

Astrological prognostications in MS Beinecke 558:

“Sonday prime drye wether”

Master's thesis
University of Turku
School of Languages and Translation Studies
Department of English
March 2010
Mari-Liisa Varila

TURUN YLIOPISTO

Kieli- ja käännöstieteiden laitos / Humanistinen tiedekunta

VARILA, MARI-LIISA: Astrological prognostications in MS Beinecke 558:
"Sunday prime drye wether"

Pro gradu -tutkielma, 122 s., 7 liites.

Englantilainen filologia

Maaliskuu 2010

Tutkimukseni käsittelee 1500-luvun keskivaiheilla kirjoitettua englanninkielistä käsikirjoitusta (New Haven, Yale University, Beinecke Rare Book and Manuscript Library MS 558). Olen työssäni laatinut käsikirjoituksesta kuvauksen, joka sisältää esimerkiksi listan käsikirjoituksen sisältämistä teksteistä sekä käsikirjoituksen pääkirjurin käsialan paleografisen analyysin.

Tarkastelemani käsikirjoitus sisältää paljon astronomista ja astrologista materiaalia. Keskityn erityisesti käsikirjoituksen sisältämiin astrologisiin ennustusteksteihin, jotka olen jakanut kuuteen kategoriaan. Luokitteluni perustuu osittain Laurel Meansin ja Irma Taavitsaisen tutkimuksiin, jotka koskevat keskienglanninkielistä astrologista materiaalia. Työssäni olen soveltanut näitä tutkimuksia uuden ajan alun materiaaliin. Olen myös tarkastellut käsikirjoituskulttuurin ja kirjapainokulttuurin vuorovaikutusta viiden editoimani esimerkkitekstin kautta.

Tutkimustulosteni perusteella käsikirjoituskulttuuria ja kirjapainokulttuuria ei tulisi nähdä vastakohtina. Niiden välistä vuorovaikutusta tulisi jatkossa tutkia tarkemmin, sillä näin voitaisiin saada uutta tietoa tekstien levittämisestä ja leviämisestä sekä Englannissa että koko Euroopassa kirjapainotaidon yleistymisen ensimmäisinä vuosisatoina. Tällaisessa tutkimuksessa tulisi käyttää niin määrällisiä kuin laadullisiakin menetelmiä ja ottaa huomioon kirjojen luonne sekä henkisinä ja taiteellisinä tuotoksina että fyysisinä esineinä.

Asiasanat: englannin kieli, kielihistoria, käsikirjoitukset, uusi aika

Table of contents

Table of contents

List of figures

1. Introduction.....	1
2. Scientific and practical thought in early modern England.....	5
2.1. Knowledge written in the stars.....	6
2.1.1. Astrology and astronomy.....	7
2.1.2. The geocentric system.....	8
2.2. Prognostic texts in Middle and Early Modern English.....	11
2.2.1. Four categories of Middle English prognostic material.....	13
2.2.2. The Middle English lunary as a genre.....	17
2.2.3. Early Modern English prognostic texts.....	22
2.3. The commonplace book.....	24
3. The commonplace book of Thomas Buttler.....	28
3.1. New Haven, Yale University MS Beinecke 558.....	30
3.1.1. Grouping the items in MS Beinecke 558.....	34
3.1.2. Manuscript contents.....	37
3.2. "Sayth Buttler".....	43
3.2.1. Thomas Buttler of Harlow, Essex.....	43
3.2.2. MS Beinecke 558 as a commonplace book.....	47
4. Editorial procedure.....	51
4.1. Selection of texts.....	52
4.2. The scribal hand of the edited texts.....	56
4.3. Editorial principles.....	72
5. Types of prognostic texts in MS Beinecke 558.....	74
5.1. Lunar prognostications.....	75
5.1.1. Stöffler's judgement upon the 28 mansions of the moon (f. 7r).....	79
5.2. Electionary prognostications.....	86
5.2.1. Here folowith the usage of the old philosophers (f. 20v).....	87
5.3. Questionary prognostications.....	89
5.3.1. To knowe the thefe that hath stolen (f. 2v).....	93
5.4. Nativity prognostications.....	96
5.4.1. The nativity of Thomas Buttler (f. 42r).....	99
5.5. Weather prognostications.....	102
5.5.1. Prognostication on the prime (f. 5r).....	105
5.6. Other types of prognostications.....	111
6. Conclusion.....	115
Bibliography.....	119
Appendices	
Finnish summary	

List of figures

Figure 1. Superscript abbreviations

Figure 2. Abbreviations for *per*, *pro* and *pri*

Figure 3. Abbreviation for *-es*

Figure 4. Abbreviations for nasals

Figure 5. Abbreviations for *et/and* and *et cetera*

Figure 6. Abbreviation for *ser*

Figure 7. Abbreviations for *-us* and *-rum*

Figure 8. Abbreviation for *a(nno) d(omini)*

Figure 9. An example of a *positura*

Figure 10. A line-filler in red ink

Figure 11. Examples of a *paragraphus* symbol

Figure 12. The astrological symbol for *Sun* between two points

Figure 13. Examples of parentheses

1. Introduction

Sixteenth-century Europe witnessed several interesting changes in the fields of technology, ideology and social structure. Some of these changes have traditionally been called 'revolutions'. For example, the change from earth-centered to sun-centered world view is generally known as the Copernican revolution. The emergence and spreading influence of the printing press, developed by Gutenberg in the previous century, has also been called a revolution. These changes, together with the rise of the middle class and changes in the political and religious circumstances, affected daily life in England as well. While many of the changes may be called revolutionary, they did not take place overnight. Most of the processes were relatively slow, with a period of overlap between the old and the new system. When analysing change, it is important not to neglect continuity. This thought is essential from the point of view of my thesis.

The history of English is traditionally divided into periods ranging from Old English to Present-Day English. Scholars of English historical linguistics often study the language of a certain period, becoming experts of their chosen stage of English. Moreover, when the transitional periods are studied, the emphasis is usually on change. In this study, I wish to explore an Early Modern English manuscript not only as a product of its period but also as a continuation of medieval tradition.

The manuscript I will focus on in this thesis is known as New Haven, Yale University MS Beinecke 558 (henceforth Beinecke 558). It is currently located in the Beinecke Rare Book and Manuscript Library, Yale University. The Beinecke library catalogue describes the contents of the manuscript as *Astronomical and astrological treatises*. However, the manuscript can also be called a *commonplace book*, as the texts in it were compiled

according to the needs of an Essex merchant, Thomas Buttler. Very little has been written about the manuscript, although the library catalogue entry calls for further research. In this thesis, I shall respond to that call by presenting a description of both the manuscript and the main scribal hand. In addition, I shall provide the reader with a considerably more detailed list of manuscript contents than the one available in the Beinecke library catalogue at the moment.

My study will also help fill a gap in another field of Early Modern studies. Traditionally, non-fictional, especially scientific, texts have rather seldom been used as primary data in historical linguistics. This has been changing lately, with scholars studying for example medical and astronomical texts. Such genres have been discussed for instance by Laurel Means, Linne R. Mooney, Irma Taavitsainen and Linda Ehrsam Voigts. However, there is still a lot to be done in the field of historical linguistics in this respect. Furthermore, more research seems to have been conducted on medieval than on early modern material. Even less is written on the interplay between manuscript and print cultures in relation to the circulation of scientific works in the early centuries of the printing press in England. My analysis of Beinecke 558 can be treated as a case study of the relationship between manuscript and print formats regarding vernacular scientific texts in mid-sixteenth century England.

The scope of the thesis on one hand and the number of scientific texts in Beinecke 558 on the other hand make it impossible for me to discuss all the texts in detail in this study. Therefore, I have chosen astrological prognostic texts as my focus. Such texts have been previously studied by Taavitsainen (1988) and Means (1992). I shall take into consideration their classifications of prognostic material when discussing the texts in Beinecke 558. I have selected and edited five representative prognostic texts from the

manuscript. The edited texts will shed light on the genre of astrological prognostications while also highlighting the connection between manuscript and print cultures in early modern England. As instances of texts in Beinecke 558, they will also supplement the manuscript description.

I will begin my analysis by discussing the context in which Beinecke 558 was produced. The first section of Chapter 2 is a brief discussion of the status of astronomy and astrology as science and the main astronomical and astrological concepts of medieval and early modern Europe. Appendix 1 contains a list of astronomical and astrological terms and symbols used in Beinecke 558 and in this thesis. In Section 2.2. I shall take a look at earlier research on Middle and Early Modern English prognostic material and introduce the classifications used as the starting point of my analysis. I will end Chapter 2 by defining and discussing the concept of *commonplace book*.

In Chapter 3, I shall introduce my main primary source, Beinecke 558. Section 3.1. contains a description of the manuscript based on a microfilm copy and digital images of the original, as well as a discussion of the themes detectable in the manuscript contents. I will provide the reader with a detailed list of contents in Section 3.1.2. This section is supplemented by Appendix 2 in which I have compiled the titles of the texts in Beinecke 558. Section 3.2. contains information on the first owner of Beinecke 558, Thomas Buttler, and discusses the manuscript as an example of the commonplace book genre.

My purpose in Chapter 4 is to introduce the reader to my methods of text selection and the editorial principles utilized in this thesis. A list of editorial symbols in Appendix 3 may be consulted for quick reference. I will describe the main scribal hand of the

manuscript in Section 4.2. This is done in order to complement both my description of Beinecke 558 and my edition of select texts in the manuscript. In addition, the analysis of the hand sheds some light on the production of the manuscript and raises interesting questions on the identity of the scribes of Beinecke 558.

Finally, in Chapter 5 I present my model of the types of prognostic texts in Beinecke 558, with an edited sample text supplementing each of the five main categories. In the general discussion of the categories of prognostic texts in the manuscript, I will deal with several texts relevant from the point of view of this study. The edited texts, in turn, will work not only as instances of prognostic text types and specimens of early modern English scientific texts in general but also as illuminating examples of the contents of Beinecke 558, thus supplementing my description of the manuscript. At this point, the origin of the manuscript as a commonplace book is revisited in order to determine the relationship between what is known about the owner and what is found in his manuscript. Importantly, I will also address the relationship between the prognostic texts in Beinecke 558 and those found in contemporary printed books. By comparing similar texts in manuscript and print format, I will demonstrate that there was no fixed direction for transmission of texts in sixteenth-century England. Texts were not necessarily copied from manuscript to print – printed works could equally well function as exemplars for manuscript notes or books, and it is also possible that manuscript exemplars were reproduced to be sold in both manuscript and print formats at roughly the same time. In Chapter 6, I will conclude by presenting a brief summary of my findings and their relevance from the point of view of my research questions.

2. Scientific and practical thought in early modern England

In the Early Modern English context, to discuss *science* is to discuss a relatively new concept: the first quotations including the word *science* in the *Oxford English Dictionary* are from the 14th century (*OED Online*, s.v. *science*). Moreover, the sense in which the word is used in these quotations is different from the modern one. *OED* quotes Chaucer's translation of Boethius' *Consolation of Philosophy* from c. 1374: "þe soule whiche þat hap in it self science of goode werkes" (*OED Online*, s.v. *science*). Here *science* is used in the meaning 'knowledge'. According to John Henry, "[o]ur present use of the word 'science' was first coined in the nineteenth century and, strictly speaking, there was no such thing as 'science' in our sense in the early modern period" (1997: 4). As it is difficult to discuss the concepts relevant to the current study without using the word 'science', the term will definitely enter the following discussion. To justify this decision, I suggest that although 'science' is quite a recent addition in the lexis of English, forms of what could be called *scientific thought* must have existed already in the previous centuries. Modern-day science did not suddenly emerge from nothingness – it was built on the knowledge of previous generations.

As Henry tries to define the 'science before science', he refers to the concepts of *natural philosophy* (including technical, mathematically oriented disciplines such as astronomy or mechanics), *medical* disciplines like anatomy and pharmacology, and finally *practical arts*, for example navigation and surgery (1997: 4). Henry states that the actual relationship between natural philosophy and the various disciplines and arts must be carefully studied (1997: 4). In many of the fields mentioned by Henry, both scientific and practical thought are present. I shall not try to create a clear distinction between theory

and practice where a natural one does not exist; therefore, the theoretical and practical aspects of early modern thought are discussed in unison.

In the following sections, I shall take a look at scientific and practical thought in the early modern period in the fields relevant to the current study. I shall first discuss the fields of *astrology* and *astronomy*, after which I will proceed to explain the changing world view of the sixteenth century. In the following section, classifications of Middle and Early Modern *prognostic* (predictive, foretelling) *texts* are introduced. The relevance of this discussion to the study shall become apparent from Chapter 3 onward in the description and analysis of Beinecke 558. Finally, I will briefly discuss the *commonplace book*, both a medium in which some of the scientific and practical thought patterns of early modern individuals may be traced and a genre in which MS Beinecke 558 can be placed.

2.1. Knowledge written in the stars

The medieval and early modern usage of the terms *astrology* and *astronomy* differs considerably from the way the words are used today. Whereas they used to go together, astronomy perhaps being the theoretical and astrology the practical element of the union, astrology is nowadays usually given the status of a pseudoscience. Various scientific developments have influenced our world view, which is naturally markedly different from that of sixteenth-century England. It is thus crucial from the point of view of the current study to discuss briefly both the terminology and the world view relevant to the manuscript context of MS Beinecke 558. In the next section, I shall briefly introduce the concepts of *astrology* and *astronomy*, after which a short discussion of the *geocentric astronomical system* follows.

2.1.1. Astrology and astronomy

Astronomy is one of the branches of science belonging to the *artes liberales*, the seven 'liberal arts' taught in Western universities in the Middle Ages. Henry (1997: 119) defines astronomy as "the study and interpretation of the heavenly bodies. A practical art useful for calendrical determinations and in navigation, astrology and cosmology". In other words, astronomy may be utilized for example when determining the dates of solstices or eclipses or when choosing the right course for a ship to take. Mathematical calculations are thus an integral part of astronomy. *Astrology*, in turn, can be described as "the study and interpretation of the influence of the stars upon human and other earthly affairs" (Henry 1997: 119). In the medieval and Renaissance Europe, it was widely believed that the stars affected the events on Earth; however, there was a decline in the practice of astrology by the late seventeenth century (Henry 1997: 119).

Both astronomy and astrology – as the terms indicate – are thus fields related to the stars, and in both fields heavenly bodies are studied in order to gain knowledge about the world. A practising astrologer, predicting future events, must also have had some astronomical knowledge and probably also skills to perform calculations; thus the scientific and practical thought were brought together in order to facilitate everyday life. As the two fields were still intricately intertwined at the time when MS Beinecke 558 was written, I shall not try to consistently differentiate between the terms *astronomy* and *astrology* in the later chapters of this study.

From the sixteenth century onwards, as the heliocentric system, the developing experimental scientific mindset and the new, Protestant branch of Christianity were widely adopted in Western Europe, astrology gradually became a marginalized

pseudoscience. However, at the time of writing of the manuscript discussed in this study, astrology was still widely practised and the heliocentric world view had not yet become the dominant one. In order to shed light on the world view of MS Beinecke 558, I shall next describe the basic principles of astronomy during the medieval and early modern periods, concentrating on the aspects relevant from the point of view of the present study.

2.1.2. The geocentric system

The world view present in the astrological texts of MS Beinecke 558 is the one prevalent in the medieval period – the *geocentric* one, based on ideas of authors of the Antiquity such as Aristotle and Ptolemy. Although the notion of the earth revolving around the sun had already been suggested by Aristarchus (third century BC) in Greece, the geocentric theory, placing the earth in the centre of the universe, remained the dominant one until the early modern period (Cohen 1985: 24-25).

According to the geocentric world view of the European Antiquity and Middle Ages, the earth is the centre of the universe, and the sun and the moon are considered planets. Various theories were formed to explain the movements of the planets and stars. The theory of *concentric spheres*, attributed to the Greek Eudoxus and developed by Callippus and Aristotle, claimed that each planet was “fixed on the equator of a separate sphere, which rotates on its axis, the earth being stationary at the center” (Cohen 1985: 25-26). Some planets might have more than one sphere, which facilitated explaining the various movements of the planets and stars in relation to each other, for example the travelling of a planet among constellations (Cohen 1985: 26). The planetary spheres – instead of the actual planets – were thought to influence earthly affairs (Cohen 1985: 27). The

theory of concentric spheres was further developed by Arabian astronomers (Cohen 1985: 27). The deep-rooted belief in the relationship between the microcosm and macrocosm (the human body and the universe) and the capability of the celestial bodies to affect the earth and its inhabitants was also accepted at least to some degree by later astronomers such as Kepler (Shapin 1996: 42). This suggests that adopting the new, heliocentric world view did not necessarily result in abandoning the belief in the influence of planets on humanity.

Another, more complex geocentric theory was formulated by Ptolemy circa 2nd century AD. According to the *Ptolemaic system*, the varying movements of the planets and stars in relation to the earth and each other can be explained by the fact that the earth, although the celestial body around which other planets revolve, is not located exactly in the centre of the orbits (Cohen 1985: 28-29). Some planets might revolve around other planets, or the centre of an orbit might move, which would explain the apparently retrograde (backward) movements and varying brightness of planets observable from the earth and create the possibility for seemingly elliptical motion (Cohen 1985: 29). Thus, the Ptolemaic system is essentially a complex set of interlocking orbits with the earth at its centre. Unlike in the system of concentric spheres, the orbits are not homocentric but eccentric – the earth does not have to be in the exact center of each orbit. According to Henry, the Ptolemaic system was seen more as a theoretical model providing help for astronomical calculations than as a realistic representation of the universe (1997:9). In Ptolemy's works, astronomical tables are provided in order to facilitate calculating the positions of the planets, solar and lunar eclipses and rising and setting of stars. It is noteworthy in the current context that Ptolemy also produced a popular treatise on astrology, the *Tetrabiblos*. Finally, the four elements – water, fire, earth and air – had an important role in the Ptolemaic system (Shapin 1996: 22-23). In addition to the four

elements, there were other sets of “physical and physiological fours” (Taavitsainen 2005: 183). These include the qualities of people and things (hot, cold, moist and dry), the four humours (blood, phlegm, yellow bile and black bile), four seasons and four ages of man (Taavitsainen 2005: 183; Page 2002: 53-54). Maintaining balance was essential – for example, an illness might be explained by the lack or excess of one of the humours. As will be seen later, these sets of fours are also present in Beinecke 558.

As can be expected of a manuscript reflecting the geocentric world view, Beinecke 558 lists seven planets (usually in this order): Saturn, Jupiter, Mars, Sun, Venus, Mercury and Moon. Most of the time, the planets are referred to by their symbols, very similar to the ones in use today. In addition to the planet symbols, the manuscript also includes symbols referring to other astronomical and astrological entities such as the zodiac signs. I shall provide a more accurate account on the astronomical and astrological symbols in Beinecke 558 and my editorial treatment of them in Chapter 4. Appendix 1 may also be consulted for the symbols and their explanations.

The heliocentric system was reintroduced by Nicolaus Copernicus (1473-1543) in his work *De revolutionibus orbium coelestium* (*On the Revolutions of the Celestial Spheres*) in 1543. Although Copernicus placed the sun in the centre of the universe, his work was influenced by Ptolemy, whom he admired (Cohen 1985: 35). The theses of Copernicus are not yet visible in Beinecke 558. However, there is an intriguing, albeit loose, connection to be found between Beinecke 558 and Copernicus’ work. As will be seen in the manuscript description in Chapter 3, Beinecke 558 contains excerpts from a work called *A General Prognostication* (later revised and published under the title *A Prognostication Everlasting*) by Leonard Digges (c. 1520-1559), an English scientist and mathematician. The work contains for example a perpetual almanac and weather predictions, and the

world view is based on Ptolemaic principles. Digges' son, Thomas Digges (1546-1595), an astronomer, published a partial English translation of Copernicus' theory under the title *A Perfit Description of the Caelestial Orbes* (1576) (Cohen 1985: 36). Thomas Digges even made an important addition of his own by suggesting that the sphere of the stars is infinite (Shapin 1996: 22). The ideas expressed by Digges were to be very influential in England, and especially the notion of the infinity of the universe was an early one compared to continental writers (Johnson 1936: 404). In addition, Thomas Digges stressed the importance of the experimental method and the importance of observations in verifying astronomical hypotheses (Johnson 1936: 399-400). This shows the difference a generation could make in the scientific thought of sixteenth-century England, the world in which MS Beinecke 558 was created.

One of the applications of astronomical knowledge was – and still is – the attempt to predict the future on the basis of the movements of celestial bodies. This may be done with the help of complicated charts and calculations, but popular mnemonics and rhymes for the same purpose also exist. Texts written as instructions for predicting the future can be labelled *prognostic texts*. Such texts, as astronomical and astrological texts in general, often have a long history, resulting in a textual tradition spanning centuries or even millennia. The scope of this thesis will not allow me to discuss the whole history of prognostic texts, but I shall take a look at medieval astrological prognostications in English before moving on to the early modern period.

2.2. Prognostic texts in Middle and Early Modern English

As the transition from Middle English into Early Modern English was not an event but a process, it is understandable that the genres and text types present in Middle English

are often represented in the body of Early Modern English writings as well. Therefore, it is useful in terms of the present study first to consider categorizations of Middle English prognostic texts before moving on to discuss early modern prognostic texts. Middle English prognostic texts have been studied and categorized by Laurel Means (1992), whereas Irma Taavitsainen (1988) concentrates on lunaries, one category of astrological texts, as a genre. I shall first introduce the framework established by Means, continuing with a summary of Taavitsainen's treatment of astrological texts with emphasis on lunaries.

As Means states, various procedures have been followed by scholars categorizing Middle English prognostic material (1992: 368). Depending on the grounds on which this kind of a categorization is attempted, the results may differ notably. The texts may be grouped for example according to their titles, the method of prognostication chosen or the heavenly bodies affecting the prediction made on the basis of the work. A grouping made on the basis of text titles may prove rather inconsistent: not all texts in manuscripts are given a title, and even when they are, Middle English titles are often not as informative as their Latin counterparts in terms of declarations of text form or subject matter (Means 1992: 368-9). Astrological texts may also be difficult to categorize due to the fact that astrological methods were used in various fields of science including medicine and theology (Means 1992: 369). Moreover, prognostic texts often resemble each other to such a degree that it might be difficult to distinguish one text or work from another – both in terms of the content of the text and the visual appearance of the text in a manuscript (Means 1992:369). As astrological texts can be categorized in various ways, I will next introduce two slightly different frameworks for treating Middle English astrological texts, starting with Means' categories of prognostic material and continuing by discussing Taavitsainen's classification of astrological material and the

Middle English lunary as a genre. Although the following frameworks have been designed with the Middle English period in mind, they can be used in the context of Early Modern English as well, since Early Modern English popular astrological literature builds on medieval tradition. Furthermore, Taavitsainen's categorization is partly based on the work of Keith Thomas (1971), discussing astrological texts in the sixteenth and seventeenth centuries – that is, in the early modern period.

2.2.1. Four categories of Middle English prognostic material

Laurel Means (1992) establishes four main categories into which she divides the body of Middle English prognostic texts. The following four summaries of characteristics of the categories are based on Means (1992: 367-403) in their entirety.

Electionary

An *electionary* is a text that can be used to establish the most suitable time to perform an action in relation to astrological conditions. Alternatively, an electionary can be called a *horary*, as electionaries are occasionally titled "Elections of hours" in both Latin and Middle English works. The Middle English electionary has both Latin and Arabic predecessors, including works by authors such as Ptolemy, Zael and Messahalla, important figures in the history of astronomy and astrology. Sometimes elements of electionaries may be integrated into more general astrological works. For instance, a discussion of the nature of signs and planets may contain information on choosing a right time to act. However, some electionaries contain very specific knowledge. For example, a bloodletting electionary concentrates on choosing the best time to let blood.

Lunary (Lunar prognostics)

Lunar prognostics are dependent on the position of the moon. Like electionaries, *lunaries* contain information on planetary influence selecting proper times for particular actions. The main difference between these two categories is that in *lunaries* the moon is the planet determining the best times of action. The influence of the moon depends on its age or phase of cycle. The moon was traditionally seen as the most important planet in astrological writings, which is apparent from the extant body of astrological texts. Many electionaries also contain descriptions of the moon and its influence on Earth. As with electionaries, *lunaries* can also be general or specialized in terms of their scope. For example nativities (birth horoscopes), bloodletting advice or weather predictions may be included in *lunaries*.

Lunaries can be divided into two subgroups. First, a *lunary* can be based on days or “mansions” of the moon – the position of the moon on its cycle. Second, a *lunary* may be structured according to the moon’s position in relation to the zodiacal signs. Texts of the second type are also included in electionaries; however, in electionaries the other planets are also given a similar section. The first type is thus divided into days or mansions (28 or 30), the second into twelve ‘months’ according to the moon’s position in relation to the twelve signs. Predictions are provided for each day or ‘month’ in turn. Of these two types, the mansion or day *lunaries* are the more accurate. Mansion or day *lunaries* usually begin with the first day and end with the 28th or 30th day of the moon, whereas sign *lunaries* list the months from Aries to Pisces. However, there are also hybrid *lunaries*, combining properties of the two main types, and *lunaries* titled misleadingly; this adds difficulty to the process of categorizing prognostic material.

Destinatory

In short, *destinatory* is a birth horoscope taking into account the astrological conditions at the moment of birth and determining the future of the newborn according to the positions of heavenly bodies. As with the other categories, there are various titles found in manuscripts for destinaries, including *horoscope*, *nativity* and *fortune*. Destinaries are related to electionaries and lunaries; the moment of birth is often an important time specified in electionaries, whereas a lunary may also include nativity prognostics.

Destinaries start by determining the *ascendant* planet or sign at the moment of birth. The ascendant sign is the one rising above the Eastern horizon at a certain time and in a certain location. The positions of other heavenly bodies are also taken into account, as well as their placement in the twelve astrological *houses*, which are formed by dividing the *ecliptic* (360 degrees; the path of the sun around the earth) into twelve sections of 30 degrees. By studying the astrological conditions on the moment of birth, the future of the newborn on various areas of life, such as career and health, can be predicted. A horoscope figure may be drawn to represent the nativity.

Most destinaries appear to start with the sun ascendant in Aries, then describing the influence of sun in all the signs in their conventional order, ending with Pisces. There are also destinaries following the calendar year from January (Capricorn or Aquarius) to December. Some nativities are constructed according to the planets, usually starting with Saturn in the ascendant. Moreover, there are also destinaries structured by the division of the week into seven days and their governing planets. Some destinaries distinguish between men and women, in other versions the gender of the newborn does not matter. Physiognomical theory, according to which people's character and future

can be determined by studying the features of their face, is also represented in nativities, in the form of descriptions of the future physical appearance of the newborn. Once again, the border between destiny and other types of Middle English prognostic material is blurred: destiny texts may be misleadingly titled or remain hidden inside a larger body of text, for example a lunary.

Questionary

A *questionary* deals with questions asked in a specific way, addressing specific areas of life. Usually these areas of life are connected to the twelve houses found in a horoscope, all of which govern certain matters – for example, the fourth house things hidden, the sixth one health and illness and the twelfth war. When questions are answered, a figure (similar to that used in destinaries) is drawn and the positions of heavenly bodies in the house appropriate to the question are determined, according either to the hour of birth of the questioner or the hour of asking the question. The main feature distinguishing questionaries from other types of prognostic material is the way in which the material is organized.

Having established above the main features of the four categories of medieval prognostications according to Means (1992), I shall now briefly discuss the usefulness of her classification from the point of view of the present study. The main basis for the division in Means (1992) seems to be the focus and thus also the structure of the material. Similar content may be present in all the categories, but the main structure and focus are somewhat different. While an electionary concentrates on selecting a suitable time for a certain action, a questionary organizes the material according to the houses

and the areas they govern. Lunaries are structured according to the position of the moon, whereas in destinaries the moment of birth is the crucial factor.

Means' categorization is not a straightforward, easily grasped one. The borders of the categories are fuzzy, and it may be quite difficult to determine into which category a given text should be placed. Furthermore, as Means herself notes, several subgenres of prognostic texts, such as astrometeorological (weather-related) prognostications and lists of critical (dangerous) days, are not discussed in the categorization (1992: 403). However, in terms of function the division seems to be a useful one: if one establishes the focus of a text first, using the guidelines presented by Means is one possible way of grouping prognostic material.

As titles and rubrics in Middle English prognostic material are often misleading (Means 1992: 368-9) and there is overlap between the contents of various categories, analyzing a prognostic text and placing it into a category may require a fair amount of research. However, as the body of scientific and practical works, including the subcategory of prognostic texts, remains largely unedited (Means 1992: 402), Means' categorization provides a rare tool for approaching Middle – and Early Modern – English prognostic material. I will use Means' categorization as a starting point for my discussion of prognostic texts in Beinecke 558 in Chapter 5.

2.2.2. The Middle English lunary as a genre

In her doctoral dissertation, Irma Taavitsainen (1988) studies the Middle English lunary as a genre. Although the focus is on lunaries, Taavitsainen also presents a general classification of Middle English astrological texts, based partly on Keith Thomas'

Religion and the Decline of Magic (1971), partly on Taavitsainen's own research (1988: 33).

This classification includes six categories, of which the first and the last are Taavitsainen's additions (Taavitsainen 1988: 34; Thomas [1971] 1997: 286-7):

1. Encyclopaedic treatises
2. General predictions
3. Nativities
4. Elections
5. Horary questions
6. Occult

Thomas introduces the categories 2-5 as "main branches... [of] judicial astrology" in Europe in the sixteenth and seventeenth century ([1971] 1997: 286). *Judicial astrology* refers to the art of determining and predicting the influence of the heavenly bodies on human affairs. As Thomas discusses early modern astrology, his categorization is certainly relevant from the point of view of the present study, focusing on a sixteenth-century manuscript. Taavitsainen's rather gentle treatment of Thomas' classification – with only two additional categories – in applying it to Middle English material shows that the categories of Middle and Early Modern English astrological texts are similar enough to allow the use of nearly the same framework for both bodies of text. However, in Thomas' classification, the branches are defined from the point of view of professional astrologers, and the definitions are rather broad ([1971] 1997: 287), whereas Taavitsainen's definitions are somewhat more detailed, having been formulated with the Middle English body of astrological texts in mind (1988: 33). Thus the two sets of definitions serve a function different from each other.

The items in the first category, *encyclopaedic treatises*, are learned treatises, including both theoretical and practical astrology (Taavitsainen 1988: 34). The second category, *general predictions*, contains two subsets: *astrological geography*, connecting the planets and their

influence to various regions and countries, and *societal prognostications*, predicting events influencing whole communities and often including weather prognostics as well (Taavitsainen 1988: 35). The original definition by Thomas ([1971] 1997: 286) is not as specific as the one by Taavitsainen: according to Thomas, general predictions are, basically, societal prognostics. The third category, *nativities*, is similar to Means' (1992) destinaries discussed above. However, Taavitsainen also includes in this category nativity predictions occurring within lunaries (1988: 36), whereas for Means destinaries and lunaries are distinct categories (1992). As can be seen from the list above, Taavitsainen does not have a category for lunaries as such – lunaries can be found within more than one category. Thomas ([1971] 1997: 286) does not specify the text types in the nativity category; for him, the decisive factor is that nativities are predictions related to the date of birth and thus the destiny of an individual.

Taavitsainen's fourth category, *elections*, sounds similar to Means' electionaries. There is, however, a difference: whereas Means' category of electionaries does not contain lunaries, Taavitsainen also includes some lunaries in her category (1988: 37). Means distinguishes between electionaries, containing information on selecting the right time for an action according to the positions of heavenly bodies, and election-type texts, in which the moon is the only planet affecting the prediction, placing the latter texts in the lunary category (1992). For Taavitsainen, it does not matter whether all the heavenly bodies or only the moon is consulted – if the text is focused on deciding when to perform a certain action, it belongs to the category of elections (1988: 37). However, she does note that lunar predictions stand out from the body of electionary texts, since the moon had such an important status in the medieval worldview (Taavitsainen 1988: 37). In Thomas' original classification, elections are defined as an astrological means of selecting suitable times for actions ([1971] 1997: 286).

Horary questions are related to Means' questionnaires. Both Thomas and Taavitsainen include in this category texts containing questions answered by looking at the relations of heavenly bodies at the time of asking the question (Thomas [1971] 1997: 286-7; Taavitsainen 1988: 39). Astrological figures could be drawn in order to facilitate answering the questions (Taavitsainen 1988: 39). Taavitsainen also notes that for some astrologers, answering questions and casting nativities became a business during the sixteenth and seventeenth centuries (1988: 39). The last category, *occult*, includes "descriptions of astrological images, charms, and alchemical texts" (Taavitsainen 1988: 33).

As stated above, there are some differences in the way in which Means and Taavitsainen categorize astrological texts. The most striking difference seems to be in the way the two scholars treat lunaries: Means (1992) has a separate category for text organized according to the position of the moon, whereas Taavitsainen (1988) does not see lunaries as a direct subcategory of astrological texts. However, the viewpoint in these two classification systems is different, since the material they classify is defined in different terms: Means' article focuses on prognostic texts, whereas Taavitsainen's classification aims at categorizing astrological texts in general. As lunaries are the main focus in Taavitsainen's (1988) work, I shall next briefly introduce her classification of lunary texts.

Taavitsainen distinguishes between the terms *moonbook* and *lunary*, of which the latter is a subcategory of the former (1988: 23). Furthermore, she establishes three categories of popular moonbooks based on their definition of time, although she notes that these categories are closely related (1988: 45). In *lunaries proper* the predictions are divided into 30 days of the moon, starting with the new moon (Taavitsainen 1988: 23, 45). The

decisive factor in placing texts into this category is that they only take into account the light of the moon (Taavitsainen 1988: 47). According to Taavitsainen, these texts are the simplest form of popular moonbooks (1988: 23). *Mansions of the moon* texts have 28 sections, organized according to the 28 *mansions* or 'seats' of the moon (Taavitsainen 1988: 47). This is obviously quite similar to the previous category as to the number of sections included in the work; however, in these texts not only the light of the moon but also the zodiac is taken into account (Taavitsainen 1988: 47). Finally, *zodiacal lunaries* are divided into 12 sections, as the moon remains in each zodiacal sign roughly two and a half days (Taavitsainen 1988: 47). As Taavitsainen notes, the first two categories have a nearly equal number of sections; it is thus easily understandable that hybrid versions of lunaries proper and mansion-type lunaries exist (1988: 47). However, also other kinds of lunary hybrids exist (Taavitsainen 1988: 47-8). The simplest lunaries are quite easy to use, whereas determining the moon's zodiacal position is more difficult: tables and volvelles – instruments for calculating the positions of the heavenly bodies – were often added into manuscripts containing lunar prognostications (Taavitsainen 1988: 48). As will be seen in Chapter 3, my material also contains tables and instruments that could be used as aids when performing astrological calculations.

Taavitsainen's classification of lunaries is in a way a structural one. What matters is the way in which the position of the moon is defined, and the structure of the lunary echoes that choice. The division resembles Means' treatment of lunaries, although Means does not distinguish between day-type and mansion-type lunaries (Means 1992: 378-9). Placing lunaries into Taavitsainen's categories seems simple enough, since the method of classification is clearly defined. However, it is difficult to categorize hybrid lunaries according to this scheme. Furthermore, the classification in itself does not reveal much of the content of the lunaries. Taavitsainen's framework is, nevertheless, carefully

defined and provides a systematic scheme for classifying lunaries in terms of their method of defining time and thus their structure. I think this framework is best utilized in studying textual transmission and describing lunaries while also providing notes on textual content, since it is probably quite difficult to divide into three groups the heterogeneous body of Middle and Early Modern English lunary material. I shall revisit Taavitsainen's classification of lunaries in Section 5.1., in which I present an edition of a lunary found in Beinecke 558.

2.2.3. Early Modern English prognostic texts

Popularization of science seems to follow a certain pattern. The scientific breakthroughs in universities become knowledge taught to students. Gradually, this knowledge spreads to other communities and levels of society, sometimes as such, sometimes after having undergone processes of transformation or simplification. The new findings finally become everyday, common facts. However, new breakthroughs are made all the while, and when a piece of information reaches the general public, it might already be an old, even abandoned thought in the academic world. Even today, despite the advances in technology, this pattern seems to be alive and well, demonstrated for example in the hierarchy of scientific and educational publications from academic articles to university course books to primary school material or encyclopedias addressed to the general public.

The process described above can also be detected in the transmission of astrological texts. Astrological texts often have a long history of transmission and translation. The journey of an astrological work from Greek or Arabic (often via Romance languages) into English could take centuries. Neither did the popularization of astrology in

England happen overnight. As I have stated above, this is evident from classifications of Middle and Early Modern English astrological texts – similar categorizations can be applied to both bodies of text, although Middle English astrological texts have been more widely studied than their early modern counterparts. As Thomas states, the main premises of astrology were the same in the Egypt of the first centuries AD and in seventeenth-century England ([1971] 1997: 284). It is interesting that astrology, a discipline nowadays often referred to as a pseudoscience, managed to remain essentially the same for more than a millennium. Thomas notes that even in the seventeenth century many English astrological treatises were but translations of Latin texts written centuries ago ([1971] 1997: 284). Although astrology became a popular science during the sixteenth and seventeenth centuries, the main principles of the field were highly traditional (Thomas [1971] 1997: 284). The division between ‘popular’ and ‘learned’ texts in the late medieval and early modern period is not straightforward, as Taavitsainen notes:

On the one hand, works that appear simple and ‘popular’ were owned by men of highest possible learning, and simple applications of basic principles were copied in textbooks for professional use. On the other hand, lay people copied scientific doctrines in their notebooks. This fact shows how the consumption of scientific ideas spread through the literate layers of society.

(2005: 181-182)

However, the audience(s) of the texts should be carefully considered. Taavitsainen (2005), discussing the *appropriation* of the same scientific text by different audiences, distinguishes between what was copied and how the copied texts were understood by the readers. She states that “the same text is perceived in different ways at different times by different audiences, depending on how and in which context it is presented” (Taavitsainen 2005: 180). While the text of a Middle English work might be quite similar

to an Early Modern English copy of the same work, the early modern audience probably differs from the medieval both in terms of quality and quantity. In addition, the audience was presumably more heterogeneous than that of the Middle Ages. For instance, the growing literacy rates and the influence of the printing press caused textual transmission in sixteenth-century England to be a process in some ways different from that of the medieval period. Although there is no definite date to be given as to when the change took place, an understanding of the various audiences an astrological work might have had during the centuries it was circulated will add depth to a contextual analysis of any given astrological, and thus also prognostic, work.

Taking into account the context in which a certain text occurs is essential from the point of view of the audience(s) of the text. Therefore, I shall discuss below not only the edited texts but also the whole manuscript, Beinecke 558. I shall also show that the ideas presented by scholars in relation to Middle English astrological works can also be utilized when dealing with Early Modern English prognostic texts. This will become apparent in the description and analysis of Beinecke 558 from Chapter 3 onwards. However, both in terms of genre and as a physical object, Beinecke 558 can be described not only as a collection of astrological and astronomical texts but also as a *commonplace book*. In the last part of this chapter, I shall therefore briefly introduce the concept of commonplace book before moving on to a detailed description and discussion of the manuscript.

2.3. The commonplace book

According to the *Oxford English Dictionary* (1989), a commonplace book is

A book in which 'commonplaces' or passages important for reference were collected, usually under general heads; hence, a book in which one records passages or matters to be especially remembered or referred to, with or without arrangement.

(*OED Online*, s. v. commonplace-book)

As the definition suggests, a commonplace book is essentially a collection of items deemed important by the owner of the book. The commonplace book can also be seen as a literary genre; commonplace books may be said to have been compiled for a similar purpose, and certain types of contents, discussed below, can be seen as typical of commonplace books. Scholarly opinions on the borders of the genre vary. In his relatively recent study *The Commonplace Book in Tudor London* (1998), David R. Parker discusses four commonplace books from the Tudor period surviving in manuscript format, also providing the reader with a general introduction and conclusion discussing what he calls the late medieval English commonplace book. As MS Beinecke 558 is a product of the Tudor period, the work by Parker is certainly relevant in terms of the current study. Therefore, I will comment on Parker's views in the following discussion of the commonplace book as a genre.

Although Parker describes the commonplace book as "a private space" (1998: vii), I suggest that the commonplace book occupies a place in both the public and the private sphere. On one hand, every commonplace book is a unique construction tailored to suit the interests, needs and quirks of its owner. On the other hand, commonplace books are not like modern-day diaries, with the writer or commissioner as the narrator – they may contain texts and excerpts from manuscript exemplars or printed books read by a wider audience as well as popular lyrics and verse. Parker's analogy between the commonplace book and an art collection does seem rather appropriate (1998: vii).

As noted above, the contents of commonplace books vary: religious and lay, prose and verse, personal and public, theoretical and practical texts can all be found in these works. What distinguishes a commonplace book from miscellanies and anthologies is the “discernibly personal selection and combination of texts for the book” (Parker 1998: 2). Parker locates the birth of the commonplace book in the fifteenth-century middle class environment, with growing literacy rates increasing the need and want of household books (1998: 2). He also notes that both the adoption of paper as the writing medium and the strengthening status of London merchants influenced the advance of the commonplace book (1998: 4). The busiest periods in commonplace book production in England were the fifteenth and sixteenth centuries; in addition, the popularity of early printed miscellanies and compilations also illustrates an existing demand for works with mixed contents (Parker 1998: 7).

Parker notes that commonplace books often contain religious texts, short verses and lyrics, verse romances, remedies, recipes, lists of kings and queens of England and histories of London and England (1998: 162). The composite nature of commonplace books shows not only in the contents but also in the media used and in the production process of the manuscripts. A commonplace book might contain both parchment and paper (as is the case with MS Beinecke 558). It might also have been compiled booklet by booklet and bound into a volume later, instead of having been written on the pages of an empty volume, starting from the first leaf (Parker 1998: 6-7). These factors have to be taken into account in the codicological analysis of commonplace books, since they affect for instance the structure and coherence of the work in question. In addition, the items in commonplace books, taken from various sources, are not usually arranged in any orderly fashion (Taavitsainen 2004: 43), which is at least partly due to the books often being written over long periods of time.

The owner of a commonplace book had a central role in the production of the book. However, it has been disputed whether a book commissioned by the owner and copied by a professional scribe can justly be called a commonplace book. Parker notes that it is not the hand that wrote the book but the mind selecting the texts that makes a commonplace book: if the work is personal, even idiosyncratic, it can be included in the genre regardless of whether it is a commissioned work or a holograph, (also physically) written by the author (1998: 3). Taavitsainen (2004: 43) also identifies the purpose of the work as the determining factor when distinguishing between commonplace books and other compilations. I agree with Taavitsainen and Parker here. When discussing genres, I think the purpose and nature of the work are more important factors than the question of who is responsible of the actual scribal work. This is not to say that there is no difference between a holograph and a commissioned work, but to suggest that this division on its own is not enough to exclude works from the commonplace book genre. This suggestion is supported by the fact that professionally copied or printed booklets were sometimes added into commonplace books (Parker 1998: 6). These hybrid versions might present a categorization problem, if no professionally copied text was allowed in the genre.

However, whether a commonplace book was written by its owner or not may tell us something about the owner. In schools, pupils were taught reading a few years before writing, and in order for the owners to be able to write their own books they would usually have had to attend school for several years; still, it has to be kept in mind that the merchant class also needed writing skills for producing business records, which increased the possibilities of apprentices and servants to receive the necessary education (Parker 1998: 5). In addition, the physical act of writing a commonplace book is a time-consuming one – this indicates a genuine interest on the part of the owner in the items

present in self-written commonplace books (Parker 1998: 163). To sum up, it is useful to collect information on the processes of physical production of commonplace books in order to shed light on the sociohistorical background of such books and their owners.

The advantages of studying a commonplace book as a whole are discussed by Parker, who states that “[a]s commonplace books contain such an important portion of Middle English literature, one can clearly see the need for a study of the books as manuscript contexts of their contents” (1998: 8). As commonplace books are highly personal and unique but also contain texts widely circulated in manuscripts or in print, the possibilities for the scholarly study of them seem to be manifold. Parker also notes that commonplace books might reflect not only the personality of their owner but also the social, practical and political trends of the period on a larger scale (1998: 10-11), which offers even more viewpoints from which to examine the genre. In the following chapter, I shall introduce MS Beinecke 558, both a commonplace book and a collection of astronomical and astrological texts. As the scope of this study is limited, I cannot provide the reader with a detailed picture of all the texts in the manuscript. I shall, however, aim at treating the manuscript as a whole and presenting the edited texts in their manuscript context.

3. The commonplace book of Thomas Buttler

What once was the commonplace book of Thomas Buttler, an Essex merchant, is now known as New Haven, Yale University, Beinecke Library MS 558. Very little has been written about Beinecke 558 despite the call for further research in the library description: “This manuscript should be carefully analyzed because it contains a great deal of interesting material” (Beinecke Rare Book and Manuscript Library, library

description of MS Beinecke 558, henceforth “Beinecke description”). In this chapter, I shall first introduce the manuscript and its contents, after which I shall discuss the manuscript as a commonplace book. All folio references in this and the following chapters are to Beinecke 558 unless otherwise stated.

By writing a manuscript description on Beinecke 558, I hope I will be able to shed more light on commonplace books in general and Beinecke 558 in particular. However, it should be noted that this study is conducted without direct access to the original manuscript. Although the microfilm copy of the manuscript is mostly legible, there are some limitations caused by the medium. I shall discuss them further in Chapter 4 in connection to the editing process. At this point, I shall only deal with the limitations relevant from the point of view of writing a manuscript description.

First of all, the microfilm is a greyscale reproduction of the manuscript. Although the digital images of Beinecke 558 available in the Beinecke Library *Digital Images & Collections Online* database clearly demonstrate that red ink and even some colouring are used alongside black ink in the manuscript, the microfilm does not show the difference in any reliable way. However, for all the texts edited in this thesis, I have used digital colour images from the Beinecke Library, which adds to the level of detail concerning the five edited examples in Chapter 5. The select colour images and a microfilm copy of the whole manuscript provide information accurate enough for the purposes of this thesis, although any further research conducted on Beinecke 558 would certainly benefit from accessing the original manuscript.

The collation of the manuscript cannot be properly studied on the basis of microfilm evidence. Some pricking and ruling patterns are visible, others probably not, and it is

also difficult to distinguish between paper and parchment leaves. In some of the digital images, the texture of the writing surface is visible and it is possible to say whether the text is written on paper or parchment. Measuring the size of the leaves is difficult without access to the original manuscript, especially as Beinecke 558 is compiled of quires (booklets) of various physical dimensions (see Beinecke description).

Despite the abovementioned limitations, I consider it useful to include a manuscript description of Beinecke 558 in this thesis. I hope that the description will serve to place the manuscript in its context and provide background information helpful for understanding the relationship between the edited texts and the rest of the manuscript. In addition, the description of Beinecke 558 presented in this thesis can be seen as a case study on the English commonplace book.

3.1. New Haven, Yale University MS Beinecke 558

The manuscript discussed in this study is currently located at the Yale University Beinecke Rare Book and Manuscript Library. The Beinecke Library description of the manuscript is available online at <http://webtext.library.yale.edu/beinfla/pre1600.ms558.htm>. The following manuscript description is based on the Beinecke description, on my analysis of the microfilm copy and select digital images of Beinecke 558 and on two articles by Daniel Birkholz (2003 and 2006) discussing the manuscript. As practical works on editing Early Modern English manuscripts are rare, the structure of the description is adapted from *A Guide to Editing Middle English* edited by Vincent McCarren and Douglas Moffat (an outline for a manuscript description appears in Appendix A: A practical guide to working with Middle English manuscripts, pp. 305-318).

Shelfmark. New Haven, Yale University Beinecke Rare Book and Manuscript Library MS 558.

Size and material. The Beinecke description notes that “the manuscript is a composite of many separate treatises, some on paper, others on vellum, of varying sizes bound together”. 205x150mm is given as the approximate size of the manuscript. The number of lines per page and size and layout of the written space vary. There are usually about 30-45 lines per page. Black and red ink with some colouring are used; the description attached to the back cover of the work states that the manuscript is in “red, black and green”. There are also volvelles containing movable parts (Beinecke Rare Book and Manuscript Library, *Digital Images & Collections Online*, see for example images 1109884, 1109887). In addition, the manuscript contains several figures and tables.

Language. The manuscript is written in English. Some Latin words occur in the MS; for instance, the text *Numerus mensis* on 72v-r utilizes both Latin and English. The tables of fixed stars on ff. 22v and 80v show mixed use of Latin and Arabic names for the stars.

Date. The dating given in the Beinecke description is “16th century”. According to the manuscript, Thomas Buttler was born in 1500 (ff. 42r, 63v), but there are additions by a later hand datable to the early seventeenth century. For example, the table of kings and queens of England (f. 49r) has been revised by a later hand. The last name written in the hand in which the main body of the table is drawn is Edward VI; he ruled 1547-1553. Birkholz (2003: 11n) uses this as a piece of evidence, dating Beinecke 558 between 1547 and 1554, although some of the texts in the manuscript could probably have been written prior to 1547 (see *Foliation* below). The names “Phil. & Mary”, “Elizabeth” and “James” have been added to the table by a later hand, although no details of their reigns

are provided. James I, the last ruler whose name is clearly visible in the manuscript, succeeded Elizabeth I in 1603 and ruled until 1625. However, there are traces on the bottom margin of f. 49r suggesting that the name Charles (I of England, who ruled 1625-1649) was also added to the list. It is probable that his name was cut out when the manuscript was bound, as only the upper parts of what seem to be the letters *C*, *h* and *I* show on the page. It is, of course, possible that names were added below that of Charles, cut out entirely when Beinecke 558 was bound.

To mention other items in the manuscript datable to the seventeenth century, there is a nativity figure on f. 66v dated July 22, 1612. Finally, the manuscript contains marginal notes referring to William Lilly's *Christian Astrology*, the first edition of which was published in 1647. These notes shall be further discussed in Section 5.3.1. To sum up, on the basis of internal evidence I agree with Birkholz in that the main body of the work was probably written in the mid-sixteenth century. However, some items and notes in the manuscript are datable to the first half of the seventeenth century.

Provenance. Beinecke 558 was owned by the Buttler family in the sixteenth century. The next known owner of the manuscript is John Brand (1744-1806), an antiquary and topographer, whose library consisted of 243 manuscripts and 8611 printed books related to navigation and the 'discovery' of America (Birkholz 2003: 31-34). The next phase in the history of the manuscript remains uncharted, but in the twentieth century it became a part of Henry C. Taylor's collection of manuscripts, books and maps acquired 1938-70 (Birkholz 2003: 31). As a part of this collection, Beinecke 558 became property of Beinecke Rare Book and Manuscript Library in 1970.

Foliation. i+89+ii, foliated 1-89, foliation marked on top right of recto. As the manuscript is a composite one (see *Size and material* above), the foliation was probably added during or after the process of binding the manuscript. Beinecke description for f. 67 reads “15th century; an addition”. F. 67 contains instructions for using a volvelle, in a hand that does not seem to appear elsewhere in the manuscript. The scribe uses the letter *yogh* (ȝ), to the best of my knowledge not used in any other text in Beinecke 558. Furthermore, in addition to a short *r*, the scribe uses an open, long anglicana *r*, again not used by the other scribes. These two features of the scribal hand on f. 67 seem to support the Beinecke description suggestion of this text having been written earlier than the bulk of the manuscript.

Pricking and ruling. Pricking marks and ruled sections exist, but no clear pattern of pricking and ruling for the whole manuscript can be established. This is due to both the composite nature of the manuscript and the fact that the manuscript is mainly accessed through a microfilm copy.

Contents. As stated in the Beinecke description, Beinecke 558 mostly contains short astronomical and astrological treatises, related for example to prognostication and medicine. However, there are also household notes, tables of measures, calendars and items related to the history and geography of England in the manuscript. The contents of the manuscript shall be described in more detail in 3.1.1. and 3.1.2. below.

Script. The Beinecke description characterizes the script very generally as “English book script, in numerous hands”. A more detailed discussion of the scripts in Beinecke 558 will follow in Chapter 4.

Binding. The Beinecke description reads: “Bound in brown calf, gilt”. In addition, the microfilm copy contains a note on the fact that the manuscript is tightly bound, causing writing to be lost in the spine. Recto beginnings and verso endings of lines are thus not always visible in the microfilm copy or the digital images. John Brand’s bookplate is found inside the cover of Beinecke 558 – either Brand himself had the manuscript bound or it had been done already before he acquired the manuscript (Birkholz 2003: 34). This, together with the evidence on the name of Charles I (f. 49r) having been cut out, suggests that the manuscript was bound between 1625 – the year when Charles I was crowned and could thus be added to the list of kings and queens in Beinecke 558 – and early nineteenth century, the last years of John Brand.

3.1.1. Grouping the items in MS Beinecke 558

In this section, I shall briefly discuss my method of handling the contents of Beinecke 558. The list of contents in 3.1.2. follows the current codicological structure of the manuscript, starting from leaf 1r. Beinecke 558 contains a number of relatively short items which could be categorised in several different ways. As the purpose of Section 3.1. is to briefly introduce the manuscript and its contents, I have decided to follow the structure of Beinecke 558 in order to keep the description as transparent as possible. I suggest that there are thematic boundaries to be found in the manuscript, some more visible than others. However, in my opinion most of these boundaries are very subtle, and it would be difficult to systematically divide the manuscript into textual groups. Such a division, if attempted, might even be misleading. Therefore I shall comment on the thematic shifts in the manuscript where they are visible without any strict grouping of the texts.

As I do not have access to the original and thus cannot perform a full codicological analysis of the manuscript, I have restricted my description of MS Beinecke 558 to the foliated section, leaves 1-89. There is no text on the flyleaves except for a calligraphic capital M and short alphanumeric codes probably written by librarians handling the work. The lack of access to the original manuscript also prevents me from using the binding as evidence. The manuscript is tightly bound and thus the quire boundaries do not show in the microfilm copy. A period of time probably passed between the writing or copying the texts and the binding of the manuscript, and it would be very difficult to try to trace the order in which the texts were written solely on the basis of the microfilm copy, except for some items and notes that are clearly by a later hand. Due to the reasons discussed above, I will not aim at presenting a strict grouping of the texts. Therefore, the current order of texts in the manuscript will be used as a logical basis for the description and discussion of the manuscript.

Some comments can be made on the overall themes of the manuscript. Most items in the manuscript are in some way related to astrology: there are for example prognostications, charts, figures and texts on medicinal astrology in the manuscript. The first descriptive clause in the Beinecke description reads "Astronomical and astrological treatises", although as will be seen, the contents of Beinecke 558 are actually more varied than the description implies. Another important aspect the items in the manuscript have in common is practicality. Most of the astrological texts are designed for practical purposes, a feature shared by the non-astrological items in Beinecke 558. Non-astrological practical texts include for instance the various tables of measures and the map of England. Astrology and practicality seem to be the focal points of Beinecke 558. The importance of practicality is in a way no surprise, as MS Beinecke 558 is a commonplace book. However, the manuscript lacks romances and verse and only has a

few lines of religious text – even for a commonplace book, Beinecke 558 is practical. The importance of family and family business also shows. The horoscopes of Thomas Buttler and his children, tables of measures for various goods and the arithmetical tasks can all be connected to the Buttler family and their household and business matters. Also the prognostications show interest in certain themes; the prognostications, the main focus of this thesis, will be dealt with in more detail in Chapter 5.

Some thematic boundaries can be established in the manuscript. For example, the first 42 leaves contain astrological items, the last ones being the nativities of the Buttler family. Some arithmetical problems are introduced on leaves 43-45, but these are interspersed with astrological comments. The section easiest to distinguish from its surroundings is probably the group of historical and geographical texts on leaves 47-49. These items all relate to the history and geography of England, and they do not utilize astrology. Furthermore, the section is framed by blank leaves both before and after the items. After the section on history and geography, astrological items follow. There is another group of non-astrological texts on ff. 63v-65. These texts might be labelled household and business notes, as they include records of birthdays, measurement tables and a multiplication table. Similar items can be found in the very end of Beinecke 558, ff. 85v-89r. The last table has not been finished. Between the household notes, there are astrological texts. Among the astrological texts, there is a section more specifically on medicinal astrology on ff. 81r-84r, after which a weather prognostication and a calendar follow. However, the transition is again subtle: the last medical item on f. 84r is from Humphrey Lloyd, as is the judgement of weather following it on f. 84v. All in all, the shifts between themes are most of the time very subtle, but astrology, practicality and family are certainly keywords when discussing Beinecke 558 on a general scale.

As will be seen, my listing of the contents of the manuscript differs considerably from the partial list of contents in the Beinecke description which reads:

f. 1 r	The saiengs off Almansor in propositionibus.
f. 4v	Of wether after Humphrey Loyde.
f. 5r	Judgment of wether by Digge.
f. 7r	Stoflers Judgement upon ye 28 mansions of ye mone.
f. 9r	Judgement of Massahala.
f. 16v	Zahell saieth.
f. 22v	Manual of the astrolabe.
f. 42r	Horoscopes of Thomas Stalon, Jhon Buttler, Thomas Buttler, Alex Buttler.
f. 47v-48r	The Mape off Ynglannd.
f. 49r	Reigns of the English Kings.
f. 51v-52r	Calendar for 1485-1604.
f. 67	15th century; an addition.
f. 81r	The Names and natures off herbes.
f. 84r	Saiengs off Humfrey Loyde.
f. 85r	Calendar for 1540-1570.

This list seems to concentrate on the items containing personal names. Authors such as "Loyde", "Digge" and "Zahell" are mentioned. Also the members of the Buttler family are listed, although Ales (as the name stands in the manuscript) has become Alex in the list. As both Thomas Buttler and his wife Elizabeth refer in their testaments to their daughter, of whose name John Brooks Threlfall uses the form "Alice" ([1990] 1992: 32-34), it is probable that the Ales of the horoscope is a daughter rather than a son. I shall discuss the Buttler family in more detail in Section 3.2.1. below.

3.1.2. Manuscript contents

Although the Beinecke description (introduced in the previous section) manages to mention most of the personal names found in the manuscript, the contents of Beinecke 558 are more varied than one would think on the basis of the library description – and, as mentioned above, further research on the manuscript is welcomed in the description.

I have compiled the following list on the basis of my analysis of the microfilm copy and select digital images of the manuscript. The titles in this list are editorial, as spellings have been modernized and abbreviations silently expanded for clarity. Some idiosyncratic spellings have been preserved where no certainty about the modern equivalent can be reached. Such words are written in italics in the list below. Texts without titles have been given a descriptive, editorial title. For a closer representation of the spellings, see Appendix 2.

Leaf	Title
1r	The sayings of Almansor in Propositionibus
1r	How to find out pars fortuna
1v-2r	Judgement of sickness out of Amicus Medicorum
2r	Of the tokens of life and death
2v	To know the thief that hath stolen
2v-3r	To know how thou shalt speed in thy journey
3v	The natures of planets
3v	The judgement of 8 winds
4r	[A note on tides]
4r	To know what moon maketh full sea at many ports whose names be as folowith
4v	Of eclipses
4v	Signification of comets
4v	Of weather after Humphrey Lloyd
5r	Judgement of weather by Digges
5r	How weather is known after the change of moon by the prime days
5v-6r	[Blank]
6v	Things to be observed by the course of moon
6v	Of bloodletting
7r	Stöffler's judgement upon the 28 mansions of the moon
7v	For beginning of works the moon aspecting the planets
8r-8v	Judgement of mutation of the air between planet and pla(net)
9r	Judgements of Massahala [Messahala or Masha'allah ibn Atharī] and Hala Abenragell [Haly Abenragel or Abû I-Hasan 'Alî ibn Abî I-Rijâl]
9r	To go to find a man at home
9r	For the querent's thought
9r	Whether suspicion be true or no
9v	For obtaining of substance
9v	For one's brother how he doth
9v	To knowe of treasure
9v	Whether a woman be with child or no
10r	A woman with child of one or two [One or two children]
10r	A woman with child of man or woman [A male or a female child]

10r	If a messenger comith
10r	What a messenger bringith
10r	If guests bidden shall come
10v	If a prisoner shall be delivered
10v	If marriage shall be or not
10v	Whether a young woman be a maid or no
11r	How many husbands
11r	A woman have a child or not
11r	If a woman be true to her husband
11r-11v	For beasts strayed away et cetera
12r-12v	Of the thief and of theft
12v	Whether a thing stolen be one or more
13r-13v	Whether the thief be a stranger or no
14r	If a man be dead or alive
14r	If a sick man shall be healed
14r-14v	A woman gone from her husband
14v	Of removing from place to place
14v	Of any house or heritage
15r	To know the form of a house both without and within, according to the signification of the planets, by moving of a question
15r	For to find a thing hidden or lost in town or field [Illustration on lower left corner]
15v-16r	[Blank]
16v	Zahell [Sahl ibn Bishr al-Israili] sayeth If thou findest that the theft be in the house, and thou woldest know the place that it is in, behold the lorde of the fourth house, and the planet that is there
16v	To know in what place the thing is in that is missed, and where it resteth
16v-17r	The signification of the 12 signes of the place of the theft in the fourth house
17v	Whether the thief be of the house or no
17v	The seventh in the fourth house
18r	If the thing be in the house
18r	If the thing be out of the house
18r	If a thief or murderer shall be found
18r	If thou wylt know what the theft is that is taken or stolen away
18v-20r	Judgement upon the 12 houses
20v	Here folowith the usage of the old philosophers, which day and hour in the week is best to labour diverse causes in
20v	To know when a person cometh to thee, whether he beare thee good will or no
20v	Whether news be true or false
21r	This figure above is of the aspects showing how signs and planets aspect one to another in the zodiac [Illustration above the text]
21v	The names and <i>catherectes</i> of signs and planets [Illustration above the text]
22r	The natures of the twelve houses
22v	[Table] The names and natures of fixed stars in the astrolabe
22v	[Table] Sign, houses, exaltations, joys, falls, triplicities and faces
22v	[Table] [Original title on top of page cut off; gloss by later hand reads "Dignities"]
22v	[Table] The terms of planets
23r	[Astrolabe, untitled]

23v	[Volvelle, untitled]
24r-39r	[A series of astrological figures representing the twelve zodiac signs, from Aries to Pisces, in the ascendant]
39v	[Blank; markings on upper left corner]
40r	[Chart, untitled]
40v	[Volvelle, untitled]
41r	The declaration of the astrolabe
41v	The declaration of the astrolabe
42r	[Horoscopes of Thomas and John Buttler with nativity figures]
42v	[Horoscopes of Thomas Buttler (the Younger) and Alice Buttler with nativity figures]
43r	[Blank]
43v	Of 3 women [Upper part of the title cut out]
43v	Of a ship
43v	Of a hermit
43v	To learn to multiply
43v	Of herring
43v	Of oats
43v	[Note on the influence of the moon on buying and selling]
44r	[Blank]
44v	To know how many he hath bought
44v	To know what number one thinketh
44v	To cast with dice
44v	With money or counters
44v	Counters or money
44v	To know how many
44v	For the bringing in of a thing in one's hand
45r	To know what it is o'clock by fetching in of a thing
45r	For to know who hath 3 things
45r	Which side of a goat lieth upward
45r	What end of a dagger or knife is upward
45r	Of 12 persons
45r	Of 20 pilgrims
45r	A chantry
45v	[Blank]
46r	Judgements by the lord of the hour [Illustration on lower left corner]
46v	[Blank]
47r	[Table] The ways from town to town on to London
47v-48r	The map of England
48r-49r	The chronicle of England made short
49r	[Table] The reign of king [Edward VI; a note below the table, modernized, reads "Edward crowned king on Shrove Sunday 1547"]
49r	[Table] The reign of all the kings since the Conquest
49v-50r	[Blank]
50v	[Table] For to know how long the moon do shine every night from the change to the full after the sun is down
50v	[Table] For rising and going down of sun and length of the day and the night
50v	[Table] For to know where the moon is every day in what sign and where the sign reign in man
50v	[Table] Christmas days and New Year days

51r	[Table] An Easter table [For 1485-1604]
51v-52r	[Calendar running from January to December]
51v	[Table] When sun rises and sets
51v	[Table] Persons [Saints]
51v	[Table] High Easter [and] low Easter
52r	[Table] Movable feasts
52r	[Table] Ember days
52r	[Table] <Tarm>
52r	[Table] <M>arring
52v-53v	For natures, properties, complexions and sickness in planets
54v-56r	Moon for dolours or sickness and faces and members of signs
56r-56v	For fixed stars in the 12 signs, their natures and <i>ren**</i>
57r-59v	The nature of signs when the sun is there for <i>prodstyn**</i>
60r-60v	For good diet and good counsel of diet and what is all good for the brain
61r	The nature and complexions of signs and planets and times
61v	[Blank]
62r	Here is old sayings and rules
62r	[Yearly prognostication based on the planets and dominical letters]
62v	Here folowith Alexander's distinctions and judgements
63r	Pythagoras' sphere
63v	[Table] The rent of <i>mar<k> havll <l>ord shep</i> at every * year [A list of personal names and payments. A part of Harlow, Essex is still known as Mark Hall, and there was a manor called Mark Hall in Harlow/Latton, Essex. The earliest mention in the Essex county records is that the estate was bought by James Altham in 1562 (<i>Records of Arkwright Family of Mark Hall, Latton and Harlow</i>).]
63v	[Table: Payments]
63v	[A family chronicle, written line by line starting from the bottom of the page]
64r	[Weights and measures of various kinds of goods; an addition by later hand in the middle of the page on the measures of paper]
64v	[Table] Measure for land [With geometrical illustrations]
65r	[Table] Measure for stone or timber [With geometrical illustrations]
65r	[Table] Measure for glass or board [With geometrical illustrations]
65v	[Table] A rule for daily expences for the day, the week, the month and the year
65v	[Table] A help for multiply[ing]
65v	These be the 7 sciences
66r	To know when the moon will be south every day of the year
66r	To know the true hour of the night by the moon
66v	[Nativity dated July 22 1612, with a horoscope figure]
67r-67v	Pro noticia volvelle [Instructions for using a volvelle, the body of the text is in English]
68r	[Pythagoras' sphere; text begins] First take all the letters of his name that is sick
68v	[Pythagoras' sphere; text begins] The way of Pythagoras the Philosopher of the infirmities of sick men
69r-70r	[Pythagoras' sphere; text begins] To know the life and the death of the husband and the wife which of them shall die first
70v-71r	[Pythagoras' sphere; text begins] For to know in what sign a man or a woman is born under

71r-72v	[Pythagoras' sphere; text begins] A rule for diverse things
72v-73r	Numerus mensis
73r-73v	Nomina pro amore et vita
74r	[Mostly alphabetical list of first names]
74v	[Prognostication for the year according to the dominical letter]
75r-76r	Of predestination
76v-77r	Faces of planets in signs
77v	Members, complexions and sickness of planets
77v-78r	Members of planets in signs
78v	Dolours or sickness, moon in signs
79r	For beginning of works, moon being in s[igns]
79v-80r	The governance, diseases, of planets
80r	[Table: Faces of the zodiac signs]
80v	[Table] The names and natures of fixed stars
80v	[Table] The houses, exaltations, joys and falls of planets
80v	[Table] A table to find the dignities of planets in the 12 signs
80v	[Table] Triplicities
81r-82v	The names and natures of herbs, as Avicenna [Ibn Sīnā] and other sayeth in the great herbal
83r	To those good times for to give medicines
83r-84r	Here folowith the natures and vertues of herbs and spice[s] to comfort and to purge
84r	The sayings of Humphrey Lloyd
84v	The judgement of Humphrey Lloyd for weather
85r	[Calendar for 1540-1570]
85v	The 7 sciences
86r-88v	[Tables of measures]
88v-89r	[Unfinished table]
89v	[Blank]

As can be seen from the titles in the list of manuscript contents above, Beinecke 558 contains quite a large number of short texts. In addition to astrological texts, there are historical and geographical items in the manuscript. There are also several tables and figures supplementing the practical and instructional texts. As seen already in the Beinecke description, several personal names are mentioned in the titles of the texts – not only traditional authorities including Avicenna and Messahala or contemporary authors such as Stöffler, Digges and Lloyd, but also names related to the Buttler family. In the next section, I shall concentrate on the Buttler family and their relationship with Beinecke 558.

3.2. "Sayth Buttler"

I shall begin this section by introducing the person most intimately connected with the manuscript – Thomas Buttler. His name shows more than once on the leaves of Beinecke 558, and at times his voice is heard as well: "And yet all Shalbe done that god wyll haue done Sayth Buttler" (f. 5r). Although there is a limited amount of information available on him and his life, that what is known will be of great help in determining the history and cultural context of Beinecke 558. Therefore, Thomas Buttler, his family, business and interests are dealt with in Section 3.2.1.

After giving a brief account of Thomas Buttler, I shall proceed to discuss the relationship between Buttler and the items found in Beinecke 558. As commonplace books tend to be unique and personal, it is crucial to take into account the role of the owner or author as well when reading as when editing such a work. On one hand, details known about Thomas Buttler will undoubtedly shed light on questions such as the selection of texts in the manuscript; on the other hand, the manuscript may reveal new information on Thomas Buttler and his family.

3.2.1. Thomas Buttler of Harlow, Essex

Under a table establishing the influence of the moon on high tides in various harbours, Thomas Buttler is identified as "Thomas Buttler of Harlow in Essex" (f. 4r). This is not the only time Buttler's name occurs in Beinecke 558. Birkholz (2003: 11n) notes that Buttler's family name appears on leaves 4r, 5r, 42, 47v, 48r, 61r and 63v, either as "Butler" or "Stallon". Indeed, in his nativity horoscope (f. 42r) Thomas Buttler appears

as “Thomas stalon”. Birkholz points out that Thomas is referred to as “Stallon *alias* Butler” in the family wills (2006: 33). A discussion of the Stallon family name is included in Threlfall (1992: 31). In this study I shall use the form “Thomas Buttler”, spelled the way it stands on f. 4r.

Perhaps the most informative passage in Beinecke 558 from the viewpoint of Thomas Buttler’s personal life can be found on f. 63v. The bottom half of the leaf is filled with what seems to be a family chronicle. Interestingly, the text has been written line by line starting from the bottom of the page. Read this way, the text begins: “I was born 31 day of Ian(uar)y & thorsday at 12 at nytt th(e) {Sun} in {Aquarius} th(e) {Moon} [in] {Aquarius} ano 1500” (f. 63v). Next, Buttler records his marriage in 1523 and lists his children: “hary John & Jhon & thomas Jon & ales & robard” (f. 63v). The only children to have their birthday recorded here are Jhon [John], Thomas and Ales [Alice]. According to the record, John was born 1524, Thomas 1528 and Alice 1532. These children are also the only ones whose nativity horoscopes are found in Beinecke 558 (alongside that of their father, see f. 42r-v) and the only ones mentioned in the wills of Thomas Buttler and his wife Elizabeth (Threlfall 1992: 31-34).

The dates given in Threlfall’s work differ somewhat from the ones given in Beinecke 558. Threlfall gives “about 1509” as Thomas Buttler’s year of birth (1992: 31). According to him, John was born around 1532 and Thomas (the Younger) about 1541 (1992: 34). He does not give a year of birth for Alice. Beinecke 558 states that Alice was born on Monday, 26th August 1532 (f. 63v). As can be checked from any perpetual calendar, 26th August 1532 was indeed a Monday. All the other weekdays connected to the birthdays in the manuscript also match the dates and years mentioned. As Beinecke 558 is a unique manuscript which has never been edited, it is probable that Threlfall did

not consult the manuscript for his study. I shall thus consider the birth dates recorded in Beinecke 558 correct. Nevertheless, these considerations are not crucial from the point of view of this study, as the difference in years, if there is one, is not enough to change the manuscript context drastically. More interesting from the point of view of this study are the other details mentioned in the wills of Thomas and Elizabeth Buttler.

From Elizabeth's will we learn that Thomas and Elizabeth owned a "woolen shop" (Threlfall 1992: 34). In his will dated 1556 (Essex Record Office D/AMR 1/55), Thomas Buttler bequeaths his wife Elizabeth "the lease of Bromelees" and all the property not specifically assigned to other beneficiaries (Threlfall 1992: 33). His son Thomas is to have important instruments of Buttlers' trade, such as "my press, my jack, my shears, my cutting board, my clock, my joined chest in the shop and a box of iron", "twenty marks in money" and also "the lease of Brome Lees in the said parish of Latton" after the death of Elizabeth (Threlfall 1992: 33). The daughter, Alice, is to have "a great chest in the chamber, a little coffer with two bottoms, a brazen mortar & twenty marks in money or money's worth, a feather bed with that which belongeth therto and also honest apparel for a chamber at her mother's appointment" after Thomas' death or on the day of Alice's marriage (Threlfall 1992: 33). Thomas' brother John Stallon and granddaughter Alice Stallon are also mentioned in the will (Threlfall 1992: 33). Moreover, Buttler assigns some money to the nearby churches of Harlow and Latton and to the "amending of the highway" between these two churches (Threlfall 1992: 33).

Perhaps the most interesting passage in the will is the list of items given to Thomas' eldest son, John. In addition to other, more commonly mentioned types of property such as land, John is to have "my chest standing at London and that which is in it, my

little clock called A[ne]mometer, my great written book with a boarded cover that Isaac wrote, my quadrant & a great astrolabe that was wont to hang over the sphere in the hall" (Threlfall 1992: 32; emendation by Threlfall). The items bequeathed to John certainly sound interesting in connection to the manuscript discussed in the present study. Thomas Buttler, in addition to being a woollen-shop owner, seems to have owned scientific instruments such as a quadrant and an astrolabe.

The note about the "great written book" written by Isaac is also highly interesting. It is not Beinecke 558 that is meant here; indeed, Beinecke 558 is not mentioned in Thomas' will at all (Birkholz 2003: 30). Instead, the "great book" is now known as Yale Medical Library MS 26 (Birkholz 2003: 30). As seen in the description of the contents of Beinecke 558, the manuscript contains not only many samples of astrological material but also a fair selection of personal and business-related notes. According to Birkholz, Yale Medical Library MS 26 contains most of the scientific items in Beinecke 558 and adds more medico-astrological material, at the same time lacking the personal and business records found in Beinecke 558 (2003: 30). Birkholz dates the production of Yale Medical Library MS 26 circa 1553 (2003: 30). The connection between Beinecke 558 and Yale Medical Library MS 26 is revisited in Section 4.2., when I address the question of scribal hands in Beinecke 558.

Birkholz suggests that Beinecke 558 might be discussed in Thomas the Younger's will, which contains a reference to writings in the family woollen-shop cupboard (2003: 30). Thomas the Younger, who inherited the instruments of the wool business, would thus possibly have been given Beinecke 558, the more practical of the two manuscripts, whereas John would have received both the scientific devices of his father and the scientifically 'upgraded' version of Beinecke 558, Yale Medical Library MS 26. Beinecke

558 cannot be positively identified in the Buttler family wills, and the question of the ownership of the manuscript after Thomas Buttler the Elder cannot be given a definite answer. However, the early seventeenth-century additions in the manuscript show that the manuscript continued to be used a long time after Buttler's death.

To sum up, Thomas Buttler seems to have been not only a merchant but also a person with a keen interest in sciences, especially astronomy. This twofold quality of his personality shows on the pages of Beinecke 558. I hope that the discussion of Thomas Buttler in this chapter has already revealed something about the connection between the items found in Beinecke 558 and the life and needs of the owner of the manuscript. In the following chapter I shall discuss the character of Beinecke 558 as the commonplace book of Thomas Buttler and his family, concentrating on the relationship between the contents and the social context of the manuscript.

3.2.2. MS Beinecke 558 as a commonplace book

As discussed above in Section 2.3., David Parker lists religious texts, short verses and lyrics, verse romances, remedies, recipes, lists of kings and queens of England and histories of London and England as typical contents of Tudor England commonplace books (1998: 162). When this list is compared to the list of contents of Beinecke 558, given in Section 3.1.2., it can be noted that the lists overlap but are not identical, which is why I shall begin this section by analysing Beinecke 558 from the point of view of Parker's comments.

A chronicle of England is indeed present in the manuscript (ff. 48r-49r), immediately followed by a list of the kings and queens of England (f. 49r). The same section also contains a map of England and a table of distances between English towns (ff. 47r-48r). These items, all related to the history and geography of England, fit in the list of typical contents of commonplace books suggested by Parker (1998: 162). As this section in the manuscript is preceded and followed by a blank page (f. 46v and f. 49v respectively), it seems to form at least a thematic, if not codicologically distinct group. These items are preceded and followed by astrological texts, which even further highlights their shared thematic features. Furthermore, they all seem to be written by the same hand.

There are some instructions for the use of remedies in Beinecke 558, for example on f. 60 and ff. 83r-84r. In my opinion, many of the astrological prognostic texts included in the manuscript can be compared to the remedies and recipes mentioned by Parker. In all these text types, the reader is given instructions for performing an action. In the case of the astrological texts in Beinecke 558, the action can be for example determining a suitable time for bloodletting or deciding whether it is safe to embark on a journey on a given day. Many of the astrological texts in Beinecke 558 are related to practical issues. The prognostic texts in the manuscript will be dealt with in greater detail in Chapter 5 below.

Beinecke 558 does not actually contain religious texts – it would be more accurate to say that there is some religious text present in the manuscript. This text is in the form of biblical quotes and additions. On f. 5r, after a prime days weather prediction in the form of a mnemonic (edited below in 5.5.1.), the manuscript reads “And yet all Shalbe done that god wyll haue done Sayth Buttler”. It seems that God is here considered the ultimate authority in all things, also in determining the weather: if the prediction fails, it

is God's will. Ecclesiasticus 38:4 is quoted on f. 82v: "All mens knowledge is but vaine vnto th(e) knowledge of god. And yet th(e) lord hath ordeinyd medicine of the erth, & he th(at) is wise dispyseth yt not". This quote is placed after the text of a herbal (ff. 81r-82v). As the herbal contains information on remedial properties of plants, it might be the case that the quote is used as a theological justification for using herbal remedies. A similar passage, combining the two previous comments, is found on f. 84v after a passage on predicting the weather copied from Humphrey Lloyd's work. The form is slightly different: "But all thinges shalbe, th(at) god will have done: ffor as for all mens knowledge ys but vayne vnto th(e) knowledg of god And yet the lord hath ordeynyed medycine of th(e) erth & he that is wise dispiseth yt not. Ecclesiasticus" (f. 84v). In all these cases, the religious text can be read as a comment to the text which it follows; an acknowledgement of God's authority. On f. 4v, after a short passage on the significance of comets, there is a short comment taking up the last line of the page: "Often ought I to remember Jhus my redemer". Religious comments can also be found on f. 60v, and finally on f. 85v, in the list of the seven sciences. The definition of astronomy begins: "And by thys ys the glory of god known and also the movynges of the hevens. And by thys Scyence all the other .6. scyences were fownden" (f. 85v). Astronomy is here described as an art that facilitates understanding the workings of God and also as a basis for all the other sciences.

What *is* missing from the manuscript – if compared to Parker's list – are the verse romances, short verses and lyrics. The only passage close to a short verse in Beinecke 558 is the prime days mnemonic mentioned above and edited in Section 5.5.1. The manuscript does not contain fictional works; the items seem to have more of a practical than entertaining function, although it is difficult or even impossible to determine whether the texts were actually used for practical purposes. On the other hand, Parker's

list does not specifically mention personal and business-related notes, which are present in Beinecke 558. The nativity horoscopes of the Buttler family (f. 42r-v) have already been mentioned above; there are also tables and figures helpful from the point of view of the family business (see for example ff. 64-65). In addition, the manuscript contains practical astronomical tables and figures, for instance a table for determining Easter on f. 51r as well as a calendar for 1540-1570 (f. 85r).

An intriguing feature of the manuscript are the volvelles. These astrological instruments consist of a background and movable parts, and they can be used for example to calculate the rising and setting of the sun and the moon. Birkholz (2003: 20) suggests that Thomas Buttler might have visited the shop of a London printer, Thomas Gemini, who was also known as a manufacturer of astrological instruments. Indeed, Thomas Gemini printed works by Humphrey Lloyd and Leonard Digges, and passages of these works have been copied on the leaves of Beinecke 558 (Birkholz 2003: 20n). It is possible that Gemini also sold copied manuscript booklets in his shop (Birkholz 2003: 36n) – an interesting question to which I shall return in Chapter 4.

The presence of the astrological instruments both as physical objects in the manuscript and as items mentioned in Buttler's testament, as well as the extracts from Lloyd and Digges in Beinecke 558, lead Birkholz to believe that Buttler might have been a client of Gemini (2003: 20). Thomas Gemini is also known to have made astrological instruments for the Tudor royals Edward VI and Elizabeth I in the mid-sixteenth century (Turner and Van Cleempoel [2001] 2003: IX 400). Birkholz notes that it is interesting for a woollen-shop owner to have been connected to the scientific community of London in such a way (2003: 20). To the best of my knowledge, the whereabouts of the instruments once owned by Thomas Buttler and mentioned in his

testament are not known. However, the presence of the volvelles and figures in Beinecke 558 suits well the selection of practical astrological texts copied in the manuscript.

I have introduced above the contents and context of Beinecke 558. In the following chapters, I shall concentrate on the prognostic texts in the manuscript. In Chapter 4, I will give an account of the selection of texts to be edited in this study, discuss the scribal hands in Beinecke 558 and present my method of editing the selected texts. I shall also introduce my categorization of prognostic texts in Beinecke 558. In Chapter 5 I will discuss the categories of prognostic texts, giving an example of each category in the form of an edited text.

4. Editorial procedure

The purpose of this chapter is to give an account of the editorial decisions I made and to discuss the reasons for selecting the texts to be edited below. The limitations of my study of Beinecke 558 have already been discussed above, but it is necessary to briefly mention the limitations influencing the process of editing the manuscript. I have edited the texts using digital images of select pages and a microfilm copy of the whole manuscript and therefore cannot produce an exact codicological description of the sections of the manuscript containing the texts. The manuscript is tightly bound, making it impossible to read some recto beginnings and verso endings of lines. In some places the paper or parchment is worn and smudgy. Some of the texts are written in a small cursive hand and are thus very difficult to read. However, most of the texts, including the five texts edited below, are easily legible and require very little editorial emendation. Despite the limitations mentioned, I believe it would be possible to reliably edit most of

the manuscript on the basis of the microfilm copy. The digital images are, however, very useful in analysing the ink and pen used and in determining whether the writing surface is paper or parchment. In addition, there is some information available in the digital images which cannot be accessed as easily in microfilm format, as will be seen in Section 5.1.1.

4.1. Selection of texts

As can be seen from the list of manuscript contents in Section 3.1.2., Beinecke 558 consists of a large number of short items. Some of these items form thematic groups, as noted in Chapter 3. It is nevertheless difficult to produce a representative selection of texts here. I have therefore decided to concentrate on the prognostic material in Beinecke 558. Predicting the future with the help of astrology is one of the central issues in the manuscript, and there is a number of prognostic texts present in Beinecke 558.

In Section 2.2. above, I introduced Means' and Taavitsainen's classifications of Middle English prognostic texts and discussed the applicability of their frameworks to Early Modern English texts. In my analysis of Beinecke 558, I shall try to determine whether the prognostic contents of the manuscript can be categorized with the help of the guidelines provided by Taavitsainen and Means. I shall not merely try to find examples of all of their categories in the manuscript, as that would result in a very artificial and incomplete classification. I will rather discuss the prognostic genres found in Beinecke 558 with the help of the existing categorizations.

On the basis of my analysis of the manuscript, I have divided the prognostic texts in Beinecke 558 into six categories, using Means' categorisation of prognostic material discussed in Section 2.2. as my starting point. I will discuss these categories and their contents in more detail in Chapter 5, and I shall also provide edited examples of the texts in the categories. My categories are as follows:

1. Lunar prognostications
2. Electionary prognostications
3. Questionary prognostications
4. Nativity prognostications
5. Weather prognostications
6. Other types of prognostications

The first four categories of my model seem similar to Means' categories. However, as the borders of the categories are fuzzy, my treatment of the texts is not strictly similar to Means' model. I have also added two categories, the first one of which is called *Weather prognostications*. As Beinecke 558 contains a number of astrometeorological texts, prognostic texts among them, I believe it necessary to place these texts in a group of their own. The final category is reserved for discussing texts not readily placed in any of the other categories. In my opinion, it would be misleading to place these texts in one of the five categories, but it would be even more misleading to leave them out of the discussion altogether. However, as the final category is very heterogeneous, I shall not produce an edited example of that category.

There is a spectrum of texts from popular to learned astrology in Beinecke 558. Two of the edited texts (Sections 5.2.1. and 5.5.1.) will be samples of popular astrology; no instruments or calculations are needed for using these texts as prognostic aids. The rest of the edited texts, while not necessarily exceedingly difficult to use, require some knowledge of astronomy and astrological instruments and calculations. As noted above,

Taavitsainen stresses the point that the division between popular and learned in medieval and early modern scientific writing is not always a straightforward one (2005: 181-182). The various levels of complexity found in the prognostic texts of Beinecke 558 in relation to the astronomical and mathematical skills needed supports Taavitsainen's argument.

The texts I have selected for editing also show connections between manuscript and print culture. Although the printing press has often been described as a revolutionary invention, manuscripts still had an important status in sixteenth-century England. However, printed works affected manuscript culture and vice versa. Printed parallel texts or even printed exemplars can be found for some of the texts edited in this thesis. I shall also show some evidence on Beinecke 558 still being read in the seventeenth century together with a printed work on the same subject matter. In addition, it is possible that some of the sections in Beinecke 558 are examples of commercially produced manuscript booklets available at printers' shops (Birkholz 2003: 36n).

Finally, all the texts edited in this thesis are written in the same hand, the main hand of the manuscript, possibly that of the scribe Isaac mentioned in Buttler's testament (Birkholz 2003: 36). I mentioned already in Chapter 3 that Yale Medical Library MS 26 shares some texts with Beinecke 558. Birkholz notes that the two works also share a hand – "Isaac's, presumably" (2003: 36). Indeed, a comparison between Beinecke 558 and the images of Yale Medical Library MS 26 reproduced in Birkholz's article (2003: 39-40) suggests that the hand in MS 26 is the same as the one I have labelled the main hand of Beinecke 558, although the original manuscripts should, of course, be consulted in order to confirm this suggestion. Furthermore, according to Birkholz there is still another mid-sixteenth-century astrologically oriented commonplace book in New

Haven – Yale Medical Library MS 45 – which also seems to share a hand with Beinecke 558 and Yale Medical Library MS 26 (2003: 36n). The Yale Medical Library manuscripts have at least a partially common provenance (Birkholz 2003: 36). Birkholz sees the appearance of similar texts written by the same hand in several manuscripts as “a point suggesting that pre-copied ‘astrological booklets’ may well have been available for acquisition through Gemini’s shop” (2003: 36n). From the point of view of book production, this is an interesting suggestion. Gemini printed works of Digges and Lloyd; thus he had access to the exemplars and could certainly have had them copied in manuscript format as well. It remains an open question whether exemplars were copied by hand and reproduced in printed form at the same time or printed copies produced from manuscript exemplars or booklets copied by hand from printed exemplars to be sold separately. A study of the relationship between Beinecke 558 and Yale Medical Library MSS 26 and 45, out of the scope of this thesis, would certainly offer interesting information on the patterns of textual transmission in sixteenth-century England.

The texts in Beinecke 558 are written in roughly the same period. The table of kings and queens of England, written in a cursive hand discussed below in 4.2., is datable to 1547-1554 on the grounds explained above in 3.1. and in Birkholz 2003 (11n). Thomas Buttler’s will is dated 1556 (see Section 3.2.1. above). On the basis of this evidence, a relatively reliable dating of most of the texts in the manuscript to the mid-sixteenth century can be suggested. As the edited texts are from the same period and by the same hand, I suggest that they were used by the same person, probably Thomas Buttler. Therefore, my selection of texts sheds light on the personal interests of the first owner of the commonplace book discussed in this thesis.

The texts should not be seen only as items for personal use, especially if Birkholz's suggestion about astrological booklets being sold in Gemini's shop is taken into account. However, the nativities of the Buttler family found in the manuscript were hardly generally available in Gemini's shop – they must have been written specifically for Buttler's use. It should also be noted that it is difficult to determine the history of the texts and booklets in what is now known as Beinecke 558 before the manuscript was bound into one volume. A codicological analysis of the physical structure of the manuscript would be helpful in determining the booklet boundaries in Beinecke 558.

In the following section I shall take a closer look at the scribal hand of the edited texts. Although it seems that the same hand – that of 'Isaac' – is present in Beinecke 558 and Yale Medical Library MSS 26 and 45, a full analysis of the hands would have to be conducted in order to confirm this hypothesis. Such an analysis is out of the scope of this thesis. However, I will present a description of that hand as it appears in Beinecke 558. I hope that my description will be helpful in future research on the three manuscripts mentioned above.

4.2. The scribal hand of the edited texts

MS Beinecke 558 can safely be said to contain more than one scribal hand. Most of the manuscript is written in a clear sixteenth-century book hand – the hand of 'Isaac', mentioned above in Section 4.1. and described in further detail below. There are several notes and marginalia written in an italic hand, for example in the margin of the questionnaire on f. 2v (edited below in 5.3.1.). There is also a lengthy nativity in italic script on f. 66v, dated 1612 – over half a century later than Thomas Buttler's testament. Although a full analysis of the scribal hands in MS Beinecke 558 is out of the scope of

this thesis, I believe it is helpful to include a paleographical description of the main hand in this study. First, the main scribe is responsible for a number of texts in the manuscript. Second, on the basis of my analysis I suggest that all the texts edited here were written by the same scribe. My description of the hand in this section is largely based on the five texts edited in this thesis, although some comments on other sections of the manuscript are also provided. A full analysis of the hands in Beinecke 558, including the main hand and with reference to Yale Medical Library MSS 26 and 45 discussed above, remains to be conducted in the future.

Layout and scripts

The manuscript contains prose text, figures and tables. There is no verse text in the manuscript. The prose text is written in one column, the number of lines per page varying between 30 and 45. Headings are usually set apart from the body of text by the use of red ink and a different script or taller letters. Headings consisting of more than one line are connected with a curly bracket for example on f. 5r and f. 15r. The layout of tables and figures varies; many of them are ruled. For different types of tables and figures, see for instance ff. 4r, 21v, 49r, 62v, 64r, 65r, 68r, 73r-73v and 86r-88r. The importance of tables and figures in early English scientific texts has been discussed by Linda Ehsam Voigts, who states that “the late medieval English [scientific] manuscript is characterised by extensive use of illustrations and diagrams” – this feature of scientific works had thus developed well before the introduction of the printing press ([1989] 2007: 350). The most complicated items in the manuscript in terms of layout are probably the volvelles (see for example f. 23v), which can be treated as astrological instruments rather than texts. Understandably, the layout of the map of England on ff. 47v-48r also differs from the other items in the manuscript due to the function and

form of the item. None of the texts edited in this thesis are in table or figure format. However, Thomas Buttler's nativity, edited in 5.4.1., is accompanied by a horoscope figure. In addition, the text of the lunary edited in 5.1.1. is essentially in list format, perhaps closer to tables than prose in terms of textual structure. Finally, the questionnaire prognostication edited in 5.3.1. is dependent on the use of figures and tables to determine the astronomical conditions crucial to the prediction. As can be seen, even in the absence of actual figures and tables, the selection of edited texts is connected to the use of charts, tables and figures typical of scientific works.

The main hand of the manuscript is, in general, a clear and easily legible book hand version of secretary script, although some pages seem to be somewhat more carefully written than others. There is linking between the letters, but the script is not highly cursive or decorative. The actual text contains very little flourishes; the headings are more decorative and usually written in a larger size than the body of the text. Some of the headings have been written in Gothic textualis quadrata with some secretary features, others in secretary. Most headings are centered in relation to the body of text on the page. Some initial words of paragraphs have also been written in a larger-size script, either textualis or secretary. Judging on the basis of the digital images of the texts edited in this thesis, some headings, paragraph-initial words, initials and astrological symbols are written in red ink.

Letter-forms and capitalization

When analysing the letter-forms in all the five texts edited here, I found that the shortest one of the texts, the weather prognostication on f. 5r, already contained most of the letters and variant letter-forms present in the edited texts. In addition, most of the

variants only differ from each other in calligraphic details such as the shape of the loops of ascenders and descenders (respectively, the parts of the letter extending above or below the line). On this basis, it could be suggested that the main hand is rather consistent. It is worth noting that more decorative letter-forms can be found for instance in the lists of names on ff. 73r-74r, including different versions of capital letters. As these lists will not be edited in this thesis, I will not deal with them in my discussion of letter-forms below. However, if a full paleographical analysis of the hands in Beinecke 558 is conducted in the future, the letter-forms in the lists should definitely be considered in the discussion. The repertoire of initials may reflect scribal proficiency. If so, this would support the suggestion that the main hand belongs to a professional scribe, perhaps 'Isaac'.

Giles E. Dawson and Laetitia Kennedy-Skipton's *Elizabethan Handwriting 1500-1650: A Guide to the Reading of Documents and Manuscripts* (1968) has been of great help to my discussion of letter-forms. I have also consulted a more general manual of Western scripts by Michelle P. Brown (1990) and *The Handwriting of the Renaissance* by Samuel A. Tannenbaum (1930). Many works on handwriting and scripts available only discuss scripts until the emergence of printing although, as has been stated above, handwritten documents still had an important status in England in the early modern period and beyond. However, as scripts tend to change gradually, the works by M. B. Parkes ([1969] 1979) and Jane Roberts (2005), describing scripts used in England up to 1500, have also been helpful.

a The scribe uses both a one-compartment and a two-compartment *a*. Of these, the two-compartment *a* seems to be used only in word-initial position, often also sentence-initially, possibly as a capital letter. The one-

compartment *a* occurs in initial, medial and final position. The scribe uses a textualis two-compartment *a* in the headings written in textualis script. A two-compartment *a* used as a majuscule form can be found on f. 16v, l. 33 *Aries*. There is an instance of the use of a distinct capital *A* in the electionary edited below (see 5.2.1.), in the first word of l. 36, *And*. The word is written in textualis and in a larger size than the body of the text. Finally, there is an example of a one-compartment form in the textualis heading on 14r, l. 1 *A*.

e, æ A majuscule *E* can be found for example on f. 4v, l. 1 *Eclipses*. The secretary minuscule *e* of the main hand is formed with two curled strokes open to the right, resembling a mirror image of the number 3. In some instances the upper stroke forms a closed compartment, but the construction does not seem to differ in terms of penstrokes and their directions. A textualis *e* is used in the headings. The ligature of *a* and *e*, *æ*, resembling the letter *ash*, is used in the nativity figures on ff. 42r-42v, in the Latin phrase 'dominus horæ' ('Lord of the hours') written in the centre of three of the four figures. In the horoscope figure of Thomas Buttler the Younger (f. 42v) the text reads 'dominus hore', although all four nativities are written in the same hand.

i, j, y Minuscule *i* is usually dotted. The dot is placed either above the letter or to the right of the top of the letter, above the next letter. The direction of the penstroke varies: before the minim letters *n* and *m*, consisting of similar strokes, the bottom of the *i* seems to turn to the left, the first stroke of the following minim connecting it to the *i* stroke. Before all

other letters and after minim letters the bottom of the *i* seems to turn to the right, usually ending with a tail linking it to the next letter. The letters *i* and *y* seem to be used interchangeably for a vowel sound, although *i* is more common before *n*, a minim letter beginning with a stroke similar to that of *i*. This happens especially with the preposition *in*. However, there are also instances of *y* before *n*, for example f. 2v, l. 15 *fynde* and f. 20v, l. 13 *wynning*. Both *i* and *y* may occur before *m*. The letter *i* is used for a consonant sound in *iourney* and *iourny* (f. 7r, ll. 4-5). A form of *j* is used for a consonant sound for example on f. 2v, l. 19 *Judge*, but also for a vowel sound on the same leaf, l. 37, in the word *I*. This form might be either a minuscule *j* or a capital *I* or *J*. There is also another type of capital *I* or *J* in the manuscript. This type is used as a capital in headings, also those in textualis, for example in *Judgment* (f. 7r, l. 1). It is also used in secretary, for example in *January* (f. 42r, l. 4). It is used for a vowel sound in *In* (f. 5r, l. 8). Furthermore, *y* is used for a consonant sound in the word *you*, on f. 2v, l. 26 and elsewhere.

o In addition to the secretary minuscule *o*, an angular textualis minuscule form and a distinct capital *O* are used by the main scribe.

u, v, w There are distinct forms for minuscule *u* and *v* used by the main hand. They both occur medially representing a vowel sound, as can be seen from the words *mvst* (for example f. 2v, l. 2) and *houre* (f. 2v, l. 28). They are also both used medially for a consonant sound, as in *movyd* (f. 2v, l. 2) and *haue* (f. 5r, l. 32). An example of *u* in word-final position is *thou* (f. 2v, l. 3); *v* occurs in initial position in *vnderstandest* (f. 2v, l. 23). There are also

distinct secretary and textualis forms of minuscule *w*. Several different calligraphic variants of the capital *W* can be found on f. 8r-v in the word *Whan*, occurring paragraph-initially twenty times.

b, d The letters *b* and *d* appear in both secretary and textualis minuscule forms. The calligraphic details, such as loops and hooks, vary to a degree. However, the ascender of the secretary minuscule *b* usually has a closed loop. The ascender of the minuscule *d* is an oblique (diagonal) stroke, sometimes with a loop downward or a hook upward. The textualis ascenders occasionally have hooks or flourishes, like the *b* on f. 8r, l. 1 *betwixt*. In most cases, the ascender of the textualis *b* is straight, the ascender of *d* oblique. Majuscule forms of *B* and *D* can be found for example on f. 4r.

c, f, g, p There are both secretary and textualis minuscule forms for these letters in the main hand. Examples of capital *C*, *F* and *P* can be found on f. 4r; a capital *G* is found for instance on f. 10r, l. 33 *Geste(s)*. The secretary minuscule *c* is formed with two strokes: a curved stroke open to the right and a horizontal stroke on the top, often linking to the next letter. The *f* usually has a looped ascender; when doubled, the first *f* has no loop. The loop of the descender of the secretary *g* is open, but the body of the letter is closed. The descender of *p* is either vertical or has a little curve open to the right. The textualis forms are angular; the *f* has no loop and the loop of *g* is closed. The descender of textualis *p* may branch at the bottom, as in f. 4v, l. 1 *Eclipses*.

- h, k, t The main hand only has one secretary minuscule form for *h*, *k* and *t*. Minor details vary, as the form of the letter depends on the previous and following letters. The ascenders and descenders of the letters sometimes form hooks or loops, but the general appearance of the letters remains the same. The minuscule forms occurring in the textualis script might be labeled bastard secretary rather than textualis forms, as the loops, ascenders and descenders are rounded, not angular. Distinct majuscule forms of these letters are also found in the manuscript.
- l The secretary minuscule *l* used by the main hand usually has a looped ascender. The bottom of the letter is sometimes curved to the right, sometimes horizontal. The latter form occurs for example on f. 4r, column 1, l. 20 *london* or *London*. The loops of a final doubled *l* are often crossed with a horizontal stroke. This may represent an abbreviation for final *e*, especially as the double *l* is not crossed word-medially, for instance on f. 9r, l. 15 *falling*. On the same leaf, the double *l* in the textualis heading is crossed (l. 1, *Abenragell*).
- m, n The letters *m* and *n* have both minuscule secretary and textualis forms consisting of minim strokes. Both letters also appear in two distinct capital forms. *M* can be found on f. 14r, l. 1 *Man*. Another, more modest form of capital *M* occurs on f. 17r, l. 36 *Moreover*. The more formal type of capital *N* can be found on f. 4r, l. 1 *Note*; another, less decorative type on f. 4v, l. 14 *Note*.

- q, x, z These letters occur rather rarely in English; therefore, a full analysis of the texts written by the main scribe would be needed in order to be certain of all the variants. The secretary minuscule *q* has a vertical ascender without any loops or hooks, as on f. 5r, l. 3 *quarters*. A capital *Q* can be found on f. 4r, column 1, l. 8 *Qvinborough*. A secretary minuscule *x* appears for instance on f. 5r, l. 31 *myxt*; a textualis variant appears on f. 8r, l. 1 *betwixt*. There is a majuscule *Z* on f. 21r, l. 2 *Zodiack*. A similar form is also used as a secretary minuscule on f. 22v, column 1, l. 15 *Azimech*.
- r There are two minuscule forms of *r*, the more common of these being a short *r* with a wide foot. A form resembling the number 2 also occurs, for example on f. 20v, l. 26 *or*. This form is similar to the abbreviation used for *(vowel)+r* (see *Punctuation and abbreviations* below). A distinct textualis minuscule form can be found for instance on f. 5r, l. 1. There is an instance of a majuscule form on f. 4r, column 1, l. 13 *Redban*.
- s Beinecke 558 contains several different forms of the letter *s*. There are both minuscule and majuscule textualis forms in the manuscript, seen for example on f. 7r, l. 1. Apart from the textualis forms, there are four basic types of *s* used by the main hand. One of these is a majuscule *S*, used initially, for example f. 20v, l. 10 *Sorowes*. A long *s* is used both initially and medially, as in f. 20v, l. 16 *such* and l. 3 *best*. A short, kidney-shaped *s* is used in word-final position, for instance f. 20v, l. 3 *ys*. The sigma-shaped *s*, although less common, is also found word-finally, as in f. 20v, l. 14 *religyous*.

Abbreviations

There are several abbreviation symbols used in the manuscript. They all seem to be rather conventional when compared to lists of abbreviations in handwriting manuals (Dawson and Kennedy-Skipton 1968: 18-21; Roberts 2005: 9-12). The astrological symbols, listed in Appendix 1, can also be seen as a form of abbreviation. Superscript is a common way of abbreviating words in Beinecke 558. Figure 1 shows examples of different words abbreviated by writing the final letter or letters of a word in superscript to denote that there are letters missing from the middle of the word.

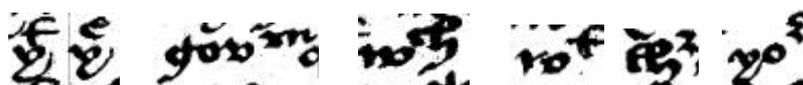


Figure 1. Superscript abbreviations. *th(at) th(e)* (f. 2v, l. 20); *gov(ern)* (f. 3v, l. 7); *w(hich)* (f. 7v, l. 27); *w(ith)* (f. 9v, l. 28); *th(er)* (f. 7r, l. 3); *yo(ur)* (f. 1r, l. 37) (Beinecke Rare Book and Manuscript Library, Yale University).

There are instances of a *p* with a stroke through the descender, standing for *per*, and a *p* with a curvy extension of the bowl continuing through the descender, standing for *pro*. A *p* with an s-shaped curve on top stands for *pri*. Examples of these abbreviations can be found in figure 2.

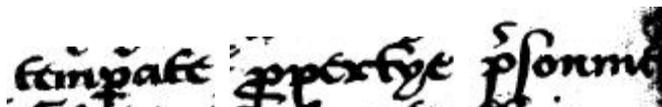


Figure 2. Abbreviations for *per*, *pro* and *pri* in *temp(er)ate*, (f. 7r, l. 9); *p(ro)pertye* (f. 19r, l. 15); *p(ri)sonme[nt]* (f. 20v, l. 17) (Beinecke Rare Book and Manuscript Library, Yale University).

An *e* with a long tail, usually extending below the line, is often used for *-es* in word-final position, as in *beaste(s)* (f. 7r, l. 22), shown in figure 3.

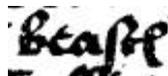


Figure 3. Abbreviation for *-es* in *beaste(s)* (f. 7r, l. 22) (Beinecke Rare Book and Manuscript Library, Yale University).

The nasals *n* and *m* can be represented by a macron – either a horizontal or a curved line – over a vowel, as can be seen in figure 4.



Figure 4. Abbreviations for nasals in *co(m)myng* (f. 1v, l. 15); *com(m)on* (f. 10r, l. 4); *Im(m)ovable* (f. 1r, l. 5); *servau(n)t* (f. 19r, l. 28) (Beinecke Rare Book and Manuscript Library, Yale University).

The word *and* is often written as the Latin symbol *&* (*et*). The symbol is also used in the abbreviation for *et cetera*. The shape of the symbol depends on the script used – the version used in the body of text is more rounded than that found in the rubrics. Both forms can be seen in figure 5.

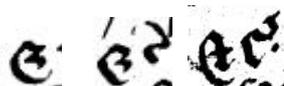


Figure 5. Abbreviations for *et/and* (f. 1r, l. 14) and *et cetera* in secretary and textualis (f. 5r, 21; f. 11r, l. 26) (Beinecke Rare Book and Manuscript Library, Yale University).

The syllable *ser* is sometimes abbreviated as a long *s* with an additional curve, as seen in figure 6.



Figure 6. Abbreviation for *ser* in *s(er)uice* (f. 7v, l. 24) (Beinecke Rare Book and Manuscript Library, Yale University).

The superscript symbol reminiscent of the number 9 is used for *us* for example in the title on f. 1, l. 1. In the same title, the Latin word ending *-(r)um* is abbreviated. These abbreviations can be seen in figure 7.



Figure 7. Abbreviation for *-us* in *amic(us)* and for *-rum* in *medicor(um)* (f. 1v, l. 1) (Beinecke Rare Book and Manuscript Library, Yale University).

The abbreviation for the phrase *anno domini*, as seen in figure 8, can be found for example in the nativities on f. 42r.



Figure 8. Abbreviation for *a(nno) d(omini)* (f. 42r, ll. 2-3) (Beinecke Rare Book and Manuscript Library, Yale University).

There are some abbreviations related to money and arithmetics on ff. 43v-45r. However, as the use of these types of abbreviation is restricted and they do not occur in the edited texts, I will not discuss them in this thesis.

Punctuation

Analysing the punctuation of the whole manuscript might be interesting, as the scribes of Beinecke 558 use a wide selection of punctuation marks. The main scribe of the

manuscript often ends stretches of text with a symbol consisting of three dots and a small flourish, shown in figure 9. This symbol can be called a *positura* (Parkes 1992: 306).



Figure 9. An example of a *positura* (f. 2v, l. 35) (Beinecke Rare Book and Manuscript Library, Yale University).

The *positura* often occurs together with *virgula* – a symbol similar to the modern forward slash – in line-fillers in the end of a paragraph. The *virgula* and *positura* are written in black ink for example on f. 4v, l. 17, but the line-filler shown in figure 10, on the same leaf, is in red ink.



Figure 10. A line-filler in red ink (f. 4v, l. 31) (Beinecke Rare Book and Manuscript Library, Yale University).

Furthermore, a combination of *virgula* strokes and the symbols shown in figures 9 and 10, all in black ink, is used as a line-filler on f. 2v, l. 35. Finally, f. 4v, l. 16 is an example of a *virgula* used as a punctuation mark. A version of the *paragrophus* symbol, shown in figure 11, is used on f. 1v to separate sections of text. However, it cannot be seen on the microfilm whether the *paragrophus* is in black or red ink. On 1v, there are also examples of both a comma and a *paragrophus* in the same slot, as can be seen in figure 11. Interestingly, the *paragrophus* is only used in some of the texts written in the main hand, which might be due to the exemplars used. However, the punctuation patterns might reveal new information on the production and collation of the manuscript.



Figure 11. Examples of a *paragraphus* symbol (f. 1v, l. 15 and l. 39) (Beinecke Rare Book and Manuscript Library, Yale University).

A *double punctus*, or colon, is used to mark textual division for example on f. 4v, ll. 25-26. However, it seems to be used as an abbreviation symbol in the title on f. 8r, l. 1 *pla(net)*. The main hand often uses a comma for separating short phrases and words in sentences, as can be seen for example on f. 1r. According to Parkes, the type of comma used today “first appears with early type faces” (1992: 303). If so, the use of the comma in Beinecke 558 suggests that the scribe was familiar with contemporary printed works; indeed, it might even be taken as evidence for the use of printed exemplars. The *punctus*, or point, is also used by the main scribe. The astrological and astronomical symbols and numerals occur in text between two points, usually placed at mid-height of the row, as seen in figure 12. Such a mid-height point is also known as *media distinctio* (Parkes 1992: 303).



Figure 12. The astrological symbol for *Sun* between two points (f. 4v, l. 16) (Beinecke Rare Book and Manuscript Library, Yale University).

The astrological symbols are in red ink, and it seems that the point before the symbol is often written in black ink, the point after the symbol in red. The points might thus work as placeholders for the symbols, added later in red. However, in some cases both points have been written in the same colour (either black or red). Examples of each case can be

found on f. 4v. In addition, the placement of the points varies; in some instances they are placed on the bottom of the row (see for example f. 4v, l. 17).

The hyphen is often used when a line break occurs in the middle of a word. In Beinecke 558, the hyphen consists of a short, diagonal pair of lines. It resembles a modern equality sign (=), slightly slanted upward. An example of the hyphen can be found for example on f. 1r, l. 4. There are also examples of the use of parentheses, as seen in figure 13.

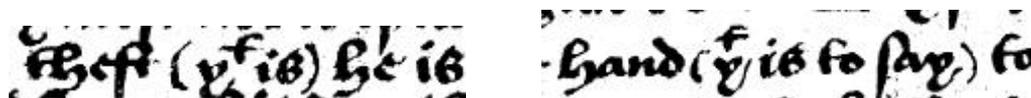


Figure 13. Examples of parentheses (f. 13v, l. 6; f. 21r, l. 5) (Beinecke Rare Book and Manuscript Library, Yale University).

The passage on f. 13v, ll. 5-6 reads: “he is not knowen in theft (that is) he is not suspectyd”. The explanatory “th(at) is” is placed in parentheses. There is another instance of parentheses on the same leaf, l.16, again around “th(at) is”. The latter example in figure 13 shows a similar use of parentheses for an explanatory phrase, “th(at) is to say” (f. 21r, l. 5). According to Parkes (1992: 305), parentheses developed in the late fourteenth century. It is difficult to say whether the use of parentheses in Beinecke 558 is a feature of the exemplar or the punctuation repertoire of the scribe.

Numerals

The main scribe of Beinecke 558 uses Arabic numerals very similar to those in use today, although there is one variant that may confuse the modern reader. Number 4

often occurs in a shape easily recognizable today, but it is also sometimes drawn as a continuous curve with the loop on the top, as on f. 7r, l. 7. Number 7 of the main hand is similar to the present-day form. However, it is interesting to note that in the more cursive hand seen for example in the section on history and geography (ff. 47r-49r) and in many of the tables written in the same cursive hand, 7 is consistently written with the angle of the numeral pointing upwards. Whether the two hands – the main hand and the cursive hand – belong to two different scribes is an interesting question which cannot be answered in this study, as a full analysis and comparison of the letter-forms of the hands would be required. However, both hands are found on the same leaf at least on f. 7r – I will return to this instance in Section 5.1.1.

Corrections

There seem to be very few corrections in Beinecke 558 visible on the microfilm. On f. 1r, l. 26, the text reads “thou mvst ~~the signes~~ number th(e) signes”. It is difficult to determine whether the correction has been made by the hand in which the rest of the text is written, but the width of the strikethrough seems to match the writing on the page. As the cancelled words are repeated in the corrected text after the word “number”, it seems possible that the scribe has first omitted the word “number”, noticing the mistake immediately and correcting it. There is also an example of the use of a caret to indicate an addition. On leaf 46r, l. 28, the text reads “wherby you Judge”. A caret has been inserted after the word “you” below the line, and the word “mai” has been written above the line. The correction seems to be written by the main hand, as is the text in question.

It is difficult to find traces of erasure without direct access to the original manuscript. However, there is one such example on f. 4v, l. 12. The manuscript reads “In ffiry sygnes”, but there is a wide space between *In* and *f*. In addition, the *i* is rather thick and unclear. It seems that the letter was originally an *e*, turned into an *i* later. Indeed, an examination of the digital image of the page seems to show a pale *w* in the space between *In* and *f*. The *n* of *In* also has an additional flourish, probably inserted in order to fill the space. This evidence would suggest that the scribe originally wrote *watery*, and later changed it into *ffiry* – the beginning of the word was erased and the *e* of *watery* converted into the *i* of *ffiry*. This correction is made by the main hand.

Some unclear letters or letters with redundant strokes can be found in the manuscript; this could be the result of scribal self-correction. Overall, very little evidence of correction seems to be visible at least on the microfilm copy of the manuscript. A further analysis of the manuscript might reveal whether there indeed are few corrections in the main hand of Beinecke 558, and if so, whether this could be taken as a sign of scribal proficiency. If some of the texts were indeed available in Gemini's shop as manuscript copies, it might be the case that copies with a number of scribal errors would not have been sold at all.

4.3. Editorial principles

When editing the sample texts from Beinecke 558, my aim is to provide an accurate representation of the texts by reproducing the essential content of each text. The lineation of the texts has been preserved. The numbers in the margin refer to the line numbers of the text being edited. When a text occurs in the bottom of a leaf, the lines above it have not been taken into account in the lineation of the edition. The original

punctuation of the manuscript has been followed as closely as possible; however, points are reproduced as periods regardless of their position in relation to the line-height. There are various types of line-fillers in the manuscript, as seen in Section 4.2. above. They are represented by the symbol /-/. I have expanded all abbreviations in my edition. If a word occurs in Beinecke 558 in its unabbreviated form, I have used that form for the expanded abbreviation in the edited text. All the expanded abbreviations are placed in parentheses in order to make editorial alterations transparent, as in *th(e)*. The definite article often appears as *y^e*; however, the same abbreviation is in some instances used for *thee*. These are edited respectively as *th(e)* and *th(ee)*. The double / with a strikethrough, ~~/~~, is not treated as an abbreviation in my edition. However, it should be noted that these instances might be interpreted as either *//* or *//(e)*.

I have made an attempt at reproducing the capitalization of the original, but in some occasions it is very difficult to decide whether a word should be capitalized or not. The capitalization does not affect the content of my edition, but if the reader is interested in the capitalization patterns of Beinecke 558, it is essential to access the original manuscript or a digital reproduction of it. I have used bold type for text and symbols written in red ink. As mentioned in 4.2., the headings in Beinecke 558 are often in Gothic textualis quadrata script; however, I will not distinguish between the scripts in the edited texts. I have retained the original word divisions. Some line breaks occur in the middle of a word; in these cases, my edition follows the hyphenation in the manuscript. Hyphens are reproduced as modern hyphens.

Most instances of the names of planets, zodiac signs and aspects in the manuscript are not words but symbols. A list of these symbols is given in Appendix 1. In the edited texts, the symbols have been treated as special forms of abbreviation. I have placed the

transcription of a symbol in curly brackets. For instance, when the crescent-shaped symbol of the moon appears in the manuscript, I have transcribed it as {Moon}. Unclear, illegible characters are marked with an asterisk. An attempt is made to provide roughly as many asterisks as there are illegible characters, for example *weth***. Suggested, conjectural readings have been placed in angle brackets, as in *weth<er>*. Square brackets are used for editorial comments, for example [*smudge*].

5. Types of prognostic texts in MS Beinecke 558

An edition of all the prognostic texts in Beinecke 558 is out of the scope of this thesis, as there is a number of prognostic items in the manuscript. In addition, very little earlier research exists on the manuscript and its source texts. As stated above, my focus is on the prognostic texts, which I have placed into six categories introduced in 4.1. In this chapter, I shall discuss the categories in more detail. Sections 5.1.-5.5. deal with the first five categories of my model, and I shall produce an edited example of the categories in the subsection of each section. Section 5.6. is reserved for discussing the sixth category, *Other types of prognostic texts*.

Some of the items discussed in this chapter may seem more clearly prognostic than others, in the sense that some texts are used in actually predicting the future, for instance whether a sick man shall live or die, whereas other texts guide the user's actions based on what can be known beforehand, for example what is the best time to go on a journey. The latter texts in a way empower the users by giving them the possibility to affect the future through choosing a proper time for their actions. The first type resembles Means' questionaries, the second type is close to her electionaries. Means

includes both types in her discussion of prognostic material, and I will also discuss both types in my study.

In the quotations from Beinecke 558 included in the following six main sections (5.1.-5.6.), abbreviations have been silently expanded, excluding the names of astrological symbols which remain in curly brackets to distinguish the editorial, modern spellings from the body of text. Titles of texts are editorial, matching the list of manuscript contents in Section 3.1.2. above (for a more accurate representation of the titles, see Appendix 2). In some cases, I have inserted editorial clarifications in square brackets. This procedure differs somewhat from the editorial principles discussed in Section 4.3., as my purpose in 5.1.-5.6. below is to introduce a number of texts briefly, and I believe it is best done after a simple fashion, with as few distractions for the reader as possible. The emphasis here is on the content, not the form and layout of the texts. However, the first five sections contain a subsection (5.1.1.-5.5.1.) with an edited sample text representing the category. These texts have been edited in more detail, according to the editorial principles introduced in Chapter 4.

5.1. Lunar prognostications

To start with prognostications related to the position of the moon, there is a *mansion lunary* in Beinecke 558, on leaf 7r. The lunary consists of short, mostly one-line entries in numerical order from the first to the 28th mansion of the moon. It runs from Aries to Pisces, which is typical of lunaries (Means 1992: 380); however, the 28th mansion is in Aries again. The entries give the location of the mansion in relation to the zodiac signs, the nature of the mansion (dry, moist, cold or temperate) and advice on the actions one should take when the moon is in a certain mansion. An example entry reads: "The .5.

[mansion] is in .10. [de]gre of .{Gemini}. dry. good to marry, to go to scole, & medicins". The title of the item in Beinecke 558 suggests that the lunary has been taken from "Stofler" – Johannes Stöffler (1452-1531), a German mathematician, astrologer and astronomer. This text is edited and discussed in more detail below in 5.1.1.

The mansion lunary is preceded by various notes related to the position of the moon. On f. 6v, there are two items, titled *Things to be observed by the course of moon* and *Of bloodletting*. The first text contains references to Ptolemy and Pliny. It is apparently taken from Humphrey Lloyd (1527-1568): the text ends "thus Saieth humfrey Loyde" (f. 6v, l. 27). Humphrey Lloyd (or Llwyd) was a Welsh author, antiquary, physician and Member of Parliament (*Welsh Biography Online*). One of his published works is titled *An Almanack and Kalender containing the Day, Hour, and Minute of the Change of the Moon for ever* (*Welsh Biography Online*). The exact date of publication is not known, but nineteenth-century sources suggest that this may have been his first work, the second one having been published in 1551 (Parry 1834: 301; Williams 1836: 182-183). To the best of my knowledge, the *Almanack* is not available in digitized format; however, judging by the title of the work and the implied date of publication (1551 or before), it may well be the source for the Lloyd extracts in Beinecke 558.

The text in Beinecke 558, *Things to be observed*, considers the increasing and decreasing of the moon and the (mostly agricultural) activities appropriate during a full, increasing and decreasing moon, for example: "all thinges that you wold to encrease as planting, graffing, sowing of corne with such other thinges are better in the increase of {Moon}" (f. 6v, ll. 15-17). There is some empty space on the page before the second item, a short note on bloodletting. The note begins: "These signes are most daungerous for bloudlettyng the mone being in them" (f. 6v, ll. 29-30). According to the text, the age of

the moon and the age of man are parallel – for example “from the change to the first quarter” of the moon is the proper time “to let yong men bloud” (f. 6v, ll. 32-33). Thus the system of ‘fours’, described in Section 2.1.2., shows here: the first phase of the moon is connected to youth, whereas the following three phases are suitable respectively for “myddle age”, “aged folk” and “olde men” (f. 6v, ll. 34-36).

Both these texts are related to Means’ electionaries, as they give suitable times for various actions. The moon is the focus of the prognostications here, so the texts could also be classified as lunaries. However, the information is not constructed in the mansion, day or sign lunary form. Perhaps it would be fair to quote Means and state that these texts “depend upon lunar prognostic principles” (1992: 384) while not matching Taavitsainen’s lunary categories as such. One way of categorizing these texts is to treat them as simplified and generalised versions of agricultural and bloodletting lunaries. It should be noted here that the manuscript also contains weather prognostications based on the position of the moon. These will be discussed in Section 5.5. below.

On f. 78v, there is a text titled *Dolours or sickness, moon in signes*. This text describes the types of sickness based on the relationship of the moon to the signs. For example, when the moon is in Libra, it causes “Sycknes in the raynes as the stone / or rather in the bladder as the white stone / & bleding in membres” (f. 78v). This text could perhaps be labelled a medical lunary. It is declarative rather than instructional, but it could probably be used for prognostic or diagnostic purposes. Another lunary, *To those good times for to give medicines*, is found on f. 83r. It resembles an electionary in that it gives instructions on the best times to take various types of medicines – for instance, it is good to “enter a bathe .{Moon}. being in .{Cancer}. {Scorpio}. or .{Pisces}.”. However, towards the end of the text the contents become more general, giving advice on when to “set, sowe,

plant, or graffe” and when to “set chylidren to scole”. Thus this text could be seen as a hybrid between a medical and a general lunary. A similar text, organized by the zodiac signs from Aries to Pisces, is found on f. 79r. It is titled *For beginning of works, moon being in s[igns]*. It combines medical and general advice. For example, the entry for the moon in Aries states that it is good to “speke to kinges & great men, & to be let bloude of the armys, yt ys indiferent to take medycines, but yt ys evill to cure the head” (f. 79r).

Finally, there is a text in Beinecke 558 which could well be placed in both this category and the next, as it could be classified as a lunary or an electionary. The text is *For beginning of works the moon aspecting the planets* on f. 7v. I have decided to place this text in the lunar prognostications section, as each entry in the text is dependent on the position of the moon. As the title suggests, the text gives advice on suitable times for actions on the basis of the position of the moon in relation to the other planets. These relationships between planets are known as *aspects*. They are named according to the angle the planets form with each other. The main aspects are *conjunction* (0°), *sextile* (60°), *quartile* or *square* (90°), *trine* (120°) and *opposition* (180°). These terms are used in several texts in Beinecke 558, and there is a figure illustrating the aspects with an explanatory text on f. 21r. As the planets and zodiac signs, the aspects occasionally occur in the manuscript as whole words, but are more commonly found as symbols (shown in Appendix 1). The same symbols are used in other manuscripts and contemporary printed books (see for example Page 2002: 23-25; Digges 1555: B4r-C1v).

The first entry of *For beginning of workes* (f. 7v) is titled “{Moon} & {Saturn}”, and it reads:

Whan saturne & the mone is conioyned together it ys evill to begyn any good worke or thing. Whan ther is a {Sextile} or {Trine} aspect betwixt {Moon} & {Saturn} then is good to meddle with rulers of a towne, or husbandmen & old men, to eare & sowe, to plant, & to build houses. Whan ther is an {Opposition} or {Quartile} aspect betwixt {Moon} & {Saturn} yt is very ill to medle with old men, or women, or to begin any new worke, to hire servauntes, or to take Journeys.

(f. 7v, ll. 3-10)

Similar entries of the moon's aspects with Jupiter, Mars, Sun, Venus and Mercury follow. As can be seen from the example above, this text resembles Means' electionary category – it lists suitable actions for the aspects between moon and the other planets. Nevertheless, as the moon has such a central role in this text, I have placed it here in the lunar prognostications category, following Means' principles of categorization (1992: 376). The other side of the same leaf, f. 7, contains a clear example of a mansion lunary, edited below in 5.1.1.

5.1.1. Stöffler's judgement upon the 28 mansions of the moon

(f. 7r)

- 1 Stoflers Judgement upon th(e) .28. mansions of th(e) mone /-/
- 2 The first mansyon of .{Moon}. beginneth in th(e) .9. degree, & .26.
minute
- 3 of .{Aries}. whose nature is temperate, & wha(n) .{Moon}. is th(er), it is
good
- 4 to take a iourney, & medicine, but it is evill to take a prentyse /-/
- 5 The .2. is in .2. gre of .{Taurus}. dry, good to iourney by wat(er) & bie
tame beste(s)/-/

- 6 The .3. is in .15. gre of .{Taurus}. moist, good to bie, euill to make frindship.
- 7 The .4. is in .28. gre of .{Taurus}. cold good to sowe sedes, & evill to marry
- 8 The .5. is in .10. gre of .{Gemini}. dry, good to marry, to go to scole, & medicins
- 9 The .6. is in .23. gre of .{Gemini}. temp(er)ate good to go to warre, ill for goodn(ess)
- 10 The .7. beginneth in th(e) .6. degre of .{Cancer}. moist of nature, yt is good to eare, sowe & put on new clothes, it is ill to Journey /-/
11
- 12 The .8. is in .19. gre of .{Cancer}. misty, cloudy. & temperate, good to take medicines, to cloth th(ee) new, & to take a Journey by wat(er)
13
- 14 The .9. is in .2. gre of .{Leo}. dry, good to borow or lende whete /-/
15
- 16 The .10. is in .15. gre of .{Leo}. moist, good to go a woing, il to Journey.
17
- 18 The .11. is in .28. gre of .{Leo} temp(er)ate good to sowe and plante /-/
19
- 20 The .12. is in .10. gre of .{Virgo}. moist, good to build, marry, eare & sowe /-/
21
- 22 The .13. is in .23. gre of .{Virgo}. temp(er)ate good to marry, & Journey /-/
23
- 24 The .14. is in .6. gre of .{Libra}. temp(er)ate, good for medicins & to plante /-/
25
- 26 The .15. is in .19. gre of .{Libra}. moist, ill to Journey, good to dytche /-/
27
- 28 The .16. is in .2. gre of .{Scorpio}. moist, it is good to do no good thing /-/
29

22 The .17. is in .15. gre of .{Scorpio}. moist, good to put beaste(s) to
pasture /-/
23 The .18. is in .28. gre of .{Scorpio}. dry, good to take a(n) office & bye
londe(s)
24 The .19. is in .10. gre of .{Sagittarius}. moist, yt is evil to enter a Shippe
25 The .20. is in .23. gre of .{Sagittarius}. moist, yt is good to Bie beastes
/-/
26 The .21. is in .6. gre of .{Capricorn}. temperate, good to sowe lond, &
build.
27 The .22. is in th(e) .19. degre of .{Capricorn}. moist of nature, it is good
to
28 take medicine, to Journey, to clothe th(ee) new, & evill to marry
29 The .23. is in th(e) .2. degre of .{Aquarius}. temperate, it is good to take
30 medicines, & Journeis, & it is evill to lay ony wagers /-/
31 The .24. is in .15. of .{Aquarius}. temp(er)ate, fortunate, good for
medicins
32 The .25. is in .28. gre of .{Aquarius}. dry, good to Journey southward.
33 The .26. is in .10. gre of .{Pisces}. dry, it is ill to begin any thinge /-/
34 The .27. is in .23. gre of .{Pisces}. moist, good to bie & sell, sowe &
mary /-/
35 The .28. is in .6. gre of .{Aries}. temp(er)ate, & like to the .27. mansion
/-/
36 And if thou wilt go spedely in thy Journey or oth(er) busines
37 set forth in the houre of .{Moon}. whan she is in a good man-
38 shion off these signes .{Cancer}. {Taurus}. {Pisces}. or .{Sagittarius}.
& let her be fre from

39 <i>nfortune, & in a good aspect, to a good planet, then is good
40 to do any thing, ffor th(e) mone sygnifieth th(e) messenger /-/-

As can be seen from the edited text above, the language of the lunary is highly formulaic. The main body of text consists of short entries for the mansions from the first to the 28th. Numerals and planets are written as symbols, not whole words, which reduces the amount of space needed for the text. In addition to the text presented here, the symbols for zodiac signs are found in the left margin; they match the organization of information in the lunary text. I have not inserted them in my edition, because the placement of the symbols varies: some of them are in the beginning of a line, others between lines. The order of the symbols is a conventional one, beginning from Aries and ending with Pisces, the entry for the 28th mansion being assigned to Aries again. The digital image of this text is available through Beinecke Library *Digital Images and Collections Online* (Image ID 1237690).

The title, "Stoflers Judgement", suggests that this text has been taken from Johannes Stöffler, a German mathematician and astronomer. Indeed, a similar text is found in Stöffler's Latin works *Almanach nova plurimis annis venturis inservientia*, published in Ulm 1499 (11r-v), and the later *Ephemeridum opus ab anno 1532-1551*, published 1531 (C2r-v). *Ephemerides* are works containing tables in which the daily positions of the seven planets are given; the tables could be used when conducting astrological calculations, for example when drawing horoscope figures (Page 2002: 15-16; horoscope figures are discussed below in 5.4.). In Stöffler's two works, the text resembling that in Beinecke 558 is titled *Mansiones lunae*. The text is almost the same in both works, if accidentals are not taken into account. However, there is one case in which the texts are contradictory as to the advice they give. In the earlier version, the entry for the second mansion reads

“non fac iter per aquas” (“do not travel by water”), whereas the 1531 work reads “Fac iter per aquas” (“travel by water”). The latter work agrees with Beinecke 558, which reads “good to iourny by wat(er)”. Therefore, I have decided to use the latter work for comparison with Beinecke 558. In addition, if the approximate dating of Beinecke 558 to the mid-sixteenth century is taken into account, the years treated in the latter work, 1532-1551, were probably of more interest to Thomas Buttler than the years included in Stöffler’s earlier work.

The Latin text is somewhat more detailed than the Beinecke 558 text, but the items are very similar in essence. The Latin text always gives both the degree and minute values of the mansion, whereas the English text in Beinecke 558 only records the minutes for the first mansion. The rest of the mansions are only given the degree value. The formulaic beginning is more varied in the Latin version than in the English one. The English text mostly uses the formula “The X. is in Y. gre of {sign}”, whereas the Latin version utilizes full words and synonyms: “Prima mansio *initium sumit a* 9 gra. 26 minuto {Aries}”, “Secu(n)da mansio *incipit in*”, “Tertia mansio *habet initium a*”, “Quarta mansio *est in*”, “Quinta mansio *incipiatura a*” (Stöffler 1531: C2r; emphasis added). In other words, varied, synonymous phrases such as “has its beginning in”, “begins in” and “is in” are used in the Latin text.

The Latin text also gives the names of the stars related to the mansion, for example “Quarta mansio est in gra. 28 min. 0 {Taurus} *nominata Aldebaran, aut Aldelamen, id est caput tauri*” (Stöffler 1531: C2; emphasis added) – “called Aldebaran, or Aldelamen, that is, bull’s head”. These names of stars and constellations are not present in the Beinecke 558 lunary, although there are tables of fixed stars elsewhere in the manuscript. The quality of the mansion – dry, moist, cold or temperate – is given in both the Latin and

the English text. Most of the activities to be recommended or avoided when the moon is in a certain mansion are the same in both texts. There are, however, some activities mentioned in the Latin text but not in Beinecke 558, and in some instances the wording of the texts differs although the message of the entries is basically the same. For example the Latin entry for the 26th mansion reads: "Nil incipe, quia mala est protecto" (Stöffler 1531: C2v) – "Begin nothing, because you are weakly protected". The English advice reads: "it is ill to begin any thinge". As can be seen, the advice given in the two lunaries is essentially the same.

The title line of this text in Beinecke 558 is interesting from the point of view of manuscript production. There is something written under the textualis heading in faint, greyish script. The writing is so pale that it does not show very well in the microfilm copy of the manuscript but can be seen in the digital image. The handwriting matches the cursive hand found elsewhere in the manuscript, for example in the map of England. As the textualis heading is written on top of the cursive hand, not all the words under the red heading are easily decipherable in the image. In addition, the spellings of the cursive hand tend to be more idiosyncratic than those of the main hand. However, it is possible to see the words "of stofflar for" in the middle of the top of the page. This indicates that the faint script under the heading is related to what is now found on the page – a lunary taken from Stöffler. The title might thus be a preliminary one, written when the page was being prepared for the actual text. The ruling on the page seems to be drawn with a similar shade of grey as that used in the cursive heading. The lunary text is written on the ruled lines, but occasionally runs over the vertical line into the margin.

A close examination of the microfilm copy actually shows traces of such preliminary titles at least on ff. 7r-9r. The appearance of the two scripts on the same page raises an interesting question on the identity of the scribes of Beinecke 558 and the hands in the manuscript. If astrological booklets were indeed copied to be sold in Thomas Gemini's shop or if Beinecke 558 was a commissioned work and the main hand of Beinecke 558 belongs to a professional scribe, whose is the cursive hand in the manuscript? Taking into account the fact that the cursive hand appears on ff. 47v-48r, with the name "Thomas buttlar" written in the same hand in a scroll under the map, one possibility is that the cursive hand belongs to Thomas Buttler himself.

As mentioned, the analysis of the cursive hand is out of the scope of this thesis. A comparison of the hands in Beinecke 558 and Yale Medical Library MS 26 would be a good starting point for an attempt at identifying the scribes of Beinecke 558. On the basis of the lunary on f. 7r and the other texts with preliminary titles, however, it seems possible that there were two scribes involved in the production of some of the texts in Beinecke 558: one preparing the page and the other copying the body of text. In addition, some texts in the manuscript are written in the cursive hand throughout. The layout of these texts tends to be less carefully planned; the leaves do not seem to have been lined, and the spellings are more idiosyncratic than those of the main hand (see for example ff. 52v-61r for evidence). As noted above, the cursive hand also appears in the map of England on ff. 47v-48r, with Thomas Buttler's name in the same hand on the bottom of the page. However, Buttler's name also appears in the main hand, for example on the bottom of f. 4r and in the nativities on f. 42r-v. Whether these two hands belong to two different people or not is an interesting question to be dealt with in the future. It is also uncertain whether one of these hands – in that case, most probably the cursive one – belongs to Thomas Buttler or whether they were written by one or

two professional scribes. What can be established is that there is a hierarchy between the two hands: the texts written in the main hand are clearly the more carefully executed in terms of layout design and calligraphy. This hierarchy is demonstrated in a very concrete manner in the two layers of the title of the lunary edited above.

5.2. Electionary prognostications

Electionary prognostic texts help in choosing the right time for a certain action on the basis of astrological conditions. As mentioned in Section 2.2.1., lunaries and electionaries may be very similar in relation to their contents. Whereas the role of the moon is central in lunaries, electionaries take into account other heavenly bodies as well. The lunary edited in 5.1.1., for instance, resembles an electionary in that it gives advice on when to perform certain activities. However, the selection of time is dependent on the phase of the moon only. Similarly, the lunary text on f. 7v (*For beginning of works*) discussed above in 5.1., resembles an electionary but is dependent on the position of the moon. I have therefore placed it in the section on lunary prognostications, following Means' principles (1992: 376). However, it is worth remembering that such texts could also be placed in the elections category of Thomas and Taavitsainen, whose models do not have a separate category for lunaries (Thomas [1971] 1997: 286-287; Taavitsainen 1988: 34).

Electionary texts deal with themes present in other astrological prognostic text types as well – for example when to go on a journey, when to marry and when to plant seeds. Some texts can be used with very little astronomical and astrological knowledge. An example of the easily accessible end of the scale is *Here folowith the usage of the old philosophers, which day and hour in the week is best to labour diverse causes in* (f. 20v). The text

deals with the weekdays, connecting them to their ruling planets and listing the actions suitable for each day. This text is edited and discussed below in 5.2.1. In fact, it seems to be the only text in Beinecke 558 that fits the category of electionaries as defined by Means.

5.2.1. Here folowith the usage of the old philosophers (f. 20v)

1 Here ffolowith th(e) vsage off
2 the old philosophers, whych day and
3 houre in the weke ys best to labour ff<or>
4 dyvers causes in /-/
5 First the monday that ys of .{Moon}. ys good to labour
6 all maner of viages, & mocyons or removinge(s), and
7 all messages present or absent /-/
8 The tuysday ys of .{Mars}. and that ys for all maner of <co->
9 ntentyons, dyspraysinge(s), contraryetyes, & felde, plees
10 Sorowes & Strifes /-/
11 The wednesday ys .{Mercury}. and that ys good for theft, wri*
12 ing, for Sicknes and ffor all Such workes /-/
13 The thursday ys .{Jupiter}. & that ys for wyunning, merchand<i->
14 se, & religyous thinge(s), & for all coyne & money /-/
15 The fryday ys .{Venus}. and yt ys good for love & for ma<ri->
16 age, & for all such thinge(s) /-/
17 The Saterdag ys .{Saturn}. & yt is for all prisons, or p(ri)sonme<nt>
18 & for dreade of prisoning, & to Suffer other paines /-/
19 The Sondag ys .{Sun}. & that ys for all honour of king<es>

20 & for all that longeth to kinge(s) /-/

21 Moreouer yt ys good that every day in the weke

22 you take a good houre & a good planet of th(e) same day <a->

23 cording to the matter that you labour ffor /-/

The text is written by the main hand in black ink, with paragraph-initial words and astrological symbols in red. There are no traces of pricking or ruling on the page. However, in the end of line 20, there is one word, "Dignitye", written in a later, cursive hand. There are several notes and even some texts in one or more seventeenth-century hands in Beinecke 558; these hands should be carefully analysed in order to establish the relationship between them and the number of hands present in the manuscript. What can be stated on the basis of the handwriting in the glosses is that at least some of the texts in Beinecke 558 were still read and used in the seventeenth century. Another example are the names added in the table of kings and queens of England (f. 49r) already discussed above in Chapter 3.

There are several editorial emendations in the edited text above. This is due to the fact that the manuscript is tightly bound – some of the line endings do not show in the digital image of ff. 20v-21r (*Digital Images & Collections Online*, Image ID 1237691). More text actually shows in the microfilm copy, although some of the line-final letters are lost. I have therefore provided the reader with what is in my opinion the most probable reading of each word.

As the purpose of the text edited above is to inform the reader of suitable times for various actions, it can be labelled as an electionary. In this case, the use of the electionary is relatively simple: the reader only needs be aware of the days of the week.

No minute calculations of astronomical conditions are needed. The comment on ll. 21-23 potentially adds to the level of complexity of the process of prognostication, as it suggests that one should also take into account the hour of action. Some of the other texts in Beinecke 558, for example the astrological tables, could have been used together with this electionary in order to calculate the best possible times for various actions.

As can be seen from the activities included in the electionary, the connections between the planets and the weekdays are not wholly arbitrary but rely on the tradition of connecting certain things to certain planets. For example Tuesday, the day connected to the planet Mars, is related to war, disagreement and sorrow; Mars is also the name of the Roman god of war. Friday, the day of Venus (the planet and the Roman goddess of love) is connected to love and marriage. Similar connections are made in other texts in Beinecke 558 as well. On the scale from popular to academic texts, this electionary may be placed to the popular end if seen in terms of accessibility, that is, the knowledge required to be able to use the text. If the final comment on ll. 21-23 is taken into account, however, the reader may arrive at a more precisely defined prognostication, perhaps with the help of other texts and tables in Beinecke 558.

5.3. Questionary prognostications

Beinecke 558 contains quite a number of texts resembling the questionary category in Means' framework. These texts give instructions for answering specific questions, mostly matters of everyday life. One of the central themes of questionaries in Beinecke 558 is that of life and death. On ff. 1v-3r is a group of texts that can be placed in Means' questionary category. The first one, *Judgement of sickness out of Amicus Medicorum*

(ff. 1v-2r) is a manual for determining the cause and nature of the illness of a person.

The text begins:

First you must consyder the houre & mynute when the patient fallyth syck, or els if you can not knowe that truly, take the lust houre when the messenger movithe the question to the[e] off the syck, then make thy fygure, wherin note that the ascendent & the lorde therof ys assygned to the syck.

(f. 1v, ll. 2-7)

As can be seen from the opening paragraph, in order to determine the cause of sickness of a patient the reader should take into account the time of falling ill and draw a figure on the basis of this information. The text also informs the reader on the significance of the astrological houses and zodiac signs. Interestingly, the word *almuten* – originally from Arabic – is used in the text: “Ffor the declaratyon of thes thinges beforesayd, behold the almvtē of the syck” (f. 1v, ll. 35-36). The first quotations containing this word in *OED* are from the 17th century (*OED Online*, s.v. *almuten*; “The prevailing or ruling planet in the horoscope”), later than Beinecke 558. *Amicus Medicorum*, given as a source in the title, was compiled by Johannes Ganivetus (or Jean Ganivet) already in the fifteenth century and published in print at least in 1496 (*Bibliothèque nationale de France*, French books before 1601, 461.1). The use of the word “almuten” in Beinecke 558 might thus be due to the exemplar.

Judgement of sickness (ff. 1v-2r) is immediately followed by another questionnaire text, titled *Of the tokens of life and death* (f. 2r), which also instructs the user on how to find out whether a person fallen ill will live or die. In addition to the question of life and death, another important theme of the questionnaires in Beinecke 558 is theft. After the two questionnaires dealing with illness, a text titled *To know the thief that hath stolen* (f. 2v) follows. This text is edited and discussed together with other questionnaire texts related to

theft in Beinecke 558 below in 5.3.1. The next text, *To know how thou shalt speed in thy journey* (f. 2v-3r) concentrates on yet another common theme of questionaries, travelling.

Another group of questionnaire texts can be found on ff. 9r-14v. The first title given on top of f. 9r, *Judgements of Massahala and Hala Abenragell*, may be read as referring to the whole group of texts, as a concluding paragraph on f. 14v begins: "And thus endith the judgements of astronomy taken out of Haly Abenragell & Zael". There are three astronomical authorities named – Massahala, Haly Abenragel and Zael. The concluding paragraph also contains a reference to "other notable" authors (f. 14v). The contents of this textual group resemble the contents of the questionaries discussed above, as can be seen from the titles in the list of manuscript contents in Section 3.1.2. The texts are related to issues such as family (marriage, children, relatives, guests), business and property (theft, prisoners, gaining wealth, heritage, servants, domestic animals), life and death (illness, whether someone is alive or not), travelling and news (the location of a person, messages and messengers). The next text on f. 15r seems to be related to the questionaries, as it is titled *To know the form of a house both without and within, according to the signification of the planets, by moving of a question*. In this text, the signification of the heavenly bodies for various types of locations is discussed. For example, the moon signifies "without the house a ryver or a rvnnyng water and wythin [the house] a celler, a pytt, a laver, or a cesterne, or a place wher water is holden & kept" (f. 15r). Below this text there is a figure, accompanied with a text titled *For to find a thing hidden or lost in town or field*. The text explains the procedure of drawing a figure in order to find the lost 'thing':

You mvst note well what planet ys governer of the thing, & in what parte of the hevins the planet ys, & in what sygne, and then make a gret round cyrcle, & devyde yt in 12 partes, & then devide that part that the planet ys in into 4 then cast out 3 & then devyde that parte into other 4 & then cast out other 3 & ye so do, ye shall come to the thing.

(f. 15r)

As the starting point of using this text is the question of where to find a lost piece of property, this text may be included in the questionnaire texts. This is also an example of a practical instructional text, as the reader is given guidance on drawing the circle; the figure next to the text illustrates the prognostic technique. The theme of finding lost property and identifying and catching criminals – thieves and murderers – with the help of astrology is continued in the questionnaire texts on ff. 16v-20r.

It is difficult – and perhaps not very helpful – to distinguish between prognostic texts and texts that are intended to be used as aids for prognostication but are not instructional as such. The texts on ff. 16v-20r can be seen as an example of the fuzziness of the borders between general, astronomical texts and prognostic texts. Whereas some of the texts are clearly instructional, others are more declarative. For example, the text on f. 16v begins by giving instructions: “Zahell Saieth Iff thou findest that the theft be in the house, & thou woldest knowe the place that yt is in, behold th(e) lorde off the .4. house, & the planet that ys ther” (emphasis added). The rest of the text consists of declarative entries organized according to the planets – for instance, the sun as the lord of the fourth house signifies “th(e) cloister of th(e) house, & wher the master sytteth” (f. 16v). These entries are very similar to those in *The signification of the 12 signs of the place of the theft in the fourth house* (ff. 16v-17r), which, however, does not utilize imperative verb forms in the title or in the entries. The entry for Aries, for example, reads:

Aries being in th(e) .4. house sygnifyeth a place ordeynyd for familier beaste(s) in th(e) house as shepe & hogge(s) & other lyke or ther is some ovyn, or some chymney or Some other place for fyer nere vnto that place, and yt ys a sygne of the east.

(f. 16v)

As can be seen from these examples, some of the texts are explicitly instructional, containing imperative verb forms. However, some texts could be said to be implicitly instructional: the practical procedure of prognostication is probably the same, but the 'signification' of the planets or signs is given in declarative form. For the purposes of this thesis, I have decided to include both types of texts in the questionnaire category.

Another questionnaire can be found on f. 46r. This text addresses similar topics as the other questionnaires in Beinecke 558, for example judging whether a piece of news is true or false or determining whom a certain person loves. However, the text also contains instructions for drawing a figure of the astrological conditions in order to answer the question. The instructions are accompanied by an illustration, a representation of the information one should consider when drawing the figure. Practical applications of the model figure – that is, instances of figures drawn to answer specific questions – are not found in the manuscript. However, a similar figure is used for the nativity prognostications discussed below in Section 5.4.

5.3.1. To knowe the thefe that hath stolen (f. 2v)

- 1 To knowe the thefe that hath stolen
- 2 Take good hede to hym that movyd the questyon, ffor
- 3 after hym that movyd th(e) questyon thou mvst be rulyd
- 4 Also thou mvst note whether yt belonge to hym self or

5 no, and if he aske th(e) questyon for hym self then the as-
6 cendent shall sygnifye th(e) querent, & then thou mvst loke
7 after th(e) planet that sygnifieth th(e) thefe, the whych ys
8 comonly the lorde of the .7. house, but take heed yff it
9 be thy father, brother, or Syster, sonne, servau(n)t, or wife
10 thou mvst take .7. from th(e) Signes that long to the, &
11 yf thou fynde the lorde of the .7. house in th(e) ascendent
12 then put no doubt but call hym the thefe, & yf thou fi-
13 ndest not th(e) lord of the .7 house in the ascendent, loke if
14 ther be any other ther, & yff ther be having no rule nor
15 power, then call hym the thefe, & if thou fynde not th(e) lor-
16 de of the .7. house nor none other in the ascendent, then
17 loke in the .7. house & call hym the thefe, & yf ther be
18 none loke in the .4. house, & yff ther be none take th(e) lo-
19 rde of th(e) houre, & call hym the thefe, & after hym Iudge
20 & yf it happen, th(at) th(e) lorde of the houre be lord of the
21 .7. house, then yt ys th(e) more true, but whether it be
22 or not yt ys sure, than when thou hast founde th(e) sygni-
23 ficatour of the thefe, & vnderstandest his disposytyon
24 by the dysposytyon of the planet, than mvst thou vn-
25 derstand that th(e) lorde of the ascendent ys th(e) sygnificato(ur)
26 of the questyon, and if that you se that the lorde off
27 the ascendent drawith to the lorde off the .7. house or to
28 the lorde of the houre then yt sygnyfyeth the thefe sha-
29 lbe taken anone after, and yf .{Moon}. be in the fyrst ho-
30 use, or in a .{Trine}. tryne aspect with the lorde off the

31 fyrst house, thou findest the thefe, and yff .{Sun}. be in a
32 .{Trine}. aspect wyth .{Moon}. or if .{Moon}. be in a .{Trine}. with
. {Sun}. thou fi-
33 ndest th(e) thefe, and if thou wylt knowe which way the
34 thefe ys gone loke in what place .{Moon}. is in, & to that
35 quarter the thefe drawyth /-/

As the title of the text suggests, the function of this text is to help the reader determine the identity of a thief. It is clearly instructional, using imperative verb forms such as ‘take’ and ‘look’. By studying the astronomical conditions at a given moment and possibly drawing a figure with the positions of the heavenly bodies recorded in it, the reader may gain information on a theft. As the text is designed to help provide an answer to a specific question, it can be called a questionnaire. The leaf shows faint traces of pricking and ruling; the body of the text is again written in black ink with the title, first word of the body of the text and astrological symbols in red. On the basis of the digital image (*Digital Images & Collections Online*, Image ID 1237688), it seems that the text is written on paper.

There is a note by a later, cursive hand in the left margin of the page, placed approximately on ll. 20-21. The note reads “Lilly pag[e] 331”, and it is possibly written by the same hand that glossed the text edited in Section 5.2.1. above. The note is a reference to *Christian Astrology* (1647), written by William Lilly, a seventeenth-century English astrologer. Page 331 of Lilly, referred to in the manuscript, contains information on the same topic – that of theft (Lilly [1647] 1659: 331). The part of the work in which the text appears is called *The Resolution of all manner of Questions*. As the title suggests, the section contains questionnaire material. Theft is discussed in Chapter L of the work, titled

Of Servants fled, Beasts strayed, and things lost (Lilly [1647] 1659: 319). The questions on theft on page 331 are titled *Of the Significator of the Thief, The Significator of the thing stolen* and *Of thefts* (Lilly [1647] 1659: 330-366). The reference to Lilly's work in the margin of Beinecke 558 suggests that the text was still read in the seventeenth century or later – probably together with Lilly's work, both texts being questionnaires addressing the topic of theft. More references to Lilly, with page numbers, can be found in the margins of ff. 9r, 11r-v and 12r.

There are several questionnaire texts in Beinecke 558 similar to the one edited above. Among the questionnaires, there is a number of texts addressing the topic of theft and lost property, including *Of the thief and of theft* (ff. 12r-12v), *Whether a thing stolen be one or more* (f. 12v), *Whether the thief be a stranger or no* (ff. 13r-13v), *For to find a thing hidden or lost in town or field* (f. 15r), *To know in what place the thing is in that is missed, and where it resteth* (f. 16v), *Whether the thief be of the house or no* (f. 17v), *If the thing be in the house* (f. 18r), *If the thing be out of the house* (f. 18r), *If a thief or murderer shall be found* (f. 18r), *If thou wilt know what the theft is that is taken or stolen away* (f. 18r). Theft, apart from being a common topic for questionnaires, is also relevant from the point of view of Thomas Buttler's profession. As Buttler was a merchant, property was probably of special importance to him. This might partially explain the copying of prognostic texts related to theft in Beinecke 558.

5.4. Nativity prognostications

The most easily categorizable nativity prognostications in Beinecke 558 are the four nativity figures drawn for the Buttler family members, found on f. 42r-v. Each figure is accompanied by a short text, containing the exact time and date of birth of the person in question together with information on the astrological conditions at that time. The

basic construction of the nativity or horoscope figures in Beinecke 558 is a conventional one also found in medieval astrological manuscripts (Means 1992: 387; Page 2002: 32), though other types also exist (see for example Page 2002: 11, 60). The figure used in Beinecke 558 consists of a smaller square inside a bigger one, with the space in between the squares divided into 12 triangles representing the 12 astrological houses. Similar figures may also be used in questionnaires and electionaries (Page 2002: 35). As noted above in 5.3., the questionnaire on f. 46r of Beinecke 558 contains instructions on drawing a similar figure in order to answer a certain question; the explanation is supplemented by an illustration. In the nativities on f. 42r-v, the astrological conditions have been marked on the figures with numerals and symbols, using black and red ink. One of the nativities on f. 42r-v, that of Thomas Buttler himself, is edited below in 5.4.1.

A later nativity, with a similar horoscope figure, is found on f. 66v. The center square of the figure reads "July 22 1612", and the handwriting seems to fit the period suggested by the date. In addition, the nativity has a note reading "I take th(e) signs by Hoptons Concordance". According to John Hutchinson (2003 [1902]: 125), Arthur Hopton was a mathematician, whose work *A Concordance of Years, or an Exact Computation of Time* was published 1612 – the very year recorded in the nativity figure itself. According to *Early English Books Online*, the 1612 *Concordance* (STC 13778) was reprinted at least in 1615 (STC 13779) and 1616 (STC 13780), and with additions by John Penkethman in 1635 (STC 13781). On the basis of this information and the date in the figure itself, I suggest 1612 is the *terminus post quem*, the earliest possible date of writing for this entry.

The overall appearance of the 1612 nativity is different from the Buttler family horoscopes: the figure seems to be drawn less carefully, and the writing on the page is

highly cursive. The layout and content also differ from the earlier nativities. In the figure itself, the astrological conditions are marked with the appropriate symbols as in the Buttler family nativities. However, the text accompanying the nativity seems to include an explanation of the influences of those conditions. As the explanatory text comments on marriage, the nativity seems to be a personal one, as opposed to horoscopes of places or astronomical events – such as eclipses – which were also drawn during the period (Page 2002: 17, 33).

A different nativity type can be found on ff. 56r-v. This text, *For fixed stars in the 12 signs*, is organized according to the zodiac signs from Aries to Pisces. The entry for Leo reads:

[O]nthar 22 gre rys a star natvr of {Jupiter} & {Mars} thay sshavlb in hey favar [high fever] & aftr thay shavlbe pot down & be in th(e) dangar of thoor lyves & he shavll remov toward th(e) sovth at 33 ovld in yers
(f. 56v)

This text is written by the cursive hand discussed above in Chapter 4. As can be seen, the spellings of the text are more idiosyncratic than those of the main hand. A similar nativity, this time by the main hand, can be found on ff. 75r-76r. As the previous text, this nativity is organized according to the zodiac signs (written in the left margin). The entry for Taurus reads:

Syck at .7.13.17.32.53. remove at .22. to .{Mars}. & .{Moon}. south hurt in the head, sicknes in the throte, hurt w(ith) water or fyer, travaile in youth .2. wyves, he shalbe prisonyd, & find treas(ure), he shall overcome his enemyes thrise happy in horses, hounde(s), m(er)chandise, & to go to the sea.
(f. 75r)

In both these texts, it seems that the future is predicted on the basis of the astrological conditions on the day of birth of a person. However, the method of prognostication is

not very clear from the texts themselves. The texts are highly formulaic and follow the conventional structure of organizing the information according to the zodiac signs from Aries to Pisces.

5.4.1. The nativity of Thomas Buttler (f. 42r)

1 Thomas stalon
2 was borne A(nno)
3 d(o)m(ini) .1500. th(e) 30
4 day of January
5 being Thursday
6 at .12. of th(e) clo-
7 ck in th(e) nyghte,
8 .19. prime, & d
9 & .e. dominicall
10 letters, & that d-
11 ay was ther a
12 .{Quartile}. betwene .{Moon}. &
13 {Saturn}. th(e) first houre,
14 a .{Conjunction}. betwene .{Sun}.
15 & .{Moon}. th(e) .6. hou-
16 re, & a .{Conjunction} betw-
17 ene .{Moon}. and .{Venus}.
18 the .19. houre.

The text edited above (*Digital Images & Collections Online*, Image ID 1237692) is placed next to a nativity figure, a square with a smaller central square, the space between the squares divided into twelve triangles. Two of the triangles have been further divided by a horizontal line. The central square reads “{Venus}. or .{Mercury}. dominus horae”. The figure and the text fill the upper part of f. 42r; the lower part contains a similar nativity for Thomas Buttler’s son, Jhon [John]. Similar horoscopes for Thomas (the Younger) and Ales Buttler can be found on the verso of f. 42.

The nativities have been written in the main hand. This is interesting in the light of Birkholz’s suggestion that this hand belongs to a professional scribe (2003: 36) – although other texts in Beinecke 558 might have been copied and sold as booklets in Gemini’s shop, the nativities are of such a personal nature that they must have been specifically commissioned by Buttler. It is, of course, possible that sheets were prepared beforehand by ruling the page and drawing an empty horoscope figure to be filled later with the information of the customers.

The dates in the nativities can be compared to the short family chronicle on f. 63v. The nativity of Thomas Buttler the Elder records January 30, 1500 as his birthday. It also notes that it was a Thursday, and Buttler was born at twelve o’clock at night. The family chronicle on f. 63v, read beginning from the bottom line, begins: “I was born 31 day of Jan(uar)y & thorsday at 12 at nytt th(e) {Sun} in {Aquarius} th(e) {Moon} [in] {Aquarius} 1500”. According to a perpetual calendar, 30th January 1500 was a Thursday. The difference in the dates can probably be explained by the fact that Buttler was born “at 12 at nytt”, that is, midnight.

The family chronicle states that the *dominical letter* for the year 1500 is E, whereas the nativity gives both D and E as dominical letters. Dominical letters, used in calendrical calculations, run from A to G, and each year is assigned a dominical letter on the basis of the date of the first Sunday of the year. The first Sunday of the year was January 5th, the dominical letter for which is E, as E is the fifth letter of the alphabet. However, 1500 was a leap year and as such it could be assigned two dominical letters. Thus the entry in the nativity, providing two letters, is more detailed than the one in the family chronicle. The family chronicle on f. 63v also lists the birthdays of the children – John (13 November, 1524, Sunday), Thomas (30 January, 1528, Thursday) and Alice (26 August, 1532, Monday). The nativities of the children, on f. 42, agree with the chronicle. Also the hours of birth of the children are the same in both entries.

The family chronicle is written in a more cursive script and less carefully than the main body of texts – including the nativities – in Beinecke 558. As the family chronicle on f. 63v begins “I was born”, it might be assumed that the ‘narrator’ here is Thomas Buttler himself. However, there are some comments in the main hand including Buttler’s name – for example “And yet all Shalbe done that god wyll haue done Sayth Buttler” (f. 5r). These notes are especially interesting if it is assumed that the main hand belongs to a professional scribe, as they would then seem to suggest that the scribe has taken into account the intended audience of the copy. This in turn would mean that not only the nativities but also some of the other texts in Beinecke 558 were commissioned by Buttler instead of being bought as ready-made booklets – or at the very least, that ready-made copies were supplemented with notes suitable for a specific audience.

There are some interesting differences in spelling between the family chronicle and the nativities. For example, Buttler’s nativity reads “dominical letters” (f. 42r), whereas the

family chronicle seems to read “dommnykavlletr” (f. 63v). The spellings in the cursive script, in this entry and elsewhere in Beinecke 558, seem to be generally more idiosyncratic than those in the main hand of the manuscript. This supports the suggestion that the two hands belong to two different scribes. In order to further trace the patterns of textual transmission of the texts in Beinecke 558 and the provenance of the manuscript, it would be worth studying whether the cursive hand appears in Yale Medical Library MSS 26 and 45.

5.5. Weather prognostications

There is a number of weather prognostications in Beinecke 558. However, there are also several notes on ff. 4r-5r concerning the tides, eclipses and comets which are related to weather in the broad, historical sense of the word. Weather prognostications, my focus in this section, can be seen as a subcategory of not only prognostications but also astrometeorological texts, astrological texts related to weather. This, again, shows that the boundaries of the categories of astrological texts are fuzzy.

The first items in the group on ff. 4-5 are not really prognostic but rather descriptive. The texts *Of eclipses* and *Signification of comets* on f. 4v may be labelled prognostic. They include information on the events foreshadowed by eclipses and comets, such as death, war and earthquakes. The eclipse text refers to Humphrey Lloyd (“saith humfrey Loyde”, f. 4v, l. 13), whereas the comet text is apparently taken from Digges (“sayth leonard digges”, f. 4v, l. 22). These two items are followed by a text titled *Of weather after Humphrey Lloyd* (f. 4v, ll. 23-31), in which the weather is predicted according to the position of the moon in relation to the zodiac signs. The description is followed by a

note on when one should buy things. The bottom line of f. 4v is a religious note discussed in Section 3.2.2. above.

F. 5r contains two weather-related items. The first text is titled *Judgement of weather by Digges*. It resembles *Of weather after Humphrey Lloyd* on f. 4v, but it is somewhat longer and more elaborate. There is some empty space after the first item; the bottom of the page is taken up by *How weather is known after the change of moon by the prime days*. This prognostication is simple and resembles a mnemonic. It is edited and discussed in more detail in Section 5.5.1 below.

There is a weather prognostication text on f. 84v as well – *The judgement of Humphrey Lloyd for weather*. Interestingly, it seems to be similar to the short note from Lloyd on f. 4v, although the wording differs somewhat. The text on f. 4v begins: “If the mone at the chavnge, quarter, or full be in fyry Signes, The wether folowing shalbe fayer”. The beginning of the text on f. 84v reads: “The Wether ys surest knowen: By the place off the mone at the chaunge, quarters, & full mone, ffor yf the mone at that tyme be in fyry sygnes, the wether shalbe fayer”. In other words, the essence of the text is similar, although the texts are not exactly the same. Whereas the item on f. 4v only treats the moon in the zodiac signs associated with fire, earth, air and water, the text on f. 84v also discusses the sun in zodiac signs as the mover of the winds: “the sonne in Aries doth move the northwynde”. The influence of the moon on tides and the significance of the colour of the moon on certain days are also discussed. In the same manner, the appearance of the rising and setting sun is dealt with: “yf the sonne when he riseth be coveryd with a cloude, & hys beames apere ther through, yt is a sure token off tempest & specially of hayle”. Again, there is a religious comment on the bottom of the page, discussed above in Section 3.2.2. Although the moon has an important status in these

texts, the focus is on weather and other planets are mentioned in some of the items, which is why I have placed these texts in the category of weather prognostications.

A different type of weather prognostication, titled *Judgement of mutation of the air between planet and pla(net)*, is found on f. 8r-v. This text considers each possible pair of planets and all the aspects between them, describing their influence on weather. The first entry deals with Saturn and Jupiter:

Whan {Saturn} & {Jupiter} is in a {Conjunction} together in fiery signes it signifieth gret drought, & in watery signes gret rayne. And whan ther is a {Trine} {Sextile} {Quartile} or {Opposition} aspect betwyxt {Saturn} & {Jupiter} in moist signes, it sygnifieth raine, and boisterous windes.

(f. 8r)

Saturn is then discussed in relation to the other planets, after which all the remaining possible pairs formed of the seven planets are given an entry of their own. The text ends in a short note on the moon when it is *void of course*, that is, when it does not form any aspects with the other planets. A note on the four seasons is also added to the end of the text. A similar text can be found in Johannes Stöfler's *Ephemeridum opus ab anno 1532-1551* (c4v-d1v) as well as in Digges' *Prognostication Everlasting* (for example STC 435.35: B4v-C1v). The text in Stöfler is in Latin, the Digges version in English. Both texts differ from the prognostication in Beinecke 558, but the general idea and purpose of the texts is the same. An analysis of these texts might be helpful in determining the patterns of textual transmission in the history of Beinecke 558, as there is already evidence suggesting that some of the texts in the manuscript have been copied either directly or through intermediary copies from both Digges and Stöfler.

The weather prognostications in Beinecke 558 are in line with the overall practical approach manifested by the manuscript. Means and Taavitsainen do not really deal with weather prognostications in their models discussed above. In general, very little research seems to have been conducted on medieval and early modern astrometeorological literature in English. However, Means does state that the “many types of meteorological prognostications” form an important subcategory of astrological prognostications, though this category is not discussed in her article (1992: 403). The weather prognostications in Beinecke 558 would probably be the most logically placed in that category.

5.5.1. Prognostication on the prime (f. 5r)

1 How wether is knowen after th(e) chaunge
 2 off .{Moon}. by the pryme dayes /-/
 3 Sonday pryme drye wether. monday pryme moist we-
 4 ther. tuisday pryme colde & windy, wednesday pryme wo-
 5 nderfull, thursday pryme fayer & cleare, ffryday pryme
 6 myxt wether, Saterdag pryme moist wether /-/
 7 And yet all Shalbe done that god wyll haue done
 8 Sayth Buttler /-/

This short weather prognostication is written on paper by the main hand, mostly in black ink, with the first word of the title, the symbol for the moon and the first initial of the actual text in red. Traces of pricking and ruling show in the digital image of the page (*Digital Images & Collections Online*, Image ID 1237689). There is a gloss on line 4 above the first letters of the word “wonderfull”; the word “variable” has been inserted by a

later cursive hand. This hand uses a short, open *r* and a kidney-shaped *e*. The word “wonderfull” itself has been underlined probably by the same, later hand. As with the electionary and questionnaire texts (edited in 5.2.1. and 5.3.1.), the gloss can be seen as evidence of the manuscript being read after Buttlér’s time. In terms of accessibility, this text can be seen as a representative of the popular end of the spectrum of astrological texts in Beinecke 558, as it is a short, simple text reminiscent of a mnemonic.

In fact, the text edited above seems to be a version of a text also known as *Prognostication on the Prime* (Keiser 1998: 3624). The *Manual of the Writings in Middle English* describes the text only briefly: “irregular verse and prose versions, foretell weather on the basis of the day of the week on which the new moon appears” (Keiser 1998: 3624). Five manuscripts in which the text appears are listed: Harley 2252, Sloane 1609, Morgan Library 775 and two untraced manuscripts; a reference to item 827 in the *Index of Printed Middle English Prose* is also included (Keiser 1998: 3784). Halliwell (1841: 118) edits one version of the text, according to him “taken from a MS. in Lambeth Palace”. This version is one of the untraced manuscripts mentioned in Keiser (1998: 3784). The text found in Morgan Library 775 has been edited by Curt F. Bühler (1941) and will be discussed below.

In Beinecke 558, the text appears on the bottom of f. 5r, below a passage titled “Judgment of Wether by Digges”. I have already discussed Leonard Digges (c. 1520-1559) above in Section 2.1.2. Digges was an English scientist and mathematician, and also the author of a work called *A General Prognostication*, published 1553. The work was afterwards revised and published under the title *A Prognostication Everlasting*, and it contains for example a perpetual almanac and weather predictions. The text edited above also occurs in Digges (1555 and 1556). *Early English Books Online* contains an

image set of the first edition of *A Prognostication Everlasting* (STC 435.35), published in 1555 by Thomas Gemini (for a brief discussion of Gemini, see Section 3.2.2.). This edition is the earliest surviving one in *Early English Books Online*. The work was reprinted several times and edited and supplemented by Digges' son, Thomas Digges, in the late sixteenth century (see for example STC 435.47, 435.51, 435.55 and 435.57) . In the 1555 edition, the text reads

*How weather is knowne after the chaunge of
euery Moone, by the prime dayes.*
SVnday prime, drie weather. Mondaye prime moyst weather.
Tuesday prime, colde and wyndie. Wedensday prime, wo(n)der
full. Thursday prime fayer and cleare. Fryday prime, myxte
weather. Saterday prime, moyst weather.

(Digges 1555: B2v)

In the second edition of the work (STC 435.39), printed by Thomas Gemini a year later, the passage reads

*Howe weather is knowen after the chaunge of euery
Moone by the prime daye.*
SUNdaye prime, drie weather. Mondaye prime, moist weather.
Tuesday prime, colde and wyndy. Wednesdaie prime, wonder-
full. Thursdaies prime, fayer & cleare. Frydaies prime, myxte
weather. Saterday prime, moyst weather.

(Digges [1555] 1556: B2v)

There are some differences in the layout and spellings of the two early texts of *A Prognostication Everlasting*. In both editions the text occurs on the same page, although they differ somewhat as to the layout, content and amount of text on B2v. The 1555 text of *Prognostication Everlasting* was thus modified in the 1556 edition; however, the status and appearance of the weather prediction in the 1553 *General Prognostication* remains a mystery. The Beinecke version shares the plural *dayes* and the uninflected forms of *Thursday* and *Friday* with the 1555 edition of Digges. Thus the Beinecke

prognostication is closer to the earlier edition of *Prognostication Everlasting*, although Beinecke lacks the word *euery*, present in the titles of both the 1555 and 1556 editions.

A similar text is also found in *The pronostycacyon for euer of Erra Pater* (1540; STC 439.3), printed in London by Robert Wyer. The work is anonymous; Erra Pater is a pseudonym. *Erra Pater* was reissued several times in England during the sixteenth and seventeenth centuries (Thomas [1971] 1991: 350). It was attributed to William Lilly (mentioned above in Section 5.2.1.) in the eighteenth century, although the text had already been in print well before Lilly's time (Thomas [1971] 1991: 350). The text of the 1540 edition (STC 439.3) reads:

To knowe what wether
shalbe all the yeare/ after the
chaunge of euery Moone by
the Pryme dayes.

Sondaye Pryme/ drye wether/
Monday Pryme/ moyste wether/
Tuesday Pryme/ colde & wynde/
Wednesdaye Pryme, maruaylous/
Thursdaye Pryme/ fayre and clere/
Frydaye Pryme/ fayre and fowle/
Saturdaye Pryme/ Rayne.

(*Erra Pater* 1540: B1r-v)

As can be noted, the text is very similar to the one in Beinecke 558, although not as close a match as the text in Digges' work. The title, for instance, reads "all the yeare", not present in Digges or Beinecke 558. There is also variation in word choice between the instances of the text. The date of publishing given for this version of the *Erra Pater*, however, is earlier than that of Digges' work. The presence of the text in *Erra Pater* can thus be recorded as yet another example of the textual tradition related to this weather prognostication.

The text also occurs elsewhere in late medieval and early modern material. Curt F. Bühler has edited two versions of this text (1941 and 1942). The version in New York, Pierpont Morgan Library MS 775 (ff. 280v-282v), as edited by Bühler, reads:

If the mone chaunge on Soneday hit signifieth drye wether fro the furst
day tyll the xxxth day
If it chaunge on Monday it signifieth ne^{per} drye ne wete
If it chaunge on the Tywysday it signifieth cold we^{per} And northen wynde
If it chaunge on the Wendysday it signifieth wete wethurs
If it chaunge on the Thurday [*sic*] it signifyeth bryȝt we^{per} and clere
If it chaunge on þe ffryday hit signifieth medlyd we^{per} drye and rayne
If he chaunge on the Seturday hit signifieth rayne we^{per}
This rewel faylleth not moche if it be well taken in his chaunge tr[e]wlyche
(Bühler 1941: 354)

Bühler dates the handwriting to the late fifteenth century (1941: 353). The formula used in this text is different from that in Beinecke 558, but the text is clearly an example of the same prognostication. In MS Morgan 775, the prognostication occurs between a thunder prognostication and a text on the planets and their influences on the weather (Bühler 1941: 353-355); however, Bühler edits all the text on ff. 280v-282v of MS Morgan 775 without indicating textual divisions. I have presented above the part of the text that corresponds to the Beinecke 558 text, with the last line commenting on the reliability of the prognostication.

Bühler's article *Sixteenth-century prognostications* (1942) led me to yet another occurrence of a similar text, this time in a sixteen-leaf manuscript added to a copy of *Myrrour of the World* (STC 24762), printed by William Caxton (1942: 609). The copy with its additional material is known as New York, Pierpont Morgan Library PML 776; Bühler notes that the manuscript contains a reference to "this yeare 1549" and states that the style of handwriting suits that period (1942: 609). Thus the manuscript in which the item is found is probably a contemporary of Beinecke 558. The text is edited in Bühler's article,

the main difference to the Beinecke 558 item being that the PML 776 text is in verse form:

Sunday pryme fayre wether and drye
Munday pryme moiste and no lye
Tewesday pryme wynde and colde
Wednesday pryme moste strange said of Olde
Thursday pryme fayre and Cleare
Fryday pryme fowle & fayre that yeare
Saturday prime geven to Rayne
Which may be true as all-so vayne

(Bühler 1942: 614)

As can be seen, the contents of the text are very similar to the item in Beinecke 558. The last line expresses some doubt on the part of the writer, although whether it is due to actual doubt or to the fact that the verse form required an extra line cannot be stated for certain.

Bühler (1942) also mentions two sixteenth-century printed treatises in which a similar text occurs. The first one of these is Godfridus' *The Boke of Knowledge* (STC 11931), according to *Early English Books Online* printed by Robert Wyer in London c. 1556, although Bühler for some reason dates the work c. 1530 (1942: 613). The other work is Stephen Batman's edition of Bartholomaeus Anglicus, *Batman vppon Bartholome* (STC 1538), published 1582. The appearance of a parallel text in Godfridus and Batman serves as an example of the continuance of the textual tradition towards the end of the sixteenth century.

There are also other passages attributed to Digges in Beinecke 558 that can be found in *A Prognostication Everlasting*, for example the passage occurring in the manuscript just above the prime days text. As noted above, in the manuscript the passage is titled

Judgment of wether by Digges (f. 5r). In Digges 1555, the text is on B1; it is a part of a section titled *How weather is declared by the colour of the Moone: and by the nature of the signe wherin she is*. Also the passage on the significance of comets on f. 4v of Beinecke 558 can be found in Digges 1555, on leaf B2r. As can be noted from the folio and page references, all these items are physically close to each other both in Beinecke 558 and in Digges' work. In this textual context I think it is rather likely that the prime days text in Beinecke 558 is taken from some early version of Digges' *Prognostication*. However, as the entry for a similar text in *A Manual of the Writings in Middle English in 1050-1500* and the occurrence of various versions of the text in printed sixteenth-century treatises proves, the Beinecke 558 weather prediction can be seen as a part of a long textual tradition. Furthermore, if Birkholz's suggestion on the distribution of astrological manuscript booklets by Thomas Gemini is taken into account (2003: 36n), it might also be possible that the printed version of Digges and Beinecke 558 share an exemplar, as Gemini printed Digges' treatises.

5.6. Other types of prognostications

In addition to the five categories of prognostic texts introduced above, there are also other types of prognostic texts in Beinecke 558 that do not readily fit those categories. One such text, titled *How to find out pars fortuna*, can be found on 1v. This text instructs the reader by explaining the calculations necessary for determining *pars fortuna*, or *lot of fortune*, "[a]n important nodal point in the horoscope which is calculated by adding the number of degrees between the Sun and the Moon (or vice-versa at night) to the ascendant" (Page 2002: 62). Although not a prognostication by itself, this text may be used as a help when drawing horoscopes. It seems that Beinecke 558 contains several texts that can be used as prognostic aids, although the contents are not necessarily

prognostic as such. For example, some of the questionnaire texts discussed in 5.3. might be placed here. A further example of a text that can be used as a prognostic aid can be found on ff. 79v-80r. The text describes the natures of the seven planets and the sicknesses caused by them:

Jupiter is a planet ayery, hote, moist, sangvyne, masculyne, digestyve, & governyth the stomack & the lyver / And his sycknes ys of bloud, & a wylde fever & yt ys moving somtyme in the body, & somtyme in the raynes, & smyteth vp vnder the short ribbes, and an inpostvme of the lyver / he moveth .12. sygnes in .12. yeare And his mettall ys tynne, his houses be .{Sagittarius}. & .{Pisces}.

(f. 79v)

The presence of such 'tools' in Beinecke 558, together with astrological figures, tables and volvelles, emphasizes the practical nature of Buttlér's commonplace book. It is difficult to place such texts on the scale from instructional prognostic texts to astrological medicinal texts, as the variation in the contents is rather subtle. A linguistic analysis of the formulae used in such texts might prove helpful in further categorizations of medieval and early modern astrological material.

Several versions of the prognostic device known as the *Pythagoras sphere* are introduced; they can be found on f. 63r and ff. 68r-72v. Pythagorean spheres, typically used for medical prognostication but occasionally also for religious purposes, can be found in manuscripts throughout the medieval period (Joost-Gaugier 2006: 128). These devices are also known as *spheres of life and death*, due to their purpose and visual appearance (Page 2002: 8). Joost-Gaugier notes that this type of prognostic text usually consists of a circle divided by a horizontal line, containing a set of numbers, and an accompanying, explanatory text (2006: 128). She also points out that the accompanying texts are usually formulaic: they contain the name of the prognostic device and explain how to use the

figure for determining the answer to a question, for example whether a person shall live or die (2006: 128). The spheres can also be used for determining a suitable means for treating patients (Joost-Gaugier 2006: 128). The usage of the spheres is based on a system in which every letter of the alphabet is represented by a number. The numerical value of a person's name is calculated, and the number is divided by a number related to the lunar month (Joost-Gaugier 2006: 128). There are also other ways of performing calculations – for instance, the day of the moon when the illness of a patient begun can be used in the formula (Page 2002: 8). After performing the calculation, the user of the figure must locate the result among the numbers in the figure. As a common rule, the numbers below the horizontal line dividing the circle signify death, whereas the numbers above the line represent life (Joost-Gaugier 2006: 128). The Pythagoras spheres in Beinecke 558 match Joost-Gaugier's description, if the variation resulting from this tradition of prognostication apparently surviving for over a thousand years is taken into account. Compared to the figures reproduced in Joost-Gaugier's work, the Pythagorean spheres on ff. 68r-72v of Beinecke 558 are somewhat similar to the ones in the early 15th-century Oxford, Bodleian Library MS Dibgy 29, ff. 193v-194r (shown in Joost-Gaugier 2006: 217), whereas the one on f. 63r of Beinecke 558 is more carefully drawn and decorated.

The sphere on f. 63r is the most complicated one of the Pythagorean spheres in Beinecke 558. There is a miniature face drawn in the very centre of the sphere. The numbers and the explanatory words *Bona et vita* ("good and life") and *Mala et mors* ("bad and death") have been written in arch-shapes; thus the central part of the sphere resembles a star or a flower. The sphere also has additional concentric circles containing astrological information. There is an explanatory text below the sphere discussing the general principles of using the figure.

The spheres on ff. 68r-72v are not as carefully drawn as the one on f. 63r, but the accompanying instructional, explanatory texts are somewhat longer. The appearance of the figures also varies, although they are all smaller than the circle on f. 63r. According to the explanatory texts below the figures, the spheres on f. 68r-v are used for determining the outcome of a sickness. The one on f. 69r can be used for example to determine which one of a married couple shall die first, to predict the sex of an unborn child or to ascertain the fate of a pilgrim. The sphere on f. 70v can be used to discover the astrological sign in which a person was born. The last one, on 71r, gives a "rule for diverse things", including sickness, marriage, fortune, business, children, theft and love. As can be seen, the themes of the Pythagoras sphere prognostications are very similar to those that appear in the prognostications discussed in Sections 5.1.-5.5. However, the method of predicting the future is clearly different from that of questionnaires, lunaries or nativities. There is a list of personal names and numerical values in Beinecke 558 shortly after the Pythagoras spheres on f. 73, titled *Nomina pro amore et vita*. It is possible that this list was intended to be used together with the Pythagoras spheres in the manuscript. However, the list is immediately followed by a list of personal names without values on f. 74r, which once again shows how smooth the thematic transitions in the manuscript can be.

To introduce another type of prognostication not included in the five categories above, there is a prognostication based on the dominical letter on f. 74v. As already mentioned above in 5.4.1., dominical letters run from A to G and determined by the date of the first Sunday of the year. The prognostication on f. 74v has short entries for dominical letters from A to G. The entry for D, for instance, reads

A hoothe wynter / A goode Somer. and goode Corne / A ffayre harvest /
A goode seede tyme / goode ffructe / and goode hony & goode wyne /
And dyenge of women with chydren / A weete hay tyme & tydynges of
kynges and Bysshoppes

(f. 74v)

A similar prognostication, this time in the cursive hand, can be found on f. 62r. The entry for D is quite similar, stating for example that there will be a “hard wentr a good somar good whet & g(ood) sed”, “deth of shep & othar bests” and “tydyngs of kynges” (f. 62r). As can be seen, the entries include predictions on weather and agronomy, but also on general, societal issues. The method of prognostication is straightforward: the only information needed for determining the dominical letter is the date of the first Sunday of the year. Having that information, one only needs to find the proper entry for the year. The contents of the prognostication cover various areas of life, and the method of predicting the future is rather simple and does not require calculation of planetary movements by the person using the manuscript.

6. Conclusion

As my work on Beinecke 558 shows, early modern commonplace books may be used as a starting point for research on a variety of linguistic topics, including genres, audiences and textual transmission. In microhistory, a specific case is used to trace general patterns and developments and illustrate various historical events and phenomena. My thesis could thus be seen as a microhistorical case study on the field of philology, discussing early modern prognostic material and commonplace books with Beinecke 558 as my starting point. My topic is well suited to a multidisciplinary approach. Not only historical linguistics but also related fields such as history, bibliography and paleography have proved useful in studying Beinecke 558 and the context in which it was produced.

Similarly, the study of scientific texts may offer new insights in relation to both historical linguistics and the history of science.

One of my aims in this thesis was to write a manuscript description of Beinecke 558, as the Beinecke library description is relatively short and only mentions a fraction of the texts in the manuscript. Commonplace books are unique constructs, and as such they usually call for qualitative research methods. However, by writing a manuscript description I have added to the information available on Beinecke 558. I hope that this information will be useful in future research on this manuscript and English commonplace books in general, as it offers a way of familiarizing oneself with the manuscript contents without accessing and transcribing the original manuscript and therefore facilitates utilizing not only qualitative but also quantitative research methods. On the other hand, qualitative research methods should also be utilized when studying early astrological material. The study of Beinecke 558 supports Means' suggestion that the boundaries between text types in early prognostic material are fuzzy. In addition, several of the texts in Beinecke 558 are not necessarily instructional prognostic texts but rather descriptive and declarative texts that can be used together with instructional texts. If the context in which these texts appear is not taken into account these texts may easily be seen as theoretically oriented rather than practical texts.

My analysis of the main hand in Beinecke 558 supplements the manuscript description. As I have mentioned above, the patterns of textual transmission and book production in fifteenth and sixteenth-century England do not seem to be straightforward – Beinecke 558 contains examples of texts available in both manuscript and print format (for example the weather prognostication edited in 5.5.1.) as well as texts produced specifically for the purposes of the owner (as the nativities of the Buttler family). In my

opinion, the relationship between manuscripts and printed books in early modern England should not be seen as a dichotomy. Instead, further research on this topic should be conducted in order to shed more light on the patterns of textual transmission. I also think that it is important not to study the primary sources only from the point of view of textual content but also as physical objects. Since manuscripts and early printed books are at the same time physical and textual products, I feel that an approach taking into account both dimensions is best suited to the study of such material.

My thesis is also an edition of five early modern astrological prognostications. Although scientific texts have lately gained ground as a research topic in English historical linguistics, we still know relatively little about them. In addition, a fair amount on the research conducted on English vernacular scientific texts has concentrated on medieval sources, especially medical texts. My thesis is therefore not only an analysis of Beinecke 558 as a sixteenth-century commonplace book but also contributes to the study of early modern vernacular science, especially astrology. At the same time, I have shown that categorizations of Middle English astrological texts can be used as a starting point for analyzing Early Modern English texts.

The texts edited in this thesis are intended to illustrate the various types of astrological prognostications found in Beinecke 558. As was shown above, the text types found in my material were very similar to those found in medieval manuscripts. This suggests the existence of a long textual tradition and the applicability of studies on medieval material to the research of early modern vernacular astrology. The existence of similar texts in the medieval and early modern period is also interesting from the point of view of readership of scientific works, as the early modern audience for these works was probably different from the medieval one. A further study on the contexts of medieval

and early modern astrological texts would be helpful in studying the audience(s) of these texts. The edited texts also function as examples of the contents of Beinecke 558, and thus add to the research conducted on the English commonplace book both in this study and in general.

Bibliography

Primary sources

- Digges Leonard 1555. *A Prognostication Everlasting*. STC 435.35. Accessed through *Early English Books Online*. <http://eebo.chadwyck.com>.
- Digges Leonard [1555] 1556. *A Prognostication Everlasting*. STC 435.39. Accessed through *Early English Books Online*. <http://eebo.chadwyck.com>.
- Digital Images & Collections Online*. Beinecke Rare Book and Manuscript Library, Yale University. Available: <http://beinecke.library.yale.edu/digitallibrary> (13 February 2009).
- Godfridus c. 1556. *[The Boke of Knowledge]*. STC 11931. Accessed through *Early English Books Online*. <http://eebo.chadwyck.com>.
- Lilly William [1647] 1659. *Christian Astrology*. Available: http://www.astrologiamedieval.com/tabelas/William_Lilly_Christian_Astrology.pdf (16 February 2010).
- New Haven, Yale University Beinecke Library MS 558 [microfilm]. Beinecke Rare Book and Manuscript Library, Yale University.
- New Haven, Yale University Beinecke Library MS 558, ff. 2v-3r, 4v-5r, 6v-7r, 20v-21r and 41v-42r [digital images in JPG format]. Beinecke Rare Book and Manuscript Library, Yale University.
- Stöffler Johannes 1499. *Almanach nova plurimis annis venturis inservientia* [1499-1531]. Ulm. Accessed through *Münchener Digitalisierungszentrum*. <http://www.digitale-sammlungen.de>.
- Stöffler Johannes 1531. *Ephemeridum opus ab anno 1532-1551*. Tübingae. Accessed through *Münchener Digitalisierungszentrum*. <http://www.digitale-sammlungen.de>.
- The pronostycacyon for euer of Erra Pater*. 1540. STC 439.3. Accessed through *Early English Books Online*. <http://eebo.chadwyck.com>.

Secondary sources

- Beinecke Rare Book and Manuscript Library, Yale University. Library description of MS Beinecke 558. Available: <http://webtext.library.yale.edu/beinflat/pre1600.ms558.htm> (13 February 2009).
- Bibliothèque nationale de France*. Library catalogue. Available: <http://catalogue.bnf.fr> (16 February 2010).

- Birkholz Daniel 2006. The Gough Map revisited: Thomas Butler's *The Mape off Ynglonnd*, c.1547-1554. *Imago Mundi* 58: 23-47.
- Birkholz Daniel 2003. The vernacular map: Re-charting English literary history. In Lawton, Copeland & Scase (eds.): 11-77.
- Brown Michelle P. 1990. *A Guide to Western Historical Scripts from Antiquity to 1600*. London: British Library.
- Bühler Curt F. 1942. Sixteenth-century prognostications: Libri impressi cum notis manuscriptis. Part II. *Isis* 33: 609-620.
- Bühler Curt F. 1941. Astrological prognostications in MS. 775 of the Pierpont Morgan Library. *Modern Language Notes* 56: 351-355.
- Cohen I. Bernard 1985. *The Birth of a New Physics*. New York: Norton.
- Dawson Giles E. and Laetitia Kennedy-Skipton 1968. *Elizabethan Handwriting 1500-1650: A Guide to the Reading of Documents & Manuscripts*. London: Faber & Faber.
- Early English Books Online (EEBO)*. Available: <http://eebo.chadwyck.com> (8 March 2010).
- Ehrsam Voigts Linda [1989] 2007. Scientific and medical books. In Griffiths and Pearsall (eds.): 345-402.
- Firth Green Richard and Linne R. Mooney (eds.) 2004. *Interstices: Studies in Late Middle English and Anglo-Latin Texts in Honour of A. G. Rigg*. Toronto: University of Toronto Press.
- Griffiths Jeremy and Derek Pearsall (eds.) [1989] 2007. *Book Production and Publishing in Britain 1375-1475*. Cambridge: Cambridge University Press.
- Halliwell James Orchard 1841. *Rara Mathematica; or a Collection of Treatises on the Mathematics and Subjects Connected with Them, from Ancient Inedited Manuscripts*. London: Samuel Maynard. Available: <http://www.archive.org/details/raremathematica00hallrich> (3 March 2010).
- Henry John 1997. *The Scientific Revolution and the Origins of Modern Science*. London: Macmillan.
- Hutchinson John [1902] 2003. *A Catalogue of Notable Middle Templars, with Brief Biographical Notices*. London: The Honourable Society of the Middle Temple. Reprinted by The Lawbook Exchange Ltd in 2003.
- Johnson Francis R. 1936. The influence of Thomas Digges on the progress of modern astronomy in sixteenth-century England. *Osiris* 1: 390-410.

- Joost-Gaugier Christiane L. 2006. *Measuring Heaven: Pythagoras and His Influence on Thought and Art in Antiquity and the Middle Ages*. Ithaca: Cornell University Press.
- Keiser George R. (ed.) 1998. *A Manual of the Writings in Middle English 1050-1500. Volume X: Works of Science and Information*. New Haven: The Connecticut Academy of Arts and Sciences.
- Lawton David, Copeland Rita and Scase Wendy (eds.) 2004. *New Medieval Literatures: Volume VI*. Oxford: Oxford University Press.
- McCarren Vincent and Moffat Douglas (eds.) 1998. *A Guide to Editing Middle English*. Ann Arbor: University of Michigan Press.
- Means Laurel 1992. Electionary, lunary, destinary, and questionnaire: Toward defining categories of Middle English prognostic material. *Studies in Philology* 89: 367-403.
- Mooney Linne R 2004. Manuscript evidence for the use of medieval English scientific and utilitarian texts. In Firth Green and Mooney (eds.): 184-202.
- Münchener Digitalisierungszentrum*. Available: <http://www.digitale-sammlungen.de> (8 March 2010).
- Oxford English Dictionary* 1989 [online]. 2nd edition. Oxford: Oxford University Press. Available: <http://www.oed.com> (18 November 2008).
- Page Sophie 2002. *Astrology in Medieval Manuscripts*. London: British Library.
- Parker David R. 1998. *The Commonplace Book in Tudor London: An Examination of BL MSS Egerton 1995, Harley 2252, Lansdowne 762 and Oxford Balliol College MS 354*. Lanham: University Press of America.
- Parkes Malcolm B. 1992. *Pause and Effect. Punctuation in the West*. Aldershot: Scolar Press.
- Parkes Malcolm B. [1969] 1979. *English Cursive Book Hands 1250-1500*. London: Scolar Press.
- Parry John Humffreys 1834. *The Cambrian Plutarch: Comprising Memoirs of Some of the Most Eminent Welshmen from the Earliest Times to the Present*. London: W. Simpkin and R. Marshall.
- Records of Arkwright Family of Mark Hall, Latton and Harlow*. Description of Essex Record Office D/DAr. Available: http://seax.essexcc.gov.uk/result_details.asp?DocID=119650 (3 March 2010).
- Roberts Jane 2005. *Guide to Scripts Used in English Writings up to 1500*. London: British Library.
- Shapin Steven 1996. *The Scientific Revolution*. Chicago: University of Chicago Press.

- Skaffari Janne, Peikola Matti, Carroll Ruth, Hiltunen Risto and Wärvik Brita (eds.) 2005. *Opening Windows on Texts and Discourses of the Past*. Amsterdam: John Benjamins.
- Taavitsainen Irma and Pahta Päivi (eds.) 2004. *Medical and Scientific Writing in Late Medieval English*. Cambridge: Cambridge University Press.
- Taavitsainen Irma 2005. Genres and the appropriation of science: *Loci communes* in English in the late medieval and early modern period. In Skaffari et al. (eds.): 179-196.
- Taavitsainen Irma 2004. Transferring classical discourse conventions into the vernacular. In Taavitsainen and Pahta (eds.): 37-72.
- Taavitsainen Irma 1988. *Middle English Lunaries: A Study of the Genre*. Helsinki: Société Néophilologique.
- Tannenbaum Samuel A. 1930. *The Handwriting of the Renaissance*. New York: Columbia University Press.
- Thomas Keith [1971] 1997. *Religion and the Decline of Magic: Studies in Popular Beliefs in Sixteenth and Seventeenth Century England*. New York: Oxford University Press.
- Threlfall John Brooks [1990] 1992. *Fifty Great Migration Colonists to New England and Their Origins*. Westminster (MD): Heritage Books.
- Turner Gerard L'E. 2003. *Renaissance Astrolabes and their Makers*. Aldershot: Ashgate.
- Turner Gerard L'E. and Van Cleempoel Koenraad [2001] 2003. A Tudor astrolabe by Thomas Gemini and its relationship to an astrological disc by Gerard Mercator of 1551. In Turner 2003: IX (400-409).
- Welsh Biography Online*. The National Library of Wales. Available: <http://wbo.llgc.org.uk/en/s-LLWY-HUM-1527.html> (4 March 2010).
- Williams John 1836. *Ancient and Modern Denbigh: A Descriptive History of the Castle, Borough, and Liberties*. Denbigh: J. Williams.

Appendix 1: Astrological symbols in MS Beinecke 558

Astronomical /astrological symbols		Zodiac signs	
☉	Sun	♈	Aries
☾	Moon	♉	Taurus
♃	Jupiter	♊	Gemini
♄	Saturn	♋	Cancer
♂	Mars	♌	Leo
♀	Venus	♍	Virgo
☿	Mercury	♎	Libra
♊	Ascending node	♏	Scorpio
♋	Descending node	♐	Sagittarius
♌	Conjunction	♑	Capricorn
♍	Opposition	♒	Aquarius
□	Square / Quartile	♓	Pisces
△	Trine		
*	Sextile		

Appendix 2: The titles in MS Beinecke 558

In the following list of manuscript contents, the rubrics are given as they stand in the manuscript; editorial comments and titles are given in square brackets. A short description of editorial symbols used can be found in Appendix 3; for a lengthier discussion of editorial procedure see Chapter 4.

Leaf	Rubri(s)
1r	The Saienge(s) off Almansor in p(ro)positionib(us)
1r	How to fynde out pars fortuna
1v-2r	Judgment Off Sicknes out of amic(us) medico(rum)
2r	Off the tokens of lyfe & death
2v	To knowe the thefe that hath stolen
2v-3r	To knowe how thou shalt spede in thy Journey
3v	The Natures Off planette(s)
3v	The Judgment off .8. windes
4r	[A note on tides]
4r	To knowe what .{Moon}. maketh full sea at many portes whose names be as folowith
4v	Off Eclipses
4v	Significatyon off Com(m)ette(s)
4v	of wether aft(er) humfrey loyde
5r	Judgment of Wether by Digge(s)
5r	How wether is knowen after th(e) change off .{Moon}. by the pryme dayes
5v-6r	[Blank]
6v	Thinges to be obseruid by the course of .{Moon}.
6v	Off Bloudletting
7r	Stoflers Judgement upon th(e) .28. mansions of th(e) mone
7v	For beginning of workes th(e) mone aspecting th(e) planette(s)
8r-8v	Judgement of mutacion of th(e) ayre betwixt planet & pla(net)
9r	Judgemente(s) of Massahala & Hala Abenragell [Main rubric for the items found on ff. 9r-14v]
9r	To go to finde A man at Home
9r	For the querente(s) thought
9r	Whether suspexion be true or no
9v	For opteyning of Substau(n)ce
9v	For ones brother howe he doth
9v	To knowe Off Treasure
9v	Whether A woman be w(ith) child or no
10r	A woman w(ith) child of one or two
10r	A woman w(ith) child of ma(n) or woma(n)
10r	Iff A Messenger Comith

10r	What A Messenger bringith
10r	Yff Geste(s) bidden shall come
10v	Iff A Prisoner Shalbe delyuered
10v	Iff Mariage shalbe or not
10v	Whether a yong woma(n) be a maid or no
11r	How Many Husbande(s)
11r	A woma(n) haue a child or not
11r	Yff a woma(n) be true to h(er) husband
11r-11v	For beaste(s) strayed Away & c(etera)
12r-12v	Off the Thefe & of theft
12v	Wheth(er) a thing stolen be one or mo
13r-13v	Whether the thefe be A strau(n)ger or No
14r	Iff A Man Be dead Or a lyue
14r	If A Sick man shalbe healid
14r-14v	A woman Gone From H(er) Husband
14v	Off remouing from place to place
14v	Off Any House Or Heritage
15r	To knowe the forme of a house both w(ith)out and within, acording to the sygnificatyon of the planette(s), by moving of a Qvestyon
15r	For to finde a thing hidden or lost in Towne or ffilde [Illustration on lower left corner]
15v-16r	[Blank]
16v	Zahell Saieth Iff thou findest that the theft be in the house, & thou woldest knowe the place that yt is in, behold th(e) lorde off the .4. house, & the planet that ys ther
16v	To Knowe in what place th(e) thing is in th(at) is myssed, & wher yt restyth
16v-17r	The signifycatyon off the .12. signes of th(e) place of the thefte in th(e) .4. house
17v	Whether the thefe be off the house or no
17v	The .7. in the .4. house
18r	Iff the thing be in the house
18r	Iff the thing be out off the house
18r	Iff a thefe or mvrderer shalbe found
18r	If thou wylt knowe what th(e) theft ys that is taken or stolen away
18v-20r	Judgment vpon the .12. Houses
20v	Here ffolowith th(e) vsage off the old philosophers, whych day and houre in the weke ys best to labour dyvers causes in
20v	To knowe when a person co(m)mith to the[e], whether he beare th(ee) good will or no
20v	whether newes be true or false
21r	This Figure Aboue is Off The Aspecte(s) Shewing how signes & planette(s) aspect one to anoth(er) in the Zodiack [Illustration above the text]
21v	The Names & Catherecte(s) Off Signes & Planettes [Illustration above the text]
22r	The Natures Off The twelue Houses
22v	[Table] The Names & Natures Off Fixed starres in th(e) astrolaby
22v	[Table] S(ign) houses exaltac(ions) Joyes Falle(s) Triplicities and Faces
22v	[Table] [Original title on top of page cut off; gloss by later hand reads "Dignities"]

22v	[Table] The termes of plan<ettes>
23r	[Astrolabe, untitled]
23v	[Volvelle, untitled]
24r-39r	[A series of astrological figures representing the twelve zodiac signs in the ascendant; titles given in the margin]
24r	{Aries} in th(e) ascende(n)t
24v-25r	{Taurus} in th(e) ascende(n)t
25r-26r	{Gemini} in th(e) ascende(n)t
26r-28r	{Cancer} in th(e) ascende(n)t
28r-29v	{Leo} in th(e) ascende(n)t
30r-31v	{Virgo} in th(e) ascende(n)t
31v-33v	{Libra} in th(e) ascende(n)t
33r-35r	{Scorpio} in th(e) ascende(n)t
35r-37r	{Sagittarius} in th(e) ascende(n)t
37r-38r	{Capricorn} in th(e) ascende(n)t
38r-38v	{Aquarius} in th(e) ascende(n)t
38v-39r	{Pisces} in th(e) ascende(n)t
39v	[Blank; markings on upper left corner]
40r	[Chart, untitled]
40v	[Volvelle, untitled]
41r	The Declaratyon off th(e) Astrolaby
41v	The Declaratyon off th(e) Astrolaby
42r	[Horoscopes of Thomas stalon and Jhon buttler with nativity figures]
42v	[Horoscopes of Thomas buttler and Ales Buttler with nativity figures]
43r	[Blank]
43v	Of .3. women [Upper part of the title cut out]
43v	Off a ship
43v	Off an hermet
43v	To lerne to mvltipliy
43v	Off hering
43v	Off otes
43v	[Note on the influence of the moon on buying and selling]
44r	[Blank]
44v	To knowe how many he hath bought
44v	To knowe what nomber one thinketh
44v	To cast with dyce
44v	With money or counters
44v	Counters or money
44v	To knowe how many
44v	ffor the bringing in of a thing in ones hand
45r	to know what it is a clock by fetching in of a thing
45r	ffor to knowe who hath .3. thinges
45r	which syde of a grote lyeth vpward
45r	what ende of a dager or knife is vpward
45r	of .12. persons
45r	of .20. pilgrymes
45r	a chantry
45v	[Blank]
46r	Judgemente(s) by th(e) lord of th(e) houre [Illustration on lower left corner]
46v	[Blank]

47r	[Table] <T>he ways from tovn to tovn on to london
47v-48r	The mape off ynglonnd
48r-49r	The kronykel of yngland made short
49r	[Table] the rayn of kyng [Edward VI; a note below the table reads "edward kovned ky(ng) on shrof sonday 1547"]
49r	[Table] the rayn of avll the kyngs senc the kovnqest
49v-50r	[Blank]
50v	[Table] ffor to know how lovng th(e) mon do shin every nyt from the chang to th(e) fovll aftr th(e) soun is down
50v	[Table] for rysyng & goyng down of son & lynth of the day and the nyt
50v	[Table] for to know wher the mon is eevary daye in what ssynn & whar th(e) syn rayn in man
50v	[Table] krystmas daywas & new<y>er dayis
51r	[Table] a estar table [An Easter table for 1485-1604]
51v-52r	[Calendar running from January to December]
51v	[Table] whan {Sun} rys & set
51v	[Table] Persouns [Saints]
51v	[Table] hey estar [and] low estar
52r	[Table] moweabll festes
52r	[Table] embardays
52r	[Table] <Tarm>
52r	[Table] <m>arryng
52v-53v	ffor natvars proprtyes kovmplaxovns & seknes in plan[ets]
54v-56r	{Moon} for dollars or sek*enes & fases & membrvs of syns
56r-56v	for ffexed sstars in th(e) 12 ssyns thor natvrs & ren**
57r-59v	the natvr of ssyns whan th(e) {Sun} is ther for prodstyn**
60r-60v	ffor good deyatt and good kovnsll of deyatt and what is <all> good ffor th(e) brayn
61r	the natwar & kovmplaksovns of syns & planets & tymes
61v	[Blank]
62r	her is ovld sayngs & reules
62r	[Yearly prognostication based on the planets and dominical letters]
62v	Here folowith alexanders distinctions & iudgm(entes)
63r	pitagoras sphere
63v	[Table] the rent of mar<k> havll <l>ord shep at evary * yer [A list of personal names and payments. A part of Harlow, Essex is still known as Mark Hall, and there was a manor called Mark Hall in Harlow/Latton, Essex. The earliest mention in the Essex county records is that the estate was bought by James Altham in 1562 (<i>Records of Arkwright Family of Mark Hall, Latton and Harlow</i>).]
63v	[Table: Payments]
63v	[A family chronicle, written line by line starting from the bottom of the page]
64r	[Weights and measures of various kinds of goods; an addition by later hand in the middle of the page on the measures of paper]
64v	[Table] mesar for lond [With geometrical illustrations]
65r	[Table] mesar for ston or tember [With geometrical illustrations]
65r	[Table] meser for glas or bord [With geometrical illustrations]
65v	[Table] a revll for dayly expncs for the day th(e) weke th(e) month & th(e) yer
65v	[Table] a help for movlttapl

65v	thes be the 7 seyncs
66r	To know w(hen) th(e) {Moon} wilbe South euery day of th(e) year
66r	To know th(e) true hov(re) of the Night by the {Moon}
66v	[Nativity dated July 22 1612, with a horoscope figure]
67r-67v	Pro noticia Voluelle [Instructions for using a voluelle, the body of the text is in English]
68r	[Pythagoras' sphere; text begins] ffyrst take all the letters of hys name that is syke
68v	[Pythagoras' sphere; text begins] The way of Py*tagoras the Philozopher of the Infirmyties of seeke men
69r-70r	[Pythagoras' sphere; text begins] To know the lyfe and the deathe of the husbonde and the wife whiche of theym shall dye ffyrst
70v-71r	[Pythagoras' sphere; text begins] ffor to knowe in what Sygne a man or a woman ys borne vndre
71r-72v	[Pythagoras' sphere; text begins] A Rewle for dyuers thynges
72v-73r	Numerus mensis
73r-73v	Nomina pro Amore et vita
74r	[Mostly alphabetical list of first names]
74v	[Prognostication for the year according to the dominical letter]
75r-76r	Off Predestinatyon
76v-77r	Faces Off Planette(s) in Signes
77v	Membres, Complexions, & sickn(ess) Of P<lanettes>
77v-78r	Membres of Plan(n)ete(s) in sygnes
78v	Dolars or sicknes .{Moon}. in sygnes
79r	For beginning Off worke(s) .{Moon}. being in s[igns]
79v-80r	The gouernaunce, diseases, Off Planette(s)
80r	[Table: Faces of the zodiac signs]
80v	[Table] The Names & Natures Off Fyxed sterres
80v	[Table] The houses: exaltacyons: Joies: & falle(s) of planete(s)
80v	[Table] A table to finde the dignities Of plan(n)ete(s) in the .12. Signes
80v	[Table] Triplicities
81r-82v	The Names & Natures Off Herbes. As auycen & other Saith in the grete herball
83r	To those good tymes ffor to giue medicins
83r-84r	Here Folowith the Natures, and vertue<s> Off Herbes, & spies to comfort & to purge
84r	The Saienge(s) Off Humfrey Loyde
84v	The Judgement Off Humfrey loyde for weth(er)
85r	[Calendar for 1540-1570]
85v	<The .7. Sciences> [Upper part of the title cut off]
86r-88v	[Tables; vertical note on the right margin of f. 87r begins "This <r>euleys of 6 onchis of le(n)gethe"]
88v-89r	[Unfinished table]
89v	[Blank]

Appendix 3: Editorial symbols

Below is a list of the editorial symbols used in the edited texts in this thesis, including brief explanations for the symbols. A full account of the editorial principles can be found in Chapter 4.

()	expanded abbreviation
{ }	expanded name of astrological symbol
[]	editorial comment
< >	unclear; suggested reading
*	unclear character or characters
/-/	line-filler

Finnish summary

1500-luvun Euroopan teknologisia, ideologisia ja rakenteellisia muutoksia on usein kutsuttu 'vallankumouksiksi'. Esimerkiksi siirtyminen maakeskisestä aurinkokeskiseen maailmankuvaan tunnetaan yleisesti kopernikaanisena vallankumouksena. Myös kirjapainotaidon kehittymistä ja leviämistä uuden ajan alussa on kuvailtu vallankumoukseksi. Nämä muutokset, kuten myös keskiluokan aseman korostuminen sekä poliittisten ja uskonnollisten olosuhteiden epävakaus, vaikuttivat myös 1500-luvun englantilaisten jokapäiväiseen elämään. Vaikka muutokset olivatkin monessa mielessä vallankumouksellisia, ne tapahtuivat kohtuullisen hitaasti. Vanhasta ei siirrytty suoraan uuteen, vaan välissä oli usein pitkä siirtymävaihe. Kun tutkitaan muutosta, ei pidä unohtaa jatkuvuutta. Tämä ajatus on tutkielmani kannalta olennainen.

Englannin kielen historia jaetaan perinteisesti kausiin muinaisenglannista nykyenglantiin. Englannin kielihistorian tutkijat erikoistuvat usein tiettyyn kielivaiheeseen. Useita kielivaiheita kattavassa tutkimuksessa taas keskitytään yleensä kielen muuttumiseen. Tässä tutkielmassa käsittelen uuden ajan alun englanninkielistä käsikirjoitusta (New Haven, Yale University, Beinecke Rare Book and Manuscript Library MS 558) sekä aikakautensa tuotteena että esimerkkinä keskiajan perinteiden jatkumisesta uuden ajan alussa.

Beinecken kirjaston kuvauksen mukaan tässä työssä tutkimani käsikirjoitus (tästedes Beinecke 558) sisältää astronomisia ja astrologisia tekstejä. Astrologiaan suhtaudutaan nykyään yleensä pseudotieteenä, mutta uuden ajan alun Euroopassa astronomiaa ja astrologiaa ei vielä erotettu toisistaan. Niiden tuntemukseen kuului sekä teoreettinen tietämys että tämän tietämyksen soveltaminen käytäntöön. Taivaankappaleiden liikkeitä

tarkastelemalla voitiin esimerkiksi laskea auringon- ja kuunpimennysten ajankohdat, navigoida tai ennustaa tulevaisuutta. 1500-luvun puolivälin eurooppalaisten maailmankuva oli vielä maakeskinen, ja tämä näkyy myös Beinecke 558:n sisällössä. Käsikirjoituksen ennustustekstit ovat hyvin samankaltaisia kuin keskiajan ja jopa antiikin tekstit. Astrologinen tekstitradiotio näyttää säilyneen melko samankaltaisena noin tuhat vuotta, vaikka tekstien lukijakunta tämän ajanjakson kuluessa luonnollisesti muuttuikin sekä määrällisesti että laadullisesti. Suurin osa näistä teksteistä on kirjoitettu arabiaksi, kreikaksi tai latinaksi. Beinecke 558 on kuitenkin muutamaa otsikkoa ja kaavamaista lausetta lukuunottamatta kirjoitettu englanniksi, kansankielellä, vaikka suurin osa teksteistä pohjautuukin todennäköisesti varhaisempiin, arabian-, kreikan- ja latinankielisiin teksteihin.

Koska astrologiset tekstit säilyivät pitkään samankaltaisina, ja koska uuden ajan alun kansankielisistä tieteellisistä teksteistä on toistaiseksi kirjoitettu varsin vähän, käytän analyysini lähtökohtana keskiajan englanninkielisten astrologisten tekstien luokitteluja. Laurel Means jakaa keskienglanninkieliset ennustustekstit neljään pääryhmään (*electionary, lunary, destinary, questionary*). Irma Taavitsainen on puolestaan keskittynyt väitöskirjassaan lunaareihin (*lunary*). Olen jakanut Beinecke 558:n tekstit kuuteen eri ryhmään, joista neljä ensimmäistä ryhmää vastaa Meansin luokittelua. Kaksi viimeistä ryhmää olen lisännyt analyysini tulosten perusteella. Viides ryhmä koostuu sääennustuksista, kuudes ryhmä sellaisista ennustusteksteistä, jotka eivät sovi viiteen muuhun kategoriaan. Beinecke 558:n sisältämät astrologiset ennustustekstit voidaan luokitella pitkälti samoin perustein kuin keskienglanninkieliset tekstit. Ennustustekstien luokittelu on kuitenkin usein vaikeaa esimerkiksi siksi, että tekstit ovat sisällöltään usein varsin samanlaisia. Tekstin rakennetta ja sisällöllisiä painotuksia voidaan tällöin käyttää luokittelun perusteena.

Analysoimastani käsikirjoituksesta voidaan käyttää myös termiä *commonplace book*. Termillä tarkoitetaan kirjaa, johon omistaja on kirjannut muistiin itselleen tärkeitä tekstejä. Tällaiset kirjat koostuvat yleensä lyhyehköistä teksteistä, ja niiden sisältö voi olla varsin vaihteleva. Tyypillisesti kirjoissa on esimerkiksi runoja, uskonnollisia tekstejä, kronikoita ja reseptejä. Tekstit on usein kirjoitettu pitkän ajan kuluessa ja sidottu kirjaksi vasta myöhemmin. *Commonplace book* saattaa sisältää niin omistajan itsensä kirjoittamia, kirjurin kopioimia kuin painettujakin tekstejä. Lisäksi kirjojen materiaali vaihtelee – esimerkiksi tutkimani Beinecke 558 sisältää sekä pergamentille että paperille kirjoitettuja tekstejä. Beinecke 558:n ensimmäinen omistaja oli englantilainen kauppias Thomas Buttler, joka sekä käsikirjoituksen että testamenttinsa sisällön perusteella osoitti harrastuneisuutta astrologian saralla. Astrologisten tekstien lisäksi Beinecke 558 sisältää esimerkiksi Englannin kartan ja lyhyen kronikan sekä listan Englannin kuninkaista. Käsikirjoituksessa on myös Thomas Buttlerin ja hänen kolmen lapsensa syntymähoroskoopit ja lyhyt perhekronikka sekä kauppiaalle hyödyllisiä puu-, kivi- ja lasitavaran mittaamiseen tarkoitettuja taulukoita. Uskonnollista tekstiä käsikirjoitus ei muutamaa lyhyttä kommenttia lukuunottamatta sisällä, ja kaunokirjallinen aines puuttuu Beinecke 558:sta kokonaan.

Beinecke 558 on yhä sangen vähän tunnettu käsikirjoitus, vaikka Beinecken kirjaston kuvauksessa todetaan, että käsikirjoitus sisältää paljon mielenkiintoista materiaalia, jota tulisi tutkia tarkemmin. Tutkielmassani on tästä syystä käsikirjoituksen kuvaus, joka sisältää esimerkiksi yksityiskohtaisen listan käsikirjoituksen sisällöstä. Mikrofilmin perusteella laatimani kuvaus antaa huomattavasti tarkemman kuvan käsikirjoituksen sisältämistä teksteistä kuin aiemmin saatavilla ollut Beinecken kirjaston kuvaus. Beinecke 558:aa ei ole aiemmin editoitu, mutta koko käsikirjoituksen editointi ei tämän tutkielman sallimissa rajoissa ole mahdollista. Toisaalta myös ennustustekstien editioita on saatavilla

varsin vähän. Olenkin editoinut käsikirjoituksesta viisi ennustustekstiä, jotka toimivat esimerkkinä luokitteluni viidestä pääkategoriasta. Samalla tekstit täydentävät kirjoittamaani käsikirjoituksen kuvausta. Kaikki editoidut tekstit on kirjoittanut sama kirjuri, jonka käsialasta kirjainmuotoineen ja lyhenteineen olen kirjoittanut paleografisen kuvauksen. Editoitavien tekstien osalta käytin lähteenä mikrofilmin lisäksi digitaalisia, jpg-formaattiin tallennettuja värikuvia editoiduista teksteistä. Editoidut tekstit korostavat yhteyttä käsikirjoitetun ja painetun materiaalin välillä ja toimivat samalla esimerkkinä uuden ajan alun englanninkielisistä astrologisista ennustusteksteistä. Ne myös tukevat laatimaani käsikirjoituksen kuvausta.

Tutkielmani täydentää myös uuden ajan alun tieteellisistä teksteistä tehtyä tutkimusta. Tieteellisiä tekstejä on varsin harvoin käytetty alkuperäislähteenä historiallisessa kielitieteessä. Viime vuosikymmeninä tällainen tutkimus on kuitenkin lisääntynyt. Lääke- ja tähtitieteen aloihin kuuluvia tekstejä ovat tutkineet esimerkiksi Irma Taavitsainen, Laurel Means, Linne R. Mooney ja Linda Ehsam Voigts. Keskiaikaiset tekstit ovat kuitenkin tutkimuksissa edustettuna huomattavasti paremmin kuin uuden ajan alun tekstit. Vielä harvinaisempaa on se, että samassa tutkimuksessa käsitellään sekä käsikirjoituksia että painettua materiaalia ja näiden medioiden vuorovaikutusta. Tämä tutkielma voidaan nähdä tapaustutkimuksena käsikirjoitusten ja painetun materiaalin vuorovaikutuksesta ja kansankielisen tieteellisen tekstin leviämisestä uuden ajan alun Englannissa. Editoimani tekstit toimivat hyvinä esimerkkeinä siitä, että käsikirjoituskulttuurin ja varhaisten painettujen kirjojen välillä on uuden ajan alussa selviä yhtäläisyyksiä ja yhteyksiä. Beinecke 558 sisältää useita sellaisia tekstejä, jotka on luultavasti kopioitu 1500-luvun puolivälissä painetuista kirjoista. Voidaan siis sanoa, että uuden ajan alussa tekstejä ei kopioitu vain käsikirjoituksista painettuihin kirjoihin, vaan myös painetusta materiaalista käsikirjoituksiin. Uuden ajan käsikirjoitusten ja painetun

materiaalin tutkiminen tästä näkökulmasta voisi avartaa käsitystämme tekstien levittämisestä ja leviämisestä Englannissa ja Euroopassa kirjapainotaidon yleistymisen ensimmäisinä vuosisatoina. Mielestäni tutkimuksessa tulisikin keskittyä käsikirjoitus- ja kirjapainokulttuurien vuorovaikutukseen, ei vastakkainasetteluun.

Beinecke 558:n kaltaisia yksityishenkilöiden kirjoittamia tai kirjoituttamia, ainutlaatuisia käsikirjoituksia voidaan käyttää lähdemateriaalina monenlaisessa kielitieteellisessä, kielihistoriallisessa ja historiallisessa tutkimuksessa. Työni voidaan nähdä mikrohistoriallisena tapaustutkimuksena, jossa yhden käsikirjoituksen kautta voidaan tarkastella yleisempiä historiallisia kehityskulkuja ja ilmiöitä. Tutkimusaiheeni tarjoaa myös mahdollisuuksia monitieteisten menetelmien käyttöön; työssäni olenkin historiallisen kielitieteen metodien lisäksi hyödyntänyt esimerkiksi historian tutkimuksen, kirjahistorian ja paleografian menetelmiä. Toisaalta tällaisesta tutkimuksesta saatua tietoa voidaan hyödyntää historiallisen kielitieteen lisäksi myös tieteenhistorian alalla.

Kirjoittamani käsikirjoituksen kuvaus helpottaa tutustumista Beinecke 558:n sisältöön, sillä olen koonnut kaikkien käsikirjoituksen sisältämien tekstien otsikot listaksi. Tällaista tietoa voidaan toivottavasti tulevaisuudessa käyttää apuna kansankielisten astrologisten tekstien ja toisaalta *commonplace book* -luonteisten käsikirjoitusten määrällisessä tutkimuksessa. Analyysini perusteella olen kuitenkin sitä mieltä, että laadullisia menetelmiä ei voi tämänkaltaisessa tutkimuksessa sivuuttaa. Ennustustekstien luokittelu on varsin hankalaa, mutta asiayhteyden huomioonottamisesta on apua. Esimerkiksi Beinecke 558 sisältää useita tekstejä, jotka toisessa yhteydessä voitaisiin nähdä teoreettisina tähtitieteellisinä teksteinä, mutta jotka tässä käsikirjoituksessa tukevat käytännöllisiä, lukijaa ohjeistavia ennustustekstejä. Tulevaisuudessa olisikin syytä tutkia astrologisia tekstejä myös siitä näkökulmasta, millaisissa konteksteissa ne esiintyvät. Tällä

tavoin voitaisiin saada uutta tietoa tekstien yleisöistä ja mahdollisesti kehittää parempi menetelmä tällaisen materiaalin, esimerkiksi ennustustekstien, luokitteluun. Lisäksi niin käsikirjoitusten kuin varhaisten painettujen kirjojenkin tutkimuksessa tulisi mielestäni huomioida sekä tutkimuskohteen henkinen että fyysinen ulottuvuus. Paitsi henkisiä ja taiteellisia tuotoksia, kirjat ovat myös esineitä, joista voidaan saada paljon tietoa esimerkiksi tutkimalla sitä, mitä materiaaleja kirjan tekemiseen on käytetty, mitä lukijat ovat kirjoittaneet marginaaleihin tai miten kirja on sidottu.