

Scientific Treatises and Their Companions: A Study on the Unscientific Texts in a Scientific Manuscript

I. Introduction

At first glance, BL Harley MS 941 looks like a collection of scientific writings. The majority of texts in it are indeed related either to astronomy, geography and rhetoric, the branches of the seven liberal arts that make up the liberal arts curriculum at medieval universities. However, the manuscript contains some sections unrelated to the liberal arts too, such as a legend on the discovery of the isle of Britain, poems on politics and maintaining health, a satirical verse against the clergy, treatises on magic, a text about learning, a calendar and medical recipes. In my paper, I will investigate why these texts appear alongside those that discuss medieval science. Considering how many faces the manuscript has, I will select only a few from these unrelated treatises to examine.

The starting point of my research will attempt to identify the compiler of the manuscript as a student of the seven liberal arts. By verifying that Harley 941 is the compilation of a student's notes, I will gain a perspective from which I can speculate the reason why the texts that were unlikely to have been part of his education are present in the manuscript. After learning more about the person behind Harley 941, I will study some of the treatises that have no connection to the seven liberal arts. I will investigate the presence of the religious texts to understand how the Church's influence over education changed at the second half of the 15th century and to learn how a satire against the clergy can be present in the manuscript. My next category will study explore the compiler's interest in poems that deal with history, politics and medicine, and even a legend about the discovery of Albion. My last classification will include the compiler's interest in such sciences he probably did not get formal education in. Here I will discuss the six medical recipes and a treatise on magic.

The examination of these selected treatises combined with the assumption that the compiler was a student at a university should be enough to pinpoint if these texts unrelated to the education of the liberal arts were included for pure interest, which would provide further information about the nature of the compiler.

II. The Compiler of the Manuscript

According to the webpage of the British Library, Harley 941 was written in the second half of the 15th century, but its first known owner is Edward Stillingfleet, the bishop of Worcester and also theologian, who lived in the 17th century. The two missing decades between the creation of the manuscript and its first recognised possessor is a long time to make a valid guess to its origins, therefore the only option that remains is speculation.

The handwriting throughout the manuscript seems to be identical, which, if linked to the subject of the texts, assumes that the author was a university student, and that Harley 941 was originally the collection of notes he made during his studies. The material of the book does not exclude this idea. The British Library reports that the manuscript was written mainly on paper, and that parchment only appears as biofolia to the gatherings “on the outside and in the centre” (British Library). According to the Central European University’s webpage, paper was cheaper than parchment, and it became a common practice for the students of the 15th century to record their studies in writing, which further supports the possibility that the author of Harley 941 could have been a student.

The quality of the handwriting indicates that the manuscript was intended for personal use. Compared to the codices of the monasteries or contemporary guilds in London, which were carefully copied by scribes to preserve knowledge for mutual use, the writing in Harley 941 lacks such an intention. Although most of the pages are ruled, there are some exceptions. The calendar starting on fol 25v and the following recipes on fol 26v have no ruling, and because of this, the written lines are slightly crooked and the line spacing is compressed. Furthermore, the style of writing throughout the manuscript indicates fast writing, and in such examples as between fol 25v and fol 26v, or on some notes taken at fol 99v and fol 100r, it can even be described as hasty and careless. The lack of delicate handwriting implies that the copier of the texts intended them for personal, and not for public use.

The calendar that starts on fol 25v suggests that the compiler of Harley 941 was a student at the Oxford University. The calendar is introduced as “Thys tretis was made at Oxynford be the new katedra / and preved in all the unversyty”, pinpointing that the calendar was specifically made for the use of those at the Oxford University.

The sciences discussed in the manuscript reveal that the author was learning the upper division of the liberal arts. In the Middle Ages, the foundation level of education was collectively called the seven liberal arts. It was divided into two parts: the trivium and the quadrivium. The trivium was considered the lower part of learning, and it focused on grammar,

logic and rhetoric. The quadrivium included the subjects of arithmetic, geometry, astronomy and music. These four subjects were the “higher” arts taught at universities. Although Harley 941 contains a treatise on rhetoric, the greater part of it is built up by various texts and graphs on astrology, astronomy, cosmology and one even on geography, which was close to geometry in medieval studies. This collection of texts implies that the author might have been the student of the quadrivium.

III. The Unusual Aspects of the Manuscript

As stated above, Harley 941 is a compilation that contains mainly scientific texts. There are some segments of it however, which do not fit the expectations of such a work. These unrelated treatises can be placed into categories. The first group will contain the religious texts and a satire against the clergy. The second will examine the literary and historical interests of the compiler, such as the poems *On the Times* and *Dietary*, and the legend called *De origine gigantum*. The third category will investigate the texts that have a scientific relevance outside the curriculum of the seven liberal arts. The texts discussed here will be the medical recipes and the treatise on magic.

1. Religious Texts

Harley 941 contains various texts that can be connected to religion and the Church. The British Library describes the text from fol 4r to fol 5v as a “short explanation of the Decalogue followed by a text on the seven mortal sins”. Later in the manuscript, from fol 97v to fol 99v a “satirical verse against the clergy” was copied.

Although religion is not part of the seven liberal arts, university students were educated on it. According to Nicholas Orme, earlier in the 15th century, Thomas Arundel, the archbishop of Canterbury, “ordered schoolmasters not to teach their pupils anything about the faith or the sacraments that was against the determination of the Church, and not to allow their pupils to hold disputations concerning matters of faith” (222). This was Archbishop Arundel’s reaction to the rise of the Lollards, who challenged the Catholic Church with their notion to reform Western Christianity. The explanations on the Decalogue and seven mortal sins can be regarded as the results of such a strict education.

By the end of the century, the Renaissance view spread to England and changed university education, demolishing Archbishop Arundel’s methods. The authority of the “new

katedra” mentioned at the beginning of the manuscript’s calendar might indicate that the university curriculum was already reformed by the Renaissance, or was in the process of it.

The presence of an estate satire in the manuscript titled by the British Library as “a satirical verse against the clergy” also contradicts Archbishop Arundel’s efforts. As stated by the Norton Anthology of English Literature’s webpage, estate satires “set forth the functions and duties of each estate and castigate the failure of the estates in the present world to live up to their divinely assigned social roles” (The Norton Anthology of English Literature). These satires can be outright attacking or they can be indirect such as Geoffrey Chaucer’s *The Canterbury Tales*, thus the presence of one in a student’s notes is not enough to assume his views on clergy.

The presence of the satire among the other notes cannot be explained with certainty. It could not be the part of a lecture, solely for the nature of the text. It does not fill the empty space at the end of a gathering either, as the notes at the end of the satire extend to the middle of a recto side and then most of that side remains empty. Despite this, the satire was probably copied by the compiler due to interest, and the presence of two poems, *On the Times* and John Lydgate’s *Dietary* also support this possibility. From this perspective, the satire can be read either as proof to the compiler’s political allegiance, or as wisdom on how the educated elite should behave and how not to.

2. Interest in Literature and Legends

After a longer passage which the British Library titled *Imago mundi*, two poems are copied into the manuscript. The first one is *On the Times*, a political poem from the 14th century, which warns the people of England that their behaviour is going to awaken the wrath of God. As the description of the seven liberal arts demonstrates, and James M. Dean also states, “The science of politics did not exist in the Middle Ages, at least in our disciplinary sense of the term. Universities did not recognize politics as a separate category or discipline” (Middle English Text Series). The same is true to history, which is another subject that was not acknowledged as a science. This means that *On the Times* was presumably not part of the university curriculum, or at least not for its subject. As the poem ends on a verso side, it is possible that the writer filled the empty space left near the end of a gathering. The choice of the poem for this role could have been either an aesthetic decision before the following poem by John Lydgate, a personal interest in politics or history, or simply an appreciation of poetry.

The second poem is John Lydgate's *Dietary*, which is a composition that mainly advises the self-restraint of the body over acts that George Shuffleton summarises as "external influences that included food, drink, excretion, sleep, air, exercise, emotion, and sexual intercourse" (Middle English Text Series), and also encourages charity. The advice provided in the poem is aimed to improve both religious and medical well-being, which Faye Getz defines to be the belief "of the Stoic philosopher and not the physician" (89). The poem might have been included in the manuscript for a similar reason *On the Times* was: for the interest in poems, their subject, or to not let empty leaves go to waste. Moreover, *Dietary* was a very popular poem in the 15th century. Coincidentally, although Lydgate's poem provided no legitimate advice, its topic is close the subject of medicine which will return one leaf later, in the form of six medical recipes.

The manuscript's first text, the Latin version of *De origine gigantum*, also demonstrates the compiler's interest in literature, and also in legends and history. The narrative is the story about how the land of Albion was found and named by Albina and her twenty-eight giant sisters. The narrative survived in Anglo-Norman and Syrian, and it was later translated into Latin from both languages (Carley & Crick 48). Carley and Crick believe that the original of the translation in Harley 941 is not the Anglo-Norman, but the Syrian variant, based on several differences the plot has in the Anglo-Norman and Syrian legends (48). The most notable distinction between the two narratives is the presence of a daughter in the Anglo-Norman version: the youngest daughter betrays her sisters, therefore saves the husbands of her sisters. The Syrian variant features no such character, which results in the death of the husbands (47).

Carley and Crick assume that the compiler of Harley 941 did not make a copy of the translated legend, but translated it himself (49), and that he believed the tale to hold at least some truth (49-50). The British Library's webpage records that "the leaves may have been taken from a different manuscript" (British Library). As the handwriting is similar to the rest of Harley 941, and Carley and Crick believe that the translator was the compiler, the question about the intention and time of creation emerges. The translation was most likely not part of the compiler's education, as the university's curriculum did not expect students to translate texts from Syrian. Because of this and the assumption that the leaves were not part of the original gatherings, the text cannot be connected to any part of the manuscript with certainty, indicating that the translation could have been created any time before, during, or after the student's years at the university. If Carley and Crick are right about the compiler being the translator, however, then it is possible to recognise him as a person who was interested in knowledge beyond what the university offered. Harley 941 contains other examples which can argue for this statement.

3. Interest in Sciences Beyond the University

Although the majority of Harley 941 is a compilation of scientific texts, some of them cannot be considered as part of the seven liberal arts. The six medical recipes on fol 26v are hastily written lines that give advice to cure symptoms such as paralysis and trembling. As medicine was a science outside the boundaries of the liberal arts, the student who compiled Harley 941 either did not receive education on it, or attended courses without the wish to get a degree on it. As Vern L. Bullough observes, while Oxford had a faculty of medicine, it was the smallest in the university (62), and the school had smaller influence on the subject than Cambridge (74). For this reason, many students could take classes on medicine, even if they did not wish to work in that field later (74). He also claims that writing a manuscript on medical treatments does not mean that the author had a degree in the subject (66).

All this information implies that the author of this manuscript could attend classes on medicine due to interest, although Lydgate's *Dietary* and the six medical recipes that fill the empty space after the calendar can prove only interest, not actual education.

The second notable text that regard science not directly taught at universities is the collection of three treatises on magic, starting at fol 58r and ending at fol 61r. The entry on magic in *Medieval Science, Technology, and Medicine – An Encyclopaedia* states that while magic was regarded as “foolish and irrational” (Glick, Levesey and Wallis 318), since the 12th century some of its features were taken more seriously, although those never became subjects at the universities.

Interest in magic, however, did not mean agreeing with it. Claire Fanger defines magic in the Middle Ages as “false knowledge or non-knowledge [...] or as demonic” (26). David J. Collins connects magic of this kind to the nature which was created by God, concluding that if magic (so a demonic power) could alter nature in any way, then it is an act against God (468). Collins proposes that such an interpretation could attract the interest of those who study theology or natural philosophy, which is the “rational reflection on notion and change in the physical world, as well as fields (by medieval reckoning) such as medicine, physics and astronomy” (468). According to this classification, Harley 941 contains a considerable amount of texts on natural philosophy, which might rationalise the presence of the three magical treatises as products of scholarly curiosity.

IV. Conclusion

As demonstrated above, the unusually diverse, not clearly scientific content in a scientific manuscript can prove to be not that unrelated to the rest of the texts as it first appears. The Church had great influence over the education in the universities, thus the Christian teachings and interpretations could easily be part of the curriculum. The subject of the poems is either political, historical or medical, which, combined with the medical recipes and the treatises on magic, displays the interest of the compiler in knowledge he was not, or could not be educated in. Even the legend is conceivably the compiler's translation.

If most of these different texts were filling up empty leaves, then the manuscript becomes much more than the notes of a student, as it sheds light on its compiler as a person who showed interest in every kind of knowledge about the world around him.

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