

# CULTURE AND COSMOS

*A Journal of the History of Astrology and Cultural Astronomy*

Vol. 4 no 2, Autumn/Winter 2000

Published by Culture and Cosmos  
and the Sophia Centre Press,  
in partnership with the University of Wales Trinity Saint David,  
in association with the Sophia Centre for the Study of Cosmology  
in Culture,  
University of Wales Trinity Saint David,  
Faculty of Humanities and the Performing Arts  
Lampeter, Ceredigion, Wales, SA48 7ED, UK.

[www.cultureandcosmos.org](http://www.cultureandcosmos.org)

Cite this paper as: Ross, David J., 'The Bird, the Cross, and the Emperor: Investigations into the Antiquity of the Cross in Cygnus', *Culture and Cosmos* Vol. 4 no 2, Autumn/Winter 2000, pp. 3-28.

British Library Cataloguing in Publication Data  
A catalogue card for this book is available from the British Library

*All rights reserved. No part of this book may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage and retrieval system, without permission in writing from the Publishers.*

<b>ISSN 1368-6534</b>
-----------------------

Printed in Great Britain by Lightning Source

Copyright © 2018 Culture and Cosmos  
All rights reserved

# **The Bird, the Cross, and the Emperor: Investigations into the Antiquity of the Cross in Cygnus**

---

**David J. Ross**

**Abstract.** When was it that someone first gazed up at the Summer Milky Way and recognized the Cross among the stars of Cygnus? After the Big Dipper and the Seven Sisters of the Pleiades, the Northern Cross is among the most familiar of asterisms, for Westerners at least. Turn to almost any modern handbook on the constellations and we find under Cygnus that the Swan often goes by this well known alias. Little explanation is required; the Cross being simply a matter of common knowledge. But when did it become so? One such popular guide, by the late veteran interpreter of the stars, Julius Staal, ventures only that it was 'early Christians' who recognized the cruciform shape of Cygnus.<sup>1</sup> It is certainly a reasonable guess; but which early Christians recognized the Cross where others in their day would have imagined a great swan flying along the river of milk flowing from Hera's breast? Although it seems little more than an odd bit of trivia, attempting to answer the question of the asterism's antiquity touches on some interesting aspects of our cultural history. I hope to show how light from this admittedly peculiar angle may illuminate ways that astral imagery played upon the early Christian imagination, particularly as related to aspects of the history of Constantine the Great, the first Christian emperor of Rome.

## **The Bird and the Cross**

The easiest part of the Northern Cross asterism to address proves to be the adjective 'Northern'. As we might suspect, this was added to 'the Cross' some time after the recognition by early seafarers of the fifteenth and sixteenth centuries of a welcome figure among the unfamiliar and as yet largely unpatterned stars of the Southern sky. Crux, the Southern Cross, has been illustrated as a separate constellation at least since 1592, appearing as such on the globes of the English cartographer Mollineux. This Crux Australis, which came to be a convenient tool that early navigators used to find the South celestial pole, begs the question of an older Cross that became Borealis to distinguish it from this new one.<sup>2</sup>

The Age of Exploration did indeed give rise to a great deal of innovation and experimentation in celestial cartography. New constellations had to be devised to make sense out of the relative chaos

---

David J. Ross, 'The Bird, the Cross, and the Emperor: Investigations into the Antiquity of the Cross in Cygnus', *Culture and Cosmos* Vol. 4 no 2, Autumn/Winter 2000, pp. 3-28.

#### 4 The Bird, the Cross, and the Emperor

explorers encountered on such distant waters. This was also that age of religious fervour stirred by the Reformation and Counter-Reformation in Europe.

**Figure 1. The Cross of St. Helena, from Andreas Cellarius' *Atlas Coelestis seu Harmonia Macrocosmica* (1660), based on Schiller's earlier Christianized atlas. Both featured stars plotted in the traditional reversed manner. By permission of The British Library.**

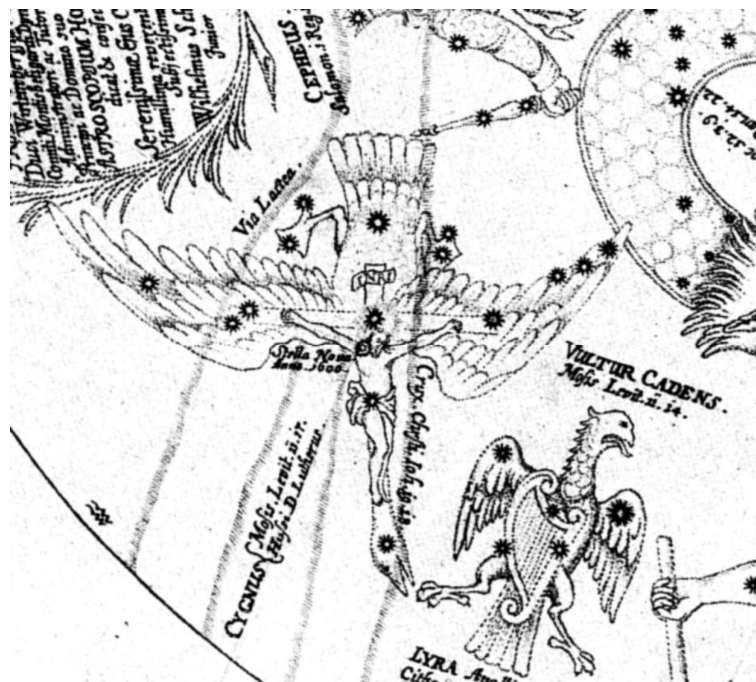


It should not be surprising then that a brief 'biblicizing' movement arose among cartographers of the early seventeenth century and it's among these that we readily find explicit depictions of the Cross in Cygnus.<sup>3</sup> For Julius Schiller, whose *Coelum Stellarum Christianum* of 1628 offered a thoroughly Christianized portrait of the heavens, the stars of the Swan became 'St. Helena with The Cross', referring to the Emperor Constantine's mother and her legendary discovery of the wood of the 'True Cross'. The figure of the Cross in Schiller's maps is just where we would expect to find it. And, as I have already indicated, the era he invokes by associating it with Helena may prove to be an important clue for our investigation.

Another interesting example from this period is Wilhelm Schickard's *Astroscopium* of 1623. This Lutheran pastor turned Hebrew scholar,

mathematician, cartographer, printer, engineer and astronomer is best remembered in the annals of computing for the calculating engine he invented for his more famous friend, Johannes Kepler, to aid in the laborious task of computing ephemerides. His *Astroscopium* featured an innovative conic projection and was among the first modern style star maps to plot the constellations as they naturally appear in the sky. Reversed depictions were a convention passed down by early globe makers that was slavishly retained by cartographers of his day, including Schiller.

**Figure 2.** Wilhelm Schickard's Crux Christi, from his innovative conical star chart *Die Astroscopium* (1623). Biblical references were devised for each classical constellation depicted. Schickard's was among the first maps to portray the stars realistically and not reversed as on early celestial spheres. Note the nova of 1600 recorded in Cygnus. By permission of The British Library.



## 6 The Bird, the Cross, and the Emperor

Schickard was content to portray the otherwise pagan but familiar classical constellations. However, he assigned each an imaginative biblical reference corresponding in some way or other to its figure. Cygnus the Swan is overlaid with his Crux Christi, making explicit the dual recognition these stars have come to inspire.<sup>4</sup>

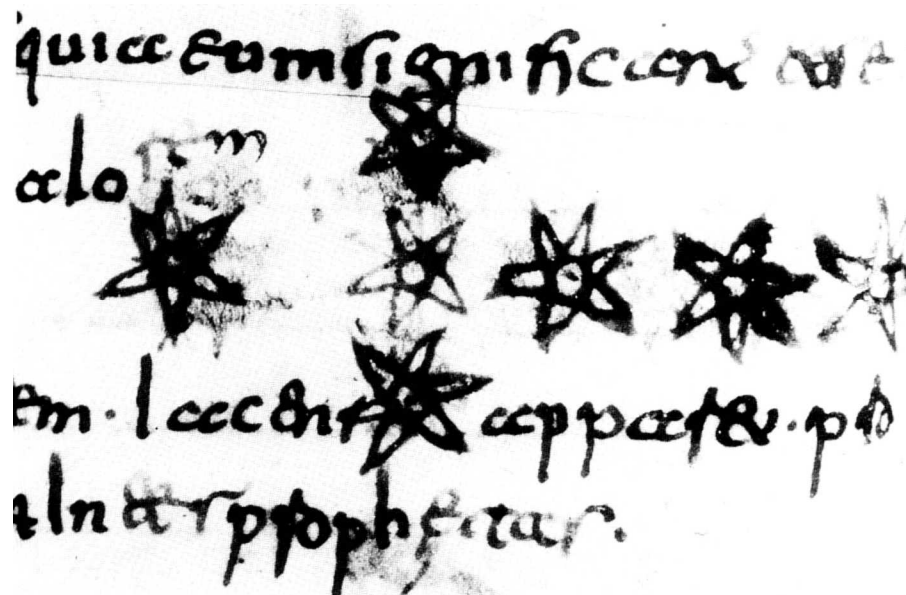
The works of both of these biblicizers were influenced by the great Johannes Bayer's *Uranometria* of 1603. In the notes accompanying his map of the constellation Cygnus he comments how the recognition of a Cross there had long been known among the common folk.<sup>5</sup> Even so, current research has uncovered no similar references for nearly a full millennium. Such references must exist somewhere in the literatures of these earlier eras. That they seem to be so difficult to uncover may not be entirely unexpected, however.

The Renaissance was marked by an obvious appreciation for the classical traditions of Greece and Rome. In astronomy this grew out of the recovery of those traditions that took place during the later part of the Middle Ages as a result of European contact with the Arabic world.<sup>6</sup> From the 'House of Wisdom' founded by Caliph al-Ma'mun in the ninth century came translations of Greek philosophy and science that would eventually revive the intellectual life of the West. For the purposes of astronomy, not to mention astrology, the most influential text of all proved to be Ptolemy's *Almagest*. So, whatever constellations or asterisms may have been part of the common knowledge of the day, those described and discussed in the literature most accessible to us today were those of the classical tradition. However, as we press further back in time we do encounter clues to distinctly Christian ways of envisioning the heaven of stars above.

Searching through the pages of R. H. Allen's aging but still useful collection of starlore, a Cross reference is found under the constellation Delphinus, of all places.<sup>7</sup> The comment comes from the great Muslim historian and scientist of the eleventh century, Abu Raihan Al-Biruni. In his book *The Chronology of Ancient Nations* the section on the calendar of the Syrians contains a listing for Ayyar 7 (Ayyar = month 2, approx. May) and a Feast of the Apparition of the Cross in Heaven. Although Al-Biruni opens his comments with a discussion of the Cross vision of Constantine the Great, and then summarizes the legend of Helena's discovery of the relic of the True Cross, the vision commemorated on that day among Orthodox Christians is that of St. Cyril of Jerusalem, an event dated some several decades after the time of Constantine. According to Cyril's account, the cross was seen 'above holy Golgotha stretching out

as far as the holy Mount of Olives'.<sup>8</sup> Al-Biruni states, 'Other Christians, who are not learned people, speak of the cross in the constellation of the Dolphin, which the Arabs call *Ka`ud* (riding camel)... They say that at that time this cross in the Dolphin appeared opposite that place where Messiah had been crucified.'<sup>9</sup> In any case, the tantalizing reference leaves us wondering what these 11th century Syrian Christians may have made of nearby Cygnus, having found a cross in little Delphinus.

**Figure 3. Crux Major, illustrated in a late 8th century manuscript of Gregory of Tours' *De cursu stellarum*. The Cross is shown on its side as it would appear in the East at its rising. By permission of the Staatsbibliothek Bamberg, Msc. Patr. 61; fol. 79v.**

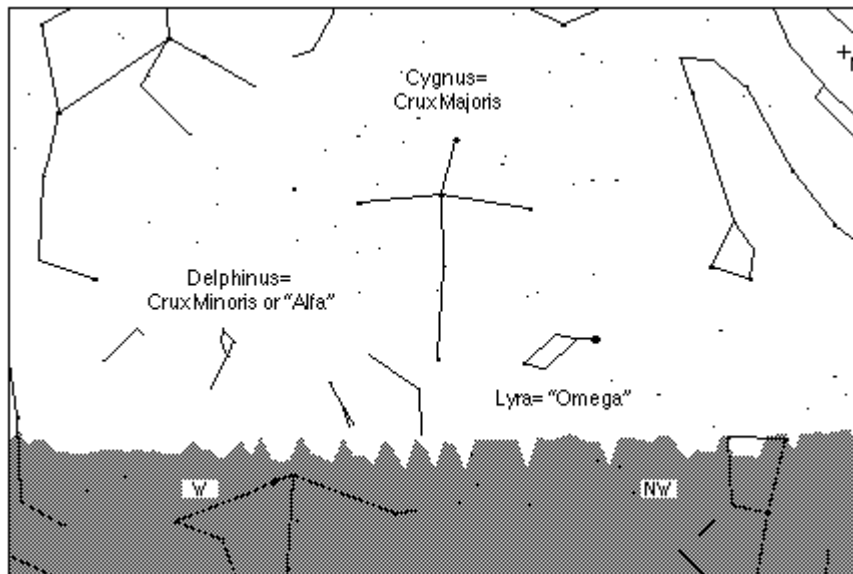


Stephen McCluskey has identified what appears to be the earliest clear reference to the Cross in the late sixth century monastic writings of Gregory of Tours.<sup>10</sup> Gregory inherited rules for ordering monastery life which included the admonition found in John Cassian's *De institutis coenobiorum*, written sometime after 420 AD, which urged that the night offices of prayer should be kept by carefully observing the stars rather than being left up to the sleepy whim of whomever had been assigned the task of waking his brothers.<sup>11</sup> Just how the stars were to be used in

keeping time wasn't described there, but Gregory's work *De cursu stellarum* (On the Course of the Stars), written shortly after his consecration as bishop in 573, gives thorough instructions for how this should be done; by careful observations of the rise and progress through the sky of select stars and constellations. *De cursu stellarum* was an exercise in practical astronomy that McCluskey has studied as an important means by which vestiges of the classical astronomy of the Greeks and Romans were preserved during the Dark Ages.

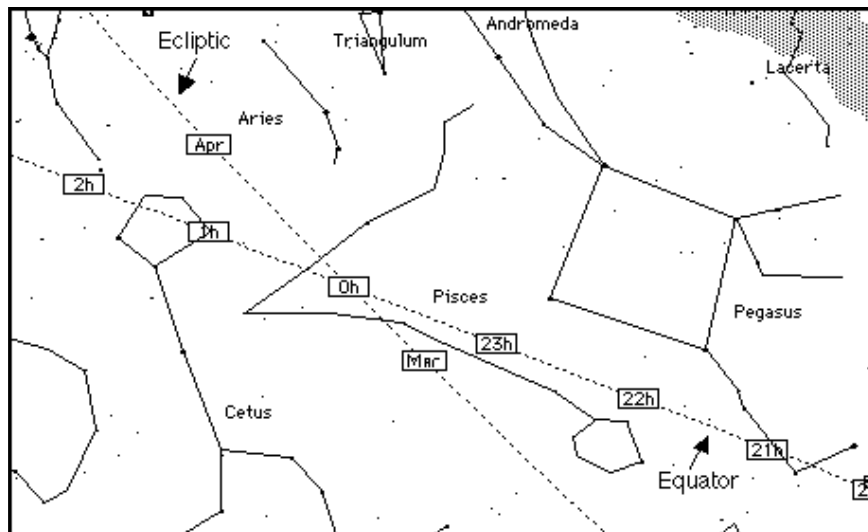
Gregory exemplifies a Christian culture that had rejected the pagan mythologies that lay behind the traditional constellations and dismissed the superstitions of the astrologers. His constellations are mostly Christianized depictions. A handful of surviving manuscripts of *De cursu stellarum* feature illustrations intended to help the monks learn to recognize the patterns discussed in the text. It is here that we find the earliest clear reference to 'The Greater Cross' among the stars of Cygnus flanked by an 'Alfa' or 'Lesser Cross' in Delphinus and an 'Omega' in Lyra.<sup>12</sup>

**Figure 4. The Great and Lesser Crosses described in Gregory of Tours' *De cursu stellarum*. Time: 11 pm local time on 10/27/592 from central France (Lyons). (All charts were prepared using *Voyager II*, Carina Software, 1992-1993.)**



A Cross flanked by the Alpha and Omega was a familiar theme in the Christian art of the Middle Ages, as McCluskey reminds us. Such familiarity would well serve the kind of instruction undertaken in Gregory's manual. Thus, the enigmatic reference of Al-Biruni concerning a cross in Delphinus finds a kind of corroboration among Gregory's constellations. Certain Christians as early as the sixth century did indeed see a cross there and also recognized a 'greater' one nearby.

**Figure 5. The invisible 'Heavenly Chi', traced by the intersection of the celestial equator and the ecliptic, expressed for some early Christian writers part of the cosmic symbolism of the Cross. Precession had carried 'the first point of Aries', the Sun's location at the vernal equinox, well into Pisces by the time of Constantine. Time: the 'Chi' would be near the meridian for observers at Rome around 9:30 pm local time on 10/27/312.**



The impulse to redraw the heavens as witnessed with the biblicalizers of the seventeenth-century is frequently described as originating with the writings of Bede the Venerable in the ninth century,<sup>13</sup> but the example of Gregory's manual is an obviously older antecedent. In fact, in his essay, 'The Twelve Apostles and the Zodiac',<sup>14</sup> Jean Danielou reveals how Jews, Christians and Gnostics had all been busy claiming and transforming celestial imagery for a very long time indeed, at least since the second century in the case of Christians. Schiller may have been the

first actually to draw a zodiac made up of twelve disciples or apostles but the idea may go back as far as Genesis 49 which, some interpreters allow, reveals zodiacal imagery in its descriptions of the twelve tribes.<sup>15</sup>

Hugo Rahner's *Greek Myth and Christian Mystery* outlined the many ways in which early Christians sought to transform and appropriate cosmic symbols such as the sun and moon in support of the Gospel.<sup>16</sup> In the third century Hippolytus felt called to refute the evident excesses of the sect he calls the Astrotheosophists and their weakly Christian mythic allegories.<sup>17</sup> Yet, by the late fourth century Bishop Zeno of Verona would risk preaching a 'divine horoscope' for the benefit of the newly baptized 'children' under his care, for fear that their astrological curiosities might otherwise lead them astray.<sup>18</sup> However, the closest we come to something like the recognition we have been seeking, prior to the sixth century, seems to be reflections on Plato's discussion in the *Timaeus* of the world-soul made manifest by the intersection of the two great circles of the astronomers, the 'heavenly chi' formed where the ecliptic and celestial equator invisibly meet. Rahner states that these otherwise invisible lines were to 'become for the Christian eye a heavenly cross' and that, through Justin and Irenaeus' seminal doctrine of recapitulation, a long meditation on the cosmic symbolism of the cross entered Christian tradition. By the fourth century the converted astrologer Firmicus Maternus declares, 'The sign of a wooden cross holds the machine of the firmament together, strengthens the foundations of the earth, and leads those that cling to it towards life'.<sup>19</sup>

However, with respect to Cygnus it's not until the sixth century that we encounter the earliest clear reference to the recognition of a cross. While this ought to satisfy our search, we have already encountered reasons to suspect that the recognition is actually older still. Gregory's work surely represents elements of a received tradition. Cassian's rule about using the stars to keep the hours for prayer reflects the practice of the monasteries of Lower Egypt which he had visited late in the fourth century. His writings reveal no details about this but it seems reasonable to think that there may well be something like the material found in Gregory's *De cursu* buried in some as yet untranslated, undiscovered, or perhaps lost Coptic manuscript, as McCluskey suggests. It seems easier to imagine, for example, that an earlier tradition diffused westward to Gregory and eastward to Al-Biruni's Syrians than that Gregory's Latin manual could exercise an influence so far east into Byzantium.<sup>20</sup>

### **The Emperor**

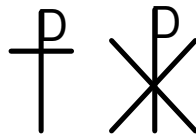
Even though it necessarily enters into rather speculative territory, I'd like to suggest that we can press our quest back to at least the early part of the fourth century. A clue lies, I think, in the history of Cross visions mentioned above. Concerning one of those visions, that reported by Cyril, we have seen that at some point in Christian lore the vision came to be associated with stars and a constellation. Before Cyril, Constantine the Great is said to have been won over to the Christian faith when granted a vision of 'the trophy of a cross of light in the heavens'. The setting was prior to his final battle for the throne against his rival, Maxentius, in the year 312 AD; the famed battle at the Milvian Bridge outside Rome. According to the Church historian Eusebius this vision first took place in broad daylight, the cross appearing 'above the sun'.<sup>21</sup> Modern historians have tended to interpret the event in terms of one or another of the well-known perihelial phenomena caused by the play of sunlight on ice crystals in the upper atmosphere.<sup>22</sup>

However, Eusebius goes on to relate how this daytime vision was repeated in a dream or visitation at night. Likewise, Lactantius, the Christian Cicero, tells of Constantine's dream on the night before the battle, an account written just six years after the event. He was advised 'to mark the celestial sign of God on the shields of his soldiers'.<sup>23</sup> Does the night time setting for these dreams offer anything toward interpreting the vision? Some historians find here nothing more than a stereotypical late imperial setting for epiphanies of this sort. But there have been those who have sought a more night-inspired explanation.

F. Heiland, on the staff of the Zeiss planetarium at Jena back in the late 1940s and 50s, wrote a paper for that institution's journal entitled 'Die astronomische Deutung der Vision Kaiser Konstantins' (The Astronomical Interpretation of the Vision of the Emperor Constantine).<sup>24</sup> In it he observes that the Fall of the year 312 AD was indeed attended by a noteworthy spectacle: the syzygy or close alignment of three bright planets in the evening sky above the southwest horizon. Mars, Saturn and Jupiter were positioned along a line within about 20 degrees of each other on the border of Capricornus and Sagittarius. Such an event would surely have drawn the attention of the astrologers and diviners attached to all Roman armies who would have worried at what may well have been taken as an ill omen. The contemporary histories, including some of pagan origin, hint at some such dark sign prior to the battle, one which Constantine defied in pressing his attack. Heiland's solution was to suggest that Constantine overcame the psychological impact on his army

of the pagan astrological omen by appropriating it to fashion a Christian token of victory. Both Lactantius and Eusebius describe that token as something more than a simple Latin cross; as a ‘staurogram’ in the case of the former or the Chi-Rho ‘monogram’ in that of the latter.

**Figure 6. The ‘staurogram’ (left) and the Chi-Rho ‘monogram (right)**



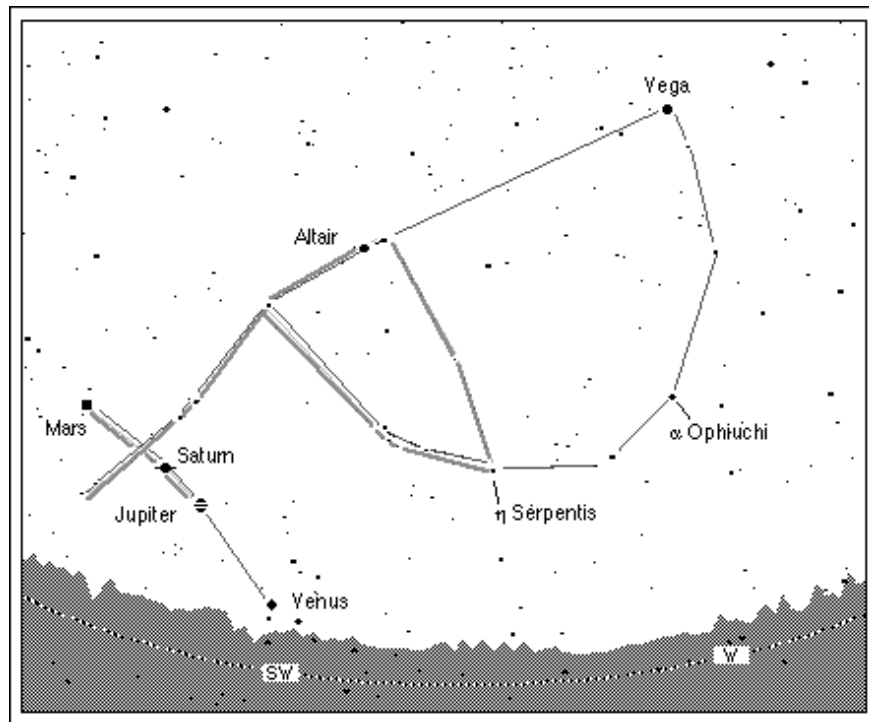
Following Lactantius’ description, Heiland pictured a new and obviously temporary asterism formed by combining the alignment of planets with surrounding stars. Prof. Michael DiMaio has more recently offered a modified version of Heiland’s proposal, noting that Venus also eventually joined the alignment on the ecliptic in October of 312. The cross member is thus lengthened and the upright with the ‘Rho’ becomes a rather enormous loop reaching all the way to bright Vega.<sup>25</sup>

These proposals somewhat tax the imagination. Can a precedent be cited for combining planets and stars to form such an ephemeral asterism? Would borrowing stars from such a variety of already existing and familiar star patterns be very convincing for Constantine’s ‘astrologically challenged’ generals? Although DiMaio is correct to include Venus in the alignment, since the presence of the queen of heaven adds drama to any evening sky, I note how very close to the horizon it is as twilight begins. By the time it had grown dark enough for stars in Ophiuchus to be discernible Venus would have all but set. Also, the moon was eleven days old. So, although the ‘alignment asterism’ is not very convincing, it can add to our understanding of the atmosphere of portent found in the histories, something largely neglected by modern scholarship.

Could the Cross in Cygnus offer a simpler interpretation? Without entertaining any illusions about being able to prove such a thing, let me briefly offer a way of crafting such an interpretation that seems to me to be at least as interesting and as plausible as the ‘alignment asterism’. Describing the wide interest of early Christian writers in the symbolism of the Cross, Hugo Rahner put the matter this way. ‘The cross is everywhere- it is in the shape of the human form when we stretch out our

hands in prayer, it is in the flight of birds, in the instruments of husbandry, it is in the form of the ship's mast when it is crossed by a spar'.<sup>26</sup> Examples abound from the works of Justin Martyr, Tertullian, Minutius Felix and Methodius. The latter, writing in the early 3rd century, offers this observation: 'For every creature, so to speak, has, for

**Figure 7. The 'alignment asterisms' of Heiland (heavier lines) and DiMaio, made by combining the alignment of planets with stars borrowed from several classical constellations. Venus, in DiMaio's arrangement, would have been very near to setting at the end of twilight on his proposed date of October 27th in 312 AD. An eleven-day-old moon would be shining in the SE on that date. Time: 6:30 pm at Rome.**

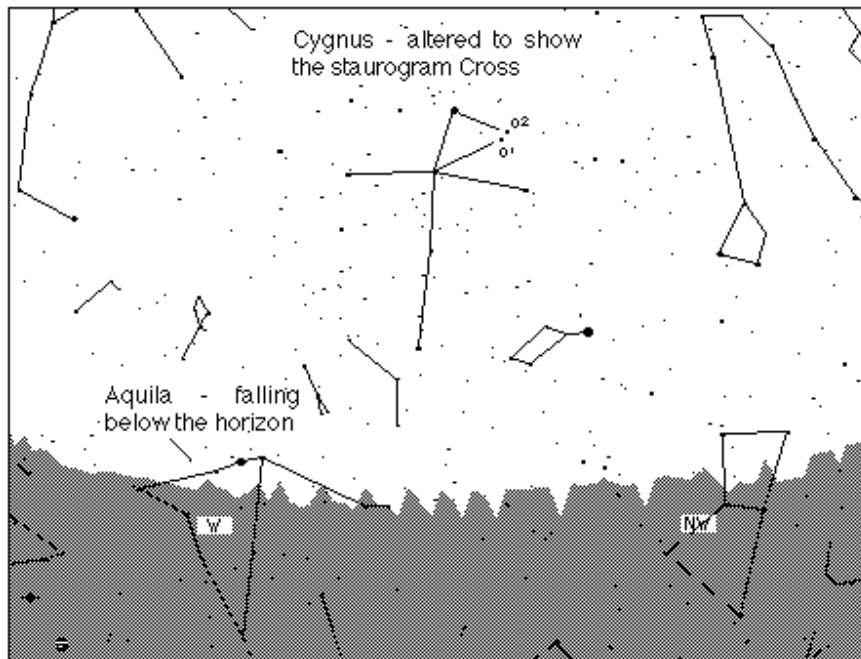


the sake of liberty, been marked with this sign; for birds which fly aloft, form the figure of the cross by the expansion of their wings...'.<sup>27</sup> Among those familiar with Aratus' *Phaenomena*, Cygnus was known simply as the Bird, 'ho ornis'. Given that Christian imagination had recognized the figure of the cross so widely and early on, if it really had failed to find

one in Cygnus before the sixth century we should wonder why not.

Divination based on the flight of birds was regularly practised on behalf of the Roman military, the idea being that winged creatures could convey messages from the lofty realm of the gods to mortals keen to read them on the earth below. The army carried the necessary complement of chickens wherever they marched. Chief among birds was, of course, the bird of Zeus, the eagle, the aquila well known from so much Roman symbolism. By imperial times the aquila had long since become the principal standard carried by the legions and the worship of these standards was a regular part of army life. Setting up a shrine to the aquila in the Temple was among the sacrileges inflicted upon the Jews of Jerusalem by the Roman army as the city fell in 70 AD, according to Josephus.<sup>28</sup>

**Figure 8. The ‘celestial augury’ suggested by the way the Imperial Aquila is said to have been replaced by the heavenly sign of God on the shields of Constantine’s army and by the myth of an Eagle/Swan combat. Although little commends it as more than an imaginative speculation, the legend of Constantine’s Vision may have contributed to the eventual recognition of a cross in the stars of Cygnus. Time: 10:30 pm local time on 10/27/312 from Rome.**



The cross used by Constantine on the shields of his soldiers, the new standard under which they marched, called the 'labarum' by Eusebius, in effect replaced the eagle of Imperial Rome. So notes the nineteenth century historian Philip Schaff.<sup>29</sup> It suggests to me an interpretation of Constantine's vision which imagines it as a sort of celestial augury. R. H. Allen's *Star Names* offers this note under the section on Aquila: 'Thompson thinks that the fable, in Greek ornithology, of the eagle attacking the swan, but defeated by it, is symbolical of "Aquila, which rises in the East, immediately after Cygnus, but, setting in the West, goes down a little while before that more northern constellation"''.<sup>30</sup> Lord D'Arcy Thompson, the English naturalist, collected all manner of classical information for his book, *A Glossary of Greek Birds*, often with an eye toward aspects related to 'the picture-book of the sky', as he called it.<sup>31</sup> In my celestial augury the Eagle v. Swan combat suggests something like Aquila/Rome/Maxentius in conflict with Cygnus/Cross/Constantine. Perhaps this Cygnoid Cross, backed by the story of the emperor's celestial epiphany, was employed to offer an effective promise of victory over against the astrologers' unnerving portent.

What of the staurogram figure? To make Lactantius' cross 'with the top of its head bent round',<sup>32</sup> add a loop to the traditional cross starting at Deneb, passing through omicron Cygni 1 and 2 and closing at gamma Cygni. These are not terribly bright stars and there are competing stars sprinkled nearby. Yet, as star gazers know so well, all that's necessary is to recognize the pattern once to lock it into the imagination. At least it has the advantage of simplicity. For those who may have access to any of today's computerized planetarium programs, just advance the time in half hour steps to watch the conflict unfold until Cygnus rests unassailed and the victorious Cross stands upright on the northwest horizon after around 10:30 pm in the late October skies of 312 AD.

The sources that survive from fourth century Rome simply don't allow for very much resembling the possibility of definitive proof for any of the various interpretations proposed for Constantine's vision, which has also been interpreted as an outright miracle of faith, a political and religious fiction, a purely psychological experience, something to do with solar halos, something to do with stars, or combinations thereof. Each has had proponents over the years. More certain by far is the fact that Constantine's legend seems to have contributed, or else attracted, elements of astral imagery. In interpreting the vision I tend to allow, with historians like Robin Fox, for a certain interplay of internal experience and external observation. Elusive as it is, imagination is key. As Fox puts

it, 'A man only sees in the sky what he is predisposed to notice or recall...'.<sup>33</sup> What might Constantine have been predisposed to notice or recall? We cannot know fully, but perhaps there are clues.

Christian advisors had at some point gained access to the emperor's thoughts or else his conversion, whatever we make of it, would be completely unintelligible. Yet, the world in which he lived, grew up, and aspired to the purple was still mainly a pagan one in which Mithraism and the cult of Sol Invictus were very much a part of the religious milieu of the army and the imperium. Astral symbolism played a significant part in the Mithraic mysteries, although significant details are still being debated.<sup>34</sup> E.C. Krupp's recent book, *Skywatchers, Shamans and Kings: The Astronomy and Archaeology of Power*,<sup>2</sup> rehearses the cosmic imagery behind Rome's empire; from Julius Caesar's apotheosis upon the appearance of a comet, to Augustus' use of Capricorn, his moon sign, on his coins and banners, to the erection of the Solarium Augustii.<sup>35</sup>

That Constantine may have had similar interests in employing celestial imagery is suggested several ways. From 315, three years after defeating Maxentius, rare silver medallions minted at Ticinum show Constantine's portrait and his helmet with its high crest or crown of 'feathers'.<sup>36</sup> Although I am not aware of any specific study of the iconography of these decorations, to my eye their round shape and rayed appearance give the impression of nothing so much as stars. Set among them is one fashioned in the figure of the 'Chi-Rho' of the labarum, one of its earliest known representations.<sup>37</sup> Do we have here something of a hint as to what he might have been predisposed to notice or recall? Or, was it mere rhetoric that inspired the emperor to lend these words, toward the end of his life, to the inscription on the monument to St. Peter in Rome, 'Because of your leadership the glorious universe has reached to the furthest stars...'?<sup>38</sup> Finally, and perhaps most tellingly, what of the way Constantine's memory is celebrated in the Eastern Church? Orthodox Christian monasteries celebrate the feast day of Saints Constantine and Helena on 21 May with hymns that include the following lines for Matins: 'Having stretched forth thy senses toward heaven and acquired the beauty of the stars, thou wast taught by them the mysteries of the Lord of all; and the weapon of the Cross shone forth in their midst...'.<sup>39</sup>

**Figure 9.** The silver medallion minted at Ticinum in 315 AD, shown enlarged. Constantine's "high crested" helmet has been described as being decorated with "feathers", but it might just as easily be described as a crown of stars. The foreground "star" at left bears the Chi-Rho symbol, one of its earliest known depictions. The reverse shows Constantine addressing his troops. By permission of the Staatliche Munzsammlung Munchen.



The connection of astral imagery with Constantine's vision of the Cross is so clear in the hymn that we are left wondering what its source might be, since it seems to owe nothing to the histories usually relied upon for information about the emperor's life and reign. The Slavonic text for the Orthodox Menaion dates back only as far as the 17th century, but it is obviously based on more ancient Byzantine tradition. There is a considerable body of hagiographic literature inspired by Constantine and, especially, the legend of Helena's discovery of the Cross.<sup>40</sup> So far the search for such astral imagery there has been in vain. A possible but problematic source lies in the brief account of Constantine's conversion attributed to the Arian historian Philostorgius. His lost fifth century *Ecclesiastical History*, judged by historians to be rather unreliable as an account of the origin and spread of Arianism, comes to us as a ninth century epitome by Photius. It tells how 'the sign of the cross was seen in the East, vast in extent and lit up with glorious light, and surrounded on

**Figure 10.** A rare 15th century depiction of Constantine's Vision from the Church of the Holy Cross of Agiasmati on the island of Cyprus. Although it would be hard to attribute the four stars forming the cross shape to Cygnus, the scene is certainly constellation-like and shows the influence of the Orthodox Saints' Day hymn discussed in the article. Acknowledgment: Andreas Stylianou, Judith A. Stylianou, *The Painted Churches of Cyprus*, A. (G. Leventis Foundation, Nicosia, 1997), p. 201, fig. 114



114. The Vision of Constantine the Great, "By this Conquer", 1494, church of the Holy Cross of

each side by stars like a rainbow, symbolizing the form of letters'.<sup>41</sup> The letters spell out the well known heaven-sent message to Constantine, *In hoc signo vinces*, 'By this sign you will conquer,' apparently in Latin instead of Greek. But starry letters 'on each side' of the Cross bear a striking similarity to what we find in Gregory's *De cursu stellarum*. That

such a theologically tainted source would have contributed directly to the Orthodox liturgy is hard to imagine. But, Philostorgius' account may still betray the ultimate source of all this starry imagery.

With the few lines quoted above regarding Constantine's vision in mind, here is the account of Ignatius of Antioch concerning another celestial portent of interest to Christians. 'How then were these mysteries revealed to the ages? A star shone in the sky, brighter than all other stars; its light was indescribable and its strangeness provoked wonder, and all the rest of the stars with the Sun and moon made a choir around that star which outshone them all...' <sup>42</sup> The celestial sign Ignatius describes here is, of course, the Star of Bethlehem recorded in the Gospel of Matthew.

**Figure 11a. The right end panel of the fifth century tomb of Flavius Julius Catervius in Tollentino, Italy. The Magi appear before Herod while one points above to the Constantinian monogram. By permission of the Pontificio Istituto di Archeologia Cristiana.**



**Figure 11b.** The left end panel of the fifth century tomb of Flavius Julius Catervius in Tollentino, Italy. Above the scene of the Adoration a staurogram cross presides as though in place of an otherwise absent star. By permission of the Pontificio Istituto di Archeologia Cristiana.



Philostorgius' sign of the cross shining with a wonderful light and surrounded by a rainbow of stars, a choir that silently spells out its message not so much of praise but of assurance, bears a certain resemblance to Ignatius' commentary on the familiar nativity scene. Both may have in mind the dreams of Joseph in Genesis 37. The detail that the cross shines 'in the East' may suggest that Philostorgius had in mind the tradition of the Christmas Star. If the similarities between these passages are not simply coincidental, it may be argued that they fit well with the recent interpretation offered by Richard Trexler regarding the role of the

magi and the star in Christian art from the Constantinian era.<sup>43</sup>

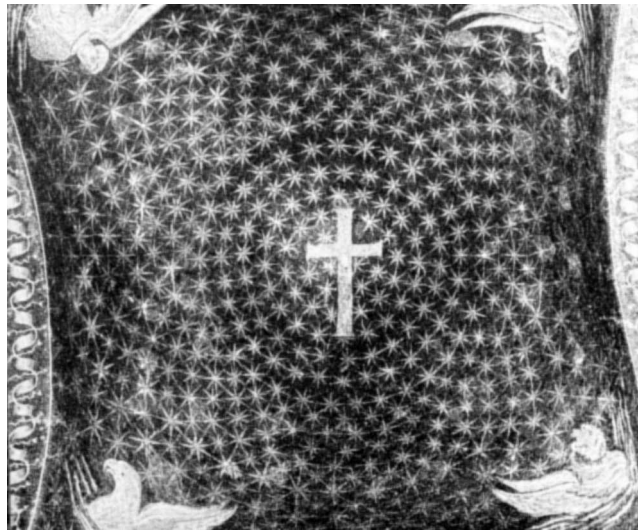
Proposals tracing the evolution of the Chi-Rho of the labarum from a pagan star have been largely dismissed by historians. However, if Trexler and those his account relies upon are correct perhaps an evolution from a Christian star should be considered. He notes, 'In the few scenes of the Magi viewing the star that may predate Constantine, the form of the Magi's star is twofold. Far the most common is a six-pointed star; in rare cases one encounters the superimposed Greek letters iota and chi, the first letters in the Greek word for "Jesus" and "Christ"'.<sup>44</sup> After 312, however, both the star and the chi encounter competition from a superimposition of the letters chi and rho, the first two Greek letters of the word 'Christ'. An example that entails both monogram and staurogram as apparent stand-ins for the Bethlehem star can be found on the fifth century tomb of Flavius Julius Catervius in Tolentino, Italy.<sup>45</sup>

Mediated by this symbolic play of letters (recall both Gregory of Tours and Philostorgius) Star and Cross, or at least Star and Labarum, came to be associated in Christian art and imagination. Both had been celestial signs. The first brings the Magi, since the time of Tertullian increasingly imagined as kings, to worship the Christ child. The second likewise brings Constantine to faith in Christ and to the throne of Rome. Unless some explicit source in Constantinian hagiography remains to be identified, perhaps we need search no further for the origin of the astral language of the feast day hymns than the role the Magi and their star played in early and later Christian imagination as presented in Trexler's account. The things Constantine, and those after him, would have noticed and recalled were perhaps richly stellar.

### Conclusion

The question of the date of the recognition of a Cross in Cygnus involves some interesting aspects of Western history and Christian tradition. Approaching it in terms of the earliest explicit literary reference takes us back to the late sixth century and Gregory's manual on time keeping. There we discover how by that time astronomical observation had acquired an important function as a regular part of monastic practice and was given a distinctly Christian flavour. The monasteries contributed the names Crux Major for the Swan and Crux Minor for the Dolphin, names that entered into usage in various European languages as the Cross, Great Cross, Midnight Cross and Little Cross.<sup>46</sup> By the beginning of the modern era, as Bayer testifies, such recognitions had become the common knowledge of ordinary people.

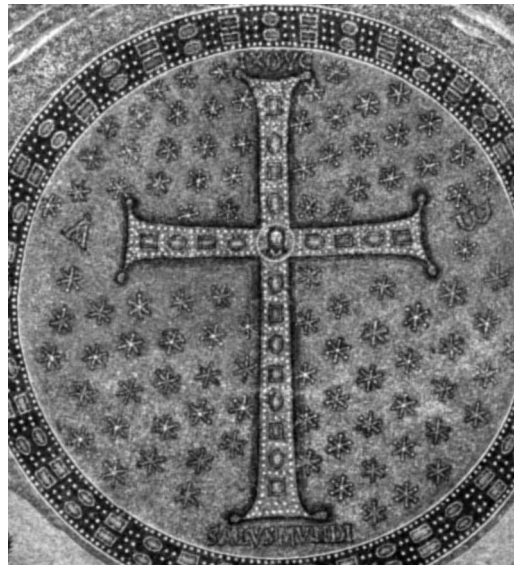
**Figure 12.** Historians have long noted that the widespread use of the Cross in art arose only after Constantine's conversion, which was followed by decrees putting an official end to the practice of crucifixion in the Roman Empire. These starry crosses, along with the one eventually recognized in Cygnus, may owe something to the Emperor as well. Below: the domed ceiling of the fifth century mausoleum of Galla Placida in Ravenna. In addition to the celestial cross against a starry field, at the four corners are the traditional figures representing the four evangelists. These originate in the vision of the prophet Ezekiel (I. 4-28) and are thought by some to reflect zodiacal imagery. (Alinari Archive, Florence)



If the question is approached more generally in terms of origins we are forced to wonder about still earlier monastic traditions, now lost to the mists of time, and the ways Christian imagination was directed toward the heavens by the stories of the Saviour's Star and the Emperor's Vision. Constantine's celestial sign, whether by day or night, fired the imaginations of others who were soon, not surprisingly, granted epiphanies of their own. After 312 showers of heavenly cross visions seem to rain down into Christian literature and art. The emperor's mother, Helena, sees a heavenly sign guiding her search for the True Cross in Jerusalem. Constantine's sons have cross visions as does Cyril of Jerusalem.<sup>47</sup>

The celestial sign that brought the Emperor to Christ reminded Christians of the one that first guided the Magi to the stable in Bethlehem. Cross and Star came to be seen in each other's glorious light. Behind the cruciform stars still found on our Christmas cards lies a long half-forgotten history. Thus, regarding the question of the asterism's origins perhaps the most certainty that can be gleaned is that if the recognition of a Cross in the stars of Cygnus had not already taken place by or in the early part of the 4th century it soon became all but inevitable for one to be found there after Constantine.

**Figure 13.** The cross from the apse of the sixth century church of St. Apollinare de Classe outside Ravenna. The theme of the apse is the Transfiguration of Christ, when 'the heavens were opened'. At the sides of the transverse member the letters alpha and omega are found. The edifice is roughly contemporary with Gregory's *De cursu stellarum*. (Photo Scala) By permission.



## References

1. Julius D. W. Staal, *The New Patterns in the Sky* (Blacksburg, Va.: McDonald and Woodward Publishing, 1988), p. 177.
2. Otto Zoeckler, *The Cross of Christ* (London: Hodder and Stoughton, 1877), pp. 38-39; see also R. H. Allen, *Star Names: Their Lore and Meaning* (New York: Dover, (1898)1963), s.v. 'Crux'; and William W. Seymour, *The History of The Cross* (New York: G. P. Putnam's Sons, 1898), pp. 451ff.
3. Deborah Warner, *The Sky Explored* (New York: Alan Liss, Inc., 1979), pp. 224-232.
4. George Snyder, *Maps of The Heavens* (New York: Abbeville Press, 1984), pp. 93-103.
5. Joannes Bayer, *Uranometria* (Alburgh, Norfolk: Archival Facsimilies Ltd., 1987).
6. A summary of the Arabic contribution to Western astronomy can be found in Owen Gingerich, 'Islamic Astronomy', in *The Great Copernicus Chase And Other Adventures in Astronomical History* (Cambridge: Cambridge Univ. Press, 1992), pp. 43-56.
7. Allen, p. 200.
8. Cyril of Jerusalem, 'Letter to the Emperor Constantius', in J. Stevenson, *Creeeds, Councils, and Controversies* (London: SPCK, 1966), pp. 28-30.
9. Al-Biruni, *The Chronology of Ancient Nations*, C.E. Sachau, trans. (Frankfurt: Minerva Gmbh, (1879) 1967), p. 292.
10. Stephen C. McCluskey, *Astronomies and Cultures in Early Medieval Europe* (Cambridge: Cambridge Univ. Press, 1998), pp. 104-110; and 'Gregory of Tours, Monastic Timekeeping, and Early Christian Attitudes to Astronomy', *ISIS* (Princeton, 1990, 81), pp.8-22.
11. John Cassian, *The Twelve Books of the Cenobia*, (II: 17). Unless otherwise noted all Patristic sources can be found in the various editions of either *The Ante-Nicene Fathers*, A Roberts and J. Donaldson, eds., (American Reprint of the Edinburgh Edition) or *The Nicene and Post-Nicene Fathers*, P. Schaff, ed.
12. McCluskey, 'Gregory of Tours...', pp. 16-17. First to identify and comment on Gregory's constellations was the astronomer J.F. Galle in the 1853 edition of

*De cursu stellarum* edited by F. Haase in which the work's attribution to Gregory was confirmed.

13. Basil Brown, *Astronomical Atlases, Maps and Charts* (London: Search Publishing, 1932), pp. 31-35.

14. Jean Danielou, *Primitive Christian Symbols* (Baltimore: Helicon Press, 1964), pp. 124-135.

15. Eric Burrows, *The Oracles of Jacob and Balaam* (London: Burns Oates and Wasbourne), 1938.

16. Hugo Rahner, *Greek Myth and Christian Mystery* (New York: Biblio and Tannen, 1971), pp. 89-176.

17. Hippolytus, *The Refutation of All Heresies*, (IV: ch. 49).

18. Rahner, p. 173-174. Translations of this and other Easter sermons by Zeno can be found in Gordon P. Jeans, ed., trans., *The Day Has Come!* (Collegeville, Minn.: The Liturgical Press, 1995), pp.69-71. See also pp. 130-137 for a brief commentary.

19. Rahner, p. 52. Firmicus Maternus, *De errore Profanarum Religionum*, ch. 27.

20. Matthew Black reports on an Egyptian inscription, dated apparently from the third century, containing a staurogram preceded by an alpha and followed by an omega. Max Sulzberger at the beginning of this century argued that the signs were added to the inscription at a later date. Black's article summarizes more recent developments pushing back the dates for Christian symbols of this sort, but I am unaware of any further resolution regarding this particular inscription. Does it reflect some sort of Egyptian antecedent, direct or indirect, for Gregory's use of the symbols translated to the sky? See Black's 'The Chi-Rho Sign - Christogram and/or Staurogram', in W. Gasque and R. Martin, eds., *Apostolic History And The Gospel*, (Grand Rapids: Eerdmans, 1970) p. 320.

21. Eusebius, *Life of Constantine* (I:26-40), J. W. Eadie ed., *The Conversion of Constantine* (New York: Holt, Rinehart and Winston, 1971), p. 9ff.

22. A.H.M. Jones, *Constantine and the Conversion of Europe* (Toronto: Univ. of Toronto Press, (1948)1978), pp. 85-86; Timothy D. Barnes, *Constantine and Eusebius* (Cambridge, Mass.: Harvard Univ. Press, 1981), p. 306, n. 148; Robin Lane Fox, *Pagans and Christians* (New York: Alfred A. Knopf, 1986), p. 616; Michael Grant, *Constantine the Great* (New York: Scribners, 1994), p. 138.

26 The Bird, the Cross, and the Emperor

23. Lactantius, *De Mortibus Persecutorum* (44:5), J. L. Creed, trans. (Oxford: Clarendon Press, 1984), p. 63.

24. F. Heiland, 'Die astronomische Deutung der Vision Kaiser Konstantins' in *Sondervertrag im Zeiss-Planetarium Jena*, 2. Auflage September 1952.

25. Michael DiMaio, Jr. et al., 'Ambiguitas Constantiniana: The Caeleste Signum Dei of Constantine The Great', *Byzantion* (Bruxelles: v. 58, 1988), pp 333-360.

26. Rahner, p. 55.

27. Methodius, *Three Fragments...*, (I). For other cross symbolism see Justin, *First Apology*, (ch. 55); Tertullian, *Ad Nationes* (I: ch. 12), *Apologia*, (ch. 16); Minutius Felix, *Octavius*, (ch 29).

28. See *The Oxford Classical Dictionary* (Oxford: Clarendon Press, 1949), p. 838.

29. Philip Schaff, *The History of The Christian Church*, v. III (Grand Rapids: Eerdmans Publishing, 1910), p. 28.

30. Allen, p. 57.

31. D'Arcy W. Thompson, *A Glossary of Greek Birds*, s.v. 'aetos' and 'kuknos' (London: Oxford University Press, 1936).

32 *De Mortibus* (44:5). See Creed's commentary on the difficult passage, p. 63 (see n. 23).

33. Fox, p. 617.

34. David Ulansey, *The Origins of the Mithraic Mysteries* (New York: Oxford University Press), 1989; Roger Beck, *Planetary Gods and Planetary Orders in the Mysteries of Mithras* (Leiden: E.J. Brill, 1988).

35. Edwin C. Krupp, *Skywatchers, Shamans and Kings* (New York: John Wiley and Sons, 1997), p. 34. The primary source of Krupp's survey of Roman themes is Paul Zanker, *The Power of Images in the Age of Augustus* (Ann Arbor: Univ. of Michigan Press), 1988. The classic work on astrology in the Roman empire is Frederick Cramer, *Astrology in Roman Law and Politics* (Philadelphia: American Philosophical Association, 1954).

36. K. Weitzmann, ed., *Age of Spirituality (Catalogue of the exhibition)*, (New York: The Metropolitan Museum of Art, 1979), p. 66.

37. Patrick Bruun, *Roman Imperial Coinage*, VII (London: Spink, 1923-), pp. 62-63; also in Eadie, p. 77ff.

38. Grant, p. 198.

39. *The 21st Day of the Month of May: Commemoration of Holy Equals of The Apostles, The Emperor Constantine and The Empress Helena*, trans. I. E. Lambertsen (Liberty, Tn.: St. John of Kronstadt Press, 1992), p. 5. I am grateful to Fr. Basil Lourie of the St. Petersburg Center for Byzantine and Slavic Studies for alerting me to the materials in the Orthodox Menaion and for his helpful interest in this project. The painting from the Church of the Holy Cross of Agiasmati was brought to my attention by Dr. Hanna Witte Orr, a historian specializing in Byzantine ecclesiastical art.

40. A recent survey of such materials can be found in Samuel Lieu, 'From History to Legend and Legend to History: the Medieval and Byzantine Transformation of Constantine's Vita,' in Samuel Lieu and Dominic Montserrat, *Constantine: History Historiography and Legend* (London: Routledge, 1998).

41 E. Walford, trans., *The Ecclesiastical History of Philostorgius* ( London: H.G. Bohn, 1855), p. 432.

42. Ignatius of Antioch, *Epistle to the Ephesians*, ch. 19.

43. Richard C. Trexler, *The Journey of the Magi: Meanings in History of a Christian Story* (Princeton: Princeton Univ. Press, 1997). Trexler finds the alignment interpretation of DiMaio, et al., salutary. For calling my attention to Trexler's work the author is indebted to Prof. Timothy Hegedus of Waterloo Lutheran Seminary. His recent dissertation is on the subject of astrology and early Christian thought.

44. Ibid., p. 25-26.

45. Following the interpretation of G. Wilpert, Trexler refers to the figures beneath the monogram as the three Jewish boys from the story of the fiery furnace in the book of Daniel. More recent interpreters seem to agree that the scene is in fact paired with the Adoration and represents the Magi inquiring at Herod's court. See: Aldo Nestori, *Il Mausoleo e Il Sarcofago di Flavius Iulus Catervius a Tolentino* (Citta del Vaticano: Pontificio Istituto di Archeologia Cristiana, 1996), pg. 78 ff.

46. Anton Scherer, *Gestirnnamen bei den indogermanischen Völkern* (Heidelberg: Winter, 1953), pp. 223-224. For directing me to this resource and to Bayer's comment I am grateful to Dr. R.H. van Gent.

47. For a review of the visions of Helena and Cyril see J. W. Drijvers, *Helena Augusta: the Mother of Constantine the Great and the Legend of her Finding of the True Cross* (Leiden: E.J. Brill, 1992). For a consideration of the significance of this panoply of Cross visions see Michel van Esbroeck, 'La Portee Politico-Religieuse des Visions pour La Conversion des Peuples', *Revue de l'Institut Catholique de Paris* 1995, v. 53, pp. 87-113.