The Transmission of a ‘Declaracio mappe Terre Sancte’ from the 15th Century
Towards a Digital Edition of a Textual Description of a Grid Map

**Abstract** In my contribution, I address a set of short Latin pilgrimage texts dated to the 15th century, each containing a written description of a grid map of Palestine (‘Declaracio mappe Terre Sancte’) in which the holy places are located in a grid scheme. After some introductory considerations of maps, grid maps, and pilgrimage narratives, I discuss in the first instance the source of the 15th-century description of Marino Sanudo’s ‘Liber secretorum fidelium crucis’. The focus of the contribution lies in the transmission of the ‘Declaracio mappe Terre Sancte’ and on the nature of a possible exemplar map or text. The discussion of the transmission leads to considerations about the adequate presentation of the text in a digital edition, visualized by a grid scheme.

1 Introduction

The existence of a description of a map, without a map to accompany it, may seem like something of an oddity to our modern sensibilities. Any textual description of a map might normally be seen as ancillary to the apparently more informative and recognizable image of a visual map. After all, a picture speaks a thousand words. However, in the set of texts discussed in the current chapter this expectation is subverted. In each of these manuscripts, only a description of a Holy Land map survives without the accompanying map itself. This chapter will therefore address the seemingly unusual survival of these text-maps-without-maps and how these might be better understood and used.

But, before embarking on the discussion of these textual descriptions of a map, it is first of all necessary to consider the relationship between pilgrimage texts and maps or diagrams prior to the 15th-century emergence of the ‘Declaracio mappe Terre Sancte’. Useful not only as a tool for orientation, these diagrams and maps were able to help users to visualize the journey to the Holy Land.1 However, diagrams are very rarely found in the corpus of pilgrimage texts.2 Only a few manuscripts within the Adomnán of Iona/Bede pilgrimage narrative tradition, written between second half of the seventh and beginning of the eighth centuries, contain diagrams.3 Outside of this tradition, up until around the 12th century, illustrations are rarely found transmitted in either pilgrimage narratives or similar texts like Jerome’s ‘Liber de locis’.4 That said, examples of plans of Jerusalem or maps can be found as part of texts within other genres, such as biblical commentaries, or in encyclopaedic contexts. An early example of this is a diagram entitled Figura terre repromissionis, which represents the distribution of the land among the 12 Israelite tribes. It dates from the middle of ninth century and is found transmitted on the last page of a commentary on the Book of Joshua.5 The purpose of this diagrammatic representation is to clarify the text and it serves to aid in the memorization of the tribes and their territories by means of a rough topographic orientation, the topographical order being a well-known strategy of ancient mnemotechnics.6

4 Harvey (note 1), pp. 17–30.
However, starting from around 1300, maps based on the ‘Descriptio Terre Sancte’ of Burchard of Mount Sion began to be transmitted separately from this pilgrimage narrative and in manuscripts of the ‘Descriptio’ itself, we find diagrams showing the structure of Burchard’s text. Moreover, it is in the 14th century that the first European grid maps we know of are transmitted, in connection with Marino Sanudo’s ‘Liber secretorum fidelium crucis’. In these maps, a grid with quadrants is placed over the region of Palestine, though only some of the manuscripts of Sanudo contain these grid maps.

This short overview shows that pilgrimage texts referring to diagrams or maps also function independently from the diagrams or maps which they refer to. Thus, the core of my contribution addresses not maps but rather textual descriptions of maps. The set of Latin pilgrimage texts I will analyse refer to a figura, a grid map of Palestine, which is not transmitted in the extant manuscripts alongside the pilgrim text. The actual figura has not survived, but textual descriptions of it are transmitted in four manuscripts, as seen in the overview (cf. Table 1), and this short text is referred to in one of the extant manuscripts as the ‘Declaracio mappe Terre Sancte’. In addition, a further description of a grid map is embedded in the 15th-century pilgrimage narrative of Johannes Poloner. Marino Sanudo’s ‘Liber secretorum fidelium crucis’ and related grid maps serve as the sources for all the textual descriptions of a grid map discussed here.

The aim of this contribution is to improve our understanding of textual descriptions of grid maps, since the function of these descriptions deserves further consideration. To seek preliminary answers to this question I will examine how the text of the ‘Liber secretorum fidelium crucis’ of Marino Sanudo (book 3, 14, 3) refers to the extant grid maps of Palestine (section 2). Based on this examination, I will analyse the description of the grid map transmitted in Johannes Poloner’s pilgrimage narrative dated to 1422 (section 3). Next, I will explore the ‘Declaracio mappe Terre Sancte’, transmitted to four manuscripts dating from the 15th century, and its transmission (section 4) while also thinking about the nature of a possible exemplar map and/or text (section 5). Finally, I will reflect on possible new directions for the editing of pilgrimage texts that also includes the visualization of these findings about the text’s transmission and show how a digital edition of the ‘Declaracio mappe Terre Sancte’ could be realized (section 6).

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7 See below note 23.
9 Munich, Bayerische Staatsbibliothek, Clm 18736, fol. 201r.
Before turning to the ‘Declaracio’, we must first discuss the related grid maps found transmitted in connection with manuscripts of Marino Sanudo’s ‘Liber secretorum fidelium crucis’. Marino Sanudo Torsello the Elder was born in Venice in about 1260 and his book was written in an attempt to initiate a new crusading expedition.\(^{10}\)

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The grid maps associated with this work were however not produced by Marino himself, but are the work of Pietro Vesconte (d. 1330), the Genoese geographer and cartographer who was also known for drawing portolan charts.\(^{11}\) We know that, from 1321, Marino dedicated his work to important people and produced copies and maps for them in the hope that the addressees would take preparations for a crusade.\(^ {12}\) We also know, as noted by Harvey, that Marino Sanudo dedicated just the map(s), without the book, to some addressees.\(^ {13}\) It shows that Sanudo apparently trusted the persuasive visual effect of the maps to communicate his point. Despite this, his efforts were unsuccessful, and he died in 1343 without having mobilized the expedition he had hoped for.

The three books of the ‘Liber secretorum fidelium crucis’ are transmitted, with or without maps, in various different redactions.\(^ {14}\) In 1309, Sanudo had already dedicated an early version of the ‘Liber’, with one book entitled ‘Condiciones Terre Sancte’, to Clement V. Later, in the years 1312–1321 he added two more books as well as maps, including a grid map, which is most significant for the present discussion, in addition to a portolan map and a \textit{mappa mundi}. The 14th part of the third book, which consists of a detailed geography of the \textit{Terra Sancta}, is of special interest.\(^ {15}\)

With regard to the ‘Declaracio mappe Terre Sancte’, it is important to note the function of the ‘Liber secretorum fidelium crucis’, as the aim of Sanudo’s book and the related maps, is to promote a new crusade expedition. Although the text of the

\begin{footnotesize}
\begin{itemize}
    \item[12] Discussed by Harvey (note 1), p. 109; Lock (note 10), pp. 15–16; Edson (note 10); Di Cesare (note 10), pp. 43–63.
    \item[13] Harvey (note 1), p. 112.
\end{itemize}
\end{footnotesize}
‘Declaracio’ closely follows its source, the ‘Liber’, this function is not traceable. Instead, the focus seems to lie on a better visualization of the location of the holy places.\footnote{Schröder (note 10) however shows how Sanudo’s map of the Holy Land recalls the biblical as well as the crusading past.}

At this point, and with this in mind, it is useful to take a closer look at the surviving grid maps of the Holy Land. In total, nine grid maps of the Holy Land survive,\footnote{Cf. for this section the detailed discussion in Harvey (note 1), pp. 107–127, esp. p. 114.} with seven transmitted with Marino Sanudo and the other two with the ‘Chronologia magna’ of Sanudo’s contemporary, Paulinus Venetus (cf. Figs. 2–3).\footnote{Paris, Bibliothèque nationale de France, ms. lat. 4939, fol. 10v–11r, see Figs. 2 and 3, and Vatican, Bibliotheca Apostolica Vaticana, Vat. lat. 1960, fol. 265v–266r. On the discussion of Marion Sanudo’s and Paulinus Venetus’ works and on the use of a common exemplar manuscript cf. Di Cesare (note 10), pp. 43–63.} In these maps, a grid of 28 squares from East to West and 83 from North to South is placed over Palestine (cf. the scheme in Fig. 1). As Harvey shows, the same area is covered in each: the coast is at the bottom and East is at the top. In the East, the map extends to the mountains of Gilead and Petra, in the North to Damascus, and in the South to the southern limit of the Dead Sea. The colouring is similar in all the nine grid maps: water is green, mountains brown, the names of the tribes and also their boundaries in red.\footnote{Harvey (note 1), p. 114.} We do not know anything about the origin of the grid, and we can only guess about the sources for its measures, the 28 spatia – 28 leagues or 56 miles.\footnote{Ibid., p. 116. On the grid maps in general cf. ibid. pp. 107–127.} It is possible that the innovative idea of the grid was developed in the process of copying maps.\footnote{Cf. e.g. Harvey (note 1), p. 103, where Harvey prints an example of a grid which was erased but is still visible (Florence, Archivio di Stato, Carte nautiche, geografiche e topografiche 4). Arabic or Chinese influences are discussed. Vagnon mentions a connection of the techniques of artists and mapmakers, which seems possible (Vagnon [note 10], pp. 171–173). Of course, the grid also structures the map as a whole.} Yet this grid is not only a useful tool for helping to copy the map. In connection with the pilgrimage text, it serves as an instrument to help identify the location of a (holy) place and the relative distances between them.

Turning now to the part of Sanudo’s text which describes the map, we must first ask how the text of the ‘Liber secretorum fidelium crucis’ (mainly 3, 14, 3) is connected to these grid maps. And because we can be confident that a number of the manuscripts of Sanudo’s text circulated without a map, another important question to address is how the text functions without the map. Firstly, and unusually, in several chapters of the third book of the ‘Liber secretorum fidelium crucis’, it is the scheme of the grid that structures the text. In contrast, texts on the Holy Land are usually structured according to the itinerary or an imagined itinerary of a traveller and by the constraints of the biblical narrative, meaning that one place is described and then connected to the next place, usually with directions and exact distances. Thus, the reader can, in their imagination, follow the route of the traveller. We find this structural scheme as early as the fourth
in both the ‘Itinerarium Burdigalense’ and the pilgrimage narrative of Egeria.\textsuperscript{22} Indeed, this scheme dominates pilgrimage narratives right up to the 15th century. In the 13th century, Burchard of Mount Sion attempted to deploy a new structure and although his ‘Descriptio’ became the most important source for later pilgrimage narratives and maps of the Holy Land, his new structure was not adopted in most of the texts/maps based on Burchard.\textsuperscript{23} Rather than use a grid, Burchard’s text situates the most important places (\textit{civitates et loca in scripturis magis nota}) in a diagram or compass rose.\textsuperscript{24} Accon (Acre) is the centre. From this centre, he draws four lines, corresponding to the four parts of the world. These quarters are each divided into three parts. And the 12 parts that are created by this (the \textit{divisiones}), corresponding to the 12 winds of heaven, serve as the structure for the ‘Descriptio’. In contrast, Marino Sanudo structures his text using a grid scheme: “Let’s imagine (\textit{imaginemur}) the \textit{terra promissionis} divided by lines into twenty-eight strips (\textit{spatia}) extending from Mount Lebanon to the desert that leads into Egypt and – into eighty-three strips drawn with lines crossing the others from west to east, so that we have many squares (\textit{plurima loca quadrata}), each of one league or two

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{fig_1}
\caption{Diagram of the grid map described by Marino Sanudo: a grid of 28 squares from East to West and 83 from North to South is placed over Palestine.}
\end{figure}

\textsuperscript{22} Cf. on the structure of pilgrimage texts FISCHER (note 2), pp. 42–53.
Fig. 2–3 | Paulinus Venetus, ‘Chronologia magna’, Paris, Bibliothèque nationale de France, ms. lat. 4939, fol. 10v and 11r [source: gallica.bnf.fr].
miles.” In the following text, starting from the East and going to the West, the *spatia* or strips (or, if we imagine a table, the lines) are described, one after another:

*In nono spatio, quadro 22 Corazaym, in principio maris Galileae.*

In the ninth space, square 22 is Corazym at the beginning of the Sea of Galilee.

The grid structure described by Marino Sanudo is, therefore, more precise than Burchard’s division of the land, as the exact location in the grid is given. In this example we can see that the text bears some similarity to a list:

*[In primo spatio] in 76 est Petra deserti, siue Mons Regalis.*

In square 76 is Petra of the desert or Mons Regalis.

However, more information is sometimes added, as in the case of:

*[In 18 spatio] in 55 est Gabaa Saulis, vbi oppressa fuit vxor Leuitae, Iudic. & vnde Saul oriundus fuit, 1 Reg.*

In square 55 is Gabia of Saul where the wife of the Levite was killed (Judges); and where Saul was born (1 Kings).

These examples serve to demonstrate the way in which the information is structured by the accuracy of the grid, with the position of holy places located more precisely when compared to the itinerary scheme. In addition, the location of the places in the grid scheme serves as an authentication strategy. The text describes not just an itinerary, but a pilgrimage to holy places. Thus, the places mentioned are linked to the history of salvation. The map becomes traceable or imaginable in the textual description. The accuracy of the map verifies and authenticates the events of salvation history, which are in turn measured and located by the exactness of the grid scheme.

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As the grid allows for easy replication in different times and places, the presentation in the grid produces the impression of both measurability and timelessness.²⁹

In summary, Sanudo explains the grid scheme in a way that is similar to Burchard’s description of the compass rose, in particular as both authors use *imaginari* or *imaginatio* when they are talking about their structure. Most significantly, while the authors describe their text’s structure, they do not refer to the presence of an actual map or diagram within the same manuscript. Without the actual map, for us the grid structure seems difficult to imagine, but as the rhetorical treatises of antiquity and the Middle Ages suggest, there is the possibility that this scheme loaned itself to more complex imagination and memorization than we can comprehend today. The structure of the grid inspires the imagination of the holy space, allows for it to be orientated, and serves as a mind map for building a “mental grid”.³⁰

### 3 The Textual Description of a Grid Map in Johannes Poloner’s ‘Descripicio Terrae Sanctae’

There exist other shorter texts, derived from the description in Marino Sanudo’s ‘Liber secretorum fidelium crucis’, which use a grid scheme as a reference to describe the location of holy places. These are the 15th-century ‘Declaracio mappe Terre Sancte’ (see section 4) and a description which forms part of Johannes Poloner’s ‘Descripicio Terrae Sanctae’ pilgrimage narrative, dated to around 1422. Johannes Poloner was a German pilgrimage author,³¹ who came from Ratisbon and died in the Holy Land.


³⁰ The 14th-century author Giovanni di Fedanzola used the grid scheme of Marino Sanudo in his ‘Descripicio Terre Sancte’, which is transmitted in one manuscript (also without a map) and dated before 1333. Giovanni di Fedanzola da Perugia, Descripicio Terrae Sanctae: Ms. Casanatense 3876, ed. by Ugolino Nicolini and Renzo Nelli, Jerusalem 2003. In his text, he addresses how useful the grid for the pilgrim is: [S]ciendum est autem quod per situationes predictorum locorum per spatia et quadra, sicut ponantur superius, si subtiliter inspiciantur, potest homo ad notitiam distantiarum omnium predictorum locorum ab invicem facilitatem pervenire, ut autem perseverinantis preter predictam descriptionem via melius et brevius pateat peregrinandi quoad comunia loca et consuetu, maxime usque Jerusalem. In the edition of Nicolini and Nelli, this note, p. 74.

in 1441.\textsuperscript{32} The ‘Descriptio Terrae Sanctae’, on the other hand, is transmitted in six manuscripts, with the manuscript which is currently found in Wolfenbüttel likely to be the autograph.\textsuperscript{33} In this manuscript several other excerpts of pilgrimage texts are transmitted, also copied, in all likelihood by Johannes Poloner.

At this point it is important to consider the use of the grid scheme in Johannes Poloner’s pilgrimage narrative. First and foremost, it is very interesting that in describing Sanudo’s grid scheme, Johannes Poloner, unlike both Burchard and Sanudo, never uses the word \textit{imaginari}. However, like Sanudo’s ‘Liber’, the ‘Descriptio’ is not merely a list but contains biblical information about the holy places. Although no map has survived, it becomes clear that Johannes Poloner refers to a now-lost map which he seems to have added to the text:

\begin{quote}
\textit{Item sub fimbria montium secundae Arabiae usque ad Iordanem fuit regnum Og [...]}. Hoc regnum ad differentiam aliorum citrinum pinxi.
\end{quote}

Likewise from the edge of the mountains of Arabia Secunda, even to the Jordan, was the kingdom of Og [...] I have painted this kingdom yellow to distinguish it from others.\textsuperscript{34}

His use of a now-lost map is further confirmed by the phrase \textit{in colle, quam in hac carta viridem pinxi}, “upon a hill which in this map I have painted green.”\textsuperscript{35} Furthermore, this map used symbols (e.g. a sword) that are explained and described in the text, for example: \textit{In modica distantia versus aquilonem signavi locum cum gladio, ubi Iosue pugnavit contra regem Assur.}\textsuperscript{36} Thus, in contrast to Marino Sanudo, Johannes Poloner directly refers to the map and states that he himself drew it,\textsuperscript{37} referring to the differ-

\begin{itemize}
\item \textsuperscript{32} Information about his place of origin and about his death can be found in an addition to Munich, Bayerische Staatsbibliothek, Clm 14583, fol. 469v. Cf. Julia Knödler: http://www.manuscriptamedievalia.de/dokumente/html/obj31784519 (01.04.2022).
\item \textsuperscript{36} Johannes Poloner, ‘Descriptio Terre Sancte’, ed. Tobler (note 31), p. 258. “I have marked with a sword the place where Joshua fought against the King of Assur.” Translation: Stewart (note 34), p. 27.
\item \textsuperscript{37} In the narrative of Johannes Poloner, the narration of ‘personal’ experience seems to be more authentic than in other texts. Generally, one has to be careful, because apparently authentic personal experience or opinion was often copied in the texts. Cf. Fischer (note 2), pp. 38–41. In the ‘Declaracio mappe’, for example, we find the words: \textit{Ego autem discredo, quia vidi Iordanem}
ent colours he used. Moreover, it is clear that Johannes Poloner’s map relies on the explanations of this text. This is in line with a concept expressed by Paulinus Venetus in the Paris manuscript (Bibliothèque nationale de France, ms. lat. 4939, fol. 9r) as part of the beginning of the text beneath the accompanying *Mappa Mundi*. He states regarding his work, that the text (*scriptura*) and the drawn image (*pictura/figura*) do not function independently of one another. Neither can the geographical content be shown adequately in the text without the figure nor the other way around. It seems that *figura* and *scriptura* are also intricately connected for Johannes Poloner and it is highly likely that there was at least the intention to include a sketch of a map in the work where he marked the places mentioned in the text with the corresponding symbols. To see whether such a relationship between text and image was always implied, we turn our attentions away from Johannes Poloner’s text and towards the unusual example of the text referred to previously as the ‘*Declaracio mappe Terre Sancte*’.

### 4 The ‘*Declaracio mappe Terre Sancte*’

The ‘*Declaracio*’ is transmitted in three manuscripts: one from the Vatican (V), one from Munich (M₁), and one from Nuremberg (N). Alongside these, a further description is transmitted in a different Munich manuscript (M₂) in connection with

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38 Cf. Vagnon (note 10), p. 183, see also p. 181 on the description of the map in Vatican, Biblioteca Apostolica Vaticana, Vat. lat. 3851.  
40 Vatican, Biblioteca Apostolica Vaticana, Vat. lat. 3851, fol. 4r–5v. Cf. the transcription in Vagnon (note 10), pp. 393–394.  
41 Munich, Bayerische Staatsbibliothek, rar. 801, fol. 126r–129v.  
42 Nuremberg, Stadtbibliothek, Cent. III, 93, fol. 171r–172r.
the name of an otherwise unknown Magister, Mauritius Parisiensis. This attribution is found in the heading of the ‘Declaracio’ in a later hand, which records: Declaracio mappe terre sancte – per magistrum Mauricium Parisiense. The text transmitted in M₂ is a short version, but despite this it only differs from the text transmitted in the three other manuscripts in a few sentences. The last passage of the text contains the sentences (fol. 203r) that form the beginning of the text in the other manuscripts and at the end of the text information on colouring is added: the spacia are drawn with red lines (per lineas rubeas) and the other lines are drawn in black (per lineas nigras). This, in itself, is interesting, as of the transmitted grid maps only the one from Paris (Bibliothèque nationale de France, ms. lat. 4939, fol. 10v–11r) has a grid of different colours similar to what is described here in this version of the textual map.

The manuscripts N and M₁ are closely connected as they contain common errors, for example ad ad (N, fol. 171r; M₁, fol. 126v), while the text in V possesses more errors in general. How the manuscript V is connected to the manuscripts from the Southern German region remains to be seen. As V seems to have been written in Italy, there might be a connection to maps that were produced in this region.

M₁ is bound together with the printed version of Hans Tucher’s pilgrimage narrative. It is written in the hand of Hartmann Schedel (see Fig. 4) and it seems very likely that he copied M₁ from the Nuremberg manuscript, which is dated 1457. Hartmann Schedel, born in 1440 in Nuremberg, and living there permanently from 1466 onwards, was involved in the collecting and copying of a great number of books. Regarding the dating of N, it is improbable that the text written by Schedel (M₁) is the work of Hans Tucher himself, as has been assumed in research.

The ‘Declaracio mappe’ in these manuscripts is a short text. It is an abbreviated version of what could have been seen in a figura, as the following examples illustrate:

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44 Harvey (note 1), p. 122.
46 Cf. the description of the manuscript: Ingeborg NESKE, Die lateinischen mittelalterlichen Handschriften: Varia: 13.–15. und 16.–18. Jh. (Die Handschriften der Stadtbibliothek Nürnberg 4), Wiesbaden 1997, p. 34.
48 EDGINGTON (note 31), p. 157: “These manuscript additions are almost certainly the work of the author Hans Tucher.”
49 Vatican, Biblioteca Apostolica Vaticana, Vat. lat. 3851, (V) fol. 4v.
The Transmission of a ‘Declaracio mappe Terre Sancte’ from the 15th Century

Fig. 4 | ‘Declaracio mappe’, Munich, Bayerische Staatsbibliothek, rar. 801, 126r [CC BY-NC-SA 4.0].
Cetera loca eiusdem quadri patent in figura

The places of each square are apparent in the image.

Hec omnia clarent in figura prepicta

All this becomes clear in the drawn image.

On the other hand, the following statement provides us with some information as to how the text was copied:

Secundum hanc tabulam quam ego N. peregrinus in Ierusalem repinxi in sancto monte Syon (V, fol. 4r)

After this image that I, the pilgrim N., copied in Jerusalem on the holy Mount Sion.

The “N.”/nomen should have been replaced by the name of the copyist, but we find the sentence exactly like this in all the three manuscripts without a name having been inserted, leading to the conclusion that the text was copied from an exemplar text and/or map. Furthermore, in these manuscripts a Cronica Syon (in N, fol. 171v) is mentioned. In a recent study, Camponiano has shown that the Franciscans of Mount Zion provided a collection of material for the pilgrims to use and to copy. There could, therefore, have been a grid map within several texts made available to pilgrims to copy and this much seems to be indicated in the manuscripts themselves by the phrase sequitur aliud rescriptum ex chronica Syon (V, fol. 5r: “Something else follows copied from the Chronica Syon”). The existence of a grid map in Jerusalem is not unlikely, as Vagnon has noted, if we consider Marino Sanudo’s efforts, even after his death, through his will to distribute his maps to places as far away as Jerusalem. But the appearance of this sentence in all the texts does not have to mean that all the manuscripts must have been written there and that a map had to accompany all of them. It is highly likely that this sentence, as well as the other references to that map, were added to one manuscript and then copied further while the manuscripts circulated.

50 Edgington (note 31), p. 165.
52 Vagnon (note 10), p. 176.
5 The Exemplar of the ‘Declaracio mappe Terre Sancte’

The mention of a *tabula* or *figura* leads to two questions: was a map ever included in these manuscripts or were these phrases only copied from the text of an exemplar?\(^{53}\) And what was the nature of the exemplar map and / or text which the author or copyist had before their eyes?\(^{54}\) Essentially, the phrase *figura prepicta*\(^{55}\) might have simply been copied verbatim from the text of an exemplar rather than referring to an actual image which the copyist had seen. Considering the processes and limitations involved in the copying of a map during the journey or in a library on Mount Sion, it seems improbable that there would have been enough time to copy a complex grid map or even an incomplete version of it. Thus, we must work on the assumption that it is unlikely that there was a map added to all the manuscripts of the ‘Declaracio mappe Terre Sancte’, even though it makes mention of a *figura* or *tabula*. After all, when we compare the text to Johannes Poloner’s description of the grid map, we find the process of drawing described much less clearly.\(^{56}\)

That being said, it is possible that the exemplar was a map and that a version of the ‘Declaracio mappe Terre Sancte’ was initially accompanied by a map, but that in the copies taken from the map this drawing disappeared. Generally, the discussion about an exemplar has to stay speculative at this point as the relations and dependences of the manuscripts of Sanudo and related texts have not been, as yet, sufficiently researched.

Based on the assumption that the author or copyist had an exemplar map before their eyes,\(^{57}\) any such exemplar could be considered to be similar to the transmitted grid maps which have survived. This hypothesis is supported by two factors related to the connection between map and text in the transmitted grid maps.

First, in the transmitted maps connected to Sanudo,\(^{58}\) we find five pieces of text written beneath the map, labelled with the letters A–E. These letters refer to the respective letters written on the map.\(^{59}\) After the description and location of holy places in the grid, there follows, in N, M₁, and V, a section that relates to a larger area

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\(^{53}\) Cf. on this question also Edgington (note 31), p. 165 and Nicolini and Nelli (note 30), p. xx.

\(^{54}\) Cf. Campopiano (note 51), p. 125.

\(^{55}\) Vatican, Biblioteca Apostolica Vaticana, Vat. lat. 3851, (V) fol. 4v.

\(^{56}\) Maps were not only copied from other maps, but also created on the basis of texts. Could the ‘Declaracio mappe Terre Sancte’ be used as the basis for map making? By noting the location of each element in the grid map, the map can be copied by using only the text. The information provided on colouring could be a hint for the mapmaker. But only if the text also provides enough information on the rivers and their ways through the land, as it is provided by the Sanudo text, but not in the short descriptions of the ‘Declaracio mappe’.


\(^{59}\) Discussed by Harvey (note 1), p. 117.
Comparing this section with the legends written beneath the map on a transmitted grid map, we can observe how these texts are related:

<table>
<thead>
<tr>
<th>'Declaracio mappe Terre Sancte' (N, M₁, and V)</th>
<th>Legend ‘D’ of the Sanudo grid maps, transcription by Bongars (note 8), p. 288</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sequitur. Aman extenditur supra mare mortuum et circuit ei lītus australe usque ad montem Seir, qui est ultra mare mortuum. Versus oriens fere ad duas dietas et coniungitur desert Pharan habens a latere desertum Synay et mare rubrum. A mari mortuo usque ad mare rubrum sunt quinque die. Cum quo putatur continuari per aquam Marach. Dicunt quidam quod aqua Iordanis mari mortuo non misceatur, sed a terra asorbetur.</td>
<td>Amon extenditur supra mare mortuum, &amp; circuitus eius latus Australe, vsque ad montem Seyr, qui est ultra Mare Mortuum ad tres dietas, in confinio vbi habitauit Ismael socer Esau, &amp; coniungitur desert Pharam, habens a latere desertum Synay, &amp; Mare Rubrum [...]. Secundum Saracenos, dietae quinqu, &amp; inde vsque ad Mare Rubrum, V dietae, cum quo potent continuari Mare Mortuum per aquas Marat, de quibus Ex. 15. finis autem apparens est in deserto Pharam: &amp; dicunt quidam, aquas Iordanis, aquis huius maris non miscer, sed potius a terra absorber.</td>
</tr>
</tbody>
</table>

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<tr>
<th>'Declaracio mappe Terre Sancte' (N, M₁, and V)</th>
<th>Legend ‘E’ of the Sanudo grid maps, transcription by Bongars (note 8), p. 288</th>
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<tbody>
<tr>
<td>Desertum Cades miserunt filii Israel exploratores qui post quadraginta dies reversi erant. Murmurante itaque populo duci sunt in desertum per viam maris rubri, et post triginta annos redierunt ad locum eundem et circuierunt montem Seyr et terram Amon, et capta terra regis Seon et regis Basan venerunt ad Jordanem.</td>
<td>Desertum Cades, vnde miserunt filii Israel exploratores, qui post XL dies, huc redierunt, &amp; murmuraent populo, iussi sunt redire in desertum per viam maris Rubri, &amp; post XXX annos redierunt ad locum istum: vnde mouentes castra contra Orientem, circuierunt montem Seyr &amp; terram Amon, &amp; capta terra Seon Regis Esebon, &amp; Og Regis Basan, venerunt ad Iordanem contra lericho.</td>
</tr>
</tbody>
</table>

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60 While the text in M₂ ends.
61 Vatican, Bibliotheca Apostolica Vaticana, ms Pal. lat. 1362, fol. 7v–8r.
62 Cf. the source, the text of Sanudo’s ‘Liber’, ed. Bongars (note 8), p. 250: Vltimo sequitur pars terrae Amon, quantum durat Mare Mortuum: & circuit eius latus Australe vsque ad montem Seyr, qui coniunctus est deserto Pharan iuxta Cadesbarne, habens a latere desertum Sinai, & Mare Rubrum. – “Last, comes part of the land of Amon which reaches all the length of the dead Sea and its south side circles round to Mount Seyr which joins the desert of Pharan near Cadesbarne, having on its side the desert of Sinai and the red Sea.” Translation: Lock (note 10), p. 399.
63 Cf. the text of the ‘Liber’, ed. Bongars (note 8), p. 252: Inter quae maria computantur dietae quinque, & ex hiis putant esse aquas intermedias, quae Exod. XV aqua Marath appellantur. Dicunt etiam aliqui quod aquae Iordanis non intrant Mare Mortuum, sed cum illuc perveniunt absorbentur a terra. – “Five days [journey] are reckoned between the two seas and they think that from these seas come the waters in between that were called the waters of Marath in Exod[us] 15. Also, some say that the waters of Jordan do not enter the Dead Sea, but when they approach it they are absorbed by the ground.” Translation: Lock (note 10), p. 401.
Second, in the Paulinus Venetus map, in the manuscript Paris, Bibliothèque nationale de France, ms. lat. 4939, we find a text or a legend beneath the map with three headings written in red: Explicacio de quibusdam oppidis et notabilibus locis terre promissionis (fol. 10v), De montibus (fol. 10v), and De fluvibus et aquis (fol. 11r). The text is shorter, but clearly follows the description by Marino Sanudo. The references to the grid scheme are missing, but if we look at the cities in the second column written in red as an example, we can see the same order as in the ‘Declaracio mappe Terre Sancte’: Tiberias – Kabul – Samaria – Sychen.

Therefore, as the cited examples show, the source of the ‘Declaracio mappe Terre Sancte’ could have been a grid map comparable to the maps related to Marino Sanudo’s ‘Liber’. It is highly probable that the exemplar was a map with long legends and sections

longo tempore manserunt filii Israel; & inde montem Seyr iussi sunt circuire [...]; & inde redierunt per viam Maris Rubri. – “And still further beyond, towards the red Sea, is Cadesbarne from where Moses sent out the spies. The children of Israel stayed here for a long time and were ordered to journey around Mount Seyr […], and from there they came back by way of the Red Sea.” Translation: Lock (note 10), p. 401.


of text written above and beneath the grid (like the transmitted maps, cf. Figs. 2–3). Whereas the corresponding visual map has not survived or was not copied, the textual form of this grid map, the ‘Declaracio mappe Terre Sancte’, circulated further in Europe.

6 Towards a Digital Edition of the ‘Declaracio mappe Terre Sancte’

The ‘Declaracio mappe Terre Sancte’, with its unique connection to a grid scheme, opens up possibilities for a visual presentation of the text by means of a digital edition. The case of the ‘Declaracio mappe Terre Sancte’ is special and as such different approaches need to be taken when editing it compared to conventional travel or pilgrimage literature. This is because the text is not structured according to the description of a route, by an itinerary structure, but by quadrants, and this makes it particularly suitable for a digital edition. During a one-year project funded by the Ludwig Maximilian University of Munich, I set out to present the text’s unique nature in a visual form. To achieve this, my initial question was how to make the grid scheme function in a digital edition even though no grid map has survived in the manuscripts of the ‘Declaracio mappe Terre Sancte’. Furthermore, I intended to make the processes of transmission visible. That meant that, next to a critical apparatus, the source (Marino Sanudo) and the related texts (Johannes Poloner and the legends of Paulinus Venetus’ map) had to be visible. GIS is often used in projects in the digital mapping of medieval texts. However, for this project, it was of secondary importance and might well have distorted our understanding of the medieval text, and so I was determined to avoid the problems encountered by users of GIS who have tried to use it to map past or fictionalized landscapes. Furthermore, this approach differentiates itself from approaches of literary geography because of the nature of the description, which already refers to a map or rather the grid system of a map. The spatial structure of the text is evident, thus questions about the benefits of digital mapping and literary geography are unnecessary.

My approach is different to those of other projects that are digitally connecting itineraries or travelogues and medieval or modern maps, as georeferencing is avoided and a critical apparatus of the text is shown. Examples of other approaches can be seen, for instance, in Anthony Bale’s maps of pilgrims’ itineraries to Jerusalem and

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67 I thank the anonymous reviewer for the valuable suggestions regarding this section.

68 Bayerische Gleichstellungsförderung (BGF), Förderung der Chancengleichheit für Frauen in Forschung und Lehre, Stipendium für den exzellenten wissenschaftlichen Nachwuchs.

Rome, the Mapping Mandeville project, or various other projects using Recogito. Recogito, as a platform, possesses many of the desired requirements, in that it offers a zoomable map with the possibility to highlight areas with on-click pop-up windows (see Fig. 5 for an example of the grid scheme in Recogito).

These technical considerations aside, the first question was what scheme or map should be used as a basis for the edition. The four possible options were: (1) a modern map (GIS), (2) one of the medieval grid maps, (3) an empty grid scheme, or (4) a reconstructed map/scheme of a map. An argument against the use of a modern map with georeferencing (1) is that modern Cartesian maps inadequately visualize medieval geographical conceptions. In addition, the use of a surviving grid map (2) seemed to be misleading or more appropriate for an edition of Marino Sanudo’s description. I did not want to start creating a connection between the surviving grid maps and the ‘Declaracio mappe Terre Sancte’ before having explored the relation of the ‘Declaracio’ to these maps. However, in the process of editing and understanding the processes

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70 https://www.google.com/maps/d/viewer?mid=1OQ8VhUakbdVI0mCu860px1TAGEs&ll=41.6936076870975%2C15.137159299999995&z=5 (01.04.2022).
73 The Digital Mappa platform (https://www.digitalmappa.org/) is also an interesting interface connecting edition and map.
of transmission I now (in retrospect) think that it might be possible to use Paulinus Venetus’ map in Bibliothèque nationale de France, ms. lat. 4939 as the basis for such an edition. Yet I still think that the surviving map (as well as georeferencing) would distract from the important elements of the edition: the text and not the map. Caution is needed here, because the presence of a map might communicate something new or suggest new connections that cannot be found in the texts.

To realize the project in timespan of one year, I decided to use a grid scheme as a basis for the edition. The use of just a grid scheme without any orientation seemed unsuitable for the modern imagination (cf. Fig. 1). Accordingly, to save time, I decided to use a pre-existing reconstruction, namely one drawn by Titus Tobler in 19th century, which was created on the basis of Johannes Poloner’s ‘Descriptio’ and the existing Sanudo maps. To visualize and highlight the problematic use of a reconstructed map in general, the view of the reconstructed map is blurred intentionally when zoomed out on the website. But it is important to emphasize at this point that my edition does not intend to reconstruct the map that might have accompanied the text, but rather to show how the text of the ‘Declaracio’ refers to the grid scheme.

On the technical side, I wanted to build a website, containing some information on the project, to serve as the core of the digital edition of the ‘Declaracio mappe Terre Sancte’. I intended to connect the possibilities offered by Recogito with my plan to highlight the described quadrants, and to show the critical text of the ‘Declaracio’ connected to each respective quadrant through a mouse click. With help of the Digital Humanities Centre of the Ludwig Maximilian University of Munich (https://www.itg.uni-muenchen.de/), I started to realize my vision for the project. We used the mapping platform mapTiler for the creation of the background layer of map tiles and Leaflet for the interactive zoomable map. Leaflet is an open-source JavaScript library used to build web-mapping applications and create interactive layers, such as markers which create popups when clicked. To return the right data on a mouse click, there are three MySQL database tables: one with the text, one with the coordinates of the quadrants, and one which connects the right text with the right quadrant.

Working with the manuscripts, I realized that a pop-up window was unsuitable for showing the text because, depending on the length of the text, it covered parts of the map. Now, on the mouse click, the text appears below the map. The way this has been implemented can be seen in Figure 6.

Another reason for the presentation of the text in this way is that I also wanted to show the genesis of the text as well as include the sections from Sanudo’s ‘Liber secretorum fidelium Crucis’, the legends of the maps, and comparative sections of Johannes Poloner.

74 Printed in the appendix of Tobler (note 31).
76 I thank especially Dr Tobias Englmeier for his support.
When completing my project, I observed two particular problems. First, it is difficult to get an overview of the text or the order of the passages of text. It is possible to read the table line by line, but not to view the text in its entirety. To overcome this and to stay oriented, I also offered the edition in the form of the text (https://www.pilgrimage.gwi.uni-muenchen.de/edition/). A further step in future could be to once again link the passages of text with the map. The second problem I see is the one of mapping ‘slippery’ geographies, literary texts, or ‘fuzzy data’. As the text becomes more narrative or digressive, it becomes difficult to locate the right place on the map to link the text to. On the website, I indicate this problem by not connecting the final sections of the ‘Declaracio mappe Terre Sancte’ with the map. Overall, it became clear that this kind of edition, while an extremely useful approach, is only suited for short itineraries and not for detailed narrations.

7 Conclusion

In this paper, I analysed a set of texts transmitted in 15th-century manuscripts describing a grid map of Palestine and a similar passage taken from Johannes Poloner’s pilgrimage narrative. The ‘Declaracio mappe Terre Sancte’ is a description of places, set in the grid scheme of a map, but this map is not transmitted with the text. The source of these short texts is Marino Sanudo’s ‘Liber secretorum fidelium crucis’. But while the text of the ‘Liber secretorum fidelium crucis’ refers to a grid scheme,

77 The problem of uncertainty is discussed by scholars working in the field of literary geographies and digital cartographies. Cf. e.g. TAYLOR et al. (note 69).
the 'Descriptio' of Johannes Poloner refers to a map that is said to have been drawn by Poloner himself. As we have seen, the text of Johannes Poloner is more narrative and more extensive than the 'Declaracio mappe Terre Sancte', which might never be accompanied by a map. From the analysis of the 'Declaracio mappe Terre Sancte', we may draw the conclusion that the direct source was a grid map, which did not survive, with legends similar to the other extant grid maps. Nevertheless, the transmitted text is a 'textual map', a map described by a text and not accompanied by an actual map, and which was circulating in Europe during the 15th century.

As the description of a grid map seems to be especially suited for a digital edition, I undertook the project of producing such an edition based on a map with a grid scheme, the results of which have been detailed above. The schematic structure of the quadrants and the direct reference to a non-existent map makes the 'Declaracio mappe Terre Sancte' a unique text in the genre of pilgrimage literature. It is important for our understanding of this wide and hybrid genre and allows us to explore new possibilities in the editing and the visualization of these texts. And while there is still room for further refinement of the processes used to construct a digital edition of this text, it is clear that experimenting with platforms like Recogito or Digital Mappa possesses much potential for future research into other pilgrimage texts.