

Christian Cosmology in Medieval Europe

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For background, see *The History of Western Astrology*, Vol. 1 chaps 8, 15, 17.

IMPLICATIONS OF COSMOLOGICAL TEXTS IN THE BIBLE

Astrology

Texts cited in support of astrology

NB. The use of texts to solicit Biblical support for astrology does not mean that the writer(s) had an astrological intent.

The classic statement cited in support of astrology is Genesis 1.14:

'And God said "Let there be lights in the firmament of the heavens to separate the day from the night; and let them be for signs and for seasons and for days and years'. (see also Psalm 104.19).

(The challenge to this passage as a support for astrology was first proposed by Origen, in his Commentary on Genesis, composed in Alexandria around 229 - Trigg, Joseph W., *Origen*, London and New York: Routledge 1998)

Psalms 19.1 is also frequently cited:

The heavens are telling the glory of God,
and the firmament proclaims his handiwork.

Texts cited as condemnation of astrology

The fact that certain texts are cited by anti-astrology Christians as condemnation of astrology does not mean that the writer(s) had an anti-astrology intent.

However, anti-astrology Christians usually cite the condemnation of Babylonian astrologers in Isaiah 47.13-14:

'You are wearied with your many counsels;
let them stand forth and save you,
those who divide the heavens,
who gaze at the stars,
who at the new moons predict
what shall befall you.
Behold, they are like stubble,
the fire consumes them;
they cannot deliver themselves

from the power of the flame'.

Jeremiah 10.2-3:

'Thus saith the Lord,
"Learn not the way of the nations,
nor be dismayed at the signs of the heavens
because the nations are dismayed at them,
for the customs of the peoples are false".

Star of Bethlehem

Matthew's Gospel.

The story of the star presented anti-astrology theologians with a major problem. To which the usual solution was that, by venerating Christ, the magi renounced their belief in the power of the stars.

1. Now when Jesus was born in Bethlehem of Judea in the days of Herod the king, behold, wise men from the East came to Jerusalem, saying,

2. "Where is he who has been born king of the Jews? For we have seen his star in the East, and have come to worship him."

3. When Herod the king heard this, he was troubled, and all Jerusalem with him;

4. and assembling all the chief priests and scribes of the people, he inquired of them where the Christ was to be born.

5. They told him, "In Bethlehem of Judea; for so it is written by the prophet:

6. 'And you, O Bethlehem, in the land of Judah,
are by no means least among the rulers of Judah;
for from you shall come a ruler
who will govern my people Israel.'"

7. Then Herod summoned the wise men secretly and ascertained from them what time the star appeared;

8. and he sent them to Bethlehem, saying, "Go and search diligently for the child, and when you have found him bring me word, that I too may come and worship him."

9. When they had heard the king they went their way; and lo, the star which they had seen in the East went before them, till it came to rest over the place where the child was.

10. When they saw the star, they rejoiced exceedingly with great joy;

11. and going into the house they saw the child with Mary his mother, and they fell down and worshiped him. Then, opening their treasures, they offered him gifts, gold and frankincense and myrrh.

—*Matthew 2:1–11, Revised Standard Version*

Signs from Heaven: Omens of the End

Mark 13.

24 But in those days, after that tribulation, the sun will be darkened, and the moon will not give its light,

25 and the stars will be falling from heaven, and the powers in the heavens will be shaken.

26 And then they will see the Son of man, coming in clouds with great power and glory.

27 And then he will send out the angels, and gather his elect from the four winds, from the ends of the earth to the ends of heaven.

...

31 Heaven and earth will pass away, but my words will not pass away.

32 But of that day or hour no one knows, not even the angels in heaven, nor the Son, but only the Father.*

33. Take heed, watch, for you do not know when the time will come.

* Acts 1.6: 'So when they had come together, they asked him, "Lord, will you at this time restore the kingdom to Israel?" He said to them, "It is not for you to know times or seasons which the Father has fixed by his own authority'.

Acts 2.19-21:

And I will show wonders in the heaven above

And signs on the earth beneath,

Blood, and fire, and vapour of smoke;

The sun shall be turned into darkness*

And the moon into blood,*

Before the day of the Lord comes,

the great and manifest day

And it shall be that whoever calls on the name of the Lord shall be saved.

The Crucifixion.

The Crucifixion took place at the Passover, celebrated on the first or second full moon or second following the spring equinox. i.e., the full moon of 14/15 Nisan, the first month. Descriptions of the crucifixion can be interpreted either metaphorically as literary indications of God's grief or anger, or literally as the occurrence of an eclipse:

Matthew 27.51: 'Now from the sixth hour there was darkness all over the land until the ninth hour'.

This is repeated almost word for word in Luke 23 44-45: 'It was now about the sixth hour and there was darkness over the whole land until the ninth hour, while the sun's light failed...'

The key to the dating is that the Passover took place on a Friday - Luke 24.56 tells us that the following day was the Sabbath, i.e., Saturday.

There would have been a lunar eclipse at 11⁰ Libra in the tropical zodiac on 3 April 33 AD in the modern calendar (Full Moon at 17.37 LMT)
(Colin J. Humphreys and W.G. Waddington of Oxford University, cited by Dietrick E. Thomsen in the January 21, 1984 issue of *Science News*.)

The problem with a literal interpretation of the passage is that the full moon can only coincide with lunar eclipses, and they can only be visible at night. Yet Mathew 27.50 and Luke 24.46 record Christ's death as the darkness ended at the ninth hour, which can only be the ninth hour after dawn, hence around 3 pm.

Medieval Commentary on the Crucifixion 'Eclipse'

ECLIPSE DURING THE PASSION MIRACULOUS. --

From the aforesaid it is also evident that, when the sun was eclipsed during the Passion and the same Passion occurred at full moon, that eclipse was not natural -- nay, it was miraculous and contrary to nature, since a solar eclipse ought to occur at new moon or thereabouts. On which account Dionysius the Areopagite is reported to have said during the same Passion, "Either the God of nature suffers, or the mechanism of the universe is dissolved."¹

Revelation

The only overtly cosmological text in the New Testament, though, is the Revelation of St. John, an imaginative work of grand proportions. Its repetition of the number seven - churches in Asia, spirits before the throne of God, the famous seals and, significantly, stars, ties Christian cosmology to the planets.² The woman with a crown of twelve stars and the tree with twelve kinds of fruit, one for each month for the 'healing of the nations' brings in the zodiac.³

Then he showed me the river of the water of life bright as crystal, flowing from the throne of God and of the Lamb through the middle of the city; also on either side of the river, the tree of life with its twelve kinds of fruit, yielding its fruit each month; and the leaves of the tree were for the healing of the nations
Revelation 22, 1-2.

Meanwhile the omens of the end of the world include eclipses - a blackened sun and blood red moon - as well as stars falling to the earth - implicitly reinforcing the use of

¹ Thorndike, Lynn, *The Sphere of Sacrobosco and its Commentators*, Chicago: University of Chicago Press 1949, p. 142; see also p.117.
<http://www.esotericarchives.com/solomon/sphere.htm> .

² For seven stars see Revelation 1.17 and 3.1

³ Revelation 12.1, 22.2.

Babylonian style astrology of celestial signs.⁴ Revelation's role in reinforcing Old Testament predictions of celestial signs of the apocalypse was to mean that all Christian condemnations of astrology have had to be directed against the deterministic version which emanated partly from Platonism but especially from the Stoics, and has to make allowances for an astrology of divine warnings.

AUGUSTINE

Aurelianus Augustinus 354-430 CE, St. Augustine of Hippo.

In his two great works, *Confessions* (c.397) and *City of God* (410), St. Augustine established himself as the foremost theologian of the Catholic church. His argument that the newly christianised Roman state was the representative of the Kingdom of God on earth gave the church a firmly conservative identity as the ally rather than opponent of the political order which was to be the basis of church-state relations through to the early modern period - at least up to the upheavals of the Reformation. The son of a pagan father and Catholic mother, Augustine had a good classical education though, perhaps unique amongst classical philosophers, he failed to learn Greek which he disliked intensely, to any more than a rudimentary level. He is remarkably frank about his utter dislike of Greek literature. At the age of nineteen he joined the Manicheans, a Christian church which had adopted the Zoroastrian Persian cosmology in which the structure and history of the universe was based on the perpetual struggle between light (good) and darkness (evil). To the Manicheans Christ, rather than the Persian deity Ahura Mazda, was the representative of light. During this period Augustine achieved recognition for his philosophical work and was appointed professor rhetoric at Milan. At the age of twenty-eight he converted to Catholicism and at the same time began reading Plato and the neo-Platonic philosophers, Plotinus and Porphyry. Although he personally challenged such elements of neo-Platonic cosmology as the divinity of the stars, the stamp of his authority established a favourable attitude to Platonic cosmology within medieval Christian culture. He was baptized in 387 and in 391 he was ordained a priest in Hippo, near Carthage in what is now Tunisia. He was appointed bishop of Hippo on 395 and spent the rest of his life there. The *City of God* was written in response to the widespread shock aroused by the Visigothic sack of Rome in 410 and Augustine died twenty years later, during the Vandal siege of Carthage.

Augustine's contribution to the history of astronomy is based in his definitive denunciation of astrology, the result of which was to confirm the separation of astrology from astronomy for many Christians and provides a rationale for Christian opposition to astrology to the present day. This was to influence Isidore, bishop of Seville (570-636), whose *Etymologiae*, was the first medieval Latin text to explicitly separate astronomy from astrology. Augustine had studied astrology during his time as Manichean and found he had no theological objection to it because astrologers neither offered sacrifices nor prayed to spirits for assistance in their divination. However, his conversion to

⁴ Revelation 6.12-13, 8.10.

Catholicism resulted in a substantial change of heart. He no longer regarded God as the only supreme power in the universe, with direct authority over all creatures. He tackled astrology in two levels. First he argued that it was incompatible with Christianity and second he pointed out illogicalities in its reasoning.

In the *Confessions* (IV.3) he claimed that to argue that God's authority could be exercised via the stars caused theological offence, for it both limited God's power to intervene directly in human affairs and implicated Him in the stars' less admirable decisions. It also absolved human beings from responsibility for their own actions and, ironically, pushed that guilt on to God who had instructed the stars to cause men to sin. He widened his attack in the *City of God* (V.1-7), dealing at length with the issue of twins and how two babies born at the same time could have different lives. He also tackled the problem of the apparent contradiction between the astrally-determined fate inherent in an astrology of individual births with the assumption of free-will inherent in the astrological election of auspicious moments to begin new enterprises. He questioned whether astrology applied to worms or trees and challenged the belief that the rise of the Roman Empire had been astrologically determined rather than due to God's favour. He also dealt with the claim that astronomical alignments functioned as signs rather than causes and pointed out that even astrologers who argue that the stars signify events nevertheless talk as if they cause them, and hence are still impinging on territory rightly reserved for God. Augustine, *City of God*, V.1-7.

In book VII he went on to ridicule the flawed logic behind stellar divinities although in book V he had also sought allies amongst the pagans, appealing to them on the grounds that, if astrologers ascribed power over human affairs to the stars, they were challenging the authority of pagan deities as well as the Christian God.

Although Augustine regarded the reasoning behind astrology as profoundly flawed he had no doubt that it worked, although he changed his mind on how. In the *Confessions* he argued that it appeared to work because of chance. Thus an astrological forecast appeared to be right in the same way as a volume of poetry might fall open at a page which was meaningful at that moment. In the *City of God* he took a firmer line, claiming that evil spirits fed correct predictions to astrologers.

Augustine's attack on astrology should be seen as an attempt to de-spiritualise the universe, saving religious authority for God alone. His criticism of secular, liberal education and advocacy of Scripture as the ultimate source of truth also left little room for classical astronomy, leaving the Genesis creation story as the basis of Catholic cosmology. While his separation of astrology from astronomy was therefore of great significance, the effect of his teaching was to retard the development of astronomy in the Christian world until the seventeenth century.

The Confessions, book 4 chapter 3

'The same reasoning did not prevent me from consulting those impostors, the astrologers, because I argued that they offered no sacrifices and said no prayers to any spirit to aid their divination. Nevertheless, true Christian piety rightly rejects and condemns what they

do. For sweet it is to praise the Lord and say Have mercy on me; bring healing to a soul that has sinned against you. And it is wrong to impose upon your readiness to forgive, taking it as licence to commit sin. Instead we must remember Our Lord's words to the cripple: You have recovered your strength. Do not sin any more, for fear that worse should befall you. This truth is our whole salvation, but the astrologers try to do away with it. They tell us that the cause of sin is determined in the heavens and we cannot escape it, and that this or that is the work of Venus or Saturn or Mars. They want us to believe that man is guiltless, flesh and blood though he is and doomed to die despite his pride. Instead they have it that the blame is to be laid on the Creator and Ruler of the heavens and the stars, none other than our God, himself the very source of justice, from whom its sweetness is derived - on you, O God, who will award to every man what his acts have deserved, you who will never disdain a heart that is humbled and contrite.

There was at that time a man of deep understanding, who had an excellent reputation for his great skill as a doctor. As he was pro-consul at the time, his was the hand that laid upon my head the wreath I won in the poetry competition, but it was not a doctor's hand that could cure my disordered state of mind. This is a disease that only you can cure, you who thwart the proud and keep your grace for the humble. But you did not fail to use even that old man to help me, nor did you cease to give my soul through him the medicine which it needed. He and I became better acquainted and I listened intently and without fail to what he had to say, for though he was not a gifted speaker, his lively mind gave weight and charm to his words. In the course of our conversation he learned that I was an enthusiast for books of astrology, and in a kind and fatherly way he advised me to throw them away and waste no further pains upon such rubbish, because there were other more valuable things to be done. He said that as a young man he had studied astrology himself, intending to make a living by it, and that if he could understand Hippocrates I need no doubt that he had been able to master these textbooks as well. All the same, after a time he had given them up and taken to medicine instead, for the very good reason that he had found out that they were entirely wrong, and, being an honest man, he had no wish to earn his living by deception. "But you can support yourself by your rhetoric," he went on. "Your interest in this trickery is mere curiosity and you do not have to depend upon it for a living. All the more reason, then, why you should believe what I say, because, as it was to be my only means of support, I tried to learn as much about it as I could."

I asked him why it was then that the future was often correctly foretold by means of astrology. He gave me the only possible answer, that it was all due to the power of chance, a force that must always be reckoned with in the natural order. He said that people sometimes opened a book of poetry at random, and although the poet had been thinking, as he wrote, of some quite different matter, it often happened that the reader placed his finger on a verse which had a remarkable bearing on his problem. It was not surprising, then, that the mind of man, quite unconsciously, through some instinct not within its own control, should hit upon some thing that answered to the circumstances and the facts of a particular question. If so, it would be due to chance not to skill.

This answer which he gave me, or rather which I heard from his lips, must surely have come from you, my God. By means of it you imprinted on my mind doubts which I was to remember later, when I came to argue these matters out for myself. But at that time neither he nor my great friend, Nebridius - a young man of high principled and

unexceptionable character, who ridiculed the whole business of soothsaying - could persuade me to give it up. I thought that the authors of the books made out a better case, and I had as yet found no evidence as positive as I required to prove beyond doubt that when the astrologers were found to be right, it was due to luck or pure chance and not to their skill in reading the stars'.

On the relationship between Humanity, Heaven and God

In the *Confessions* I.2-3 Augustine raises the following issue: if God fills the whole of Heaven and Earth then he also fills human beings - he is inside them.

On Politics

- **And determinism:** Without any doubt, it is by divine providence that human kingdoms are set up. If any one ascribes them to 'fate' because he uses that term for the will or power of God, let him maintain his conviction but correct his language. ...For when men hear this word, ordinary usage leads them to think of nothing but the influence of the position of the stars at the moment when a child is born...some make this independent of the will of God, while others maintain that it depends upon His will.

The City of God, the Loeb Classical Library, Book V Ch. I pp. 133-135.

- **And the theocratic state:** *Confessions* I.4: 'You, my God, are supreme, utmost in goodness, mightiest and all-powerful, most merciful and most just. You are the most hidden from us and yet the most present amongst us, the most beautiful and yet the most strong...' etc.⁵

On Stars as Omens or Causes

But sometimes it may be said that the stars portend, but do not cause those deeds, so that their position, which foretells the future, is a kind of communication, not an active force. This view has been held by men of no ordinary learning. But the astrologers are not in the habit of saying, for instance: "Mars in this position portends a murderer," but "makes a murderer."¹⁵

The City of God, Loeb edition, p.137

On Augustine's Neo Platonism

'The effect of neo-Platonism was to free him from the shackles of materialism and to facilitate his acceptance of the idea of immaterial reality. In addition, the Plotinian conception of evil as privation rather than as something positive showed him how the problem of evil could be met without having to have recourse to the dualism of the Manichaeans. In other words, the function of neo-Platonism at this period was to render it possible for Augustine to see the reasonableness of Christianity....'

⁵ Augustine, *Confessions*, I.4, trans. R.S.Pine-Coffin, Harmondsworth, Middlesex: Penguin, 1961.

(Copplestone, *A History of Philosophy*, p. 42)

Plotinus did not believe that the planets represented evil, but only the 'less good. Therefore in natal horoscopy, they could cause neither good nor evil, but only represents possibilities. He thought that Matter produced the less good from its own stock. He did agree that there were necessarily opposites, and believed that they worked together towards positive results.⁸ The good only changed to evil in the material world, for man was himself dualistic, as Plotinus demonstrates in his explanation of wealth coming to the good by correct means, but to the unprincipled it came by wickedness, including that of the giver of the wealth.⁹

Plotinus, *The Enneads*, translated by Stephen' MacKenna, Larson Publications, 1992, # 16 on p.116

But, even Augustine could never challenge the belief that there was a link between life on earth and the stars. After all, Basil had noted the sense in weather lore. The sun's relation to the seasons, and the moon's to the tides were undeniable. But were they astrology? Augustine thought not, and reluctantly conceded that not just solar and lunar, but stellar, including planetary influences, had to be acknowledged:

Now it could be maintained, without utter absurdity, that some influences from the stars have an effect on variations confined to the physical realm. We observe that the variation of the seasons depends on the approach and withdrawal of the sun, and the waxing and waning of the moon produces growth and diminution in certain species, such as sea-urchins and shell-fish, and also the marvellous variation of the tides.⁶

For Ptolemy the moon's effect on the tides was the fundamental rationale for a full-blown astrology of human character and destiny. Augustine himself, though, couldn't see the connection. In his view there was no way that one could logically move from the natural observation that there was a celestial correspondence with the seasons to the conclusion that human choice is subject to the disposition of the stars. His concession to natural astrology, or Cicero's divination from nature was, in terms of the fourth-century, a statement of the obvious, for the reality of seasonal influences was not open to question. Even his concession that the stars might influence the body, though, was to prove a Trojan horse for astrology within the Christian world. If, for example, the moon was to be taken into account in medical treatment, then why shouldn't horoscopes be cast?

Augustine on the Soul

See *City of God* IX 3 and XXII.26-8

In *City of God* IX 4 Augustine discusses classical theories of whether the soul is influenced by external influences which could (although he doesn't mention them) include the planets. He concludes that, even though it does appear that the Stoic philosophers appears to argue that external bodies could influence the soul, in fact they,

⁶. Augustine, *City of God*, Book V, 6.

along with Platonists and Aristotelians, thought that the soul had a choice as to whether to accept such influences:

And he willing to instruct a man so zealous in the pursuit of knowledge, at once took from his wallet a book of Epictetus the Stoic, in which doctrines were advanced which precisely harmonized with those of Zeno and Chrysippus, the founders of the Stoical school. Aulus Gellius says that he read in this book that the Stoics maintain that there are certain impressions made on the soul by external objects which they call phantasiæ, and that it is not in the power of the soul to determine whether or when it shall be invaded by these. When these impressions are made by alarming and formidable objects, it must needs be that they move the soul even of the wise man, so that for a little he trembles with fear, or is depressed by sadness, these impressions anticipating the work of reason and self-control; but this does not imply that the mind accepts these evil impressions, or approves or consents to them. For this consent is, they think, in a man's power; there being this difference between the mind of the wise man and that of the fool, that the fool's mind yields to these passions and consents to them, while that of the wise man, though it cannot help being invaded by them, yet retains with unshaken firmness a true and steady persuasion of those things which it ought rationally to desire or avoid. This account of what Aulus Gellius relates that he read in the book of Epictetus about the sentiments and doctrines of the Stoics I have given as well as I could, not, perhaps, with his choice language, but with greater brevity, and, I think, with greater clearness. And if this be true, then there is no difference, or next to none, between the opinion of the Stoics and that of the other philosophers regarding mental passions and perturbations, for both parties agree in maintaining that the mind and reason of the wise man are not subject to these. And perhaps what the Stoics mean by asserting this, is that the wisdom which characterizes the wise man is clouded by no error and sullied by no taint, but, with this reservation that his wisdom remains undisturbed, he is exposed to the impressions which the goods and ills of this life (or, as they prefer to call them, the advantages or disadvantages) make upon them.

See also various passages in the *Confessions* (e.g. Book VII.17-19, in which Augustine demonstrates the incorporation into Christianity of the Platonic idea that physical body obstructs the interests of the soul).

Hatred of the Body

The typical Platonic and Neoplatonic position was that physical passions could obstruct the soul's connection with the divine. Commentators argue about whether this constituted actual hatred of the body. The argument can be made either way. In Augustine's Platonic Christianity, though, it was clear that all physical desire was regarded as sinful. See for example, *Confessions* II.1-2, II.1.

The cosmological significance of this is that it concerns the manner in which the soul ascends to heaven.

On determinism

See the *Confessions*, Book XII.15, for another example of Platonic theology

Will you say that these things are false which Truth tells me, with a loud voice in my inner ear, about the very eternity of the Creator: that his essence is changed in no respect by time and that his will is not distinct from his essence? Thus, he doth not will one thing now and another thing later, but he willeth once and for all everything that he willeth--not again and again; and not now this and now that. Nor does he will afterward what he did not will before, nor does he cease to will what he had willed before. Such a will would be mutable and no mutable thing is eternal. But our God is eternal.

Again, he tells me in my inner ear that the expectation of future things is turned to sight when they have come to pass. And this same sight is turned into memory when they have passed. Moreover, all thought that varies thus is mutable, and nothing mutable is eternal. But our God is eternal.” These things I sum up and put together, and I conclude that my God, the eternal God, hath not made any creature by any new will, and his knowledge does not admit anything transitory.⁷

We see in this passage Augustine engaging with the eternal, unchanging nature of the Platonic creator, and its implications for fate. His conclusion is that, as God is eternal and unchanging, he cannot change his will from day-to-day and that his plan is therefore set from the point of creation. All things, past, present and future exist simultaneously and human beings have to experience them. This Stoic point of view was that later expressed by Boethius (see my Classical Cosmology notes). (The radical consequence of Augustine’s determinism, the denial of the power of prayer or ritual as appeals to change God’s mind, was to surface very powerfully after the Medieval period amongst the Calvinists of the early sixteenth-century onwards, who argued that one was either destined for Heaven or Hell from birth.)

Web

The Confessions on line

Augustine, *The Confessions*, trans. edited Albert C. Outler.

<http://www.ccel.org/ccel/augustine/confessions.toc.html>

Latin Text:

Augustine, *The Confessions*, trans. James O’Donnell, Oxford: Oxford University Press 1992.

<http://www9.georgetown.edu/faculty/jod/conf/>

City of God on line

<http://www.newadvent.org/fathers/1201.htm>

or

⁷ Augustine, *The Confessions*, XII.15, trans. and ed. Albert C. Outler.

<http://www.ccel.org/ccel/augustine/confessions.toc.html>

Augustine, *City of God*, tans. Marcus Dods, Edinburgh T and T Clark, 1878.
<http://www.ccel.org/ccel/schaff/npnf102.i.html>

Isidore of Seville

Isidore of Seville, the last of the great classical compilers, produced the definitive early-medieval attitude to it; Isidore's encyclopaedia, the *Etymologiae*, was to one of the chief sources for classical learning until as late as the thirteenth century. Isidore was born in Spain sometime between 560 or 570, at a time when Byzantine power was resurgent across the Mediterranean - the great emperor Justinian had died in 565, having re-established temporary Roman control over the south-western corner of Spain. Isidore was descended from an old aristocratic family which now exercised its influence through the church rather state, and he was appointed as bishop of Seville in either 599 or 600. He embodied the old spirit of learning in that he was fluent in Latin, skilled in Greek and dedicated his literary works to the Visigothic king, Sisebut, as a means of reminding the political establishment of the virtues of true Christian education.

Isidore's notion of astronomy, though, was quite clearly impoverished. He may have possessed an expert knowledge of Greek but, if he read any of the most important Greek works, he either ignored or didn't understand them. It is likely that his knowledge of classical cosmology was second-hand and his astronomy is just a matter of random definitions and descriptions of celestial phenomena with, in Bruce Eastwood's rather harsh assessment, little concept of any physical or philosophical coherence.⁸ Isidore knew of the notion that the planets orbit the earth on seven spheres, and thought that the constellations were figures burnt into the vault of heaven, and, repeated the dates for the rising of different constellations throughout the year. And, to his great credit, in all the theories he outlined, he was very careful to keep an undogmatic, open mind. It was not the depth or accuracy of Isidore's knowledge which concerns us here, even though that tells us about the limited scientific knowledge of sixth century Spain, but his influence on future thought. His discussion of astrology was brief, but of immense significance, which was immense. What he did was to recategorise astrology in such a way that, although he appeared to condemn it, he simultaneously permitted it. The confusion, though, was not in his logic, which was perfectly clear, but its consequences. To start with, he followed Claudius Ptolemy in declaring that there were two parts to astronomy, the first which dealt with the laws of planetary motion, and the second which dealt with its effects. He named the first part *astronomia*, the law of the stars, and the second, *astrologia* and, even though the two words were often interchangeable down to the seventeenth century, from Isidore onwards, it was possible to use them in different senses. However, he realised that it was not enough to follow Augustine's fudge by condemning astrology while allowing for planetary influences, pretending, unconvincingly that the latter were not astrological. Isidore therefore clearly separated astrology into two parts. The first, which was acceptable in a Christian context, was natural astrology, based on solar and lunar

⁸ See the discussion in Eastwood, Bruce S., *The Revival of Planetary Astronomy in Carolingian and Post-Carolingian Europe*, Aldershot: Ashgate 2002, III.142.

influences and seasonal changes in the positions of the stars. The second, which was emphatically not permitted, was superstitious. Elaborating on his theme, he write that mathematicians, by which he meant astrologers, should under no circumstances 'practice augury by the stars...associate the twelve signs of the zodiac with specific parts of the soul or body...or attempt to predict the nativities and characters of people by the motion of the stars'.⁹ Such astrology was connected with magic, which he unequivocally condemned: even the magi, he claimed, had lost their astrological powers after the birth of Christ.¹⁰

Superstitious astrology was definitively condemned, but natural astrology was not, and that simple fact was bound to lead to later confusion. Isidore's words in his earlier work, *De natura rerum*, which dates from around 613, expose the difficulties of condemning astrology completely. He was clearly influenced by Pliny's book of the same name in his statement, for example, that Saturn is a cold star, or that everything in nature grows in accord with lunar cycles.¹¹ Such comments clearly belong under a natural rather than superstitious astrology, but an astrology nonetheless. Isidore also conceded that comets signified war, plague and revolution and suggested, following Ptolemy, that the differences between nations may be due to the stars, and that physicians should know astronomy. After all, Augustine had allowed for the possibility of physical influences from the stars. Isidore died in 636, leaving no scholar of comparable skill and stature to take on his mantle, but he did bequeath to later generations a clear idea that, while one might study the motions of the stars, and even their general influences, they should never be used to plan or predict the future, or inquire into the details of anyone's life.

⁹ Isidore of Seville, *The Etymologies*, trans. Stephen A. Barney, W.J. Lewis, J.A. Beach and Oliver Berghof, Cambridge: Cambridge University Press, 2007, III.xxvii, p. 99.

¹⁰ Isidore of Seville, *The Etymologies*, trans. Stephen A. Barney, W.J. Lewis, J.A. Beach and Oliver Berghof, Cambridge: Cambridge University Press, 2007, VIII.ix, pp. 181-3.

¹¹ See, for example, on Saturn as a cold planet, Pliny, *Natural History*, Vol. 1, Book II, trans H. Rackham, Cambridge Mass., London: Harvard University Press 1929, II.vi.34. For a summary of Isidore's arguments, see Thorndike, *Magic*, Vol. I, esp. pp. 626-633.