# **Judicial Astrology in Theory and Practice**

Submission to Studies in History and Philosophy of Science

## **Author**

Hilary M. Carey

School of Humanities and Social Science

University of Newcastle, NSW 2308

Email: Hilary.Carey@newcastle.edu.au

#### **Abstract**

Interrogations and elections were two branches of Arabic judicial astrology made available in Latin translation to readers in western Europe from the twelfth century. Through an analysis of the theory and practice of interrogations and elections, including the writing of the Jewish astrologer Sahl b. Bishr, this essay considers the extent to which judicial astrology was practiced in the medieval west. Consideration is given to historical examples of interrogations and elections mostly from late medieval English manuscripts. These include the work of John Dunstaple (c. 1390-1453), the musician and astrologer who is known have served at the court of John, duke of Bedford. On the basis of the relatively small number of surviving historical horoscopes, it is argued that the practice of interrogations and elections lagged behind the theory.

# **Keywords**

Medieval Latin astrology, Sahl b. Bishr, John Dunstaple, horoscopes

Many kinds of astrology were known and practiced in the middle ages. However, it is not until the Latin translation of the Arabic and Greek scientific corpus, a process which began in the late tenth century, that astrologers in the west had the technical means to practice Hellenic or scientific astrology, which incorporated the use of astronomical instruments and tables to observe and calculate the heavenly bodies with precision, the casting of horoscopes, and the consultation of scholarly textbooks to guide their interpretation. From this time, it is usually argued that scientific astrology flourished in western Europe, permeating natural philosophy, theology and the arts, and influencing politics and daily life.<sup>1</sup> Nevertheless, the medieval evidence for widespread client-based practice of scientific astrology is relatively thin prior to the fifteenth century. This article provides a cautious interpretation of the two branches of judicial astrology which formed the core of personal, predictive astrology, namely interrogations and elections. It is argued that these more intimate forms of astrology were probably not widely practiced until almost the very end of the middle ages. Overall, this suggests that medieval readers were drawn to these parts of the Arabic astrological corpus as much for the sophisticated theory they provided of the relationship between the individual and the natural world than as a practical means for guiding individual actions and predicting the future. The essay is in two main sections. The first considers the theory of interrogations and elections as presented in works by the major authorities, especially Sahl b. Bishr (d. 822 or 850), known in Latin as Zael or Zahel. The second part considers historical examples with a view to finding out something about the social and cultural context of the practice of interrogations and elections in one social milieu late medieval England.

### **I Theory**

According to most authorities, the science of astrology was divided into four or more branches, which included 'nativities', 'revolutions and conjunctions', 'elections' and 'interrogations'. This body of knowledge emerged out of a professional astrological literature which was created to serve the courts of the Abassid Caliphate (758-1258) and their heirs and rivals in the Islamic world. Its golden age endured from the time of Māshā'allāh (*Messahallah*) (c. 735-815), and Abū Ma'shar (Albumasar, 787-886) in the late eighth and ninth centuries CE, to that of Abraham ibn Ezra (c.1089-1167) in the mid twelfth

<sup>&</sup>lt;sup>1</sup> See for example Boudet, J.-P (2006), Carey, H. (1992), Thorndike, L. (1923-58), Whitfield (2001).

<sup>&</sup>lt;sup>2</sup> Boudet, J.-P. (2005a), pp. 61-64

century.<sup>3</sup> From the twelfth century this sophisticated cosmopolitan astrology came to exert a tenacious grip on the later European world. While working astrologers in both the Latin and Islamic worlds were necessarily adept in all branches of their art, each of the astrological sub-disciplines covered a distinct sphere of human activity and had its own techniques of operation and specialist literature. Writing between 1361 and 1365, the French scholar Nicole Oresme reflected this understanding in the definitions of the branches of astrology which he provides in his Livre de divinacions. The first part, he tells us, is close to what we now call astronomy and concerned the measurement of the heavenly bodies and the prediction of events such as eclipses. The second part was introductory to the others, and concerned the quality, influences and physical powers of the stars, planets and signs. The third part dealt with the revolutions of the stars and with the conjunctions of the planets and could be broken down into three further sub-branches. Through an analysis of major conjunctions it was possible to understand 'the great events of the world' which he lists as plagues, mortalities, famine, floods, wars, the rise and fall of kingdoms or the appearance of prophets and new religions; secondly, there was the study of the atmosphere and the weather, sometimes called astro-meteorology; thirdly, there was the judgment of the humours of the body which comprised the astrological part of medicine. The fourth branch dealt with nativities, that is the interpretation of an individual's life and fortune based on the appearance of the heavenly bodies at the time of birth. The fifth branch of astrology dealt with interrogations: 'that is, [it] decides and answers a question according to the constellation which is in the heavens at the time when a question in asked'. The sixth and final part of astrology was elections: 'by which the time to start a journey or to undertake a task is ascertained'. These are the only branches of astrology that Oresme cares to discuss, dismissing such things as geomancy, hydromancy, palmistry and so on as 'not sciences properly speaking'. 6

One major authority who wrote on elections and interrogations was Sahl b. Bishr, or, to give him his full name, Abū 'Uthmān Sahl ibn Bishr al-Isrā'īlī. <sup>7</sup> Although Sahl was Jewish, all his work appears to have been written in Arabic from which it was translated into Latin,

<sup>&</sup>lt;sup>3</sup> The spelling of Arabic authorities follows Pingree (1990) with the most usual form of the Latin name given in brackets. Later citations are given either in Arabic or Latin depending on the context.

<sup>&</sup>lt;sup>4</sup> Pingree, D. (1990). For astrologers in the later middle ages, see Préaud, M. (1984).

<sup>&</sup>lt;sup>5</sup> Coopland, G. W. (1952), pp. 52-53.

<sup>&</sup>lt;sup>6</sup> Coopland, G. W. (1952), p. 55.

<sup>&</sup>lt;sup>7</sup> Ullmann (1970), pp. 325-8, 309-12, 325.

probably in the thirteenth century. Carmody lists fourteen works in Latin translation attributed to Sahl, noting that the first five commonly circulated as a corpus, of which the third section covering interrogations, and the fourth, elections, served as the foundation of his fame. Treatises on interrogations and elections were also written in Arabic by many other authors including Māshā'allāh (Messehalla, 762-815), Abū Ma'shar (787-886), 'Ali 'Imrāni (d. 955-56), and, in Hebrew, by Abraham ibn Ezra (c.1089-c.1167), but Sahl's work seems to have been found the widest circulation. Excerpts from the Sahl corpus were included in Arabic astrological compilations, such as the Kitab al-Bari written by Abū al-Ḥasan 'Ali b. abī 'I-Rijāl (Haly Abenragel, fl. 1016-40s), or the different versions of the *Liber nouem iudicum*. In Latin translation, he was also an important source for European astrologers such as Leopold of Austria (fl.1271), Guido Bonatti (c.1223-c.1299), and John Ashenden (fl.1350). 11

Unlike the grander cycles of life and the cosmos which were invoked in nativities and conjunctions, elections and interrogations were generally seen as lesser branches of the science of the stars. Ptolemy, the most illustrious authority for astrology in antiquity, more or less ignored judicial astrology in the *Tetrabiblos*. Nevertheless, there is ample compensation for this in the pseudonymous *Centiloquium*, a work that was attributed to

<sup>&</sup>lt;sup>8</sup> As listed by Carmody, F. J. (1956), pp. 40-45, the Sahl corpus includes: *Introductorium* inc. Scito quod [cum] signa sunt 12 [Carmody 3.1]; *50 precepta*, inc. Scito quod significatrix [Carmody 3.2]; *De iudiciis*, inc. Cum interrogatus fueris de aliqua interrogatione[Carmody 3.3]; *De electionibus*, inc. 'Omnes [sapientes] concordati sunt quod elections sint debiles nisi in divitibus' [Carmody 3.4]; and *Liber temporum*, inc. 'Scito quod tempora' [Carmody 3.5]. For this essay, I have used the 1493 edition by Locatellus.

<sup>&</sup>lt;sup>9</sup> Carmody (1956) lists: Messehalla, *De receptione planetarum siue de interrogationibus*, trans. John of Seville. inc. 'Inuenit quidam vir'. [Carmody 1.3]; and, for elections: Albumasar, *Electiones planetarum*, inc. 'Dixit Albumasar: placuit mihi inter cetera uolumina'. [Carmody 13.7]; Albumasar, *Flores de electionibus*, inc. In nomine Dei incipient electiones' [Carmody 13.9]; Haly Embrani. *De electionibus horarum*, inc. prol. Rogasti me, karissime [Carmody 24.1]; Haly Abenrudian. *De electionibus* [Carmody 30.9]

<sup>&</sup>lt;sup>10</sup> Goldstein, B. R. (1996).

<sup>&</sup>lt;sup>11</sup> See Carmody, F. J. (1956): Anon, *Liber nouem iudicum* I, inc. 'Abendaiat . .. Zaelis liber incipit'. [Carmody 15.1]; Anon, *Liber nouem iudicum* II [Carmody 16.1]; Leopold of Austria, *Compilatio de astrorum scientie* [Carmody 38.1]; John of Ashenden, *Summa astrologiae de accidentibus mundi* [Carmody 39.1]; Guido Bonatti, *Liber introductorius ad iudicia stellarum* [Carmody 40.1]

Ptolemy in the middle ages but which was probably compiled in the eleventh century by 'Ali b. Ridwān (Haly, 998-1067). 12 Nicole Oresme stated frankly that he did not think there was any rational foundation to either interrogations or elections. 13 For Latin readers, the philosophical distinction between interrogations and elections was addressed in the Speculum astronomie, the guide to approved and unapproved works on astrology and magic that appears to have been prepared by a group of Dominicans associated or led by Albertus Magnus in or around the time of the Paris condemnations of 1270 and 1277. According to this source, books on interrogations taught how to make judgments concerning a matter on which an astrological interrogation was made 'with radical intention', such as whether it will come to pass or not, what might be the cause of a matter, and whether it might be prevented or not. 14 As representative of works concerned with interrogations, the Speculum lists texts by Sahl, Messehalla, and others attributed to Aristotle and Ptolemy. 15 In other words, interrogations were a special kind of divination or augury in which the 'radical' nature of the question and the focused intention of the astrologer both played a part in drawing down the rays of the stars, which al-Kindi identified as the occult forces which empowered all astrological operations. <sup>16</sup> Since there was no particular celestial event which was marked by an interrogation – other than the decision by the client to consult the astrologer and the astrologer to cast a chart – those who trusted in this branch of astrology had to have more than usual confidence in the professional authority and integrity of the practitioner they consulted.

Elections were more technical than interrogations and required the practitioner to identify, balance and temper opposing astrological forces in a horoscope. In a period before the availability of printed ephemerides, the calculation of an election placed heavy demands on the astrologer's computational skills since it required choosing between many different

<sup>&</sup>lt;sup>12</sup> Carmody, F. J. (1956), p.16.

<sup>&</sup>lt;sup>13</sup> Coopland, G. W. (1952), pp. 56: La quinte partie, des interrogacions, et la sixte, des elections, n'ont point de raisonnable fondement et n'y a point de verite.

<sup>&</sup>lt;sup>14</sup> Zambelli, P. (1992), p. 234: Pars iterum interrogationum docet iudicare de re de qua facta fuerit interrogatio cum intentione radicali, utrum scilicet perficiatur, an non.

<sup>&</sup>lt;sup>15</sup> Ibid., p. 236: Messehalla, *De receptionibus*; *De interrogationibus*; *De inventione* occultorum; *De interpretatione cogitationis*. Sahl, *Iudicia Arabum*; *De significatione* planetarum in domibus; *De significatore temporis*; *Liber novem iudicum*; *Liber trium iudicum*; Aristotle *Secundus tractatus*; Ptolemy to Aristoxenus; John of Seville *Tertia pars artis*.

<sup>&</sup>lt;sup>16</sup> al-Kindi, *De radiis*, cap. 2 In D'Alverny, M.-T., & Hudry, F. (1974). For discussion of this principle, see Travaglia (1999), p. 38.

potential horoscopes for the same event. This was only really possible for academics or court astrologers with secure patronage who had the leisure and motivation to prepare ephemerides for this purpose. Textbooks indicate that the astrologer might be asked to make an assessment for grand occasions, such as coronations, the founding of cities, or the celebration of a royal marriage, but he might just as easily be asked to consider everyday events such as starting a journey, having a haircut, or buying a suit of clothes.

The medical uses of elections were also important and formed something of a special sub-discipline with its own instruments, almanacs and technical literature. <sup>17</sup> As examples of works on elections, the *Speculum astronomie* listed tracts by Messehalla, Sahl and the pseudo-Aristotelian *Secretum secretorum*. <sup>18</sup> In his comprehensive treatise on elections, Sahl describes how to determine times to hold a battle, the return of a pilgrim from a journey, the arrival of a letter, or the outcome of consultations with kings. Issues of health and family were very important in this branch of astrology: women's matters, such as the election of a time for the removal of a stillbirth, are considered under the fifth house; other issues relating to ill health come under the sixth house. This describes the choice of times for taking medicine for the bowels, for the stomach-ache, for headache and diseases of the head, or to cure pains in the arms and legs, as well as how to cure an old malady. The role of the moon was generally soon as vital to the course of all illnesses, and Sahl cites Messehalla in support of this general proposition:

In every cure you want to look at its position in the body and if it is in the region of the head, throat and chest, treat it when the moon is in Aries, Taurus or Gemini — this is the higher region; if the malady is in the region of the belly and lower than the navel, treat it when the moon is in Cancer, Leo or Virgo, which is the middle region; if the malady is in the lower region, such as the anus and the lower part of the body, cure it when the moon is in Libra, Scorpio or Sagittarius and let the moon be joined to the benefics, increasing in light and number; if the malady is between the knees and feet, treat it when the moon is in Capricorn, Aquarius or Pisces. <sup>19</sup>

Under the same house, there are instructions on how to choose the best time to lance a boil in the eye, cut a vein, extract teeth or go to the barber for a haircut.

<sup>&</sup>lt;sup>17</sup> Carey, H. M. (2003); Carey, H. M. (2004). See also papers in Akasoy et al. (2006).

<sup>&</sup>lt;sup>18</sup> Speculum astronomie, cap. 10, ed. Zambelli (1992), p. 239 lists: Sahl *Liber electionum;* Haly *Liber electionum;* as well as Ptolemy's *Centiloquium* and others.

<sup>&</sup>lt;sup>19</sup> Crofts, ed. (1985), pp.57-65 (Lat), 111-16 (Eng.).

How did interrogations and elections work? This was a controversial issue. The general principle of celestial influence was accepted more or less without question throughout the middle ages; the celestial bodies were God's instruments. <sup>20</sup> However, rational arguments in defence of astrology, such as appear in the first book of Ptolemy's *Tetrabiblos* and were adopted by later authorities such as Albumasar, <sup>21</sup> only really applied in the case of nativities, revolutions of the year and conjunctions, where it was possible to point to a natural cycle in the heavens and its assumed influence on the mundane sphere. Sahl extended the principal of celestial influence to interrogations and elections by introducing a mystical element into the otherwise highly rational field of astrological judgments. For Sahl, celestial influence was a force determined by God. Although divine in origin, it was a secret and subtle power which was best understood by analogy with other natural attractions, such as magnetism, filial affection, or the appetite:

And know that the omnipotent and most high created every created thing in the world, namely whatever is in it, from four natures, that is from the four elements. And he gathered together the earth and everything which is upon it both rational and irrational, moving and unmoving, in the circle. And he set between it and the circle a subtle business which wise men understand such as that subtle action which arises between the stone of a magnet and iron, and what is between father and son, and between the eater and his meal. Know this and understand it.<sup>22</sup>

If an astrologer wished to analyze or reinforce a desired event (through an interrogation), or minimize the adverse effects of an inauspicious one (through elections), it was essential to balance the natural elements above and below in ways which were seen to be analogous to the work of a physician when administering therapies to the body: 'From the concord therefore which is between both substances, that is the superior and the inferior, hostile

<sup>&</sup>lt;sup>20</sup> North, J. D. (1987), p.16.

<sup>&</sup>lt;sup>21</sup> Ptolemy *Tetrabiblos* i.2-3; Albumasar *Liber introductorii* i.2, trans. John of Seville, in Lemay, R. J. (Ed.) (1995-97), vol. 5, pp. 8-12.

<sup>&</sup>lt;sup>22</sup> Crofts, ed. (1985), pp. 33-34. Et scito quod omnipotens et altissimus creauit omnem creaturam mundi scilicet quicquod in eo est ex quattuor naturis. idest ex quattuor elementis. et collacauit terram et omne quod super eam est ex rationali et irrationabili. et ex mobili et immobili in circulo. posuitque inter hoc et circulum rem subtilem. quam sciunt sapientes. ut illa subtilis occasio quam posuit inter lapidem magnetis et ferrum, et quod est inter patrem et filium et inter commedentem et cibum: scito hoc et intelligito eum.

elements are tempered and destroyed.'<sup>23</sup> Interrogations were generally made by casting a horoscope for the moment at which a question was asked, but it was usual to also look at the birth chart of the querant and sometimes those of their children as well. The fifteenth century English astrologer, Richard Trewythian, devised double and even triple charts to cover these exigencies.<sup>24</sup> Nevertheless, Sahl warned, if the root of the judgment, that is the nativity, was hostile to the outcome of a particular activity, it would prove impossible to ensure a positive outcome. This was especially true for people of modest standing in life and, in general, as the opening of the treatise states, 'everyone agrees that elections are weak except in the case of kings'.<sup>25</sup> For everyone else, an election had to be reinforced with choices drawing on other astrological data including the nativity and the revolution of the years.

As for subject matter, treatises on elections, including Sahl's, were commonly organized according to the order of the twelve houses. According to the first book of the Introduction by Alcabitius matters relating to the houses were: 1. bodies and life; 2. substance and livelihood; 3. brothers and sisters, neighbors and cousins; 4. fathers, heritage and hidden treasure; 5. sons and legates and gifts; 6. sickness and servants; 7. women and weddings; 8. death and heritage of dead men; 9. pilgrimages and ways of faith, religion and wisdom; 10. kings and works of subtlety and exaltation of kings; 11. fortune and praising of friends; 12. enemies, sorrow, envy and beasts. <sup>26</sup> The kinds of queries that might be considered by this means were thus practically limitless and naturally included issues relating to health and the body, even though Oresme, as we have seen, considered that astrological medicine was properly a part of conjunctions and revolutions. Questions relating to life and death in the course of an illness are considered under the first house, for example: 'If anyone asks concerning an ill man whether he will get well or die'. 27 Those relating to the illnesses of women or childbirth under the fifth house: 'If anyone asks you whether he will have a son from this woman or not; whether a woman is pregnant or not. . . and if a man or a woman asks whether she will give birth to a son or not; whether the pregnancy is true or false;

<sup>&</sup>lt;sup>23</sup> Crofts, ed. (1985), p. 34.: a concordia ergo que est inter vtrasque substantias superiorem scilicet et inferiorem temperantur res et aduersitate destruuntur.

<sup>&</sup>lt;sup>24</sup> Page, S. (2001).

<sup>&</sup>lt;sup>25</sup> Crofts, ed. (1985), p.29: Omnes concordati sunt quod elections sint debiles nisi in regibus.

<sup>&</sup>lt;sup>26</sup> Alcabitius, *Introduction to Astrology* diff. i In Burnett, C. et al. (Eds.) (2004), pp. 48-55.

<sup>&</sup>lt;sup>27</sup> Sahl (1493c), fol. 142.

whether a pregnant woman bears twins, whether she will give birth to a girl or a boy'. <sup>28</sup>And in the chapter concerning the house of illness, the sixth house. the astrologer is advised to take care not to allow the moon to be impeded and to minimize the harm caused by the other malefics, namely Saturn and Mars. <sup>29</sup>

Like all branches of astrology, there were moral and rational objections to some aspects of the practice of both interrogations and elections. According to the Speculum astronomie, elections were less objectionable than interrogations. Free will was not coerced by simply choosing a favorable time for an activity, since this simply involved the precipitation rather than an impingement on the freedom of the will, which in any case remained free to disregard the choice of the hour determined for the commencement of some important action.<sup>30</sup> With so many intimate matters being discussed, it is good to know that there were some wise heads who spoke of the limitations of the accuracy of these kinds of predictions. Messehalla was one of those who observed that there were many ways in which an interrogation might fail. Mistakes could arise from a range of technical problems, such as instrument failure, but also from a failure of the will, the necessary focus of concentration, on the part of the questioner. 31 The pseudo-Ptolemaic Centiloguium also supplied advice concerning the advisability of making use of astrology to inform decision-making. One of the most quoted aphorisms in all astrological literature states: 'The wise man rules the stars'. 32 This is derived from a simplification of Haly's commentary on Centiloquium, verbum 8, which might be translated more literally as: 'The wise soul assists the work of the stars in the same fashion as a sower [helps] natural forces'. This cryptic thought is expanded in Haly's gloss in the following way:

He is a wise soul who understands what we say concerning the forces of the heavens, and is their assistant when he knows of the coming of any kind of good

<sup>&</sup>lt;sup>28</sup> Sahl (1493a), fol. 129.

<sup>&</sup>lt;sup>29</sup> Sahl (1493c), fol. 142.

<sup>&</sup>lt;sup>30</sup> Speculum astronomie, cap. 15, ed. Zambelli (1992), p. 266: De electionibus vero est quaestio minus difficilis, non enim libertas arbitrii ex electione horae laudabilis coercetur, quinn potius in magnarum rerum inceptionibus electionem horae contemnere est arbitrii praecipitatio, non libertas.

<sup>&</sup>lt;sup>31</sup> Messehalla *De cognitionibus ab intentione*. Quoted Carmody 1.5, p. 28: Scito quod ipsius astronomus potuerit quatuor modis continguere.

<sup>&</sup>lt;sup>32</sup> Wedel (1920), p. 68. Coopland (1952) p. 175 notes that the phrase does not actually occur in Ptolemy or pseudo-Ptolemy.

thing the fact of which he might be able to anticipate, so that the good of the future event might be increased and achieve a better outcome than would have occurred had he not been forewarned. <sup>33</sup>

While astrology was not subjected to quite the same hostile theological censure in the Islamic and Jewish worlds as it received in the Latin west, it is clear that for medieval Latin textbook writers, and their Arabic sources, the morally responsible astrologer avoided predictions which over-determined the future. The *Centiloquium* was also a source of advice on how to avoid erroneous judgments: Under verbum 59, for example, we are told not to judge anyone that was absent to be dead unless consideration was given to whether they might be drunk; nor should the astrologer say that someone was wounded unless they also considered whether he might be letting blood, nor that a man might win some money except it was also considered if he might recover something held on deposit, since in all these cases the judgment would be the same. <sup>34</sup>

So much for the theory. The next section turns to historical examples of the practice of interrogations and elections and assesses the evidence for the deployment of interrogations and elections in the service of patrons in medieval England.

#### **II Practice**

Tempting though it is to seize on astrological schemes and ransack them for the evidence they provide of the cultural context of astrologers and their supposed clients, there is a need to be extremely circumspect before we use horoscopes as historical evidence. This is because of all the medieval sciences, astrology was one of the most deeply conservative and respectful of past authority. To put it less positively, astrologers were strongly addicted to plagiarism and invented very little: for any historical horoscope there can be no certainty as to what might genuinely refer to a contemporary event and what is simply the humble (or

<sup>&</sup>lt;sup>33</sup> pseudo-PTOLEMY, *Liber centum verborum cum expositione Haly*, tr. John of Seville (fl.1135-1153). v.8, fol. 107v. Anima sapiens item adiuuabit opus stellarum quemadmodum seminator fortitudines naturales. [Gloss] Sapiens est illam anima que scit illud quod diximus de fortitudinibus celi, et eius adiutorum est quando aliquo bonum alicui euenturum cognouerit ei res sic aptare precipiat, ut illud bonum venturum maius ac melius eueniat quam eueniret nisi sic eum premuniret.

<sup>&</sup>lt;sup>34</sup> pseudo-PTOLEMY, *Liber centum verborum cum expositione Haly*, tr. John of Seville (fl.1135-1153). v.59, fol. 112. Cum interrogatus fueris de absente non iudices de eo mortem donec remoueas ab eo ebrietatem: nec vulnus tibi tillat sanguinis minutionem: nec etiam substantiam acquisitam: donec pecuniam sibi commissam remoueas. Est enim in omnibus idem iudicium.

deceitful) citation of earlier authority. From the second century, when Ptolemy completed the *Tetrabiblos*, the principles of learned astrology remained remarkably consistent and, apart from their historical subjects, there is little to distinguish the mathematical features of a horoscope cast in second century Alexandria, from those of fifth century Byzantium or the Tudor courts of the early modern era.<sup>35</sup> Given this conservatism, it is important for social historians to be wary of making assumptions about the contemporary relevance of information contained in astrological schemes.

One way to get around the innate unreliability of astrology as an historical source is to use other kinds of evidence, such as visual sources. Images allow us to imagine the context in which astrological treatises were researched and written, or astrological consultations conducted in different historical contexts.<sup>36</sup> However, it is much harder to determine the type of advice that medieval western astrologers proffered their clients, or the judicial reasoning which formed the basis for their interpretations. 37 There are no medieval equivalents to the copious case books with their many worked examples that have survived from the ancient world, such as those of Vettius Valens (fl. 245 BC). <sup>38</sup> The earliest geniture (astrological nativity) collections were made in the ancient world. However, the genre suffered a long eclipse before it re-emerged, as Anthony Grafton shows, with printed and manuscript collections in the fifteenth century.<sup>39</sup> Even with the benefit of contemporary evidence of this kind, Tamsyn Barton argues that any attempt to specify a precise social milieu for astrological ideas is 'doomed' from the outset because of the cultural continuity of the tradition, in which older ideas and examples were constantly recycled. 40 The most we can do is ask tentative questions about the general practice of judicial astrology and try and identify some of the more active astrologers and their patrons and preoccupations.

We might begin by asking how popular was the practice of elections and interrogations in comparison with the other major branches of astrology? Elections might be undertaken for almost any activity, however the most momentous related to the founding of cities. Yet there no medieval equivalents to the celebrated case of the founding of the city of Baghdad

<sup>&</sup>lt;sup>35</sup> Compare, for example, the collections of historical horoscopes edited Neugebauer, O., & Van Hoesen, H. B. (1959) and North, J. D. (1986).

<sup>&</sup>lt;sup>36</sup> See Saliba, G. (1992).

<sup>&</sup>lt;sup>37</sup> Though see Carey, H. M. (1992), Laird, E. (1990); Veenstra, J. R. (1997).

<sup>&</sup>lt;sup>38</sup> Neugebauer, O., & Van Hoesen, H. B. (1959). Pingree, D. (Ed.) (1986).

<sup>&</sup>lt;sup>39</sup> Grafton (2000) p. 52

<sup>&</sup>lt;sup>40</sup> Barton, T. (1994), p.160.

by al-Mansur on the advice of his astrologers on 31 July 762. Indeed, I know of only two medieval astrological elections – both from the fifteenth century. The earliest is that for the university of Pozsony (modern Bratislava), which was cast by the Polish astrologer Martin Bylica for his patron, King Matthias Corvinus of Hungary (1443-1490) in 1467. 41 Another is Bishop Richard Fitzjames's horoscope for the laying of the foundation stone of the Warden's House at Merton College Oxford in the 1490s. 42 The election for the foundation of Peter's Basilica in Rome in 1506 on the model of the founding of the city of Rome is not therefore, as Quinlan-McGrath suggests, 43 the continuation of a tradition known and practiced from antiquity, but rather the inauguration of a Renaissance one. In all the scholarly literature on medieval astrology, there are just a handful of studies of individual historical horoscopes, the vast majority of which are nativities, annual predictions, or have been lifted from Arabic textbooks. 44 It is dangerous to argue from negative evidence and there are certainly more medieval French horoscopes than there are in England. <sup>45</sup> Many more individual examples are sure to come to light as the manuscript evidence is better described. However it seems likely that if casebook evidence of astrologer practitioners survived in any numbers, it would have been described by Thorndike. For now, I will restrict the discussion to the English examples.

From the late fourteenth century, there is literary evidence of the practice of judicial interrogations, of which the best known example comes from Chaucer's Miller's Tale. In this work, the narrator writes disapprovingly that Nicholas, a young Oxford clerk, 'Hadde lerned art' but wasted his time on more esoteric studies:

.... al his fantasye

Was turned for to lerne astrologye,

And koude a certeyn of conclusiouns,

<sup>&</sup>lt;sup>41</sup> Lang (2008), pp. 11, 236 citing Schier, *Memoria Academiae Istropolitanae*. Láng notes that the election was singularly ineffective and the university never flourished. The horoscope survives as an addition to the king's copy of Ptolemy's *Almagest* in the royal library.

<sup>&</sup>lt;sup>42</sup> Bott 2001, pp. 202-3, fig. 5. This only exists in a 17<sup>th</sup> century copy which appears to have a number of errors. As copied, it is impossible to date the horoscope with any certainty.

<sup>&</sup>lt;sup>43</sup> Quinlan-McGrath (2001).

<sup>&</sup>lt;sup>44</sup> Besides North, J. (1986), see Greatrex (2002), Poulle (1968), Hartner (1955), Thorndike (1959, 1963)

<sup>&</sup>lt;sup>45</sup> Preaud, M, (1973); Poulle, E. (1969, 1999)

To demen by interrogaciouns,

If that men asked hym in certain houres

Whan that men sholde have droghte or elles shoures,

Or if men asked hym what sholde bifalle

Of every thing; I may nat rekene hem all. (A. Mil. 3191-8)

The young astronomer, in other words, used interrogations to determine questions on the weather, or anything else, too many to be counted, just as we have seen in our discussion of Sahl's treatises on these matters. Of actual practice, the evidence is less strong. If we take the entries in Thorndike and Kibre's Incipits as a rough guide to the overall pattern of the textual evidence, there are 36 index entries for elections and 38 for interrogations, as opposed to 106 entries for nativities, 41 entries for planetary conjunctions, and another 24 for revolutions. 46 These are not, of course, historical horoscopes but simply incipits of texts. However, it reflects the manuscript evidence of surviving horoscopes as well – the largest number are nativities, with lesser number of the other genres of astrological practice.

There is also evidence from the translation and adaptation of Latin treatises on elections and interrogations into European vernaculars, which suggests that a new lay audience for these practices started to emerge by the fourteenth century. Jean-Patrice Boudet has discussed the treatise on elections written in 1361 by Pèlerin de Prusse for the dauphin, the future Charles V of France, as part of the Valois scholar prince's ambitious program for the translation and investigation of the sciences. 47 In this program, astrology and astronomy played a significant part: in addition to the book on universal elections in twelve chapters, Charles is known to have commissioned translations of Ptolemy's Quadripartitum (c. 1360) with the commentary by Haly Abenrudian, as well as the Alphonsine tables (1347), the geomancy of William of Moerbeke, and the Introductorium of Alcabitius. About 20% of the books in his library were on the subject of astrology, geomancy and astronomy. 48 Boudet argues that Pèlerin de Prusse devised a book which was intended to provide astrological support for the political crises confronting the Dauphin at the time the work was commissioned. 49

<sup>&</sup>lt;sup>46</sup> Thorndike, L., & Kibre, P. (1963).

<sup>&</sup>lt;sup>47</sup> Boudet, J.-P. (2005b).

<sup>&</sup>lt;sup>48</sup> For study of the royal library, see Charmasson, T. (1988).

<sup>&</sup>lt;sup>49</sup> Boudet, J.-P. (2005b).

In England, by contrast, the evidence from translation of the technical Latin astrological literature into the vernacular shows very little in the way of intelligent adaption to a new cultural context. Cambridge, Trinity O.5.26 includes Middle English translations of the Sahl corpus, including De electionibus (fols. 61-69v); Liber temporum (fols. 69v-75 and also fols 181v-84v); Introductorium (fols. 57v-95). This remarkable manuscript also contains a range of other texts relating to interrogations and elections, including the Centiloquium attributed to Ptolemy, and Messehalla's De interrogationibus or De receptione planetarum, some of which we have already discussed. 50 All of these translations are slavishly literal, or word by word (de verbo ad verbum) in the best Boethian style, to the point where one suspects that they were never fully intelligible without resource to the Latin original. There are, nevertheless, a number of interesting adjustments which indicates that some awkwardness when dealing with evidence of the non-Christian society in which the original text was written. In choosing times for matters relating to the sixth house, where the Latin might literally be translated: 'Should there be in any place of house any kind of infestation or abundance of evil demons or their followers or any kind of terrible thing which was terrifying or the appearance of any kind of spook, and you wish it to move from the place or from any man through a charm or any inquisition or trick', 51 the English is much more prosaic speaking only of an 'infestation or grievance of evil men, swelling or any dreadful thing' (fol. 64), with no attempt to translate the Latin diabolus as 'demon'. Fragments of the older society, this suggests, lie buried in these texts. In the section on servants, Sahl warned of the need to beware of purchase of slaves when the moon was joined to an evil, for that signifies that the slave will be sold. 52 Slaves were rare and exotic in late medieval England, so the Middle English translator rendered servus as 'seruaunt' (fol. 65v). In this simple way the advice about the purchase and sale of slaves retained its usefulness in a new social context. There are also some signs of religious caution. In matters relating to the eighth house, the Middle English translation omits a line advising on elections, 'if you wish to destroy a place of idols'. 53 It is not clear why this has been done, unless it was because the Arab version referred to the destruction of Christian places of worship.

Actual horoscopes which illustrate the practice of judicial interrogations are far from common, and explanations of astrological reasoning and interpretation practically non-

<sup>&</sup>lt;sup>50</sup> For analysis of the manuscript, see Keiser, G. R. (1998). Mooney, L. R. (1995). Rand Schmidt, K. A. (1993), Voigts, L. E., & Kurt, P. D. (2000).

<sup>&</sup>lt;sup>51</sup> Crofts (Ed.) (1985), p.57.

<sup>&</sup>lt;sup>52</sup> Crofts (Ed.) (1985), pp. 65-67

<sup>&</sup>lt;sup>53</sup> Crofts (Ed.) (1985), p. 65. Et cum volueris destruere locum ydolorum.

existent. What does exist are the worked examples, with their justification, in Arabic textbooks of interrogations and elections translated into Latin. There are also high quality worked examples in Guido Bonatti's Introduction to astrology in ten books. For royal interrogations, a popular source of worked examples appears to have been Messehalla's De receptione planetarum siue de interrogationibus, with the incipit: 'Inuenit quidam vir' (Carmody 3.1a) in the translation by John of Seville. 54 Carmody lists eighteen manuscripts of this text and four editions. The introduction states that it was a book which was both royal and secret: a certain man had compiled it from the books of wise men drawing on books of the secrets of the stars which kings had treasured. 55 Potential questions are discussed for each of the twelve houses, beginning with the ascendant, the house of life which includes very serious matters such as whether the querant will live or die in the year of his query. For his later readers, one of the most useful features of this work are the worked examples which conclude the discussion of matters relevant to each of the houses. Court astrologers with a royal clientele could find handy case studies in questions for the tenth house covering issues such as whether a man would come into a realm or not, and whether he would acquire that realm in the same year or not. 56 For military matters, there was the example of a certain duke who did battle against an African king and wished to know what the outcome would be.<sup>57</sup>

We turn next to three sets of historical examples of what appear to be interrogations and elections cast which appear in manuscripts and which appear to date from the middle of the twelfth century to early in the fifteenth. The earliest group of judicial questions in any Latin manuscript are the series of Norman horoscopes in BL, Royal Appendix 85. These have been discussed by North who ascribes them persuasively to Adelard of Bath. Whether this ascription is provable must remain an open question, however the questions themselves fit the context of Adelard's service to Henry I; they were dated by North (revising Lipton) from 1123-1160. There are five horoscopes altogether and all appear to be judicial questions:

<sup>&</sup>lt;sup>54</sup> Carmody (1956), pp. 26-27. I have used the Venice edition by Locatellus, ie Māshā'allāh (1493), fols. 143-148.

<sup>&</sup>lt;sup>55</sup> Ibid., fol. 143: Inuenit quidam vir ex sapientibus librumo ex libris secretorum astrorum de illis quorum thesaurizauerant reges exposuitque eum et patefecit eius intentionem in omnibus quibus indigent homines in rebus suis de interrogationibus.

<sup>&</sup>lt;sup>56</sup> Ibid., 140r.

<sup>&</sup>lt;sup>57</sup> Ibid., 147v.

<sup>&</sup>lt;sup>58</sup> North, J.D. (1987a).

<sup>&</sup>lt;sup>59</sup> North, J. D. (1986).

'Whether the king will compel his barons to give homage to his son' [North B]; 'Concerning the coming of someone to England' [North D]; 'Concerning the Norman army. And it is judged that it will not come' [North E]; 'Concerning the death of the Count of Anjou; Concerning the association (consortio) of two people, namely of a lord and a disciple of the servant of God'. These kinds of questions accord very nicely with the royal and high diplomatic status of judicial interrogations which we gather from the textbooks of Albumasar, Sahl and Messehalla.

Another English interrogation comes in a group of horoscopes which all relate to the reign of Richard II. 60 These appear in the flyleaves of a manuscript now in the Bodleian Library, MS Rawl. D. 1227. There are four horoscopes altogether and they indicate the classical technique of building a judicial question upon the root of the nativity of a subject. In this case the precise time of birth has been 'rectified' by casting a figure for the conjunction (new moon) before the actual birthday which may have been the only date known with any certainty. Having obtained a figure for the ascendant by using this technique, a second figure could be cast for the nativity of Richard of Bordeaux, born on 6 January 1367. Finally there are two figures with more political intent: an election or possibly an interrogation of the date and time for the coronation of King Richard on 16 July 1377 at 8: 18 am, and an election 'whether Richard of Bordeaux would possess the realm of England'. The political sensitivity of the question is indicated in the statement which follows: 'This question with its figure was made after the death of Edward prince of Wales and before the death of King Edward III after the conquest'. In other words, this figure, together with the three which precede it, were calculated in the anxious interval between the death of Edward of Woodstock, the heir to the English throne on 8 June 1376, and the death of his father, the aged and senile Edward III, a year or so later on 21 June 1377. Would, or indeed should, the young heir apparent, ever posses the kingdom? Above the scheme of the horoscope is the statement: 'See that the outcome of the matter corresponds to the figure according to judicial books concerning interrogations'. <sup>61</sup> Presumably the books referred to are textbooks such as Messehalla's De receptione planetarum. For the practice of judicial astrology in relation to other events in the late fourteenth and early fifteenth century there is also the copious, but unreliable, evidence of Symon de Phares, 62 however contemporary manuscript evidence, such as we find in Rawl. D. 1227, is rare and precious.

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 $<sup>^{60}</sup>$  See Carey, H.M. (1992), pp. 124-26, 252-53 for transcription of all four horoscopes.

<sup>&</sup>lt;sup>61</sup> Rawl. D. 1227, fol. 2. Vide quod eventus rei correspondet figure secundum libros iudiciales de interrogationibus.

<sup>&</sup>lt;sup>62</sup> Carey, H.M. (1992), pp. 112-16; Boudet, J.-P. (Ed.) (1997-99).

Another fourteenth century scheme for a judicial question occurs in Cambridge, Peterhouse MS 75.I, fol. 64v, the manuscript of the Equatorie of the Planetis from where it was edited by Price. 63 Because it lacks some key data, notably degrees for the planet Jupiter (though present in the first house in the sign of Gemini), it was not possible to date this with any confidence solely on the planetary data. However, Price suggested that a date somewhere between 17 and 22 May 1379 was not impossible. The example which follows the diagram is of particular interest, as it concerns 'someone who inquired whether the kingdom which he sought, and which had been expressly promised to him, was to be secured for him or not'. Price suggested that if Chaucer is the author (by no means certain), then the question could apply quite well to John of Gaunt, duke of Lancaster and his aspirations for the kingdom of Castille at the invitation of the king of Portugal. Well, possibly. Unfortunately, this case can serve as a good illustration of the traps which lie in wait for the unwary who assume that horoscopes are contemporary with historical events. Edward Kennedy identified this particular horoscope as a borrowing from Messehalla's De receptione planetarum, a work on interrogations in twelve chapters, which survives in a number of manuscripts as well as two printed editions. <sup>64</sup> The original horoscope, which is updatable in Peterhouse MS 75.I because the major planets have been omitted from it, was dated by Neugebauer to 23 May 791 – seven hundred years before John of Gaunt and his age. Messehalla's tract is divided according to the method popularized by Sahl into questions suitable to each of the ten houses. We find the Peterhouse horoscope in the eighth chapter which considers questions relating to the tenth house, that of kings. This includes a worked example which is introduced as follows: 'and now let me give you an example that you might understand. A certain man asked whether he would achieve the realm which he sought or not. Since indeed it was promised and named for him'. 65 Kennedy states tartly that 'it is useless to speculate about the identity of the inquirer' in relation to the original scheme. However, it does not seem entirely idle to wonder at Price's suggestion that it may relate to John of Gaunt's Spanish ambitions. After all, the scheme and its associated text attracted the attention of the compiler of the manuscript for some purpose, and it may have been intended to assist with the development of a response to a question of this type. It is also very clear that medieval Latin astrologers struggled with the technical demands of this kind of astrology and relied on textbooks to cover their deficiencies.

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<sup>&</sup>lt;sup>63</sup> Price, D. J. (Ed.) (1955), pp. 88-91.

<sup>&</sup>lt;sup>64</sup> Kennedy, E. S. (1959).

<sup>&</sup>lt;sup>65</sup> Māshā'allāh, *De receptione* (Venice, 1493), 146: Et nunc constituam exemplum tibi quod debes scire. Quidam vir interogauit vtrum proficeretur sibi regnum quod petierat an non. Quod etiam sibi promissum fuerat et nominatum.

Whatever the case, the question falls squarely within the most elevated royal circles and presumably this kind of inquiry did not walk in the door too often. I have stressed so far the lack of direct evidence of astrologers attached to ducal or royal courts in England before the end of the fifteenth century and the nature of their practice – and by direct I mean schemes with calculations and interpretations for known clients. There are many more unverified cases listed by Simon de Phares. <sup>66</sup>

However, one courtier who combined a number of functions is John Dunstaple (c. 1390-1453), best known as a musician, but also a distinguished artist and astrologer. <sup>67</sup> A man of great gifts who could choose where to bestow his talents, Dunstaple served at least four noble households: John, duke of Bedford (1389-1435), who granted him lands in France; Henry IV's widow Joanna of Navarre (1307-1437), who gave him a generous annuity, clothes and other presents; her youngest son, Humfrey, duke of Gloucester; and Gloucester's friend, John Whethamstede (c. 1392-1465), abbot of St Alban's who mourned Dunstaple's death and may have composed epitaphs for him. One of these may well refer to his skill in astrological judgments: 'He is enclosed in this tomb who enclosed heaven in his breast/ John Dunstaple, who has secret knowledge of the stars. With him as judge, Urania knew how to unfold the secrets of heaven.'68 We also know about Dunstaple's astrological practice from three manuscripts which he appears to have owned, two of which concern astrology. <sup>69</sup> The third manuscript, recently associated with Dunstaple by Rodney Thompson (2009) on the basis of an erased signature, contains a copy of Boethius's De Arithmetica with a commentary by the Merton College physician and astronomer Simon Bredon (d. 1372), as well as Boethius's De Musica.

The duke of Bedford's own manuscript commissions, such as the famous Bedford Book of Hours (London, British Library, MS Add. 18850) completed in Paris 1414-23, do have exquisite zodiac signs as part of their calendar pages. But these were a normal component of service books and do not indicate any particular interest in scientific astrology. However, there are other indications that the duke of Bedford's tastes might have run in this direction, such as the *Compilatorium artis geomancie*, which was prepared for him by his physician, Roland l'Ecrivain (Roland Scriptoris), and which is now in the British Library (BL Sloane 3487); in 1430, Roland also dedicated a work on astrological physiognomy, the

<sup>&</sup>lt;sup>66</sup> Boudet, J.-P. (Ed.) (1997-99).

<sup>&</sup>lt;sup>67</sup> Bent, M. (2004).

<sup>&</sup>lt;sup>68</sup> Bent, M. (1995).

<sup>&</sup>lt;sup>69</sup> Cambridge, Emmanuel College MS 70; Cambridge, St John's College MS 162; Oxford, Corpus Christi College MS 118.

Reductorium phisonomi (c. 1430) to him. However, it is Dunstaple himself who seems to have had the expertise to provide the duke of Bedford with the services of a judicial astrologer, including interrogations and elections. Evidence for Dunstaple's service with the duke of Bedford comes from a note written in Cambridge St John's College MS 162, fol. 74. Rather ungrammatically, this states, 'This little book belonged to the musician John Dunstable [while] with the duke of Bedford'. The manuscript contains a copy of Sahl's *Introductorium in principiis iudiciorum*, with the title added in what Thompson has identified as Dunstaple's hand. This text is now bound up with three other manuscripts. Dunstaple's copy of Sahl may have wandered with him for some time because the final page is rather dirty and the text ends imperfectly on fol. 85v. However, it is nearly complete, only ending near the end of the treatise where Sahl explains how to answer judicial questions relating to the outcome of battles and military affairs. Unfortunately we do not know exactly when Dunstaple served the duke of Bedford, though possibly when he was regent of France after 1422, a time of ongoing hostilities between France and England. An astrologer musician with knowledge of military judgments may well have been a useful man.

Rather more information about Dunstaple's astrological reading and expertise comes from the second of his astrological manuscripts, most of which was written by Dunstaple himself. The autograph collection of texts in Emmanuel College I.3.18 [James 70] suggests that Dunstaple had a good understanding of the major works of astrology set for university study at the University of Bologna and elsewhere in Europe. Dunstaple had copies of the very popular commentary on the *Introduction* of Alcabitius by John of Saxony and also William of English's *De urina non visa* (fols. 66v-68v). On interrogations, he had a copy of Messehalla's *De reception planetarum* (fols. 73v-75), with its useful worked examples including questions concerning dukes and battles and kings. Also on interrogations, he collected little notes on how to locate a missing object (59v-60) or a theft (fol. 61v). He had copies of works by the Merton astrologer, John Ashenden, on the eclipse of the moon and conjunction of the three major planets on 24 March 1345 (fols. 1v-4), and the conjunctions of Saturn and Mars in 1365 (fols. 4v-14), with extracts from the same author's *Summa judicialis de accidentibus mundi* (fols. 144v-6v). He also seems to have taken an interest in chiromancy, or palm

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<sup>&</sup>lt;sup>70</sup> Cambridge, St John's College MS 162, fol. 74. Note in a hand different to that of the text: 'Introductorium Zaelis. Iste libellus pertinebat Iohani dunstabli/ cum [!] duci Bedfordi/ musicis/' [This little book belonged to the musician John Dunstable [while] with the duke of Bedford.] For the identification of the hand with the title as Dunstable's, see Thompson (2009).

<sup>&</sup>lt;sup>71</sup> James (1904), pp. 62-6; Thompson (2009). I thank Prof. Thompson for kindly providing me with a pre-publication version of his paper on Duntaple's books which includes a detailed description of the contents of Emmanuel College 77.

reading, and weather prediction. Finally, Dunstaple had notes on how to compile an almanac (fol 136rv). There is no need to assume Dunstaple studied at Oxford or had connections with Merton College simply because he owned copies of works by Oxford men. However, the comprehensive nature of the collection, which covers all the major branches of astrology, does suggest that Dunstaple had access to an excellent astrological library, which he is likely to have found either at St. Alban's or possibly at Gloucester Hall, the Benedictine house of study in Oxford which was closely supervised by Abbot Wethamstede. It is also interesting that Dunstaple made a copy, enlivened with his own dramatic illustrations, of the *Breviloquium* of Bartholomew of Parma on the constellations (fols. 80-118v). At St Alban's, it is at least possible that he may have assisted Wethamstede with astrological advice. On fol. 151 there is a scheme for a judicial question: 'on the resignation of a benefice, whether it is good or not'. This is dated 1449, and the topic of the question, if not the date, would correspond to Wethamstede's dramatic decision to step down as Abbot – only to take on the mantle again later in his career. Wethamstede gives us a very full account of this in his *Register*.

The first fully worked collection of judicial interrogations appears rather late in the English historical record. These are contained in the collection of the London money lender and astrologer, Richard Trewythian, who has been astutely investigated by Sophie Page. <sup>74</sup> In his astrological notebook in the Sloane collection in the British Library, we find excellent examples of judicial questions on, for example, simple issues such as the recovery of stolen property. The loss of a cup is featured in one scheme. It is this kind of mundane astrology (to misuse a technical term) which seems to be unrepresentative of the period prior to 1400, at least in England.

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<sup>&</sup>lt;sup>72</sup> Riley, ed. (1870-1), vol. 2, p. 383. In a letter from Wethamstede to the scholars studying at Gloucester College Oxford, he advises them to guard against heresy as the farmer (agricola) tends his fields. In the *Registrum*, ed. Riley (1870-1), vol. 1, pp. 24-25, he explains how his reforms to the teaching of grammar at St Alban's ensured that four times as many scholars were able to go on to University.

<sup>&</sup>lt;sup>73</sup> Emden (1957), pp. 2032-34. Whethamstede secured a papal bull to authorise his resignation on 23 July 1437, although he clung on until 1440 when he secured a pension and a house in the abbey grounds. Following the (understandable) objections of his successor to this arrangement, Whethamstede's patron, Humphrey, duke of Gloucester arbitrated on the case. Whethamstede was restored to the abbacy on Abbot Stoke's death in 1450.

<sup>&</sup>lt;sup>74</sup> Page, S. (2001). Richard Trewythian and the Uses of Astrology in Late Medieval England. *Journal of the Warburg and Courtauld Institute*, 64, 193-228.

Many questions remain to be asked about the pattern of survival of historical horoscopes: Why do we have so few examples of actual practice – as opposed to innumerable copies of textbooks? Why, for example, are there no contemporary worked examples in Trinity O.5.26? This important English manuscript contains just one (very) short tract on the great conjunction of Saturn and Jupiter in January 1405 (fol. 118v-19). This contains a bare account of the event, and no real astrological analysis. I confess to not having any tidy answers. However, I suspect that the computational skills of late medieval astrologers lagged well behind the literary ones required to read astrological textbooks, and lamentably to the rear of those displayed by the best classical and Arabic practitioners. There must have been many astrologers, perhaps most, who knew the theory but not how to practice scientific astrology in its most complex form. In England, Trewythian is a shining exception because he was able to calculate his own ephemerides. Without this, the calculation of elections and interrogations required hours of painstaking calculations derived from the Alfonsine Tables, or access to expensive instruments such as the equatorium. The critical breakthrough for astrologers interested in practicing scientific astrology was therefore the production of printed calendars, tables of directions, and ephemerides, notably the daily Ephemerides for the years 1474-1506 published by Johannes Regiomontanus (1436-1476). It is these works which usher in the mathematical Renaissance of judicial astrology.

# **Acknowledgements**

This essay was first presented at the Astrology and the Body Conference, 1100-1800, University of Cambridge, 8-9 Sept. 2006. I thank Lauren Kassall, Rob Ralley and the Department of History of Philosophy of Science for their support and organization, and Clare Hall Cambridge for a Visiting Fellowship which made the research for this paper possible.

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