

NICHOLAS CAMPION
THE GOLDEN AGE OF ASTROLOGY

CHAPTER 1

Persia: time as deity

And the creator Ohrmazd entrusted all the good things which are in this creation to Mihr [Mithra] and the Moon and the twelve Signs of the Zodiac which are called by the Religion the twelve commanders.¹

Note: This is an unedited draft of a chapter from *A History of Western Astrology*, Vol. 2 which was cut from the final for space reasons. It can be cited as Campion, Nicholas, *Persia: time as deity*, unpublished manuscript, 2009.

In the winter of the year 531, some time towards the winter solstice and the shortest day, a group of the most distinguished pagan, Neoplatonic, scholars in the Roman Empire, set out on a journey to the court of the Persian emperor at Ctesiphon. They were in despair at the gradual closing down of intellectual inquiry in the Roman world, but hopeful that, in the east, they would find a more liberal environment, one in which scholarly inquiry into the nature of the cosmos would be encouraged. If any date marks the end of the classical world, this is certainly a prime candidate.

For a few hundred years before the philosophers' journey, until the late fourth century, any scholar in a vast swathe of the world, from Spain and Morocco in the west to Bengal, and perhaps further, in the east, would have practised a single, shared discipline, the purpose of which was to help them search the stars for signs of meaning and purpose for human life. Through the analysis of horoscopes, mathematical diagrams portraying the heavens for a precise time and in relation to an exact location on the earth's surface, they could perform any task from locating a runaway slave to assessing the condition of one's soul. They might work in the market place or at court, and they applied technical methodologies which varied in their detail, but they shared a common tongue: astrology was the cosmological *lingua franca* of the Roman, Persian and Indian worlds.

In the fifth century, learning in the Roman world was subject to a devastating combination of sustained political and military crises, and the dead hand of Christian orthodoxy, which could permit no rival source of information about the cosmos which it had not been sanctioned. And it most emphatically did not sanction astrology. Writing in the years 397-8, St. Augustine, the greatest of the Roman theologians, put it succinctly: astrology worked, but only because of two reasons. One, which he hoped philosophers would take note of, was chance, the appearance of coincidences which fooled the unwary. The other, far more damning, and directed at the faithful, was the warning that astrological forecasts were correct because demons were working through the foolish astrologers, trapping the unwary into eternal hell-fire.² And so, even though astrology survived in isolated outposts, amongst Jews in

¹ Extract from chapter 12 of the Zoroastrian text, the *Mēnōk I Xrat*, in Zaehner, Richard Charles, *Zurvan: a Zoroastrian Dilemma*. Oxford: Clarendon Press, 1955, p. 400.

² Augustine, *Confessions*, trans. R.S.Pine-Coffin, Harmondsworth, Middlesex: Penguin, 1961, IV.3, pp. 73-4.

southern Italy, for example, or individual practitioners in Constantinople, the focus of creative inspiration departed the Roman world and moved east to Persia and India.³

The Persian kings themselves ruled Mesopotamia, the heartland of ancient astrology. The last known horoscope compiled in the Babylonian cuneiform script dates to 68 BCE, and the latest surviving astrological text to slightly later, to **the first century CE.**, which is not to say that Babylonian astrology, depending on direct visual observation rather than the tables and computations which were characteristic of Hellenistic astrology, was dying out. There is good evidence for its use in the 470s and 480s at the highest level of Roman society, in order to select auspicious moments for the proclamation of rebellious emperors.⁴ From 68 BCE, until the inauguration of the Persian Sassanian dynasty in 226 CE, we have little idea of how the astrologers of Mesopotamia or Iran conducted themselves except, perhaps as intermediaries in the extended trade in ideas between India and the Mediterranean. The Sassanians brought a much greater interest in foreign scholarship and the new rulers, who saw themselves as the heirs to the Achaemenids, set out to do what all self-consciously great rulers do, which is to patronise learning; they collected, translated and edited the great books of their own and neighbouring countries. They also, later accounts tell us, were devotees of astrology, insisting that astrologers be present not just at birth and death, but at the conception of a royal child.⁵

In spite of this great effort, no complete Persian astrological texts survive today. We do have certain fragments and ideas which are reproduced in Arabic texts but, as to what the Magi and their fellows in the third century were actually doing we have little idea, beyond intimations that, as Cicero had reported they continued to view the sky from high places. However, we know that the founders of the Sassanian dynasty, Ardashir I (226-241), Shapur I (241-272) and Hormizd I (272-273) both revived the Mazdaean religion – the worship of the supreme God of Light, Ahura Mazda, as proclaimed by the prophet Zoroaster – within a context of religious tolerance, and were patrons of learning. It was Ardashir himself who ordered the compilation of the *Zend Avesta*, the Zoroastrian scripture. The Mazdean revival was a move of considerable benefit to astrology, which found a theological rationale in some of its notions. The Zoroastrian philosophy, Zurvanism, in particular, which viewed time as a divine, supreme organising principle, was later to be a powerful force in one Islamic sect, Ismailism, with its Gnostic archons and angelic hierarchies – invisible beings tied to stars and planets.⁶ Zurvan, it is said, comprised ‘time, space, wisdom and power’;

3 For a detailed account of the transmission of astrological ideas between Babylon, Greece, Persia and India is Pingree, David, *From Astral Omens to Astrology From Babylon to Bikaner*, Rome: Istituto Italiano Per L'Africa E L'Oriente 1997.

4 Campion, Nicholas, 'The Possible Survival of Babylonian Astrology in the Fifth Century CE: a discussion of historical sources', in Oestmann, Günther, H.K. von Stuckrad, and D. Rutkin (eds.), *Horoscopes and Public Spheres: Essays on the History of Astrology*, Berlin and New York: Walter de Gruyter 2005, pp. 69-92.

5 Saliba, George. "The Role of the Astrologer in Medieval Islamic Society," in Savage-Smith, Emilie (ed.) *Magic and Divination in Early Islam*, Abingdon: Ashgate, 2004, p. 353.

6 Corbin, Henry, *Cyclical Time and Ismaili Gnosis*, London, Boston, Melbourne: Kegan Paul, 1983.

he was the very embodiment of the living cosmos.⁷ Politically Zurvanism, is a cosmocracy; literally, the cosmos rules.

The great Persian monarchs, being patrons of learning, also sponsored the collection and translation of texts from the Byzantine empire and India, including astrological manuscripts. According to the eighth century scholar Nawbakht, who was to be one of the Islamic caliph, Caliph Harun al-Rashid's, astrologers, Ardashir I commissioned the translation of the works of Hermes the Babylonian, Dorotheus the Syrian, Cedros the Athenian, Ptolemy the Alexandrian and Farmash the Indian.⁸ Some works were in Greek, others in Syriac and none needed to be imported; they were all current in the regions controlled by the Sassanian dynasty. It seems likely that there was a flourishing scholarly astrological tradition in Persia prior to the Muslim conquest from 635-42, and which placed Greek and Indian texts in the context of indigenous Persian religion. We have to assume that those who could afford it employed the services of astrologers to inspect their children's natal charts, select the most auspicious moment to launch important political or commercial enterprises, or contemplate their place within the great Zoroastrian cosmic scheme.

About the only fragment of astrological texts in Pahlavi, the characteristic Persian script, to survive is a passage dealing with the ideal horoscope for the world; its appearance in a work by the fourth century Roman astrologer Julius Firmicus Maternus, indicates that, at least in the early fourth century, astrologers in the Roman world were communicating with their Persian colleagues. We should never imagine that the flow of ideas was one way: astrologers, like any other professional or philosophical group, were united by their common beliefs, in their case that the universe revealed the most minute detail of one's life. Texts and ideas might be shared from Spain to India, from Alexandria, the centre of Greek learning, to Varanasi, the Indian holy city.

Many astrologers in the Roman world began to look to the east, when the narrow Christianising tendencies of Byzantine culture became too depressing for them to bear. The closing of debate on cosmological matters was not just a matter of concern for those with pagan inclinations but for the many heretics, many highly placed, who ran foul of the eastern emperors' need to find a religious orthodoxy to reinforce their political power. In the year 489, when the emperor Zeno closed the Academy at Edessa, a group of Nestorian Christians fled to the great medical school at Jundishapur, Persia's most important centre of learning.⁹ In 529???? Justinian, an emperor who took his Christianity especially seriously, closed the Academy at Athens, the last great centre of pagan teaching in the empire, with similar consequences: a year later, in December 531 the party of seven distinguished philosophers, including Simplicius and Damascius, the head of the Platonic Academy in Athens and so the senior pagan philosopher in the Roman empire, made their way

⁷ Zaehner, Richard Charles, *Zurvan: a Zoroastrian Dilemma*. Oxford: Clarendon Press, 1955, p. 93.

⁸ See the discussion in Pingree, David, *From Astral Omens to Astrology From Babylon to Bikaner*, pp. 9-10, and Iqbal, Muzaffar, *Islam and Science*, Aldershot: Ashgate 2002, p. 10.

⁹ The Nestorian Christians appear to have lacked the hostility to astrology of their Orthodox persecutors. See Baum, Wilhelm and Winkler, Dietmar, *The Church of the East: A Concise History*, London: Routledge, 2003.

to Persia, in the hope that the newly-ascended ruler, Khusrau I, might be the hoped-for, Platonic philosopher-king.¹⁰ To move from the Roman to Persian worlds was not so large a step, culturally-speaking. None of these dissident philosophers was a native Athenian, and Damascius himself was, as his name implied, a native of Damascus, a city almost as close to Persia as Greece. Perhaps, the philosophers hoped, Khusrau would at last inaugurate an empire based on the eternal cosmic truths of Plato's *Laws*, in which the stability of the state was ensured by the incorporation into its structures of cosmic harmonies, rather than temporary expediency, or on foolish and fractious religions, such as Christianity.¹¹ The search for the ideal state was never to succeed, the philosophers were hard to please, and Khusrau failed to impress, even if he did take advantage of their presence to commission the translation of various Greek classics into Pahlavi. However, Khusrau clearly had his guests' interests at heart and when he and his Roman counterpart, Justinian, made a peace treaty in 532, it included a clause allowing the philosophers to return home and practise their old beliefs. Once forged, though, the Persian connection remained strong and Neoplatonism found safe homes at Harran and Jundishapur.

The problem, though, for the pagan philosophers, was not so much official persecution. What's worse is that, in spite of the apparent vigour of the Platonic Academy at Athens in the 520s, once Justinian effectively closed it, they were ignored and their ability to influence the wider debate on the human condition and universal truths went into a steep decline. Certain essentials of Platonic thought had been incorporated into Christian theology, and intellectual vigour lay with Christian refutation of pagan error, but with debates within Christianity itself, between guardians of state-sanctioned theology and the heretics who, since Constantine, had been far more of a problem for the authorities, than pagans. As the focus of Christian intellectuals was devoted more and more to such ultimately trivial questions as the precise nature of Christ's relationship with God, the mechanics of such matters as the soul's relationships with the stars were forgotten. After all, if one's chances of eternal salvation were a critical matter of Christian theology, why would one bother with what Hermes or Ptolemy said about one's soul? We know only of the occasional lonely figure who continued to advocate astrology as a path to knowledge in the sixth and seventh centuries. There was, for example, Rhetorius of Egypt, whose compendium of astrological techniques provided a valuable account for Hellenistic methods of reading horoscopes. We may assume, optimistically, that Rhetorius was writing because there was at least some demand in the Greek-speaking world, rather than just for his own interest.

The Muslim armies marched into Syria in 635 and, by 642, had taken Mesopotamia and Persia. The speed of their conquest was shocking and, until then, rivalled only by Alexander. Strictly, conservative Islamic thinkers were hostile to astrology for much the same reason as their Christian counterparts: it provided a means for individuals to connect with the divine which was outside institutional religious control.¹² Such

10 Cameron, Alan, 'The Last Days of the Academy at Athens', *Proceedings of the Cambridge Philological Society*, 1969, Vol. 195, pp. 7-29. For the religious context of the time, see the discussion in Evans, J.A.S., *The Age of Justinian*, London: Routledge 1996., esp. pp. 65-78.

11 **Plato Laws xxxx and Campion, the Dawn of Astrology chap xxxxxx**

12 See the discussion in chapter 2.

theological positions, though, concerned only the devout. Everyone else was in a continual state of compromise, negotiating the calls of absolute fidelity to God with the need to actually understand the workings of the cosmos, and their place within it. The Arab rulers of the Middle East encountered, as part of the rich Sassanian culture they now ruled, a Persian astrology which offered them control over the future. This was a prospect which did not seem to interest the first wave of Islamic conquerors, for whom military might and religious faith seemed to provide all that was needed. The critical cultural shift towards Arabisation of the conquered lands took place in two stages, around half a century after the conquest of the Middle East. The Umayyad caliph ‘Abd al-Malik (685-705) began the process by making Arabic the language of government, rather than just of Islam. After this, anyone who needed a job at any level of administration, as so many educated people did, had to speak Arabic, and Greek, Aramaic, Syriac and Pahlavi were reduced to second-class status. Within a generation spoken Greek disappeared from the former Roman lands of the Islamic world. Together with his son and successor, al-Walid (705-15), under whom the Arab armies reached their most westerly extreme in Spain, al-Malik began a programme of mosque building, including the magnificent great mosque at Damascus, converting Islam into the established public religion, creating a professional army and allowing Muslims, who had previously been required to fight, to enter civil society. If we can date the origin of the Arab-Islamic culture which survives to the present day, then the beginning of the eighth century is our best option,

One important feature of the Islamic conquest was that unlike the Christians, but like earlier conquerors – Romans, Persians and so on – the Muslim authorities did not require that their subject people converted; the new rulers depended on political, not religious allegiance. The consequence was of considerable significance for the survival of the learning of the conquered lands and astrology, in particular, began to assume the same decision-making role it had previously occupied at Babylon and Rome. It was the Abbasid caliphs, who took power in 750 who were responsible for this transformation, and a succession of rulers established the conditions for what has come to be known as the golden age of Islam. Al-Mahdi (775-785) founded schools and patronised the arts, Harun al-Rashid (786-809) signalled his respect for pagan learning by ordering a collection of original Greek manuscripts. Caliph al-Mamun (813-833), building on the imperial library created by al-Mansur, set up the *Bait al-Hikma*, the House of Wisdom, in Baghdad as a deliberate and very successful attempt to bring scholars together to translate Greek, Syriac, Persian and Sanskrit works into Arabic, and exchange ideas about the nature of the cosmos. In practice the scholars of Jundishapur moved the short distance to Baghdad, where their work now benefited from much more lavish imperial patronage. The Arabs had a long tradition of astronomical lore, as did all people in the Middle East - they had borrowed the twenty-eight lunar mansions from the Indians - but the fact is that Muslim rulers required.¹³ They needed to calculate the rising of the crescent moon, which marked the beginning of the month and hence the sacred calendar. Night time prayers were timed by the rising and setting of stars, exactly as they had been in Egypt four thousand years earlier. These concerns were shared with adherents of all the other major religions but, uniquely, Muslims were obliged to orientate themselves precisely

13 See Hill, Donald R., *Islamic Science and Engineering*, Edinburgh: Edinburgh University Press and Turner, Howard R., *Science in Medieval Islam*, Austin: University of Texas Press 1995.

in space, facing Mecca at prayer. Working out the *qibla*, the direction of Mecca, when the earth has a curved surface, is an exceptionally complicated exercise, for which the stars proved invaluable. Such information was contained in texts known as *zīj*es - a *zīj* was an astronomical handbook with tables; Arabic versions begin to appear in the late eighth century but the most important was an Indian text, the *Zīj al-Sindhind*, which was presented to the Caliph in 770, as a gift from an Indian delegation. Nothing could illustrate the respect within which astronomy and astrology were held than the presentation of such a work to perhaps the most powerful man in the known world. The man who possessed and could use the *Zīj al-Sindhind* had access to the secrets of the cosmos. The Indians' gift to the Caliph seems to have stimulated a thirst for similar material and Greek and Syriac versions of Claudius Ptolemy's *Syntaxis*, the most important astronomical work of the Greek world, were translated into Arabic in the ninth century; such was its significance that it was renamed *Al-Maisti*, or the greatest, the majestic, from which its western name the *Almagest*, is derived. As important as observation of the sacred calendar was if the Caliph was to gain favour with God, if he wanted to manage his people, astrology was to be the more critical application of astronomical computations.

By the time the *Sindhind* arrived at court, the political authorities in the Islamic world had already discovered astrology, which is why it was such an appropriate gift. In 762, eight years before the *Sindhind* arrived at his court, the Caliph al-Mansur (754-775), the second ruler of the new Abbasid dynasty, had decided that he should move his capital from Damascus to an entirely new city in Mesopotamia, which he named Baghdad. A committee of astrologers working under the former Zoroastrian, and Islamic convert, Nawbakht the Persian, was convened to establish the most auspicious moment to begin construction. The date they chose equated to 31 July 762 in the Julian calendar then in use in the Christian world, and their purpose was to legitimise the Abbasids in the eyes of heaven, exactly in line with ancient near-eastern custom. Al-Mansur was to present himself as a cosmic ruler, a worthy successor not just of the Sassanians but of all the great dynasties which had dominated the region. His astrologers' work was spectacularly successful, and by the tenth century the city was a flourishing, cosmopolitan centre with well over a million inhabitants. We know the details of the horoscope because it was carefully preserved in an eleventh century manuscript, in *Al-Athar al-Baqiyah'an al-Qorun al-Khaliya*, (*The Chronology of Ancient Nations*), an historical volume by the Persian polymath al-Biruni (973-1048).¹⁴ From this we know that the time chosen was around 2.40 pm, local time, at which moment Jupiter was rising over the eastern horizon and in the sign which it ruled, Sagittarius. Decoded, this means that the most benevolent of the celestial bodies was the strongest planet of the moment and the 'lord of the chart', the principal ruler of the city's future destiny. This could not be better. Of course, every factor in the horoscope would have been taken into account in order to assure the maximum possible advantage for the future. This was long-term planning and the city was built to last. But this was not all. The entire city was designed as a mirror of heaven on earth, aligned both with the equator and the Tropics of Cancer and Capricorn, the *qibla*, and the planets. Baghdad was cosmopolitan in the true sense – a cosmo-polis, a cosmic city. The centre of the city, intriguingly, was symbolically the sun, indicating an awareness of the Hermetic cosmos, in which the sun was the spiritual centre, rather

¹⁴ Al-Biruni, *The Chronology of Ancient Nations*, trans., C.E. Sachau, from the Arabic text 'Athar al-Baqiyah', or 'Vestiges of the Past', London: W.H. Allen, 1879, p. 339.

than the ordinary physical universe, in which the earth stood at the centre.¹⁵ This was more than a matter of town planning. The entire cosmology outlined in the Hellenistic texts ascribed to the legendary teacher, Hermes Trismegistus, and in which time, space, soul and consciousness were completely interlocking and interdependent, was eagerly adopted by Islamic authors including, of course, the astrologers.¹⁶

The astrology used by Nawbakht and his colleagues would have been overlaid with Persian and Indian adaptations, but was fundamentally of the Hellenistic variety, developed in Greek-ruled Egypt in the last centuries before the Christian era. Nawbakht may have been Persian but direct Greek influence at the highest level was represented by Theophilus of Edessa, who lived from around 695 to 785 and who, in his venerable, old age, was court astrologer to the Caliph al-Mahdi. To attempt to distinguish eighth century Greek from Persian and Indian astrology is difficult, if not impossible for, although there would have been local differences arising from the constant innovation which is characteristic of astrological practice, the scholars and texts passing between the Mediterranean, the Middle East and India from the fourth to eighth centuries, ensured a certain level of consistency. Theophilus' writings indicate the broad concerns of astrology at the time - to manage political affairs. He set out the rules for what was known in Arabic as *ihitiyarat*, or 'elections' in Europe, the selection of auspicious moments of launching new enterprises, discussed military astrology, a topic of concern when al-Mahdi was actively fortifying the main centres of his empire, and solar and lunar 'revolutions'. The latter were horoscopes cast for important points on the solar and lunar cycle, usually the sun's annual entry into Aries, which, it was thought, indicated the prospects for the immediate future and could therefore be used to plan for the year ahead. A revolution might indicate such things as military threats, political upsets, financial prospects, the weather, and hence harvests, and risks to public health. Such matters were clearly of critical concern for the caliph. As Theophilus, who wrote in Greek rather than Arabic, pointed out, 'Saturn...accomplishes the ruin of kings and the taking of cities...Mars...makes arsons and pestilential sicknesses and droughts and scarcities of fruits'.¹⁷ Equipped with such knowledge, al-Mahdi was in an ideal to anticipate and outsmart his enemies. Astrology was as much a part of the technology of power as was the latest armour or cavalry tactics.

The question of Persian, Greek and Indian origins is also somewhat controversial and can arouse passions which have more to do with modern nationalism than events on

15 For Baghdad as a cosmic city see Allawi, Ibrahim, 'Some Evolutionary and Cosmological Aspects to Early Islamic Town Planning' in Margaret Bentley Sevcenko (ed.), *Theories and Principles of Design in the Architecture of Islamic Societies*, Cambridge, Massachusetts: Aga Khan Program for Islamic Architecture 1988, pp. 57-72. For the concept of the sun as the centre of the cosmos see Corpus Hermeticum XLI.17 and Campion, *The Dawn of Astrology*, p. 192.

16 For the influence of Hermetic on Islamic thought, see Affifi, A.E., 'The Influence of Hermetic Literature on Moslem Thought', in *Bulletin of the School of Oriental and African Studies*, Vol. 13 no 4, (1951), pp. 840-55 and the brief discussion in Copenhaver, Brian P., *Hermetica*, Cambridge: Cambridge University Press, 1992, pp. xlv-xlvii.

17 Theophilus of Edessa, *Works on Elections for Wars and Campaigns and Sovereignty*, trans. Holden, James Herschel, *A History of Horoscopic Astrology*, Tempe AZ: American Federation of Astrologers, 1996, p. 101, from the version edited by Franz Cumont, CCAG V.1, pp. 233-4.

the ground. Indian astrologers are wedded to the belief that their art is of great antiquity and owes little or nothing to the west. In that the *Vedas*, the Hindu sacred texts, place extraordinarily reliance, just as do the sacred books of the west, on the correct timing of religious rituals, the Indian astrologers are correct. In that sense the written tradition of Indian astrology is as old as the *Vedas*, placing it between the mid-third and second millennia BCE, contemporaneous with the origins of the literary tradition in Mesopotamia. However, the evidence suggests that horoscopic astrology travelled east from Greece and arrived in India perhaps in the third century; the earliest surviving Sanskrit text, the *Yavanajataka*, dates from 270.¹⁸ **CHECK** The creative energy, though, travelled in two directions, and it was the astrologer, al-Biruni (973-1048), who tackled what was even then evidently a nationalist rivalry. 'In the remote past', he wrote idealistically, 'they [the Indians] and the Greeks were like one family, united by similar beliefs; and in the science of stars in its two kinds'.¹⁹ The *Yavanajataka* may contain the earliest known, undisputed, example of the important branch of astrology which allows the astrologer to find the answer to any question for a horoscope cast for the moment at which the query is put.²⁰ Known as *masa'il* in Arabic, interrogations in medieval Europe, and horary charts in modern English, these horoscopes were to be one of the staples of astrological practice in Europe until the seventeenth century and still have a small but devoted following. The astrologer literally interrogates the cosmos, which, obligingly, responds. As it appears in the Sanskrit, questions of good and bad fortune were not only complex, but depended on the wisdom of the astrologer to discern what was in the questioner's mind. 'The thought of the querist [the questioner] is subtle and can be understood (only) by thought, meditation and concentration', the text reads.²¹ Psychology can be read through the disposition of the planets - 'If Venus is in the descendant', one example reads, 'he is anxious about merchandising profits, the acquisition of money, or intercourse with women' - and the total pattern of time; the significant developments may lie in the past, present or future.²² This art then, whose origins may lie in the Hellenistic world, apparently, made its way back through Persia and, in the twelfth century, was to arrive in Catholic Europe.²³ Other basic astrological readings

18 Pingree, David, *The Yavanajataka of Sphujidhvaja*, 2 Vols., Harvard Oriental Series 48, Cambridge Mass.: Harvard University Press 1978, Vol. 1, p. 5. See also Kusuba, Takanori and David Pingree, *Arabic Astronomy in Sanskrit*, Leiden: Brill, 2002 for the journey of Arabic astrology to India and Pingree, David, 'The Fragments of the Works of al-Fazari', *Journal of Near Eastern Studies*, 1970, Vol. 29 No. 2 (Apr., 1970), pp. 103-123, for material taken from India to Persia.

19 Al-Biruni, *On the Motion of the Two Lots*, in f.85v.23-f.86r.1, trans Edward S. Kennedy, as 'Al-Biruni's Treatise on Astrological Lots', in Kennedy, Edward S. *Astronomy and Astrology in the Medieval Islamic World*, Aldershot: Ashgate, 1998.

20 Pingree, David, *From Astral Omens to Astrology From Babylon to Bikaner*, Rome: Istituto Italiano Per L'Africa E L'Oriente 1997, p. 47.

21 Pingree, David, *The Yavanajataka of Sphujidhvaja*, 2 Vols., Harvard Oriental Series 48, Cambridge Mass.: Harvard University Press 1978, Vol. 2, 62.1, p. 156.

22 Pingree, David, *The Yavanajataka of Sphujidhvaja*, 2 Vols., Harvard Oriental Series 48, Cambridge Mass.: Harvard University Press 1978, 53.4, 54.7, Vol. 2, pp. 133, 135.

23 The textual evidence for the origins of interrogations are the object of some dispute: see Campion, *Dawn of Astrology*, pp. xxxxx.#

though, which derive from the marriage of Hellenistic, Indian and Persian material, combine character description with physiology, geography and botany in a manner which illustrates the range of concerns to which astrology might be devoted. According to the tenth century astrology al-Qabisi – famous in medieval Europe as Alcabitius – Gemini is ‘generous, good in its soul; it has of the body of a person the shoulders, upper arms and hands, of regions...Egypt’, while Libra ‘has tall trees...is generous, good in its soul...of the body of a person the backbone, the lower part of the body, the naval, the genitals, the thighs, the buttocks and the waist; of regions the Byzantine Empire...’.²⁴ Such information was vital if the astrologer was to advise on any question from the whereabouts of lost property to medical problems, agriculture and political threats.

We know the names of some of the Indian astrologers who visited the court at Baghdad in the eighth century, attracted by its intellectual vigour and the prospects of scholarly debate and royal patronage. The most famous was Kankah, who stayed at the court of al-Mamun and wrote on both birth-charts and ‘conjunctions’, the analysis of history using astrology; among his colleagues, two others, Judar and Naq both wrote on birth-charts but one, Sanjahil, compiled a work on *Secrets of the Questions*, or interrogations, a singularly important practice for those concerned with planning the future.²⁵ Other traces of ancient astrology were evident in the astrology of the Mandaean, the adherents of a dualistic, Gnostic religion. That the Mandaean prophet was John the Baptist, might date their origin to the first century.²⁶ Even now, they survive in southern Iran and Iraq (suggesting a strong claim to direct descent from the Sumerians), having survived persecution by Saddam Hussein, and still use certain sacred texts including a set of astrological manuscripts translated in 1949 as *The Book of the Zodiac*.²⁷ These texts, as the translator, E.S. Drower, argued, still allow the Mandaean priests to search for answers to crises, and, ‘in days of stress and war, (hope) to find in the stars a promise of peace and better times’.²⁸ The manuscripts are a compilation of Babylonian eclipse, shooting star, thunder and earthquake omens with possibly Sassanian rules for working out the horoscope of the new year – the spring equinox – together with rules for interpreting every combination of zodiac sign with horoscope house, probably derived from Greek texts, and instructions for the use of talismans which come from the same tradition as the principal text of Islamic astral magic, the *Picatrix*. Other passages deal with omens for days of the month and even the opening of doors, in which case very careful attention should be paid to the

24 Al-Qabisi (Alcabitius), *The Introduction to Astrology*, edited and translated by Charles Burnett, Keiji Yamamoto and Michio Yano, London and Turin, The Warburg Institute and Nino Arango Editore, 2004, I.27, 31, pp. 36-7.

25 Dodge, Bayard, *The Fihrist of al-Nadim: a tenth-century survey of Muslim culture*, New York: Columbia University Press 1970, Vol. 2, p. 644-5. See also the note in Holden, James Herschel, *A History of Horoscopic Astrology*, Tempe AZ: American Federation of Astrologers, 1996, pp. 103-4.

26 Drower, E.S., *Mandaean of Iraq and Iran*, Oxford, Clarendon Press 1937, and Lupieri, Edmondo, *The Mandaean: the last Gnostics*, Grand Rapids MI., W.B. Eerdmans 2001.

27 Drower, E.S., *The Book of the Zodiac*, London: The Royal Asiatic Society, Oriental Translation Fund Vol. XXXVI, 1949.

28 Drower, E.S., *The Book of the Zodiac*, p. 1.

direction from which an enters and leaves a house, very much in the style of the Chinese system, *feng shui*.

The eclipse omens in *The Book of the Zodiac* are very similar in character to those in the classic Babylonian text, the *Enuma Anu Enlil*, evidence, if any were needed, of continuity with the astrologers of almost a thousand years earlier. We find some intriguing details - for example, in the *Enuma Anu Enlil*, if an eclipse occurs on the month of Ab (but not at its appointed time), 'flood will come in the river', while in the Mandaean text, for the same astronomical occurrence, a 'great sea will come'.²⁹ The trouble is, though, that in all such texts eclipses bring a series of disasters, from rebellion to death, flood, famine and disease. The Mandaean texts have not been matched to the Babylonian omen by omen, but their spirit is close enough to identify a direct continuity of practical Babylonian astrology or, at least, of its spirit. The texts on rising signs, meanwhile, appear to be derived from the fifth century BCE Babylonian nativity omens, which provide the earliest known rules for the analysis of destiny at birth. **CHECK FOR COMPARISONS** The Mandaean texts tell us that the man born with the early part of Pisces in the ascendant will be tall, slender, with red hair, small eyes, and will come into family property. His mother will be sick when she is pregnant and he will upset his father when he is born, will have a legal dispute with a woman and be struck with an iron bar on the way back from the market.³⁰ We also find fairly specific indications for disease based on the lunar cycle. A person who becomes ill on the first day of the month, we are told, will get well, but the individual who falls sick on the thirteenth will die.³¹ Prediction is only part of the picture, though, and much of the book is concerned with active management of one's life. One may be born short or tall, with red hair or black, but such a fate need not inhibit success. For example, if one is in business then goods can be bought more cheaply - and a profit made - when the moon is in any sign from Capricorn to Gemini, or at the end of the month, while one should never set out on a journey when the moon is in Cancer, Virgo, or Pisces.³² There was also concern with the invisible entities that are constantly interfering in our lives, and book VI, titled 'Charms against Sids, Devils and Lunacy-Demons', sets out the correct procedure for dealing with such threats. For example, the demon which comes on the first or second days of the month, the forty-eight hours following the rising of the crescent moon, should be taken out of the city at dawn, exposed to sunlight, rubbed with his own blood and then made to drink some of it, after which the skin of a weasel should be tied up with some oleander. After this elaborate procedure, the demon will then grow calm.³³ We are not told how frequently this ritual was used. The complete collection of Mandaean texts, though, give us a complete picture of an astrology which recognises the power of the fate we are born into but sets out to actively negotiate with it. The texts move from a powerful Gnostic account of the creation of the stars and zodiac signs by Ptahil, the Mandaean

29 Rochberg-Halton, *Aspects of Babylonian Celestial Divination*, p. 132, V.11, fr. 8, Drower, E.S., *The Book of the Zodiac*, XVII, p. 129.

30 Drower, E.S., *The Book of the Zodiac*, I, pp. 35-6.

31 Drower, E.S., *The Book of the Zodiac*, V, p. 75.

32 Drower, E.S., *The Book of the Zodiac*, IX, X, p 99.

33 Drower, E.S., *The Book of the Zodiac*, VI, p. 77.

Demiurge, to the prediction of whether a pregnant woman is carrying a boy or a girl: 'count the name of the day on which she comes to your house, and the name of the woman's husband, and the name of the woman, and see what the letters amount to', and then subtract two repeatedly until only one or two is left.³⁴ True to Pythagorean symbolism, which attached gender to numbers, if the answer is one, the baby will be a boy, if two, a girl will be born.³⁵

There is some evidence that the Persian astrologers may have been innovating technically, independently of the work being done in the Greek-speaking world, developing methods by which the success or failure of an initiative might be assessed. For example, there may have been changes in the nature of the aspects (mathematical relationships) between the planets which were used to answer precise questions. Such innovation was of detail rather than substance.³⁶ However, there was one original Persian contribution to astrology which was distinctive and had profound religious and political implications, and was derived from the coincidence of timing between the apocalyptic teachings of Zoroastrian religion and the combined cycle of Jupiter and Saturn the two slowest moving planets. According to the Zoroastrians, world history was driven forward by a dialectical process characterised by twelve phases of one thousand years each. As one millennium came to an end and another began, a crucial phase was initiated in the bitter struggle for supremacy between Ahura Mazda, or Ormazd, the god of light, and Ahriman, his dark counterpart. At some point, most likely after the Persian occupation of Babylon in **xxxx** BCE, though we have no idea exactly when, it was noticed that the conjunctions between the two slow-moving planets, Jupiter and Saturn, which take place every twenty years, progress through the signs of the zodiac in an orderly sequence which repeats itself after 960 years.³⁷ This single insight was to provide the cosmic basis of western historiography until the seventeenth-century. As Christian mythology adapted the Persian system of the struggle of good and evil, Ahriman became Satan, an independent being entirely absent from Jewish teaching. In 'Revelation', the closing book of the New Testament, St. John adapted the thousand-year sequence in order to provide the basis of Christian apocalyptic belief: Christ will return, vanquish Satan and rule in splendour for a thousand years - the millennium - at the end of which there will be a terrible, final struggle which is to end with the final inauguration of the eternal Kingdom of God, St. John's New Heaven, New Earth and New Jerusalem.

Our earliest surviving account of the Persian astrological theories of world history was written down by Masha'allah, a Jew who was born in Basra, in modern Iraq,

34 Drower, E.S., *The Book of the Zodiac*, XVII, p. 123, X, p. 98.

35 Campion, *The Dawn of Astrology*, p. xxxxxxxx. PLUS PYTH QUOTE

36 See Pingree, David, *From Astral Omens to Astrology From Babylon to Bikaner*, Rome: Istituto Italiano Per L'Africa E L'Oriente, 1997, pp. 49; Hand, Robert (ed.) and Robert Schmidt (trans.), *The Astrological Records of the Early Sages in Greek*, Berkeley Springs: Golden Hind Press 1995, p. xiv.

37 See XXXXXXXX. If the first conjunction is in Aries, the second is in Leo, the third Sagittarius and the fourth returns to Leo. This pattern continues for around 240-260 years when it shifts to Taurus-Virgo-Capricorn. The last two quarters of the millennium are taken up by conjunctions in Gemini-Libra-Aquarius and Cancer-Scorpio-Pisces respectively. The inference of such a predictable pattern was that the universe was governed by order, and, in that the order could be predicted, purpose.

around 740 and died in 815. In the course of his life, Masha'allah, composed around twenty-five astrological texts, a number of which were to become standards in medieval Europe, where he was known as Messahala. At the age of twenty-two he worked with Nawbakht on the astrological foundation of Baghdad and he also seems to have lived at Harran, home of the Sabians, surviving heirs to the planetary religion of Babylon. The theory of Jupiter-Saturn cycles and historical epochs was set out in his *On Conjunctions, Religions and Peoples*, and he related the astronomical pattern to socio-political and religious shifts which occurred every 240 years, and the periodic conflagrations or catastrophes, such as Noah's flood, which were thought to take place every 960 years.³⁸ The fundamental premise was that the nature of any Jupiter-Saturn conjunction, on which was based its use as a forecasting mechanism, was indicated by the horoscope cast for the preceding spring equinox, the date every year when the Sun entered Aries. The logic was that, at this moment, a new cycle of time began, within which all possibilities for that cycle, were contained. Masha'allah included the horoscopes for the spring equinoxes preceding the Jupiter-Saturn conjunctions prior to the great deluge (it was believed that the rains which caused the flood began at midnight precisely, on 18 February 3101 BCE, with a conjunction of planets in Pisces, appropriately the last of the 'water' signs) and the births of both Christ and Mohammed. These were, naturally, fortunate horoscopes. They could hardly be anything else. However, both were Saturnine, and Saturn, Masahallah reminds us, indicated 'general misery and violence'.³⁹ In Scorpio, the sign of the Arabs, this pointed to Mohammed's death in the east, but the chart was saved by an exalted, benevolent, Venus in Pisces, a counter-indication which revealed the Arabs' essential strength. Masha'allah's work was potentially heretical, suggesting that God's plan was subject in some way to mathematically regulated planetary cycles. His God, though Jewish, was also the supreme mind of the Neoplatonic philosophers, whose divinity was revealed in his devotion to a somewhat mathematical, bureaucratic, cosmic order. Political changes are permitted a quarter way through the cycle, around every 240 years while great prophets appear when the cycle is complete; every 960 years a new prophet appears.⁴⁰ Of course, nothing could be so exact and Mohammed and Christ were separated by only six hundred years. All the same, the structure of planetary cycles acted as an ideal, fixed framework within which God could act. Yet the tension between two competing cosmologies is obvious: could God, or the gods, act spontaneously, as theology decreed, or were they bound by mathematical order? The solution worked out by devout Jews, Christians and Moslems was that the order itself was created by God and was subject to him. But, as soon as one drifts towards the Platonic cosmos, we enter heretical terrain on which moral choice, and so the prospect of individual salvation, is precisely ordered. For Masha'allah, God might be

38 This work has not survived intact, but part of it is included in a work written in the early/mid-tenth century by an Arabic Christian astrologer known as Ibn Hibintā (translated in Kennedy, E.S.; Pingree, David, *The Astrological History of Masha'Allah*, Cambridge, Mass.: Harvard University Press 1971.)

39 Kennedy, E.S.; Pingree, David, *The Astrological History of Masha'Allah*, Cambridge, Mass.: Harvard University Press 1971, pp. 51-2, see also p. 45; Pingree, David, 'Masha'allah's Zoroastrian Historical Astrology', in Oestmann, Günther, H. K. von Stuckrad, G. Oestmann and D. Rutkin (eds.), *Horoscopes and History*, Berlin and New York: Walter de Gruyter 2005, pp. 95-100.

40 Jupiter-Saturn conjunctions take place every twenty years. For periods of around 240 years they take place in the same element, that is the Fire, Earth, Air or Water signs. The entire cycle is complete after 960 years.

free to send prophets whenever he wishes, but those wishes just happen to coincide with the multiples of the twenty-year Saturn-Jupiter cycle. There is a further heresy evident in such thinking, and that is a kind of religious relativism which teaches that, while God's Truth may be absolute, the truths that any prophet, including Mohammed, teaches, are provisional, and likely to be superseded by his successor. Or, even if the truths can be relied on, the institutional structures of mosques, imams, synagogues and rabbis are eminently disposable, mere terrestrial trivia when faced by the enormity of cosmic time. This was dangerous work, acceptable, perhaps, in the scholarly debate which flourished in a sophisticated, cosmopolitan environment, but it was always liable to attack by those for whom the *Koran* was the final word. Even so, it struck a chord as Islamic rulers turned to their Persian predecessors for cultural *kudos*, reviving the civilised splendours of the Sassanian court. Masha'allah's work was repeated and developed by many imitators, of whom the most illustrious was Abu Ma'shar.

Born in Balkh, in modern Afghanistan, in around 787, Abu Ma'shar wrote some fifty books in almost a hundred years, dying in 886 after what was by the standards of the time an extremely long life. Under his Latin name, Albumazar, Abu Ma'shar was the best known astrologer of the Middle Ages in both the Islamic world and the Christian west, rated on a par with Masha'allah and the second century Greek polymath, Claudius Ptolemy. His *Introduction to the Science of the Judgement of the Stars*, known in the Middle Ages as the *Maius Introductorum* (Greater Introduction) was translated into Latin by John of Seville in 1133 and Herman of Carinthia in 1140. For those who were unable or unwilling to read the entire work, Abu Ma'shar thoughtfully composed an *Abbreviation* of the *Introduction*, which was translated into Latin by Adelard of Bath in the early twelfth-century.⁴¹ Every European scholar from the late twelfth to the sixteenth century would have known his name and considered his view of history to be more or less accurate. They may have disputed the detail, but the notion that God's plan unfolded in line with long-term planetary cycles was broadly accepted as a given.

Abu Ma'shar's technical work was fairly standard and in line with the Hellenistic tradition. He ran through the meanings of the planets and zodiac signs in a routine manner, drawing on the accepted authorities from Ptolemy and Dorotheus to Masha'allah. The *Abbreviation* was essentially a list of rules for exposing meaning in the stars, and the whole work was designed to act as a handbook for the beginner and an *aide memoire* for the more experienced practitioner. It began, naturally enough, with an invocation of 'God, the merciful, the compassionate' but then moved straight into an appeal to classical celestial mechanics: the incorporation of Neoplatonic thought in Islamic cosmology through astrology was evident in the statement that 'knowledge of the things existing in the world is indicated by 'the higher bodies...by the powers of their natural movements'.⁴² In common with the sacred scriptures of the

41 There are two recent English editions: Abu Ma'shar, *The Abbreviation of the Introduction to Astrology, Together with the Medieval Latin Translation of Adelard of Bath*, edited and translated by Charles Burnett, Keiji Yamamoto and Michio Yano, Leiden, New York and Koln: E.J. Brill 1994 and Abu Ma'shar, *The Abbreviation of the Introduction to Astrology*, translated by C. Burnett with historical and technical annotations by C. Burnett, G. Tobyn, G. Cornelius and V. Wells, Reston VA: ARHAT publications, 1997.

42 Abu Ma'shar, *Abbreviation*, trans Burnett *et al*, I.2.

Jews, Christians and Hindus, the *Koran* offered few clues on the workings of the cosmos beyond the information that God – or gods and goddesses - created and speaks through it. Astrologers themselves don't need to know how the stars and planets move, he adds, for they are only interested in the effects of such movements.

Abu Ma'shar's comprehensive summary of Persian astrological history was contained in his *On the Great Conjunctions*, a book whose purpose was made clear in its full title, *The Book of Religions and Dynasties*, and in which he refined and elaborated Masha'allah's work. 'We say', he insisted, 'that when the conjunction of the two superior planets necessitate something in the changes of religions and dynasties, the changes of the Sharias and the Sunnas, the occurrence of important matters, the change of the kingdom, the death of kings and the kinds of occurrence of prophets, revelation, and miracles in religions and dynasties'.⁴³ This 'conjunctional' astrology proved remarkably persistent. It was repeated by Al-Biruni,⁴⁴ the most distinguished astrologer of the tenth and eleventh centuries and, by the fourteenth century Tunisian statesman and scholar, Ibn Khaldun, in other respects a bitter opponent of astrology. As set out by Ibn Khaldun, the total period of conjunctions, 960 years, indicated a change of dynasty, the medium period, 240 years, pointed to 'the appearance of persons in search of superiority and royal authority', and the short period, twenty years, exactly as Abu Ma'shar had written, pointed to 'rebels or propagandists, and the ruin of towns of their civilisations'.⁴⁵ Ibn Khaldun also referred to a great lost work on these conjunctions by Al-Kindi, Abu Ma'shar's teacher, which had reputedly forecast the fall of Baghdad in the thirteenth century. The reason for the book's loss, Ibn Khaldun speculated, was that it had itself been destroyed when the Mongol general Hulagu, on his mission to destroy the Caliphate, sacked Baghdad and threw its libraries into the Tigris. Had the book forecast its own destruction? True as this might be, there was a problem with such prophecies, as Ibn Khaldun observed. The prediction that a rebellion was scheduled by the heavenly motions to take place might actually encourage instability, which is precisely why the Roman emperors had repeatedly tried to control the empire's astrologers. The perils of the self-fulfilling prophecy were not to be taken lightly, and Ibn Khaldun's claim that he had seen many examples of astrologically-inspired rebellions, suggests that this was indeed a problem for the authorities.⁴⁶

In the absence of Al Kindi's lost work, or any earlier Persian material, our main source for historical and political astrology remains Abu Ma'shar, who delineated in considerable detail the specific examples which future astrologers might apply to

43 Abu Ma'shar, *On Historical Astrology: The Book of Religions and Dynasties (On the Great Conjunctions)*, ed. and trans. Keiji Yamamoto and Charles Burnett, 2 Vols., Leiden: Brill 2000, 3.5. For an examination of Abu Ma'shar's historical cycles see Pingree, David, *The Thousands of Abu Ma'shar*, Warburg Institute, London 1968.

44 Al-Biruni, *The Book of Instruction in the Elements of the Art of Astrology*, trans. R. Ramsay Wright, Luzac and co; London 1934, chap. 250, p. 151. Also see Hakim, Mohammed and Ansar Zahid Zhan. *Al-Biruni: His Times, Life and Works*. Delhi: Renaissance Publishing House, 1990.

45 Ibn-Khaldun, *The Muqaddimah: An Introduction to History*, trans. Franz Rosenthal, London: Routledge and Kegan Paul 1987, 3.52 pp. 260-1.

46 Ibn-Khaldun, *The Muqaddimah: An Introduction to History*, trans. Franz Rosenthal, London: Routledge and Kegan Paul 1987, 6.31 p. 408.

forecasting the welfare of the state. Every planetary combination could bring its own set of warnings. When Jupiter is in the seventh house at the Aries Ingress and applies to Saturn in trine or sextile, there will be lawsuits amongst the ordinary people, and 'plenty of terrors'; a conjunction of Mars and Saturn indicates skin diseases, a sextile or trine from Mars to Saturn points to fraud amongst pious people and kings and, when the Sun is involved in such a pattern in the appropriate manner, he expected 'the annulment of evil'.⁴⁷ He then became more specific: when Aries is rising at the Aries ingress, which would occur in years when the Sun itself enters Aries at around dawn, we can expect tyranny, war, high pressure in the spring and intense cold in winter. And, in a possible echo of Assyrian texts, we are told that the Babylonian king may go on a journey and defeat his enemies while Armenia might suffer drought and starvation and the king of India may die.⁴⁸

Anticipating the future was vital for political management although, for historians, identifying the ebb and flow of historical patterns with astronomical patterns seemed to take precedence over prediction, almost as if their purpose was to offer proof of God's plan in the correlation of the patterns of the past with the heavens.⁴⁹ But even then prediction could not be avoided for, if God's plan had unfolded like clockwork to the present, so it must do in the future. Amazing detail could be marshalled in support of this proposition. One manuscript contained ninety-three horoscopes as evidence, running from about 2200 BCE to 1000 CE. Abu Ma'shar offered only seventeen horoscopes, but over a larger time span, from 3381 BCE to 928 CE, while a later text, which focused on the career of the Mongol warlord, Genghiz Khan (1167-1227), took as its scope the entire period from the seventh to seventeenth centuries.⁵⁰

Such work is part prophecy, part proto-sociology and entirely a matter of political management. We need to understand that, even though Abu Ma'shar's rationale, like Aristotle's is clearly Aristotelian (he talks of 'generation and corruption', the 'influences' and 'mixtures' of the celestial bodies⁵¹), the naturalistic, physical model of influences descending from the stars, and planets acting as natural causes, had little effect on his astrology. In fact, it was irrelevant. The actual structure of Abu Ma'shar's astrology is precisely mathematical, derived from the Pythagorean strand within Platonism. Everything in the historical process can be reduced to numerical formulae: when Jupiter is moving towards Saturn but still has 120 degrees to travel, prophecies will appear, when it has 90 degrees to go, religious and political leaders' affairs will

47 Abu Ma'shar, *On Historical Astrology*, 3.7-10. The first example requires that Jupiter is setting towards the western horizon around either 600 or 1200 from Saturn, in the second Mars is close to Saturn **GIVE DEGREES** and in the third Mars and Saturn are separated by around either 600 or 1200.

48 Abu Ma'shar, *On Historical Astrology*, 4.1.4.

49 See the discussion in Rosenthal, Franz, *A History of Muslim Historiography*, Brill: Leiden, 1968, pp. 110-113.

50 Kennedy, Edward S., 'An Astrological History Based on the Career of Genghis Khan', in S.Seikaly, R. Baalbaki and P. Dodd (eds.), *Quest for Understanding: Arabic and Islamic Studies in Memory of Malcolm Kerr*, Beirut: American University of Beirut, 1991, pp. 223-231, reproduced in Kennedy, Edward S., *Astronomy and Astrology in the Medieval Islamic World*, Aldershot: Ashgate, 1998.

51 Abu Ma'shar, *On Historical Astrology*, 1.1.3.

alter and, when there are 60 degrees left, conditions will similar to those that prevailed when the 120 degree situation took place. The whole situation is mathematically regulated: social, political and religious developments unfold with an unerring regularity. The question, though, whenever such predictions are made, is what on earth does one do about them? If the Armenians can expect starvation what action should the king take? Should he stockpile grain? If the king of India should die, can remedial steps be taken? Abu Ma'shar's words contain no more a hint of the necessary response than do most of the Babylonian astrological texts. In their case the appropriate prophylactic ritual, which could divert a threatened future, was specified elsewhere in the records, and we have no such evidence in the Islamic literature. We need to assume, though, that Abu Ma'shar's astrology was as participatory as that of the Babylonians. If an appearance of a comet in the king's horoscope or the solar revolution indicated rebellion,⁵² was a mighty caliph like **Harun al Rashid** likely to sit around while rebellion broke out? Or was he more likely to extend his spy network, bribe local officials and strengthen his forces in hostile areas and, perhaps, defuse potential causes of discontent? From what little evidence we have it appears that astrology became an adjunct to political decision-making, exactly as it had been in the first and second millennia BCE. Even in the fourteenth century Ibn Khaldun reported that 'Stories of soothsayers being approached by rulers...with the request for predictions, are well known'.⁵³ We do know that Masha'allah, Abu Ma'shar's teacher, was consulted by political leaders. In 794 he was called on to advise Harthama n. A'yan, governor successively of Palestine and Egypt, concerning a rebellion in north Africa which he was expected to suppress.⁵⁴ If Harthama's first purpose was to establish the likelihood of success the second was to establish how to achieve such success, to gain an insight into his rival's strategy, temperament and military strength. To be forewarned, in his view, was to be forearmed. In the event, the rebel leader, 'Abdawayh al-Anbari surrendered and the conflict, happily, ended peacefully. And conflict-resolution, in the view of astrologers from the Islamic golden age to the end of the seventeenth century in Europe, was to be one of their art's most important functions.

52 Abu Ma'shar, *On Historical Astrology* 5.7.15.

53 Ibn-Khaldun, *The Muqaddimah: An Introduction to History*, trans. Franz Rosenthal, London: Routledge and Kegan Paul 1987, 3.52, p. 259.

54 Allison, Chantal, 'The Ifriqiya Uprising Horoscope from On Reception by Masha'alla, Court Astrologer in the Early 'Abassid Caliphate', *Culture and Cosmos*, Vol. 3 no 1, Spring/Summer 1999, pp. 35-56; Masha'allah, *On Reception*, trans. Robert Hand, Reston VA: ARHAT 1998.