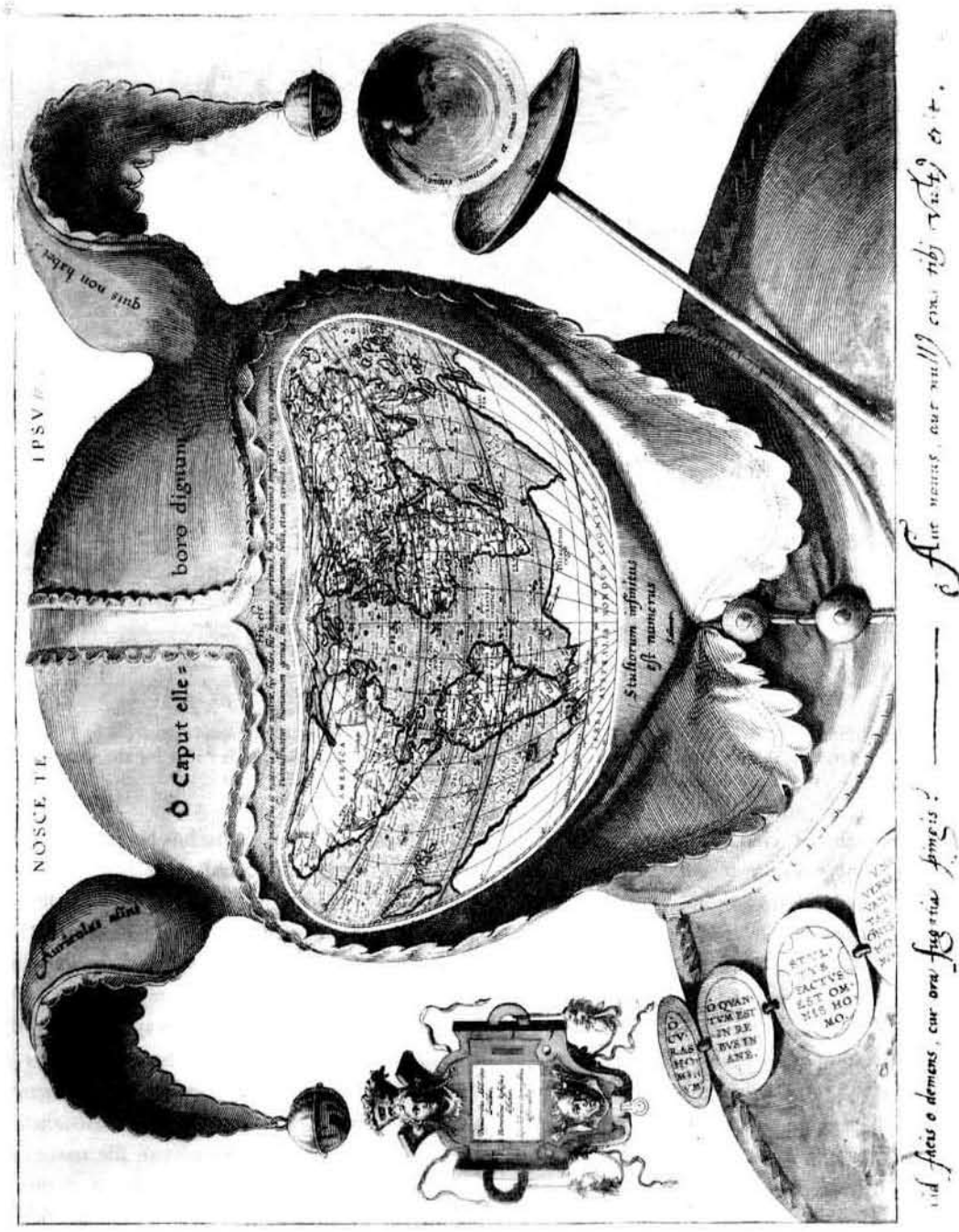


Fig. 7. The anonymous and untitled Fool's Head map (c.1590) showing the world on a cordiform projection, with geographical details probably taken from Ortelius's 1564 map of the world. (Courtesy of the Bodleian Library, Oxford. Douce Portfolio 142 (92).)

reads 'Hic est mundi punctus et materia gloriae nostrae, hic sedes, hic honores gerimus, hic exercemus imperia, hic opes cupimus, hic tumultuatur humanum genus, hic instauramus bella, etiam civilia. Plin.' [This is the place and the nature of our glory, here we have honour, manage power, wish wealth, here the human race riots, here we make wars, even civil ones. Pliny]. On each of the round medals forming the fool's collar is written, in turn, 'O curas hominum' [Oh human ambitions]; 'O quantum est in rebus inane' [O how empty is this life]; 'Stultus factus est omnis homo' [Each man has become stupid]; and 'Universa vanitas omnis homo' [Each man is a whole vanity].

That the presentation of the world as the fool's face was intended as a reference to the absurdity of national wars and civic conflict is confirmed in the cartouche. The allusion here is to the ancient philosophers' notion of the world as *theatrum mundi*. The texts refer to the Stoics Heraclitus and Democritus: 'Democritus abderites deridebat' [Democritus of Abdera laughed], 'Heraclitus ephesius desiebat' [Heraclitus of Ephesus wept], 'Epichthonius cosmopolites deformabat' [The cosmopolitan Epichthonius deformed]. These words exalt the pacifist Familist project with which Ortelius's *Theatrum orbis terrarum* has been identified. In a text on the map, the anonymous mapmaker introduces himself as a follower of Epictetus and distances himself from the two ancient philosophers to present a different moral attitude, his suggested third way being none other than that of the Neostoic's view of the individual's inner dimension. While Democritus shows contempt, and Heraclitus feels pain, for their fellow citizens, the mapmaker has chosen cosmopolitanism. The anonymity of this gaudy Fool's Head map thus makes no attempt to disguise its sympathy with the spiritual and Neostoic attitudes adopted in Ortelius's and Justus Lipsius's circles, in which the astrological-hermetic tradition of the *cor coeli* was integrated with the *theatrum mundi* tradition. In the apparent senselessness of the world, the heart-theatre of passions, of illumination and of the free moral will identify itself with the earth—theatre of human actions and of charity.

The Jesuit Cordiform

Ortelius's cordiform map was reused exactly one hundred years later, in 1664, in a striking iconographical context. Bartholomew Kilian's engraving was an overt Jesuit apology (Plate 2). The work was

prepared by J. Christoff Storer from a composition drafted by the otherwise unknown Stephen Eggestein. It was dedicated to the archbishop of Brixen. Kilian's plate forms part of a series illustrating historical and edifying episodes in the life of the Company of Jesuits.⁴⁹

The map occupies a small but central part of the total image. Above it a burst of light—identified as Christ's divinity by the letters IHS—sheds light on St. Ignatius's heart, which in turn refracts the light on to his followers. These include St. Francis Xavier, shown together with some of the orientals to whom he had brought the Christian mission, and St. Aloysius Gonzaga, patron of teaching. Ortelius's map forms the front of the altar, its heart shape symbolizing the evangelization brought by the Jesuits to the most remote countries of the world. A short piece of truncated aorta has been added, gushing blood and the fire of charity from the top of the heart.

The Jesuit cult of the 'sacred heart of Jesus' was reproduced in other seventeenth-century maps. An engraving of 1708, published in 1924 by the historian of religion Charbonneau Lassay, and at that time in the Eucharistic Museum of Paray-le-Monial (France) but now lost, shows the same devotional model, this time in the shape of a burning heart with a sketchy map bearing the inscription 'Cor Jesu, cor universi'.⁵⁰ The same year saw the publication of the first Swiss book on the heart of Jesus, *Allgemeines Sonnen-Liecht das ist Katholisch-Allgemeine auch Jederman zustehende Liebe und Andacht zu dem göttlichen Herzen Jesu* (Zug, Johann Baptist Walpart, 1708), by Michael Leonti Eberlein. Its title-page shows Christ's heart with a map of the world with the four continents.⁵¹ Long after the cordiform projection had fallen into disuse among cartographers, the cabalistic cordiform world, formerly the clandestine symbol of Familist charity, had become an icon of the zealous post-Tridentine Catholic church.

The Family of Love

To appreciate the religious sensibilities underlying the creation of the cordiform map and its later adoption into Jesuit iconography, we need to find out what can be discovered or surmised about the personal beliefs of the people involved, notably Ortelius and his circle and those associated with the Plantin printing house in Antwerp. This brings us to consider first the beliefs of the sect known as the Family of Love and then of the followers of Hiëlism

before returning to the symbolism of the maps in question.

The Family of Love was founded by Hendrik Niclaes in about 1540. Towards the end of the nineteenth century, research in the Plantin Moretus archives by P. A. Tiele, Friedrich Nippold, and Max Rooses suggested connections between Christopher Plantin and the Family of Love.⁵² Plantin's correspondence, together with an analysis of his remarkable publishing activity, seems to disclose a relationship with the patriarch and with various adherents of the sect. These researchers thought it telling that Plantin published some important Familist texts, notably *Den Spiegel der Gherechticheit* [The Mirror of Justice] (Antwerp, 1556) by Hendrik Niclaes, which was produced in an elegant and richly illustrated but clandestine edition.⁵³ Recent studies, however, have put those earlier claims about the importance of Plantin's ties with the Family of Love into a more balanced perspective, underlining the economic advantages Plantin gained through collaboration with the rich Familist prophet and playing down the possibility of spiritual affiliation.⁵⁴ Even more importantly, these studies have led to a better understanding of Plantin's own ideas, his publishing policy, and his interest in oriental matters.

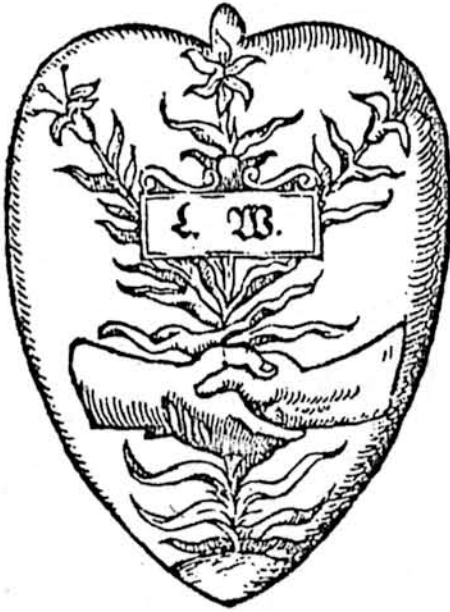
The Family of Love sect developed and proselytized among intellectuals, collectors, antiquarians, artists, merchants and bankers. Among them was the geographer Abraham Ortelius, the engraver Philip Galle and, probably, the painter Pieter Brueghel the elder. Their membership is not documented, but they were certainly in touch with the sect and what is known of their religious ideas points to many similarities with Familist thought. Whether or not Plantin shared any of the tenets of the Family of Love, wholly or in part, the existence of the sect has to be acknowledged, together with the fact that it evidently enjoyed a number of adherents among whom were many with whom Plantin associated. Indeed, given the inevitably closely knit circle of a major publishing firm like Plantin's and the degree of communication among employees of all levels—writers, engravers, correctors, illustrators—it would be surprising if there had not been at least some sharing of ideas and religious persuasion. Moreover, a printing house could provide the ideal mechanism for the dissemination of a particular creed to the places with which it had business, were this to be of importance.

Within the context of religious and political struggles in the Spanish-ruled southern Netherlands, radical clandestine movements formed a politico-religious continuum. Alastair Hamilton, Jean Dietz Moss, and Christopher W. Marsh have all shown how the religious views of the Familists were strongly influenced by the notion of *devotio moderna* and by Rhenan-Flemish mysticism.⁵⁵ Familist beliefs were based on a highly individualistic spirituality in which external rite and ceremony had no place. The faithful Familist sought a direct dialogue with God, who revealed Himself through inner 'illumination' (defined by Moss as a state of 'godliness').⁵⁶ The use of various mystical practices as aids to the understanding of the Holy Scriptures, thought to be interwoven with symbols and emblems, brought Familists into contact with contemporary hermetic culture.

At the same time, Familists were unconcerned with differences between faiths, welcoming as their co-religionists all who were able, with simplicity and devotion, to reach the condition of illumination, be they Catholics, Muslims, Jews or members of Reformed or Evangelical churches. Familism was to constitute an invisible world church, and adherents were authorized to participate in the rites of the established churches and advised to conceal their inner beliefs. Niclaes's followers also devoted themselves to works of charity—'Familia Charitatis' was another name given to the sect—while respecting political authority. In the latter respect, Familists came closer to orthodox Catholics than to the Reformed churches, even when making use of Protestant arguments to criticize the church of Rome.

At the centre of Familist iconography was the burning heart, symbol of charity and love for others and of the divine force of illumination. An illustration showing a burning heart containing three lilies and two hands clasped in a handshake, with the tetragrammaton (the Hebrew characters spelling YAWEH) and sometimes the word 'Verity' or 'Love' and the motto 'charitas extorsit', appears frequently in works by Niclaes (Fig. 8). Pictures of the human heart are found in other Familist texts. On the title page of Hendrik Jansen van Barrefelt's *Imagines et figurae bibliorum* (1584), for instance, we find, on the left, a shaded heart illuminated indirectly by Moses and, on the right, a heart lit directly by Christ (Fig. 9).⁵⁷ The title page of the edition of the Holy Bible printed by Plantin the previous year also carries the image of a heart.

Charitas extorsit.



Onse Hert is Godes Gemüch.
 Onse Wesen lieflick / also de Lelie süth.
 Onse Trüwe / Liefde vnde Warheit /
 Is Godes Licht / Leuen vnde Klarheit.

Fig. 8. Familist emblem from *Den Spiegel der Gherechticheit* [The Mirror of Justice] by Hendrik Niclaes, founder of the Family of Love sect (Antwerp, C. Plantin, 1556, p. lxxviii). (Courtesy of the Museum Plantin-Moretus, Antwerp. Library, BM. 20.417(4).)

Among the engravers responsible for images of this nature was Dirck Volckertzoon Coornhert. Coornhert was one of Ortelius's closest friends and had been personally acquainted with Niclaes, although not sharing all Niclaes's religious views.⁵⁸ Similarly, members of the Wierix family, whose numerous engravings included many heart figures, collaborated with Christopher Plantin on a number of occasions.⁵⁹ Jeronimus (Hieronymous) Wierix, for example, engraved plates for a reissue of Arias Montanus's Polyglot Bible (Antwerp, Plantin, 1583) and for Jerome Nadal's *Adnotationes et Meditationes in Evangelia* (Antwerp, Plantin, 1593).

After the restoration in 1585 of the southern Netherlands to Catholic influence, the Jesuits became the principal protagonists in Antwerpian moral iconography. We have already described their interest in the heart as symbol. The fact that, among the usual firms working for the Catholic

cause, we also find the Plantin Moretus printing house becomes less surprising (economic opportunism apart) when it is realized that the Jesuits came much closer to the Familists than is usually appreciated and with whom, in Elizabethan England, they were sometimes confused.⁶⁰ Familists and Jesuits shared an interest in science, both had a preference for employing images in their communications strategy, and both were ardent evangelists and translators of the Christian faith into other cultures.

Ortelius Hiëlist

It is not difficult to find similarities between Plantin and Ortelius. Many of their friends and colleagues also shared their opinions, including Ortelius's trusted engravers Philip Galle, Frans Hogenberg (engraver of maps in Ortelius's *Theatrum*), and Joris Hoefnagel (author of many of the urban views in Georg Braun and Frans Hogenberg's *Civitates*), and the painter Pieter Brueghel the elder of whom Ortelius was patron. All, however, were bound together by a shared outlook, close to that of the Familists.⁶¹ All were less interested in creating a new church according to the ideals of the leader of the 'Family of Love' Hendrik Niclaes than in following the teachings of Hendrik Jansen van Barrefelt.

Barrefelt was also known as Hiël or 'life of God'.⁶² He was a mystical thinker who was often Plantin's guest. Formerly one of Niclaes's pupils, Barrefelt's departure from the main body of the Familist sect (possibly with Plantin, among others, in about 1573) can be interpreted as an act of independence consistent with the individualism characteristic of Familist belief. Devoted to discovering internal illumination, Barrefelt stressed the role of images in mysticism, arguing that they helped the individual achieve a dialogue with God within his heart, the seat of memory and all passions. Barrefelt's book, *Imagines et figurae bibliorum* (written under the pseudonym Renatus Christianus and published secretly in 1584 by Plantin under the pseudonym Iacobus Villanus with a false date of 1581), demonstrates these ideas through the use of emblems designed to initiate the process of 'illumination' in the reader. Where Niclaes proclaimed himself a prophet of truth and sought to establish a new church, Barrefelt saw himself only as spiritual guide.⁶³

Ortelius's individualistic religious attitude, which must have brought the geographer close to Barre-



Fig. 9. Title-page from Hendrik Jansen van Barrefelt's *Imagines et figurae bibliorum*, published under the author's pseudonym of Renatus Christianus by Christopher Plantin in Antwerp in 1584, showing the publisher's pseudonym (Iacobus Villanus) and the false date of 1581. (Courtesy of the Museum Plantin-Moretus, Antwerp. Library, A. 1169.)

felt, comprised a philosophical outlook rather than a form of religious practice like Nicolaes's. From surviving documents and, not least, from Francis Sweet's biography, published in 1601 and again in posthumous editions of the *Theatrum orbis terrarum*, we discern a man whose considerable piety was tinged by a mysticism inspired not only by *devotio moderna* but also by his upbringing. Ortelius's father, Leonard Ortels, is well known for his radical inclinations. Together with his cousin Jacob van Meteren, Leonard had collaborated with their relative John Rogers (alias Thomas Matthew) in the translation of the Matthew Bible (1537) which completed William Tyndale's work.⁶⁴ Christopher Marsh points also to contacts between the first English Familists and opponents of Mary Tudor's government and to the fact that John Rogers, who had worked with Leonard Ortels on Tyndale's translation, was the first English victim of persecution under the Catholic queen.⁶⁵ It may well have

been through such parental contacts that the young Ortelius came to be acquainted with Hendrik Nicolaes before Plantin was. Ortelius would also have been aware of the Cassandrist movement, a sectarian group led by his friend Hubert Goltzius. The Ortelius's house in Antwerp was always wide open to political and religious refugees, and the family was clearly supportive of those in trouble with the church authorities. Ortelius's cousin Emanuel van Meteren (who was brought up with Ortelius after the death of his father), was charged with heresy while visiting Antwerp in 1575 and imprisoned, to be released only as a result of a petition organized by Ortelius.⁶⁶

Other pointers and family links strengthen the case for Ortelius's Hiëlistic sympathies (or, at the very least, tolerance). In his *Chronica*, Nicolaes refers to a legacy of about a hundred pounds—a substantial sum for the time—bequeathed to the sect by an adherent, Martynken Coels, who was

related to Ortelius by marriage.⁶⁷ Moreover, Ortelius's library contained a number of well-known Familist texts, like *'t Wonderboeck* (Deventer, 1542) by David Joris, and Nicolaes's fundamental *Den Spieghel der Gerechtigheit* (Antwerp, 1556). In 1585 Ortelius was expelled from the Antwerpian civic guard by the new Spanish administration.⁶⁸ Renée Boumans attributes this event to Ortelius's lack of religious orthodoxy and points to his friendship with Pieter Heyns, his secretary and author of a pocket-sized edition of the *Theatrum* (the *Spieghel der Werelt*, 1574). Heyns was a fervent Calvinist and member of the revolutionary administration of Antwerp during the five previous years.

In Familism, all religious attitudes were accepted as legitimate, a fact which goes a long way to explaining how Ortelius could maintain friendships with both orthodox and reformed activists. In fact, Ortelius's letters to his nephew Jacob Cool the younger (Ortelianus), whose own religious proclivities were close to those of the new Church of England, shed direct light on his views. Writing to his nephew on the 27 January 1593, Ortelius refers to the imminent publication of Justus Lipsius's *Oratio de Sancta Virgine* and continues:

Invitaveram te apud nos, mansione. Excusatum autem te habeo. Ligat te, puto, que ligat omnes bonos; religio nempe. Ligat et haec me; at minime ad locum, tempus, aut homines. Ad Deum tantum, expertem horum. [I invited you to stay with us, but I shall excuse you, I think in fact the religion, which ties all good men together, also ties you; it also ties me, but without reference to place, time or persons, but rather only to God.]⁶⁹

In March of the same year, Ortelius wrote to Cool again:

Invitaveram te apud nos, frustra autem hactenus video. Donec tempora fuerint liberiora; (te enim nondum satis liberum intelligo) an erunt autem, ignoro. Nullibi enim satis liberum, nisi libero. Non magis apud vos, quam apud nos. Tacendo autem est inconspicuum (Gygis annuli medio) se prebere, una via est securitas. [I invited you to our home, and you answered you will come when times will be less difficult, but I do not know when this will be possible. There is not enough liberty anywhere, unless for whomsoever is free; no more in England than here. But security is in silence and in being invisible each to other using Gyges's ring].⁷⁰

Referring to one of his journeys in England, he continued,

Apud vos si essem, sine annulo dicto, Vulcani manus me non posse effugere, tam scio quam nomen meum. At in illo tempore sapiens tacebit, quia tempus malum est, ut inquit propheta. Et christianismus est non hoc aut illud scire, dicere, vel agere, sed esse. [I would not have escaped Vulcan [= the fire], without the ring. The

wise man, in these times, must remain silent. Christianity is not so much knowing, saying or doing this or that, but being [a Christian].⁷¹

Finally, on 18 October 1595, Ortelius remarks, in connection with the religious disputes, that nobody understands what religion is and that 'non scire enim Christum beatitas, at habere' [there is no beatitude in only knowing Christ, but in possessing him inwardly].⁷²

The Theatrum as Moral and Scientific Paradigm

In the preface to the *Theatrum orbis terrarum*, Ortelius stressed the mnemonic function of his maps and the way portraying all countries of the world within a single volume symbolizes the values of peace and tolerance and the common origin of all human races. In 1570, after the publication of the first edition of the *Theatrum*, the Protestant poet and historian Pietro Bizzari congratulated Ortelius, calling the *Theatrum* a 'world machine', a stage on which all lands represented in the maps, with their walled towns and the names of their founders, might now live in peace.⁷³ In 1579, Alexander Grapheus, thanking Ortelius for the book he had just received (a copy of Ortelius's *Synonymia Geographica*, 1578), goes on to dedicate a poem to him. Grapheus imagines a journey through his native country (the region around Cologne), across mountains and rivers until, at a crossroads, he meets the ancient god Mercury who complains that in the days when simplicity and moderation ruled the earth, the streets were sacred to him, but that since hypocrisy and ambition have ruled, excessive greed over food, drink and clothes have distracted people from the straight and narrow way.⁷⁴ The metaphor of Hercules/Mercury at the crossroad became a humanistic topos and was also frequently used in Familist circles as a symbol of free will and of the justification by faith by which Familists maintained their beliefs in the face of the rigid determinism of the Reformation.

The manner in which the *Theatrum* was received and understood in its time also reveals how allusions and symbols were used as a language between writers who understood each other clearly. For example, in 1574 Guillaume Pantin (1510–1583) illustrated one of the pages of Ortelius's *Album Amicorum* with a drawing of a snake-draped Tau (T-shaped cross) resting on a globe (Fig. 10). Close by stands the god Pan, metaphor for Love of the World (*harmonia mundi*) and for the Christianization of Neostoic Universal Love. The



Fig. 10. Guillaume Pantin's drawing in Ortelius's own *Album Amicorum* (c.1574–1596), showing the Tau over a globe in a subtle allegory in praise of Ortelius's atlas. (Reproduced by permission of the Master and Fellows of Pembroke College, Cambridge. LCii. 111, fol. 28.)

encircling motto, 'As God loved the world, so Pan helps everybody', is a play on the artist's surname (Pan-Tin), for Pantin was a respected physician, as well as a friend of Hubert Goltzius and Justus Lipsius. The message is that the snake, symbol of medical science, operates as an aid in the world in the same way as does the *Theatrum orbis terrarum*. At the same time, the figure refers to the triumph of Christianity over the world's sin, and it is in this sense that Ortelius himself used the snake in the medallion at the top of the title-page of the *Parergon* (Plate 3).⁷⁵

Other examples show that more was being fêted by Ortelius's contemporaries than just his cartographic achievements. In 1584, the teacher and Protestant minister Daniel Engelhard illustrated his contribution to Ortelius's *Album Amicorum* with the figure of a man (Atlas) in a cultivated field supporting the weight of world on his shoulders.⁷⁶

In the motto accompanying the drawing, Engelhard asks Ortelius to be patient in order to raise the world. Engelhard was invoking, in short, tolerance and patience, two Neostoic and Familist topoi.⁷⁷ In the same book, Alexander Grapheus repeated (pages 90–91) the praise he expressed in his letter of 1579: nature ordained that all men should love each other, and Ortelius's *Theatrum* makes it possible for each person to pass through all the countries of the world while seated at home, an observation echoed by Cornelis Claesz. van Aecken.⁷⁸ Another page of the *Album* (page 105) is illustrated by Zacharia Heyns, who shows the three theological virtues leading a man towards a sky blazing with the monogram 'Pax Christi' and states, in the text below, that as virtue leads us to paradise, so Ortelius leads us in the world.⁷⁹ Likewise, Jan Raedemaecher who had helped Ortelius obtain maps for the *Theatrum*, represents

a globe encircled by the signs of the zodiac, on which is written 'Bonis in bonum' [good works lead to good], while below is another text that comments on the likeness between the potter, who moulds the clay, and God, who leads all things in the world—a reference to fate (or divine providence) which spins the potter's wheel.⁸⁰ When, in 1593, Joris Hoefnagel—whom Ortelius treated as an adopted son—drew an emblem in celebration of his friendship with the geographer, he chose to represent the terrestrial globe with the symbols of peace (an olive branch) and of *harmonia mundi* (a Hermathena, that is, Hermes and Athena together) posed over a book that can only have been intended as the *Theatrum*, to demonstrate the accepted interpretation of the meaning of Ortelius's atlas (Fig. 11).

Ortelius's *Theatrum orbis terrarum* was also identified with certain divine and moral attitudes. For Postel, the *Theatrum* paralleled in importance the Polyglot Bible of 1569–1572.⁸¹ On 9 April 1567, Postel had already written in flattering terms to Ortelius, saying how important for the church of

Christ were Ortelius's geographical studies.⁸² In 1579 Postel continued his correspondence with Ortelius, claiming that the atlas was the most important book in the world after the Bible, a work written for the entire human race and for the glory of God.⁸³ If he, Postel, was 'dispenser of the dew' (written in Hebrew but translated into Latin as *Post al*), Ortelius was to be thought of as 'light of the dew' (*Ort hel*), not simply because he brought light to unknown lands but also because the *Theatrum* helped the 'inner illumination' on which Postel's own great project rested, namely 'regere praestantissime populos super totam superficiem habitabilis terrae illius virorum israelitorum, quam ut secundum numerum filiorum Israel vel duodecim angelorum Dei divisit' [to rule well all the people of the inhabitable world of these twelve Hebrew tribes, as God divided it, according to the number of the principal angels).

Just before he died, in 1581, Postel expressed his ideas cartographically.⁸⁴ His woodcut map *Polo aptata nova charta universi* (described by Rodney Shirley as a tour-de-force) modified Ortelius's

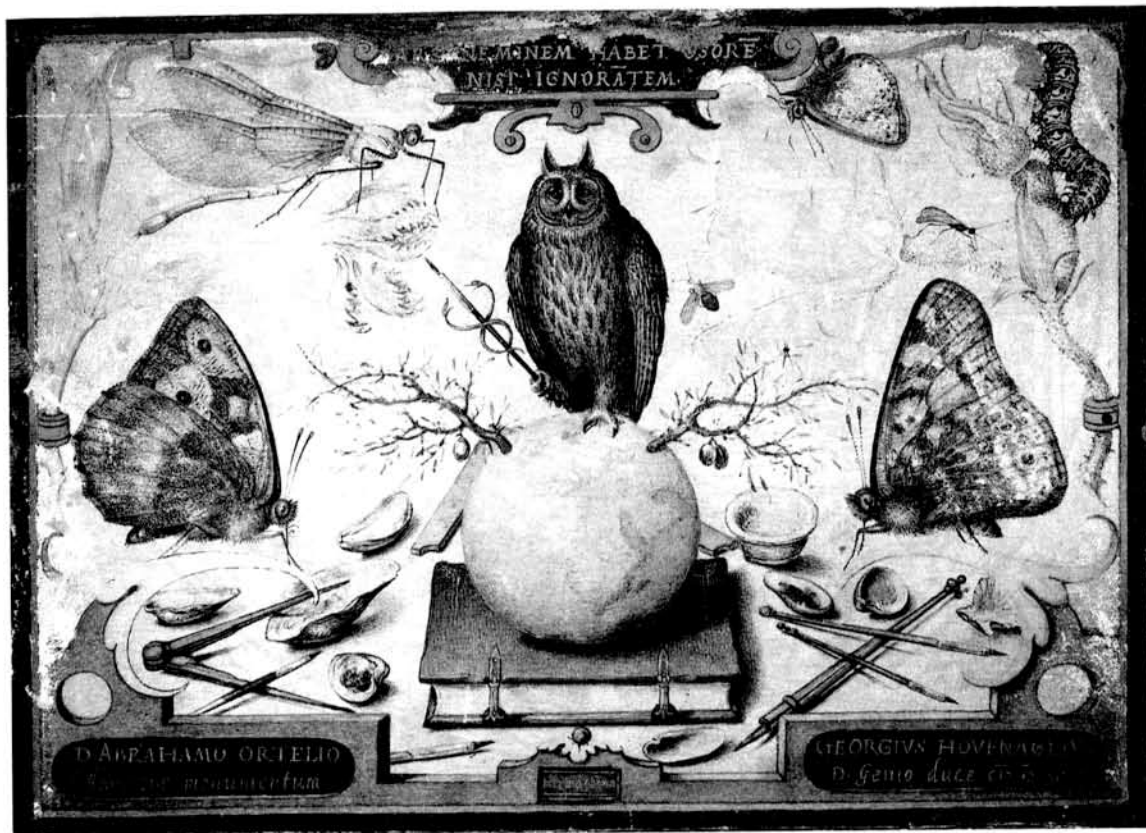


Fig. 11. Joris Hoefnagel's *Allegory of Hermathena* (Antwerp, 1593), created in celebration of the *Theatrum orbis terrarum*. The globe, decorated with symbols of peace and of *harmonia mundi*, rests on Ortelius's atlas. The cartographer's drawing instruments lie about. (Courtesy of the Prentenkabinet, Museum Plantin-Moretus, Antwerp, A.I. 3bis.)

cordiform projection to create a map of the world divided into twelve regions to correspond to the Twelve Tribes of Israel.⁸⁵ Postel packed his map with a great deal of geographical detail, surrounding it with 'striking decoration' and loading it (we must add) with Postel's own ideology.

The Heart as Emblem

Such glimpses as we can get of the personal and religious beliefs held by Ortelius and his friends and contacts help us to understand why Ortelius employed the heart shape, one of the most celebrated of all Familist emblems, for two of the

three first maps he himself made: the map of the world (1564) and the map of Asia (1567).⁸⁶ We have already discussed the map of the world. Ortelius's map of Asia (dedicated to Hubert Goltzius) touches on the link between Ortelius and Postel, for Ortelius pays a compliment to Postel's oriental studies in the text in the cartouche. It was Postel, too, who overtly drew attention to Ortelius's prophetic mission, as seen in his work in general and the *Theatrum* in particular. Features on Ortelius's map of Egypt (1565) are also worth noting. Ortelius produced this map from information provided by Scipius Fabius, a Bolognese scholar



Fig. 12. In a heart-shaped 'theatre of the world', a lost soul searches for the road to paradise. Familist emblem printed in 1576 by Nicolaes Bombarghen for Hendrik Nicolaes and widely distributed among members of the Family of Love. (Courtesy of the Library, University of Amsterdam, Church History Department. F. v. 103-2660.)

who thanks Ortelius in a letter dated 14 April 1565, and decorated it with an obelisk bearing a heart and a burning brazier, possibly as an allusion to ancient Egyptian beliefs with which Ortelius may have identified.⁸⁷ Scipius, whom Ortelius had met in 1554, belonged to the same hermetic circles as Ortelius.⁸⁸

The centrality of the emblematic heart in sixteenth-century religious anthropology was so widespread that Michael Servetus, one of the most authoritative thinkers of the Reformation and an author sympathetic to Postel's thinking (for whom Postel wrote an *Apology*) was persuaded to study the physical heart itself. Servetus's anatomical observations were remarkable, sometimes anticipating William Harvey's discoveries in the 1620s.⁸⁹ In his *Christianismi Institutio* (1553), Servetus contradicted theories derived from Galen which assumed the blood from the veins passed through the ventricular septa of the heart and instead speculated that blood is regenerated in the lungs through contact with the air there. Servetus believed blood and soul to be one and that, since the air was also the medium by which the body received the divine soul, it was from the air that the human body was able to develop all its vital and intellectual faculties.

When, in about 1540, Hendrik Niclaes, patriarch of the Familists, chose the burning heart of charity as a symbol for his sect, and when David Joris, prophet of the Davidists, spoke about the 'new Adam' regenerated by faith as a 'man with a new heart', the metaphor was already widely diffused in religious circles and easily understood.⁹⁰ In 1576, Niclaes Bombarghen, a printer closely associated with Niclaes, produced for him a devotional image which was widely but secretly distributed among Familists (Fig. 12). This picture shows a soul searching for the road to the lost paradise among dangers and fatal diversions. Within the heart-shaped frame, containing the 'theatre of the world' (theatre of charity), a variety of roads are indicated. Biblical quotations (e.g. Ezra 7, Matthew 7, Luke 13, John 14), confirm that the subject of the print concerns the choice between the narrow door and the wide door, a topos frequently employed by Familists to explain ethical and religious choice.

The paradigm of the heart was widespread within the circles in which Abraham Ortelius was brought up, lived and worked. It served as a private language, a synonym of the inner life. When sixteenth-century maps of the world are drawn in

the shape of a heart, we have to be prepared to look beyond the cartographical structure and to penetrate much further than usual into the lives of the mapmakers and the people around them. Too often the evidence examined in this paper may be found circumstantial or ambiguous, and its interpretation sometimes speculative. However, there is, I think, a need for the sort of survey attempted here, devoted to uncovering the complexity of the real function of the maps in a world in which geography and cartography had not yet emerged as specific or autonomous disciplines. We need to know more about the context in which mapmakers from Oronce Fine onwards produced their cordiform maps of the world. Developing further ideas proposed in this paper may eventually bring us closer to a better understanding of the full spectrum of meanings which Ortelius and other mapmakers close to the hermetic tradition had to take into consideration.

Acknowledgements: The author wishes to thank all the scholars with whom he has discussed details of his argument and in particular Corradino Astengo (University of Genoa), Franco Farinelli (University of Bologna), Alastair Hamilton (University of Lieden) and David Woodward (University Wisconsin-Madison). Special thanks are also due to the Plantin-Moretus Museum in Antwerp, to the Bibliothèque Royale Albert Ier in Brussels, and to all who have kindly authorized publication of the illustrations used in this essay.

Manuscript submitted in July 1997. Revised text received in October 1997.

NOTES AND REFERENCES

1. Bernard (Bernardus) Sylvanus is quoted by Ortelius in his *Catalogus Cartographorum*, published in the *Theatrum* (Bernardus Sylvanus Eboiensis). Sylvanus's outline (see Rodney Shirley, *The Mapping of the World. Early Printed World Maps, 1472-1700*, (London, New Holland, 1993), no. 32, plate 35), is distinctly cordiform in comparison with Walseemüller's version of the same map a few years earlier (1507) (Shirley, no. 26, plate 31): see Robert W. Karrow Jr, *Mapmakers of the Sixteenth Century and Their Maps: Bio-Bibliographies of the Cartographers of Abraham Ortelius, 1570, Based on Leo Bagrow's Ortelii Catalogus Cartographorum* (Chicago, Speculum Orbis Press, 1993), under the name 'Bernardus Sylvanus'. See also Numa Broc, 'Quelle est la plus ancienne carte "moderne" de la France?' *Annales de géographie*, 92 (1983): 513-30. Little is known about Sylvanus, who came from Eboli, near Naples, except that he apparently attempted to deal with the problem of squaring the circle and probably had an interest in hermetism.
2. Shirley, *Mapping of the World* (see note 1), no. 75, plate 66.
3. Justus Lipsius, a great philologist and antiquarian, was Ortelius's most intimate friend. Lipsius wrote about a return to the ancient Stoicism he professed as a religion

without external rites (his most important work, *De constantia*, Antwerp, 1584, was heavily influenced by Seneca's writings). An opportunist, Lipsius turned to various faiths (as he explained in his *Politicum libri VI*, Antwerp, 1589), involving himself with Catholics, Protestants and Calvinists before returning, at the end of his life, to Jesuit university centres. Ortelius defended Lipsius against his detractors, and Ortelius's correspondance reveals a similar attitude to the externals of religion. It was Lipsius who wrote the epigraph for Ortelius's tomb. He also dedicated his *De amphitheatro liber* (Antwerp, C. Plantin, 1585) to Ortelius.

4. I am discussing the significance of the title of Ortelius's work fully elsewhere: Giorgio Mangani, *Il 'mondo' di Abramo Ortelio. Misticismo, geografia a collezionismo nel Rinascimento dei Paesi Bassi* [The 'world' by Abraham Ortelius. Mysticism, geography and collecting in Renaissance Low Countries] (Modena, F. C. Panini, forthcoming in the series of the Istituto di studi rinascimentali di Ferrara).

5. G. De Tervarent, *Attributs et symboles dans l'art profane 1450-1600* (Geneva, 1958-1964), see under 'Coeur'.

6. Anne Sauvy, *Le miroir du coeur* (Paris, Editions du Cerf, 1989), 52.

7. Tervarent, *Attributs* (see note 5).

8. *Ibid.*

9. *La Morosophie* (Lyon, Macé Bonhomme, 1553), n. 97. See also Marie Mauquoy-Hendrickx, *Les estampes des Wierix conservées au Cabinet des Estampes de la Bibliothèque Royale Albert Ier. Catalogue raisonné* (Brussels, Bibliothèque Albert Ier, 1978-1983), n. 1573, for an analogous image by Anthonis Wierix.

10. Shirley, *Mapping of the World* (see note 1), no. 69.

11. *Ibid.*, no. 66, plate 60.

12. Peter Apian's *Tabula orbis cogniti*, the earliest extant printed cordiform map, appeared in 1530. In 1533 Apian published in his *Instrument buch* an expanded version of Johannes Werner's essay on cordiform projections, together with a commentary. He was thus technically well-informed about the projection. Karrow, *Mapmakers of the Sixteenth Century* (see note 1), 57, assumes that Apian copied the manuscript version of Fine's cordiform map of 1519.

13. Karrow, *Mapmakers of the Sixteenth Century* (see note 1), 172-73.

14. Jean van Raemdonck, 'Orbis Imago, mappemonde de Gérard Mercator de 1538', *Annalen van den Oudheidskundigen Kring van het land van Waas* (1886): 301-93, esp. 331-32.

15. Johann Stabius, whom Werner met in Vienna in 1502, had been professor at the University of Ingolstadt, c.1490. See Karrow, *Mapmakers of the Sixteenth Century* (note 1), 603 (also 57, 171).

16. Ortelius's cordiform world map is in Shirley, *Mapping of the World* (see note 1), no. 114, plate 97. About Mercator's religious sensitivities, see Antoine de Smet, 'Gérard Mercator (1512-1594) et les sciences occultes', *Scientiarum Historia* 16 (1990): 5-10; M. H. de Lang, 'Les idées religieuses de Gerardus Mercator', in *Gerard Mercator et la géographie dans les Pays-Bas Méridionaux* (Antwerp, Musée Plantin Moretus, 1994), 51-56; Manfred Büttner (ed.), *Neue Wege in der Mercator-Forschung. Mercator als Universalwissenschaftler* (Bochum, Universitätsverlag Dr. N. Brockmeyer, 1992).

17. Günter Schilder, *Monumenta Cartographica Neerlandica* (Alphen aan den Rijn, Canaletto, 1987), 2: 33-51.

18. Brigitte Englisch ('Erhard Etzlaub's projection and methods of mapping', *Imago Mundi*, 48 (1996): 103-23),

has recently shown that for his *Romweg* map of 1500, Etzlaub employed a system of stereographic projection which he then developed further in his Compass Map (1511), where he was experimenting with variably graduated latitudes, thus substantially anticipating the so-called Mercator projection.

19. Shirley, *Mapping of the World* (see note 1), no. 124, plate 105, and Karrow, *Mapmakers of the Sixteenth Century* (see note 1), 1/11.

20. Karrow, *Mapmakers of the Sixteenth Century* (see note 1), 1/1.2.

21. Schilder, *Monumenta Cartographica Neerlandica* (see note 17), n. 40 and 42.

22. Shirley, *Mapping of the World* (see note 1), no. 122, plate 104 (*Typus orbis terrarum*).

23. The map of the Travels of St Paul would have shown a large part of Europe; it is unclear if the map of the Holy Land was ever drawn (Karrow, *Mapmakers of the Sixteenth Century* (see note 1), p. 183, 27/6 and 27/7 respectively).

24. *Ibid.*, p. 185, 27/Y.

25. *Ibid.*, 184.

26. See 'Oronce Fine', in Karrow, *Mapmakers of the Sixteenth Century* (note 1). The notion of the heart was common in astrological circles. Jerome Cardan places the *cor coeli* at the centre of the heavens in horoscopes in his *De supplemento almanach* (Nuremberg, 1544, 1547). John Dee reflects, in his *Propaedeumata aphoristica*, XCIII (1558, dedicated to Mercator), that this expression was widely used. See Annelies van Gijzen, 'L'Astrologie', in Marcel Watelet, *Gérard Mercator Cosmographe, le temps et l'espace* (Antwerp, Fonds Mercator Paribas, 1994), 221-34 and especially 231.

27. Karrow, *Mapmakers of the Sixteenth Century* (see note 1), p. 171, n. 27/2.1.

28. Monique Pelletier, 'Die herzförmigen Weltkarten von Oronce Fine', *Cartographica Helvetica* 12, (1995): 27-37.

29. Karrow, *Mapmakers in the Sixteenth Century* (see note 1), 179.

30. Letter addressed to Wolfgang Haller, 3 March 1581, in M. van Durme, *Correspondance Mercatorienne* (Antwerp, De Nederlandsche Boekhandel, 1959), n. 152.

31. Pelletier, 'Die herzförmigen Weltkarten' (see note 28).

32. *De orbis situ ac descriptione* (Antwerp, 1526, 1527-30). Karrow, *Mapmakers of the Sixteenth Century* (see note 1), 407, is dubious about the date of publication 1527-30; Pelletier, referring to the copy in the Bibliothèque Nationale de France, specifies Antwerp, 1526 ('Die herzförmigen Weltkarten' (see note 28)).

33. On Franciscus Monachus see Karrow, *Mapmakers of the Sixteenth Century* (note 1), 407-9; and on Frisius's globe see, 209-10.

34. Pelletier 'Die herzförmigen Weltkarten' (see note 28), 33.

35. Van Raemdonck, 'Orbis Imago, mappemonde de Gérard Mercator de 1538' (see note 14), 313-14.

36. *Ibid.* Watelet, *Gérard Mercator Cosmographe* (see note 26), 81-90, has published the references to Mercator's arrest found in the archives (Brussels, Archives Générales du Royaume, Papiers d'État et d'Audience, n. 1653/I and 1668/I).

37. A. Tihon, 'Une lettre de G. Mercator à J. Vivian', *Bulletin de la Commission royale d'histoire* 77 (1908): 134-38. Rienk Vermij, 'Typus Universitatis', in Watelet, *Gérard Mercator Cosmographe* (see note 26), 235-39.

38. Shirley, *Mapping of the World* (see note 1), no. 103, plate 89; Karrow, *Mapmakers of the Sixteenth Century* (see

note 1), 172–73. Karrow (27/2.2) gives the Turkish title as *Kemâliyle naksh dunmush eümle cihân nümûnu*.

39. Karrow, *Mapmakers of the Sixteenth Century* (see note 1), p. 172, 27/2.3.

40. Archivio di Stato di Venezia, Series 'Senato Terra', vol. 47 (1568–69). The act about the privilege first given to Giustinian was dated May 1568. Notwithstanding, the maps were finally confiscated. See Antonio Fabris, 'Nota sul mappamondo cordiforme di Haci Ahmed di Tunisi', *Quaderni di studi arabi* 7 (1989): 3–17.

41. Jacques Severt, *De orbis catoptrici, seu, Mapparum mundi principiis*, (Paris 1598). See also Karrow, *Mapmakers of the Sixteenth Century* (note 1), 171, 211.

42. Karrow, *Mapmakers of the Sixteenth Century* (see note 1), 172–73.

43. *Ibid.*, p. 173, 27/2.3.

44. Quoted in Karrow, *Mapmakers of the Sixteenth Century* (see note 1), 172.

45. V. L. Ménage, 'The map of Hajji Ahmed and its makers', *Bulletin of the School of Oriental and African Studies* (University of London), 21 (1958): 291–314.

46. Giovanni Battista Ramusio, *Delle navigazioni et viaggi* (Venice, 1559), vol. 2, *Preface*, p. 18.

47. Pierre Hondius, *Album Amicorum* (n.d.) (Bruxelles, Bibliothèque Royale Albert Ier, MS II 2254). Albums like those of Hondius and Ortelius (see note 75) were books kept throughout the owners' life for the express purpose of collecting comments and drawings by the owner's friend. A copy of Hondius's original drawing in the *Album amicorum*, was engraved by William Kip and published in 1602 in London by Hans Woutneel.

48. The Fool's Head map discussed here is in Shirley, *Mapping of the World* (see note 1), no. 170, plate 139. I have seen the copies in the Bodleian Library, Oxford (Douce Portfolio, 142 (92)) and in the Bibliothèque Nationale, Paris (Ge. DD. 2987 (64)), and Shirley notes that other copies are in Nuremberg and Chicago (Newberry Library). The Paris map carries the handwritten name Fine, but this may be a later addition. Author and engraver of these maps are unknown. Rodney Shirley, 'Epichthonius Cosmopolites: who was he?' *The Map Collector*, 18 (1982): 39–40, suggests Frans Hogenberg, the engraver of Ortelius's maps, as a possible engraver of the Fool's Head map. Whoever the author, the map reveals a number of affinities with Ortelius's and Lipsius's ethical views.

49. Shirely, *Mapping of the World* (see note 1), no. 432A. See also Rodney Shirley, 'Six new world maps', *The Map Collector* 64 (1993): 2–7. The Jesuit map in colour adorns the cover. The work was sold at Sotheby's in June 1992 and is today in a private collection.

50. L. Charbonneau Lassay, 'Le marbre astronomique de la Chartreuse de Saint Denis d'Orques', *Regnabit* (1924): 211–24, with reproduction. The original print is now thought to be lost.

51. Giovanni Pozzi, *Sull'orlo del visibile parlare* (Milano, Adelphi, 1993), 393 and n. 3.

52. P. A. Tiele, 'Christ. Plantin et le sectaire mystique Hendrik Niclaes', *Le Bibliophile Belge* 3 (1868): 121–29; Friedrich Nippold, 'Hendrick Niclaes und das Haus der Liebe', *Zeitschrift für die Historische Theologie* 32 (1862): 343–402, 473–563; Max Rooses (ed.), *Correspondance de Christophe Plantin* (Antwerp, 1885; Neudeln, Liechtstein, Kraus Reprint, 1968).

53. Louis Voet, *The Plantin Press, 1555–1589* (Amsterdam, Van Hoeve, 1982), 1: 21–30.

54. Alastair Hamilton, *The Family of Love* (Cambridge, James Clarke, 1981); Alastair Hamilton, 'Hiël and Hiëlists:

the doctrine and followers of Hendrik Jansen van Barrefelt', *Quaerendo* 7 (1977): 243–86; and Paul Valkema Blouw, 'Was Plantin a member of the Family of Love? Notes on his dealings with Hendrik Niclaes', *Quaerendo* 23 (1993): 3–23.

55. Hamilton, *Family of Love* (see note 54); Jean Dietz Moss, 'Godded with God'. *Hendrik Niclaes and His Family of Love* (Philadelphia, The American Philosophical Society, 1981); Christopher W. Marsh, *The Family of Love in English Society, 1550–1630* (Cambridge, Cambridge University Press, 1994).

56. Moss, *Godded with God* (see note 55), 45.

57. Antwerp, C. Plantin, 1584. The work was published under van Barrefelt's pseudonym, Renatus Christianus, by Christopher Plantin, who used the pseudonym Iacobus Villanus and the false date of 1581.

58. Dirck Volckertzoon Coornhert (1522–1590) made use of the Erasmian theme of patience—shared by Familists—in his homonymous *Triumph* (1569). Based on a design by Maarten van Heemskerck, the composition represents Isaac, Joseph, David, Tobias, St. Stephen and Christ. Another theme favoured by Familists is reflected in the engraving *Christus vera lux* by Philip Galle (1537–1612), again from a design by Heemskerck, in which light from the central figure of Christ illuminates only the men of simple spirit, while monks and learned doctors are, on the contrary, blinded by his light in condemnation of their attitudes of *sophi graves* and lack of a true and authentic religious spirit.

59. The confessional inclinations of the Wierix family (Anthonis I, 1520/25–1572; Jan I, 1549–1618; Jeronimus, 1533–1619 and Anthonis II, 1555/59–1604), are unclear, although it is known that they were, like Ortelius, considered reformist. For a detailed discussion, see Mangani, *Il 'mondo' di Abramo Ortelio* (note 4).

60. Hamilton, *Family of Love* (see note 54), 134.

61. A note is due about the printers of the *Theatrum orbis terrarum*, Gilles Coppen van Diest and Gilles van den Rade (Aegidius Radens), Plantin's predecessors and to whom Plantin supplied paper. Their links with Plantin's printing house and with heretical movements in Antwerp are documented. Plantin held them in esteem, as did the governors of the town who freed Coppen van Diest from prison in 1567 when he had been charged with printing blasphemous books. Van den Rade, who had been accepted as a printer in 1570 just on Plantin's recommendation, went on to publish works by the Familist poet Jan van der Noot as well as books on cartography. He left Antwerp in 1585 when the Farnese took the town and restored power to the Catholics. Both van Diest and van den Rade were associates of Hubert Goltzius, one of Ortelius's close friends (to whom Ortelius dedicate his large map of Asia), and a leader of the Cassandrist party. It was probably van den Rade who published Goltzius's last book, *Sicilia et Magna Grecia*, in 1576. From 1579, Ortelius's atlas was printed in the *Officina Plantiniana* itself. See A. Rouzet, *Dictionnaire des imprimeurs, libraires et éditeurs des XVe et XVIe siècles dans les limites Géographiques de la Belgique actuelle* (Nieuwkoop, B. De Graaf, Le Haye, 1975), under names Coppen Diest (*sic*) and van den Rade.

62. Hamilton, *Family of Love* (note 54), 87.

63. See Jan van Dorsten, *The Radical Arts. First Decade of an Elizabethan Renaissance* (Leiden, Thomas Browne Institute, Oxford University Press, 1970), 30, n. 10; Hamilton, *Family of Love* (see note 54), 88. Barrefelt, in another of his works, *Ackerschat* (1581), wrote that the state of grace would not be achieved by only respecting

outward moral rules but by following an internal and rigorously individual discipline of belief.

64. When William Tyndale was in Antwerp in 1535, he had already published his translation of the New Testament (1526) and part of the Old Testament (1530). Miles Coverdale (who had collaborated with Tyndale) used these for his version of the Bible (1535). Tyndale was aiming to complete his work on the Old Testament when he was arrested on a charge of heresy in May 1535, taken to Vilvorde castle, near Brussels, and executed there in 1536. See David Daniell, *William Tyndale, a Biography* (New Haven and London, Yale University Press, 1994).

65. John Rogers (d. 1555) was prebend of St Paul's Cathedral and the first martyr under Mary I. His son, Daniel Rogers, was a friend of John Dee as well as of Ortelius. While John Rogers was in Antwerp, he had married one of Ortelius's relatives, Adrien van Werden, and in 1537 published there, under the pseudonym Thomas Matthew, Tyndale's translation of the Bible. It is likely that Leonard Ortelius and Jacob van Meteren both came into contact with Tyndale while he was seeking refuge in Antwerp. The suspicion that Leonard Ortelius had contacts with heretical circles is confirmed by the accusation that he possessed books containing heretical arguments, which led the Inquisition to search, in 1535, the Ortelius's family home. Tyndale's attachment to the importance of inner faith was similar to the Ortelius family's own spirituality (Daniell, *William Tyndale* (see note 64), Chap. 13).

66. Entry by Henri Wauwermans on Abraham Ortelius, in *Biographie Nationale* (Brussels), vol. 15 (1901).

67. Hamilton, *Family of Love* (see note 54), 195–99, and Jan H. Hessels, *Ecclesiae Londino-Batavae archivum* I, *Epistulae ortelianae* (Cambridge, 1887, re-edited by O. Zeller, Osnabrück, 1969), LXIII.

68. Renée Boumans, 'The religious views of Abraham Ortelius', *Journal of the Warburg and Courtauld Institutes*, 17 (1954): 374–77.

69. Hessels, *Epistulae ortelianae* (see note 67), n. 228. All translation from Latin into English here and elsewhere in this paper is the author's.

70. Hessels, *Epistulae ortelianae* (see note 67), n. 229.

71. *Ibid.*, n. 229; author's italics.

72. *Ibid.*, n. 278.

73. *Ibid.*, n. 33.

74. The Greek god Hermes (and his Roman homologue Mercury), was the god of the streets, honoured with garlands at cross roads. In Stoic philosophy and again in the Renaissance, the topos became a metaphor for ethical choice, the choice being between the street of good and the street of evil. A common pictorial version would be called 'Hercules at the Cross Roads'. In the Low Countries, the crossroads was often represented in the form of a Y. In Christian humanism, the topos was loaded with religious significance. Mercator, for instance, used the Y form in his religious cosmology (Vermij, 'Typus Universitatis' (see note 37)).

75. J. Puraye (ed.), *Album amicorum Abraham Ortelius* (monograph 1–3 of *De Gulden Passer*, 1967 and 1968), 28.

76. *Ibid.*, 53.

77. *Ibid.*, 53.

78. *Ibid.*, 90–91 for Grapheus's contribution, and 96–98 for Aecken's.

79. *Ibid.*, 105.

80. *Ibid.*, 93. See also J. Raedermaecher, 'In Theatrum orbis Abrahami Ortelii' (*Album Raedermaecher*, University of Ghent Library, MS, c. 56). If this expression seems calvinistic, it is worth noting that Raedermaecher had indeed espoused Calvinism when he moved to London in 1567. In his poem, he made the connection between the *Theatrum* and Christian pacifism. Ortelius, Raedermaecher wrote, made it possible to discover the character of humans by representing the different parts of the world in accordance with the ancient theory of climates, which stated that the inhabitants of the world blessed with superior qualities (represented by peaceful inclinations and respect for justice and religious piety), were to be found in temperate regions. Thanks to Ortelius, the poem continues, all parts of the world have been gathered into a single atlas in the same way that all future generations will share a single soul.

81. The final volume (1572) contains commentaries, illustrations, and maps and plans on biblical and oriental history. Postel saw in this apparatus a manifestation of *concordia omnium rerum*, the notion which draws attention to similarities between the Catholic, Hebrew and Islamic religions and their validation in the authority of the Holy Scriptures.

82. Hessels, *Epistulae ortelianae* (see note 67), n. 19.

83. *Ibid.*, n. 81.

84. Shirley, *Mapping of the World* (see note 1), no. 144, plate 122. Schilder's *Monumenta Cartographica Neerlandica* (see note 17), 2: n. 38, reproduces Postel's map and dates it 1578. See also Marcel Destombes, 'An Antwerp unicum: an unpublished terrestrial globe of the 16th century in the Bibliothèque Nationale, Paris', *Imago Mundi*, 24 (1970): 85–94.

85. François Secret, 'Notes sur Guillaume Postel', *Bibliothèque d'Humanisme et Renaissance*: 21 (1959): 453–67; 22 (1960): 377–392; 23 (1961): 551–74; and 26 (1964): 120–53.

86. According to Henri Wauwermans, the projection of Ortelius's map of Asia is very similar to that of his cordiform world map of 1564: *Histoire de l'école cartographique belge et anversoise du XVI^e siècle* (Amsterdam, 1864), 2: 136.

87. In Bologna the Hermathena academy, run by Achille Bocchi, was devoted to hermeticism, and we can document links between Bocchi, Plantin and Goropius Becanus (who was for socially acquainted with Ortelius). See Fig. 11 for Hoefnagel's drawing *Hermathena*, dedicated to Ortelius.

88. Hessels, *Epistulae ortelianae* (see note 67), n. 81. Scipio Fabius was related to Willelm Fabius, draftsman and antiquarian, who was teaching Greek in the University of Louvain in 1578. Willelm Fabius collaborated with Gilles Hooftman of Antwerp, who was probably responsible for providing the capital for the publication of Ortelius's pre-*Theatrum* maps: van Dorsten, *The Radical Arts* (see note 63), 40–49.

89. Walter Pagel, *William Harvey's Biological Ideas: Selected Aspects and Historical Background* (Basel and New York, S. Karger, 1966), Chap. 5.

90. Mauquoy-Hendrickx, *Les estampes des Wierix* (see note 9), n. 1987. From the start, Nicolaes made great use of pictures of the heart, symbols of friendship and fraternity such as a handshake, and heart metaphors in all his writing. See his *Exhortatio I* and his *Comedy*, for instance.

Abraham Ortelius et la signification hermétique de la projection cordiforme

La projection cordiforme utilisée par Oronce Fine, Gérard Mercator et Abraham Ortelius pourrait avoir une signification hermétique. L'essentiel de cet article porte sur Ortelius, car des études récentes ont émis l'hypothèse de rapports entre Ortelius, Christophe Plantin et une secte religieuse clandestine d'Anvers connue sous le nom de la Famille de l'Amour or la Famille de la Charité, dont l'emblème était un coeur, source d'illumination divine et de Volonté Libre. On démontre ainsi que les contemporains d'Ortelius dans les groupes religieux radicaux de l'Europe du Nord auraient compris le *Theatrum orbis terrarum* sous ce jour. Comme le jugement de Guillaume Postel concernant l'oeuvre d'Ortelius le prouve, cet atlas fut pris pour un ouvrage dont l'occultisme residait dans le pouvoir des images.

Abraham Ortelius und eine geheime Bedeutung der herzförmigen Projektion

Die herzförmige Projektion, die Oronce Fine, Gerard Mercator und Abraham Ortelius benutzten, könnte eine geheime Bedeutung gehabt haben. Der Beitrag konzentriert sich auf Ortelius, da jüngste Untersuchungen eine Verbindung zwischen diesem, Christopher Plantijn und einer religiösen Geheimsekte in Antwerpen nahelegen. Diese ist unter dem Namen der Familisten (Familia Caritatis) bekannt und verwendete das Herz als Symbol im Sinne des Ursprungs göttlicher Erleuchtung und des Freien Willens. Der Autor stellt dar, wie Ortelius' Zeitgenossen in radikal religiösen Kreisen Nordeuropas sein *Theatrum orbis terrarum* mit solchen Ideen in Verbindung bringen konnten. Die Einschätzung dieses Werkes durch Guillaume Postel zeige, daß dem Atlas der Charakter eines Talismans—basierend auf der Macht der Bilder—zuschrieben wurde.

Does *Your* Library Subscribe to *Imago Mundi*?

Whether or not your library takes *Imago Mundi* could be up to YOU! Library committees are often asked to cut less valued periodicals. Please speak up for *IM*. There are many good reasons, you can point out, for retaining, or acquiring it. For instance:

- *IM* is the journal of record for the history of cartography and the only international scholarly journal solely concerned with the study and interpretation of maps and mapmaking in any part of the world, at any period.
- Over the past five years the institutional price has increased by 17% whereas the number of pages has grown by over 50%. The present volume is the largest in the journal's sixty-year history.
- A new design was introduced in 1995, along with trilingual abstracts and additional indexes to the Bibliography (covering places and subjects).
- The present range of refereed articles (on average ten per issue) makes *IM* a genuinely interdisciplinary journal, of relevance to a growing number of university courses not only in history and geography but also in related subject areas, such as the history of art, ideas, literature and the sciences. Please ensure that *IM* is brought to the notice of colleagues in other disciplines.
- Back issues are available to fill any gaps (see the final page of this volume for details).

What others are saying about *Imago Mundi*

'this is one journal that all academic libraries, both in the humanities and sciences, should continue since its discussions cover so many other fields' *Times Higher Educational Supplement*.

'a highly pleasing journal, well worthy of examination, and subscription' *The Cartographic Journal*.

'The articles reflect an admirable catholicity of interests and geographical and chronological range' *Mapline*.

To order, see back cover.



Plate 2. Engraved by Bartholomew Kilian, Stephen Eggestein's overt Jesuit apology of 1664 features Ortelius's cordiform map as a small but central part of the image, its heart shape symbolizing the evangelization brought by the Jesuits to the most remote countries of the world. (Reproduced with permission from a private collection.) (p. 71.)



Plate 3. Title page of Abraham Ortelius's *Parergon* (London, John Norton, 1606). Note Ortelius's allegorical use of the snake in the medallion at the top of the page to indicate the diffusion of heresy among Christians. (Courtesy of the British Library. Maps K.9.Tab.8.(II.) (p. 76.)

IMAGO MUNDI

Imago Mundi, founded in 1935, is the only English-language international scholarly journal devoted exclusively to the history of cartography. It is published annually by Imago Mundi Ltd, a non-profit company registered in the U.K., which also organises biennial international conferences. *Imago Mundi* aims to communicate the results of original research on any aspect of the history of maps and to promote interdisciplinary cooperation in such research.

In addition to full-length articles, which are refereed and edited, each issue contains notices and reports, obituaries, book reviews, a chronicle of the year's events relevant to the study of early maps and a detailed bibliography with indexes. A cumulative index to the contents of volumes 1-50 is in preparation. Back numbers of the journal are available for most issues.

Imago Mundi also co-publishes *Who's Who in the History of Cartography. The International Guide to the Subject* (ninth edition, 1998). Enquiries and orders for this guide to: Map Collector Publications Ltd, 48 High Street, Tring, HP23 5BH, Hertfordshire, U.K.

Orders for the current issue of *Imago Mundi*, Index and back numbers, should be addressed to:

The Secretary & Treasurer, Imago Mundi Ltd, c/o Map Library, The British Library, 96 Euston Road, London NW1 2DB, U.K.

Prices: Volume 48 onwards—private subscribers £30 (US\$60), institutions and agents £35 (US \$70). Back numbers (up to and including volume 42)—£25 (\$50); volumes 43-49—£30 (\$60). Sterling payments should accompany the order and may be made on a sterling cheque, Eurocheque or an international money order. Dollar cheques should be drawn on an American bank. Cheques should be made payable to *Imago Mundi Ltd*. All rates are for surface mail and include packing, handling and postage charges.

Articles for publication should be sent to **The Editor**, *Imago Mundi*, c/o 285 Nether Street, London N3 1PD, U.K. Typescripts should be in English. Short articles and notes are welcome. Full-length articles should not exceed 5,000 words (excluding footnotes) and should be accompanied by a 100-word summary and short list of keywords. Articles are sent anonymously to two referees before consideration by the Editor. Please send three paper copies, complete with photocopies (not originals) of all illustrations, omitting the author's name from at least two of the paper copies. In the case of acceptance, two paper copies of the final submission will be asked for, together with a version on **disk** (which must be IBM compatible, preferably in Wordperfect 5.1, alternatively in ASCII). All illustrative material must be of the highest possible quality.

Books for review should be sent to the Book Review Editor, Paul Ferguson, *Imago Mundi*, c/o The Map Library, Trinity College Library, College Street, Dublin 2, Ireland. Unsolicited reviews are *not* accepted.

Information for the **Chronicle** and for the **Bibliography** should be sent in the first instance to your National Representative.

Imago Mundi accepts camera-ready advertising of interest to historians of cartography. Details from the **Secretary and Treasurer**, Imago Mundi Ltd, c/o Map Library, The British Library, 96 Euston Road, London NW1 2DB, U.K.