The first page of an encrypted manuscript in the British Library bears the title, “The Subtelty [sic] of Witches,” and the year 1657, by author Ben Ezra Aseph. With a decryption key, it became clear that the manuscript is in fact a copy of verbs from a Latin dictionary, most likely an edition of Calepino. The title, year, and author have no apparent relation to the actual text, and were added later by an unknown person who likely had no knowledge of what the manuscript contained. After determining the range of dates the paper the manuscript was written on was found, and narrowing down the edition of the Calepino most likely copied from, we can now put the earliest possible date for the writing of the manuscript to 1543.

1 Introduction

In the vaults of the British Library resides a strange little manuscript, with shelfmark Add. MS [10035] (Aseph, 1657), which no one has been able to read since it was acquired 186 years ago, due to the fact that all 400 of its handwritten pages were encrypted in an unknown cipher. This paper contains the first systematic description and analysis of its characteristics and its contents, to determine from where and when it originated.

We consider the characteristics of the manuscript itself in Sec. 2, the paper in Sec. 3, the provenance and title in section Sec. 4, cipher and text itself in Sec. 5, interesting phrases in section Sec. 6, and explain in sections sec. 7 and 8 how, simply put, the what, when, and the how can contribute to finding out who may have written the manuscript, and most importantly, why it may exist.

Figure 1: “Subtelty of Witches” front cover ©British Library Board, Add MS [10035].

2 Characteristics of the Manuscript

We describe the dimensions, binding, cover, stamp, and the pastedowns.

2.1 Cover

The manuscript itself is a small volume in duodecimo format (13x19cm). According to the staff of the British Library, it is still in its original binding (Fig. 1).

A leather stamp adorns the center of both the front and back cover (Figs. 2a and 2b). While we have not found any stamps of a matching design, this will continue to be the subject of our ongoing investigation. It may have been the author’s personal stamp, or the stamp of their family.

The stamp depicts a young woman with braided hair that is possibly in a hairnet or adorned with jewelry at the back of the head. She has a high forehead; plucking the forehead was common in the 15th and early 16th century (Elliott, 2009). Her dress has a draped collar with a rounded neckline.
In the first half of the 16th century, necklines were often square, with the rise of the standing collar starting at the Spanish court, spreading to the rest of Europe around 1545. The hair is not in French hood or a Gable hood, thus the woman depicted is not dressed in the typical mid-16th century fashions (McNeil and Braudel, 2009).

A painting by 15th century artist Piero di Cosimo, “Portrait of a woman, said to be of Simonetta Vespucci” (di Cosimo, C 1490), with a similar hairstyle, is shown in Fig. 3 for comparison.

We’re tentatively dating the stamp between 1460 and 1540, and will work on more precise dating in the future.

As mentioned previously, the binding is original, and has become very fragile with age. The only apparent modification to the original binding was at the time of acquisition, when the British Library (then part of the British Museum) stamped text upon the spine (Fig. 4) as follows:

BEN EZRA ASEPH
ON THE SUBTLETY
OF WITCHES: IN CIPHER
MUS. BRIT.
JURE EMPTIONIS.
10,035.
PLUT. CXXXVII. A.

2.2 Inside Cover

Figure 5 shows an older text on parchment bound into the cover for strength, called a pastedown (Ryley, 2017). It appears to be a version of Quodlibet II, q 7 by Hervaeus Natalis (a Dominican) (Iribarren, 2005) (page 151-152), which likely originated between Christmas 1308 and Easter 1309 (Schabel, 2006; Hervaeus Natalis, 1513). The fact is that reusing parts of the Quodlibet itself happened more often, as Schabel (2006) tells us on page 431 about parts recovered in at least 40 manuscripts. Where the Quodlibet originated from exactly, as
well as by whom it was written or bound, is beyond the scope of this paper. We shall cover the spread of the Quodlibeta in the Middle Ages and their reuse in later manuscripts in future work.

3 Paper

An important step toward finding the age of a manuscript is identifying the date and location of the manufacture of its medium. While we were not able to analyse the composition of paper and ink\(^1\) through techniques such as carbon-dating, there were other clues to be found.

3.1 Dating the Paper

In September 2021, we visited the British Library to examine the manuscript firsthand. Using a light sheet, we were able to obtain clear images of partial papermarks, and digitally composite these partial markings together to complete the shape of the full mark in Fig. 6.

With this composite, we were able to match the mark to entry 9613 in Briquet’s Les Filigranes (Briquet, 1907). This mark corresponds to the product of a French paper maker, Pierre Perricard\(^2\), sometimes spelled Pericard, Perricart or Pricard (see Fig. 7). Perricard operated a paper mill in Troyes, France, in the 16th century, following his marriage to Louise Pinette, daughter of paper maker and merchant Nicolas Pinette, sometime before 1543. He was no longer alive in 1578 (Le Clerc, 1926).

Paper bearing the 9613 mark has been identified from sources dating between 1547 and 1566 (Briquet, 1907) (page 504-505). Paper with this specific mark has previously been found in Namur, Antwerp, Bruges, Osnabrück, Braunschweig (Brunswick), Utrecht, Maastricht, Brussels, Aachen (Aix-la-chapelle), Leiden, Hamburg, Lübeck, Woerden, Kleeve (Cleves), Amsterdam, and Middelburg. If we take the widest possible timeframe of 1543 to 1578, the paper would have been between 79 and 114 years old in 1657. We believe it is unlikely paper that old was used for a manuscript.

4 “The Subtlety of Witches”?

One of the manuscript’s most compelling details is that the title, year, and author, is written in plaintext on the first page, which would certainly have given any casual reader cause to believe that it contained something mysterious and potentially heretical. We suspect the author did not write the title, year and

\(^1\)For the manuscript text itself, oak gall ink was used, which tells us very little, apart from being widely used from the 8th to the 19th century. It was made from oak galls, an iron oxide (usually sulfate) and a liquid (beer, wine, water). Unfortunately, it cannot be used as evidence for much, because oak trees, iron, and liquids have been widely available through the centuries, and likely suffered very few supply chain issues, even in times of turmoil.

\(^2\)It is worth noting that Pierre Perricard was a Protestant, in a time when Protestants were suffering persecution - Perricard, an Alderman of Troyes, represented the Huguenots in 1571, and it is unclear if he survived the Saint Bartholomew’s Massacre in 1572, after his house was raided. Everyone arrested there that day was murdered in the prison later that night (Roberts, 1996), but Perricard is not listed as deceased in appendix 7 “Assessment of 1572 victims and their widows”.
author, so the question is: who did, and when did they?

4.1 Provenance

According to the staff of the British Library, the manuscript was acquired in February 1836 from a London bookseller known as Thomas Rodd the Younger (1796-1849). It was acquired in a lot with 15 other, apparently unrelated, manuscripts of varying origin (British Museum, Department of Manuscripts, 1843).

It is assumed that the plaintext title and author were already written in the book when the British Museum was in possession of the manuscript, as the Museum stamped this information onto the existing binding at the time of acquisition, along with its catalog number (see Fig. 4).

It is not known where or when Rodd acquired the manuscript. In 1835 and 1836, there was a parliamentary inquiry in the British Museum (The House of Commons, 1836) since future keepers (both appointed Keeper in 1837) Frederic Madden and Antonio Panizzi clashed about how to catalogue books (if they were to be catalogued at all) (Stoler, 2006). The manuscript may have fallen through the cracks because of it. In future work, we will try to access the Madden diaries for 1835-1836 (Madden, 1873) to see if there is any mention of the manuscript at all. Of note here is that right before his death, Rodd the Younger was mentioned in a case of fraud with a “Shakespeare Second Folio of 1632” in 1849 (Kermode, 2004). We shall discuss the provenance and the key figures involved in a later paper.

4.2 Mismatch between Title and Text

The manuscript begins with a title page bearing an encrypted phrase (see Sec. 5.1 for further discussion), followed by a page containing the only plaintext in the manuscript, other than alphabetic binding marks: “The Subtelt of Witches, by Ben Ezra Aseph 1657” (see Figs. 8 and 9).

It is safe to assume this text was added after 1657, placing its addition between 79 and 114 years after the likely production of the paper it was written upon. It is not a match to the rest of the text, and even taking the encryption into account, it is clear these were written by different hands. Since the paper for the manuscript was most likely manufactured roughly a century before 1657, we can conclude it was added later, by someone other than the manuscript’s author.

We expect the person who wrote it to be misinformed at best and fraudulent at worst. Adding the information could have been a mistake, or could have been done to increase the sale value by making the manuscript seem peculiar or controversial.

5 Cipher and Text

The two title pages (Figs. 12 and 13) are followed by 400 pages of encrypted handwritten text which had, to our knowledge, never been decrypted or examined. Each page contains between 17 and 21 lines of encrypted text. The cipher itself is consistent, with no noticeable difference between the first page and the last (Fig. 10), in either handwriting

Figure 8: Plaintext title/author/year. ©British Library Board, Add MS [10035], page 1B.

Figure 9: Sample of ciphertext for handwriting comparison. ©British Library Board, Add MS [10035], page 57A.
5.1 Cipher Description and Decryption

The cipher itself, as a simple substitution cipher, is not particularly complex; in fact, only approximately half of the characters are encrypted. Some letters are replaced with numbers, and others with symbols. The key is shown in Fig. 11.

The first title page, page 1A, has a single line of encrypted text, but its meaning is extremely unclear (Fig. 12), and includes a character resembling a backslash, not found elsewhere in the text. It could be decrypted as "KHIIRA HT MI\AAN," but many of these characters are not clearly formed. Additionally it is possible that some of these characters were only intended to be plaintext numbers; for example, the characters decrypted as "MI" could be read as the plaintext number 72.

At the top of the first page of encrypted text, page 2A, (Fig. 13) is a title of three words. The first word appears to decrypt to "LIHE" or perhaps "LITE," but has some unique qualities that make interpretation difficult. First, there is a tilde over the "I"; elsewhere in the text, the tilde is used at the end of a word to indicate an abbreviated "N" or "M," as was common in handwritten Latin (Capelli, 1982). A tilde in the middle of a word is unusual however, and rarely found elsewhere in the text. This could indicate an abbreviation.

Additionally, the fourth character, possibly representing "E," is unique in that the horizontal line extends past the vertical, with a smaller vertical line crossing it. This character does not appear elsewhere in the text, so it is unclear how this word was meant to be read. It is also possible that this character is a version of the abbreviation for the suffix "-rum," (Capelli, 1982), which could lead to a possible reading of "LITTERUM," or a shortened form of "litterarum," meaning "letters" or "something that has been written."

The following two words decrypt to "VERUS IUDEX," a Latin phrase meaning "true judge" or "God." The phrase is found in many books in the 16th and 17th centuries, written and printed by Catholics and Protestants alike.

The decrypted text that follows is a collection of verbs copied from a Latin dictionary, most likely an edition of Calepino. The entries follow alphabetical order: abalienare, abdicare, abducere, abeo, and so forth.

The final entry is deportare, after which the author signs off with the phrase "christus ex virgine maria natus attestor" (translation: "I attest that Christ was born of the Virgin Mary") Fig. 14, and the final 18 pages were left blank.

The text is mostly in Latin; however, it does include occasional phrases in Middle Dutch or Flemish, leading to an assumption that this may have been the author’s native language, or perhaps they lived in or had (business) dealings with the Low Countries. Considering the text is in Latin and a ‘vulgar’ language however, we can conclude our author did have at least some education.

5.2 Calepino

After cross-checking portions of the decrypted text for exact phrase matches, we kept ending up with versions of the Calepino dictionary.

We also found the text in Fig. 15, under the verb abeo, which decodes to:

\[\text{huis ampliorem verbi significationem inquire ex calepino}\]

Tr: "consult Calepino for a fuller (discussion of the) meaning of this word"

There are 211 known versions in the Bibliographie du Dictionarium d’Ambrogio Calepino (1502-1779) (and a number of unknown versions) of the Calepino dictionary (Labarre, 1975), in multiple languages, so to identify the correct one, we have collected as many of these editions as we could,

\(^3\)a single character is used to represent both "I" and "J", as was standard for Latin.

\(^4\)Ambrogio Calepino (or Ambrosius Calepinus) was born June 2 1435 in Castelli-Calepio, Italy, to count Niccolino Calepio (Nuovo, 2013). He joined the Augustinian Order in 1548, where he dedicated his life to humanistics studies and to creating the Latin dictionary, first published in Reggio in 1502. He died in Bergamo in 1510 or 1511 (Strada and Spini, 1994)
and followed Labarre’s numbering (Hagebeuk and Mueller, 2022).

We are making the assumption that the paper used in the manuscript was fairly new, and had not been on the shelf for 79 to 114 years. We therefore limited our search for Calepino from the first edition in 1502 to the last in august 1599, which leaves us with 165 known (and 4 unknown) versions. Of those 165 we found 90 editions mentioned (Labarre, 1975) and 4 extra editions: Jean Petit (1510), Sirenis (1550b), Sirenis (1551b), and Hieronymus Curio (1556), via Google books and Google search engine by painstakingly using combinations of the search terms, with and without Exact Match:

- Calepino, Calepini, Calepinii, Calepinus, Ambrogio Calepino, Ambrosius Calepinus
- Bergamo, Bergomatis, Bergamatis
- the names of the printers
- Dictionarium
- Latinae Linguae
- production locations
- and the production dates in both Roman and Arabic numerals

These editions were then manually checked for phrases taken from the first verb written in the manuscript, abalienare. From the following de-crypted text, we were able to identify four phrases copied from Calepino’s definition of abalieno:\[^5^\]:

```
abalienare / [quod nostrum erat alienum facere] Θ ίτε(ν) avertere / ut [petrus animu(m) suum a vestra abalien-
avit potestate] ut abalienare aliqu(e) (m) a se vuijt sijn vrintschap doen [quandoque pro distungere et separare [sic] ponitur]
```

[^5^]: It is worth noting that the manuscript’s author often changed the verb form from Calepino’s singular present tense to the infinitive.
The first phrase, *quod nostrum erat alienum facere*, was only found in editions dating to 1540 and later. The second phrase, an altered version of the source dictionary’s text attributed to Cicero: *Neque uero M. Tullius animum a uestra abalienauit potestate*, was only found five editions. The third phrase was worded differently in some editions, while the fourth was present in nearly all editions we examined.

Thus we were able to narrow the selection down to only 5 of the available editions of the Calepino dictionary, all published in Basel (Hagebeuk and Mueller, 2022), between 1547 and 1553, by editor Conrad Gesner (Conrado Gesnero Tigurino), from the offices of Hieronymus Curio (1547) and Heinrich Petri (Henrichi Petri), with a word from Robert Estienne (Robertus Stephanus) in the 1547 edition (1547; 1549; 1550a; 1551a; 1553).

We examined these 5 versions and found some small differences which could further narrow the selection of possible sources. The 1547 version had a spelling error in the entry for *donotat*, which our author did not copy, under *abeo*, which was corrected in later versions.

The 1550 version has minor differences too:

- Missing text under *deportare*: *ne procul amare vel navigabili flumine quo deportari fructus et per quod merces vehi possint et verba reportet*. Missing *ab eaque cesasse. also deponere: other version ofg deponere provinciam / cum provinciam deposui in contione*

The 1553 edition has an extra l under *avolo*, that our author and the 1549 and 1551 versions do not have.

We are continuing to manually check the 1549, 1551, and 1553 versions for the best match. We are missing 75 of the 165 editions (169 including the 4 not in Labarre), and can not draw any conclusions about the exact match. We do not have enough evidence to decide if the Dutch is original or not, but will address the marks and markings, line-breaks and diacritics, missing editions, and the Dutch phrases in future work. A note on the editors and printers: they are all Protestants. We shall cover the key figures and their religious networks in future work.

Figure 16: Cipher text referencing “en slampampere”. ©British Library Board, Add MS [10035], page 8A.

Figure 17: Cipher text referencing “cuischen”. ©British Library Board, Add MS [10035], pages 8A and 8B.

6 Clues from Dutch text

None of the matching Calepino editions that match the first 3 verbs include Dutch translations, therefore it seems likely that the Dutch phrases are the original words of the author. One of the more interesting phrases we found was the one in Fig. 16:

Decrypted text:

```
patria qui itidem abligurier at bona – di
sijn patremoen goijen verslept hadde hinc
liguritor en slampampere
```

In contemporary Dutch:

```
Hij die zijn erfenis vergooid heeft Een
slampamper (nietsnut, klaploper, red.)
```

In English:

```
He who threw away his inheritance a
layabout (or good-for-nothing)
```

The Etymologisch Woordenboek, (van Veen and van der Sijs, 1989), states that slampampere is Middle Dutch (1200–1500), as is slempen.

Another interesting phrase from the manuscript, which indicated a more Flemish provenance, is shown in Fig. 17.

Decrypted text:

```
abluo ablui ablutum ter
cuischen aff wasschen
```
In contemporary Dutch:

*Kuisen, afwassen*

In English:

*To clean off, to wash (dishes)*

Kuisen is still being used in modern-day Belgium, Flanders, today. So these two sentences in the first few pages hint at the Low Countries, specifically at what is now Belgium, for the location of origin of the manuscript.

After the first 10 pages, the amount of Dutch in the manuscript diminishes significantly.

7 Conclusions and Discussion

From the book and the text itself, some things have become clear. There is no subtlety, very few witches, but a lot of Protestants, in the middle of the 16th century in Europe.

Despite the title page’s proclamation that the manuscript dates to 1657, evidence shows that it was most likely written in the middle of the 16th century, with the papermark pointing to a range of 1543-1566, and the copied text pointing to a source publication date of 1549–1553. The widest range we found evidence for is from 1543 to 1578, including 1572 because of the numbers on the title page, and Pierre Perricard going missing from records.

The text is a copy of verbs from a Calepino dictionary, or from an edition based on the Calepino dictionary (copyright isn’t as much a thing in the 16th century (Eamon, 1994)) by, for example, Robert Estienne⁶. We are missing 75 known editions of Calepino and have not yet ventured into the territory of copies under another author.

The last sentence of the manuscript, *christus ex virgine maria natus attestor*, hints at an esteem for Mary, and acknowledges her as a mother, but does not ascribe to her the status the Catholics gave her (Kronenburg, 1911).

The closest textual match we found was in the sacred Christmas carol Gaudete, which includes the phrase “Christos est natus ex Maria virginæ”. This carol was first published in Greifswald, written by Jacobus Petri Finno (1582), who was a moderate reformer and a Protestant (Skriftställare, 2008).

It is not possible to separate people, society, and culture from religion in the 16th century, but the precise theological phrasing and considerations (like the Augsburg Confession) are beyond the scope of this paper and will be addressed in future work.

Every person we have found to be involved with the manuscript in the timeframe - from the papermakers, to the trade partners, to the printers and editors of the dictionary - was a Protestant, and we expect our author was a Protestant too. Conclusions about Ambrogio Calepino, who died in 1510, before Luther nailed his theses to the Church, are impossible to draw. We can likely assume, however, that a nobleman who joined the Augustinian order willingly, was not among Alexander Sextus’ biggest fans. There may be a reason his dictionary specifically was encoded, but to name any would be pure speculation at this point.

Considering the Dutch phrases found in the manuscript, future work will include continued tracing of the manuscript’s provenance, since we know Thomas Rodd the Younger bought books in current-day Belgium, in 1835 and 1836, which he later sold to the British Museum, like an illuminated manuscript of the Four Gospels (Terbruggen, 1835), matching Egerton MS 608 (Theodericus, 2nd or 3rd quarter of the 11th century) in the British Library. We believe we’re looking for our author in the Western Europe area, specifically in the Low Countries.

8 Future Work

To possibly identify an author and a reason for the manuscript existing, we have a few lines of inquiry still open. In the future we will continue the search for a leather stamp matching that of the cover, as well as any clues in its design that might point to a specific era or region of origin.

We will further study the Quodlibet pastedown, as that could provide some clues as to when and where the manuscript was bound.

We shall follow Thomas Rodd the Younger back in time on the European mainland, to find the previous owner of the manuscript, and will try to look at the Madden diaries, to find more information about the provenance, and we will try to go back further in time from that point on.

We shall seek more of the missing Calepino editions, in view of narrowing down the source text to a single edition. We shall continue to analyze the Dutch phrases to look for any clues as to the author’s origins.

We found some compelling information hinting at a network of Protestants, in the middle of the Reformation. To consider the theological information

⁶Estienne has complained about the mistakes Calepino made (Enenkel and Nellen, 2013).
hidden in the manuscript, we have to fully decode it, and study the exact phrasing, dating, and theological arguments made, in the timeframe, in future work.

We shall also consider (the connections between) Pierre Perricard, Hieronymus Curio, Heinrich Petri, Conrad Gesner, Robert Estienne and possibly our author in future work, since we have reason to believe history is a story of people first, and who knew who and how is important information. We also note that trade, especially book trade, between Catholics and Protestants, was frowned upon in this period (Schmitt et al., 1988).

Continuing identification of the author is future work, as is trying to explain why the author felt it necessary to painstakingly encrypt 400 pages of a copied dictionary. We believe we need to take a much closer look at the Protestant Reformation and Wars of Religion to begin to find explanations. If our hypothesis is correct that the manuscript originates in the Low Countries in the middle of the 16th century, this was a volatile time, with a divided population plagued by distrust and social unrest. Book burnings and the (Flemish) Inquisition, secret (military, religious organizing) communication, or just because, are all still possible reasons for the manuscript to exist, and the possibilities are not limited to these reasons.

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