

**Representations of Jerusalem in Christian-European Maps from the 6th
to the 16th Centuries: A Comparative Tool for Reading the Message of a
Map in its Cultural Context**

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Representations of Jerusalem in Christian-European Maps from the 6th to the 16th Centuries: A Comparative Tool for Reading the Message of a Map in its Cultural Context

Introduction

Modern maps of Jerusalem, according to the conventions of modern cartography, are conventional abstract depictions of the city, dotted with cartographic signs and symbols, accompanied by a legend to decipher them. However, the maps of Jerusalem did not always look that way. Until the end of the sixteenth century, when the cartographic depiction as we know it today started to develop in the maps of Jerusalem, they were drawn as pictorial images, which differed in their style and in the image they showed. When looking at different maps of Jerusalem created in the Middle Ages or in the Early Modern Period, we actually see different cities. Sometimes the maps depicted things that did not exist in reality: many churches and crosses and no crescents, at a time when Jerusalem was under Muslim rule; a huge church of the Holy Sepulchre and tiny mosques on the Temple Mount; European styled buildings within the walls of the city; a perfectly round city, when in fact it is not. Looking at these maps, it is obvious that they did not always try, or even mean, to describe the city as it existed in the days of the mapmaker, nor were they created to enable the visitor to find his way in the city. What, then, were they created for? What are maps if not a geographical depiction of a place?

Maps, like works of art, are also a powerful means of relaying messages through cultural symbols. In addition to the limited function of conveying geographical information, they contain many layers of iconographical meaning of the culture in which they were created. They are a powerful means of communication that allows for the expression of messages of a religious, political or economic nature. In this sense, they are geographical-historical documents with strong didactic aims and purposes.¹ Maps are defined as graphic representations that facilitate a special understanding of things,

¹ Ariel Tishby ed., *Holy Land in Maps* (Jerusalem and Tel Aviv: The Israel Museum/The Ministry of Defence, 2001), 42-43.

concepts, conditions, processes or events in the human world². They are also defines as spatial configurations of places of human meaning and content, in which the central factor of the organization of space is not the morphology or geometric structures of the forms in the described area, but the ‘story’ behind them³. Another way of looking at maps is as a social construction of the world expressed through the medium of cartography.⁴ Maps are a construction of reality, images laden with intentions and consequences that can be studied in their socio-temporal context. Like books, they are also the product of both individual minds and the wider cultural values in particular societies.

Since maps are a medium of communication, or a kind of language, they should be critically studied and judged in the same way as literary verbal sources and documents.⁵ Like all other texts, maps use signs to represent the world. When these become fixed in a map genre, we define them as conventional signs. Maps do not process a grammar in the mode of written language, but they are nonetheless deliberately designed texts, created by the application of principles and techniques, and developed as formal systems of communication by map makers. While literary documents use words and phrases in order to promote ideas, or to influence beliefs, maps are designed to do just the same, but use graphic figures instead of words. Harley suggests interpreting the symbolic and metaphoric representations of the world in maps by applying the iconographical methods of art history to maps.⁶ Thus maps are sources revealing the philosophical, political or religious outlook of a period. Individual signs, symbols or decorative emblems are discrete artistic motifs, to be evaluated separately and as a whole.⁷

² Tishby, *Holy Land in Maps*, 7, cf: J.B.Harley and David Woodward eds., *The History of Cartography, vol. 1, Cartography in Prehistoric, Ancient and Medieval Europe and the Mediterranean* (Chicago: University of Chicago Press, 1987).

³ Tishby, *Holy Land in Maps*, 7.

⁴ J.B. Harley, "Text and Context in the Interpretation of Early Maps," in *The New Nature of Maps*, ed. Paul Laxton (Baltimore: Johns Hopkins University Press, 2001) 35-6.

⁵ Rehav Rubin, "Ideology and landscape in early printed maps of Jerusalem," in *Ideology and Landscape in Historical Perspective*, eds. Alan R.H. Baker and Gideon Biger (Cambridge: Cambridge University Press, 1992) 15; Harley, "Text and Context", 36.

⁶ Harley, "Text and Context", 37,46-7.

⁷ Ibid.

The research of Jerusalem maps studies mainly the development of style and genre in the maps throughout the centuries, using historical, iconographical and stylistic tools in their analysis. Some researches analyse a single map as a whole, such as the Madaba mosaic map, the Crusader Uppsala map, or the De-Angelis map of Jerusalem.⁸ Others analyse a certain meaning, motif or use in the context of other maps, an analysis which employs one of two frameworks. The first uses contemporary maps, such as medieval maps of Jerusalem⁹ to explore medieval cartographic styles and meanings, or depictions of pilgrimage to the Holy City¹⁰ to explore the expression of the idea of pilgrimage. The second draws on earlier maps, as in the research on the evolution of the circular shape of Jerusalem throughout the Middle Ages¹¹ and later periods¹². Some of these researches are in the form of a survey or a catalogue of maps of Jerusalem from the early Middle Ages until modern times.¹³ In most cases, the researcher renders a description of the map, its geographical and historical background, and thoroughly analyses one or more of its elements.

In the wider context, particularly in the last few decades, maps of cities were also studied by using the methodology of the history of cartography. This field studies the way maps are read and the tools with which they are analysed. Maps are viewed as an expression of cultural value systems, social order and social world view, as well as an expression of the power of knowledge and the control over this power. This methodology

⁸ Michael Avi-Yona, *The Madaba Mosaic Map* (Jerusalem: Israel Exploration Society, 1954); Rehav Rubin, "The De-Angelis Map of Jerusalem (1578) and its copies." *Cathedra* 52 (1989): 100-111 (in Hebrew); Milka Levy, "The Rediscovery of the Uppsala Map of Crusader Jerusalem." *Zeitschrift des Deutschen Palastina-Vereins* 111 (1995): 162-167.

⁹ Milka Levy, "Medieval Maps of Jerusalem," in *The History of Jerusalem: Crusaders and Ayyubids (1099-1250)*, eds. Joshua Prawer and Haggai Ben-Shammai (Jerusalem: Yad Ben-Zvi, 1991), 418-507 (in Hebrew).

¹⁰ Jonathan J. G. Alexander, "'Jerusalem the Golden': Image and Myth in the Middle Ages in Western Europe." *Jewish Art* 23/24 (1997/98): 254-64.

¹¹ Bianca Kühnel, *From the Earthly to the Heavenly Jerusalem: Representations of the Holy City in Christian Art of the First Millennium* (Freiburg: Herder, 1987); Idem, "Geography and Geometry of Jerusalem," in *City of the Great King*, ed. Nitza Rosovsky (Cambridge, Mass. and London, England: Harvard University Press, 1996), 288-332.

¹² Bianca Kühnel, "The use and abuse of Jerusalem." *Jewish Art* 23/24 (1997/1998): xix-xxxviii.

¹³ Kenneth Nebenzahl, *Maps of the Holy Land, Images of Terra Sancta through Two Millennia* (New York: Abbeville Press, 1986); Rehav Rubin, *Jerusalem in Maps and Views from the Byzantine Period to the Nineteenth Century* (Tel Aviv: Nahar and Kinneret, 1987) (in Hebrew); Milka Levy-Rubin and Rehav Rubin, "The Image of the Holy City in Maps and Mapping," in *City of the Great King*, ed. Nitza Rosovsky (Cambridge, Mass. and London, England: Harvard University Press, 1996), 352-79; Tishby, *Holy Land in Maps*.

combines historical research on the mapmaker and the cultural context in which he worked, cartographic and artistic comparative research of the map with contemporary and earlier maps, and literary analysis of the map's narrative, examining what was represented and how, and what was omitted.¹⁴ This comparative methodology was implemented in the case of different city views from the fifteenth and sixteenth centuries, such as Venice, Florence and Constantinople,¹⁵ and also on a group of pilgrim maps of Jerusalem.¹⁶

This paper proposes a comparative study of the tradition of maps of Jerusalem made from the Early Middle Ages, starting with the Madaba mosaic map from the sixth century, to the Early Modern Period, ending with maps made at the end of the sixteenth century, in order to fully explore their meaning and symbolism. With the maps being so different from one another, we need to define the elements and motifs that were passed on from one period to another, as a basis for comparison. These cartographic and artistic elements in the maps will define a cultural context according to which we will be able to examine a new map. They will be used to develop a comparative tool, which will facilitate the reading of maps, the definition of genre and the decipherment of their message. This work belongs to the group of researches studying maps of Jerusalem in the context of earlier and contemporary maps, but unlike them it will study all the elements of the maps, not just a single meaning, motif or use. The methodologies used in the development of this tool combine iconographical and historical analysis, used in the research of the maps of Jerusalem, with the historical-cartographical comparative analysis of a map as a text, as is utilized in research in the field of the history of cartography.

¹⁴ J.B. Harley, "Silences and Secrecy: The Hidden Agenda of Cartography in Early Modern Europe." *Imago Mundi* 40 (1988): 57-76; Idem, "Text and Context"; Idem, "Maps, Knowledge and Power," in *The New Nature of Maps*, ed. Paul Laxton (Baltimore: Johns Hopkins University Press, 2001), 51-82.; Rubin, "Ideology and landscape".

¹⁵ J. Schultz, "Jacopo de' Barbari's View of Venice: Map Making, City Views, and Moralized Geography Before the Year 1500." *The Art Bulletin* 60:3 (1978): 425-74; R. Manners, "Constructing the Image of a City: The Representation of Constantinople in Christopher Buondelmonti's *Liber Insularum Archipelagi*." *Annals of the Association of American Geographers* 87:1 (1997): 72-102; David Friedman, "'Fiorenza': Geography and Representation in a Fifteenth Century City View." *Zeitschrift für Kunstgeschichte* 64:1 (2001): 56-77.

¹⁶ Rehav Rubin, "One city, different views: a comparative study of three pilgrimage maps of Jerusalem." *Journal of Historical Geography* 32 (2006): 267-290.

As a data set, a representative sample of the Christian maps of Jerusalem was chosen, each from a different period, genre, and style and conveying a different message. Since iconography will be used as part of the analysis, the maps chosen are picture maps, artistic illustrations, where all features are illustrated by pictures and not only by plans or cartographic symbols. The time-span of these maps starts with the earliest maps of Jerusalem in the early Middle Ages and ends in the Early Modern Period. Towards the end of the sixteenth century, a new scientific trend developed in the maps depicting Jerusalem. They became more and more realistic and scientific using modern survey techniques, and the pictorial element was less and less dominant. However, pictorial maps created after the sixteenth century can also be analysed by means of the comparative tool presented here.

The analysis of a map can be made on two levels. First of all, a map can be defined according to its general similarity to other maps. For example, a sixteenth century map describing Jerusalem at the time of Jesus is imaginary and cannot be matched with realistic maps describing contemporary Jerusalem. Similarly, a map showing only a handful of sites cannot be matched with pilgrim maps, which were realistic and detailed and were intended to enable pilgrims to visit the many sites in the city. The second level of analysis deconstructs the map into its different cartographic and iconographic elements, such as the shape of the city, its orientation, the view point, the choice of sites, their layout within the city plan, the style of the architecture, the level of realism, the existence of religious symbols, the depiction of everyday life, the use of names and the relation between different sites on the map. In order to find the meaning of the choice of style and use of an element in the analysed map, each element is compared with different maps. The final stage places all the elements back together with the intention of looking at the relationship between them, enabling us to read the map as a whole. Thus, the iconographical research is combined with cartographic and historic analysis, in order to define the ‘grammar’ of the language used for ‘writing’ these maps. This analysis, performed on one or two levels, can reveal historical and cultural information on the choices made by the mapmaker and on his perceptions; thus helping us to better understand the message conveyed by the map.

The second part of this research presents the implementation of the above method. It will be used to analyse two maps, the map of Jerusalem attached to a Latin version of Ptolemy's *Geographia*, written in 1472 by Hugo Comminelli and drawn by Petrus Massarius, and a less obvious map of Jerusalem: the plan of the site of San Vivaldo in Tuscany, Italy, which was built in the beginning of the sixteenth century as a copy of the city. Since there is relatively little historical documentation on the map and the site, this cartographic and iconographic analysis is expected to contribute some of the missing information.

1. Maps of Jerusalem from the 6th to the 16th Centuries

1.1 The Madaba mosaic map

The Madaba map (fig. 1)¹⁷ was probably made between 560 and 565 A.D. for the floor of a church at Madaba, now in Jordan, some fifteen miles east of the Dead Sea. Being essentially a topographical map of a pictorial type, it shows the whole of The Holy Land and adjacent lands from Damascus to Alexandria. Small towns and villages are illustrated by conventional signs: two, three or more towers in elevation, side-view, linked by lengths of walls. The important cities are bigger, displayed in bird's-eye view, the principal street of each opened up so as to show the façade on each side. In the case of Jerusalem, we see the western wall from the outside, and the eastern wall from the inside. In order to show all the details of the buildings as clearly as possible, the mapmaker arranged them on the four sides of a square, with their facades facing inwards, even if they appear upside down. The purpose of the map is to illustrate biblical history. Thus the places it shows are either important cities, or the sites of events in the bible or church history, or else have been put in to fill spaces otherwise blank. In addition the inscriptions (all in Greek) include biblical and historical notes.

¹⁷ P.D.A. Harvey, *The History of Topographical Maps, Symbols, Pictures and Surveys* (London: Thames and Hudson, 1980), 54-5.

1.2 Crusader maps

In the summer of 1099, following the Crusader conquest, Jerusalem once more became a Christian city. Pilgrim traffic increased and, in addition to the numerous twelfth century verbal descriptions, many graphic representations, especially maps, began to appear. Fourteen maps representing Jerusalem under Crusader rule have been preserved in manuscripts, seven from the period of the Crusader Kingdom, and four copied in the thirteenth and fourteenth centuries. They are named after the places where they were found. Out of the fourteen maps, eleven are round maps, and the other three are single exemplars of very different characteristics.¹⁸

The round Crusader maps

All the round maps share the same plan of the city.¹⁹ All of them follow a common prototype, in which a circle forms the city walls (figs. 3-6). The two main streets, which appear to be the Roman-Byzantine *cardo* and *decumanus*, form a cross in the centre. The other maps also depict Jerusalem in perfect geometrical forms – a square (Montpellier), a rhomboid (Cambrai, fig. 7) and a circle (Harleian, fig. 8), though different in concept from the circle of the round maps.

The round maps are all oriented to the east, meaning that the eastern part of the city is shown at the top.

The city plan, including gates, main roads, streets, and the main buildings, is identical in all of the round maps. The two main streets that form the crossroads within the city create four quarters, equal in size. An additional street is indicated, leading to Joshafat's Gate, and in most maps another street appears, starting at St. Stephen's Gate and running under the Temple Mount. Schematic as it is, this is indeed the basic street plan of Jerusalem.

The structures standing out in all of the round maps include the Holy Sepulchre, 'Sanctum Sepulchrum'; the Lord's Temple, 'Templum Domini' - the Dome of the Rock which was turned into a church by the Crusaders. Also shown is David's Tower; the city's citadel; 'Templum Salomonis' - al-Aqsa Mosque on the Temple Mount which

¹⁸ Levy-Rubin and Rubin, "The Image of the Holy City", 353-356; Tishby, *Holy Land in Maps*, 27.

¹⁹ Levy-Rubin and Rubin, "The Image of the Holy City", 356-7; Levy, "Medieval Maps of Jerusalem", 420-21.

served as the headquarters of the Templar Order. Apart from these some of the city's gates, churches, water sources, and markets are also depicted.

In addition to naming the sites the maps often present many religious narratives and traditions, both biblical and apocryphal, that were attached to certain sites. This element appears for the first time in these maps. Such are the rock that split during the Crucifixion, Calvaria and Golgotha, Calvaria being the Crusader name of the site of the Crucifixion and Golgotha the name given to the Chapel of Adam underneath the site of the Crucifixion.²⁰

Style is the element with the greatest diversity in the maps, and is reliant on the imagination of the mapmaker: European style (Florence, fig. 3), northern style (Copenhagen), simplistic buildings (Paris, fig. 4), decorative style, sometimes with miniatures of pilgrims on their pilgrimage in the Holy Land (Brussels, fig. 5) or fighting crusaders (Haag, fig. 6).

The Cambrai map

The Cambrai map (fig. 7), dating from the twelfth century, depicts the walled city as a diamond shape. It faces north. Its special importance is that its author knew Crusader Jerusalem well and drew a very detailed, comparatively accurate map of Jerusalem.

Some of the sites depicted on this map appear also in the round maps, and they are drawn with great accuracy. Such are the Holy Sepulchre, represented after its renovation and inauguration by the Crusaders, complete with a new bell tower, twin domes, and renovated square on the south side. Next to it are the Hospitaller buildings. In the west are shown the 'Curia Regis', the Royal Court, and the 'Turrus Tancredi', Tancred's Tower.²¹ However, some of the sites and names on this map are different from those of the round maps. For example, in the Cambrai map the Holy Sepulchre is called by its Greek name, the Anastasis. The room of the Last Supper is called 'ecclesia S. Maria Montis Syon', and Solomon's Temple, the former al-Aqsa Mosque, is called 'Domus Militum Templi'.²² On the north-eastern part of the wall appears the inscription, 'Hic

²⁰ Levy-Rubin and Rubin, "The Image of the Holy City", 358, cf: John Wilkinson, *Jerusalem Pilgrims Before the Crusades* (Warminster, England: Aris and Phillips, 1977), 177.

²¹ Tishby, *Holy Land in Maps*, 27.

²² Levy, "Medieval Maps of Jerusalem", 422.

capta est civitas a Francis ('Here the city was captured by the Franks'), which also points to the author's acquaintance with the city. A unique feature of this map is its familiarity with the eastern churches in Jerusalem, of which at least six are depicted. The pseudo-topographical lines around the city indicate the hills and valley surrounding it. They demonstrate the author's familiarity with the topography of the city and its surroundings. In contrast to the round maps, the Cambrai map describes only Crusader Jerusalem and depicts no Christian traditions.²³

Codex Harleian map

The Harleian map (fig. 8) is actually a map of the Holy Land rather than a map of Jerusalem. It is a graphic presentation of a pilgrim's itinerary, a kind of pilgrim's road map, including the sites of the pilgrimage and the main walking routes. Jerusalem is the highlight of the pilgrimage, and it is emphasized by its large scale. The schematic depiction of Jerusalem includes only four gates symmetrically located, not five like in the other round maps. This map is different from the round maps iconographically, and also by way of the names of the sites, their location on the map and the traditions it mentions.²⁴

The purpose of the Crusader maps

What was the purpose of the Crusader maps of Jerusalem? Obviously the maps were not meant to be realistic or to serve any practical object. The perfect geometrical shapes of the city in these maps do not represent the actual outline of the city wall. The street pattern does not follow that of the real city. In order to make room for others or to present a more aesthetic image, buildings were often relocated. Even the author of the Cambrai map, who knew Jerusalem and drew the more realistic of the maps, did not aim to supply the viewer with an accurate map. The round maps were meant to create a certain image of Jerusalem, an image of a glorious city that combined Christian tradition and Crusader reality, an illustration of the renewed Christian rule in historical Jerusalem.

²³ Tishby, *Holy Land in Maps*, 27, 139.

²⁴ Levy-Rubin and Rubin, "The Image of the Holy City", 356; Levy, "Medieval Maps of Jerusalem", 475-78; Tishby, *Holy Land in Maps*, 139.

To attain this goal the artists combined geometrical symbols, such as the circle that conveys the meaning of Heavenly Jerusalem (to be discussed later), with sacred Christian sites and traditions side by side with the important Crusader monuments and buildings. Jerusalem is presented as a magnificent city, laden with both history and royal splendour, surrounded by a perfect circle, a symbol of the ideal city, of Heavenly Jerusalem.²⁵

1.3 The map of Marino Sanudo

The collapse of the Latin Kingdom of Jerusalem shattered the image of the rebuilt Christian city, and it could no longer be presented in the west as it had been until then. The first map presenting Jerusalem under Muslim rule is that of Marino Sanudo (fig. 9), in his book *Liber Secretorum Fidelium Crucis super Terrae Sanctae Recuperatione et Conservatione*²⁶, from the beginning of the fourteenth century. In this book, which includes a text by Sanudo and maps by Pietro Vesconte, Sanudo urges the Christian world to embark on a new Crusade, depicting Jerusalem as a target for reconquest and the reestablishment of a renewed Christian kingdom. This is the first map to represent a realistic view of the city.²⁷

Even though the map faces east in the customary manner, it depicts the outline of the city walls and the layout of the streets realistically. The churches and other holy places are depicted according to their true dimensions rather than their relative importance. Thus the Holy Sepulchre, as well as the Lord's Temple and Solomon's Temple on the Temple Mount, are not enlarged beyond their actual size. The area of the Hospitallers, with its churches, hospice, and hospital is also correctly positioned and accurately drawn, unlike the round maps. The map also attempts to delineate the water system of Jerusalem, including its springs and pools. Each water source and reservoir is identified with one of the pools mentioned in early sources. Information on the city's water system was obviously of value to those planning to reconquer the city and vanquish the Muslims.

²⁵ Levy-Rubin and Rubin, "The Image of the Holy City", 360-61; Levy, "Medieval Maps of Jerusalem", 419.

²⁶ Levy-Rubin and Rubin, "The Image of the Holy City", 362.

²⁷ Tishby, *Holy Land in Maps*, 28, 140-41.

Yet the city was important to Christians owing to its past and, therefore, Sanudo represented sites and religious traditions of biblical importance. The map delineates the course of the Via Dolorosa in the northern part of the city, as it appeared at that time, and highlights churches and Christian narratives appropriate to Mount Zion and the Mount of Olives. Sanudo identifies several traditional narratives not mentioned in Crusader maps.

Despite its accuracy in depicting Jerusalem, the walls are illustrated standing intact even though it is well known that those walls were destroyed by the Ayyubids as far back as 1219.

This map presents practical information almost completely lacking in previous illustrations and aspiring to precision and usefulness, yet it was used as a tool for transmitting tradition as well as religious and ideological messages.

1.4 The Map of Sebald Rieter

In the first half of the fourteenth century, a deputation of the Franciscan order was sent to Palestine and was organized as the Custodia Terrae Sanctae, the Guards of the Holy Land. Their task, given by the Pope, was to be the guardians of the holy places, to guide and take care of the pilgrims, and to safe keep the Catholic interests in the Holy Land. The establishment of this mission helped revive the European Christian pilgrimage, and the maps made by these pilgrims reflect their initial motivation to visit the Holy City, its sites and to walk in the footsteps of Jesus Christ.²⁸

The map of Sebald Rieter (fig. 10), ca. 1475, is the first of many maps depicting Jerusalem from a specific point of view – from the top of the Mount of Olives looking west. The city is surrounded by a wall within which gates and towers are presented. Many of the important buildings are represented fairly accurately, even though the houses are schematic and do not resemble the domed houses of Jerusalem. On the Temple Mount the map presents the Dome of the Rock and al-Aqsa Mosque, called the Temple of Solomon, ‘Templum Salomonis’, and the Church of the Saracens, ‘Ecclesie Sarazeni’. The church of the Holy Sepulchre is depicted as a large complex including Golgotha, the tomb of the Savior, a bell tower and adjacent chapels. The artist has rotated the church so

²⁸ Levy-Rubin and Rubin, "The Image of the Holy City", 364.

that the viewer can see its façade. The map also provides a detailed description of many places in Jerusalem relating to Christian traditions, by means of inscriptions and illustrations.²⁹

1.5 The Map of Bernhard von Breidenbach

In 1486, Bernhard von Breidenbach from Mainz published his book *Peregrinatio in Terram Sanctum*, describing his 1483 pilgrimage to the Holy Land. This was the first illustrated guidebook to the Holy Land and the first book to present a printed map of the Holy Land based on contemporary observation (fig. 14). All the illustrations were done by the painter Erhard Reuwich, who accompanied Breidenbach on his pilgrimage.³⁰

Jerusalem is superimposed on a panoramic map of the Holy Land, realistically illustrated in bird's eye view. The view of Jerusalem is oriented to the west, seen from the top of the Mount of Olives, while the rest of the Holy Land is oriented in the opposite direction, to the east. The fact that the city view is conceived as separate from the map of the surrounding countryside is underlined by rotating the city 180 degrees. Its importance is further emphasized by its location and its scale; Jerusalem is placed in the center of the illustration and is much bigger than that of the rest of the map.³¹

The character of the illustration as a pilgrimage map is defined by the choice of sites that are indicated on it, such as The Church of the Holy Sepulchre, the Temple of Solomon, the houses of Pilate, Caiaphas, and Herod, the Coenaculum, Mount Zion, and Golgotha. A code identifies places where indulgences are sold, such as on the Mount of Olives. Other sites on the map refer to the everyday life of the pilgrim in Jerusalem, including a hospital and a burial ground for pilgrims within the walls of Jerusalem. Even so, an unusual attention is given to features of the land and its people, aspects often ignored by pilgrim-cartographers.³²

²⁹ Ibid, 364-5.

³⁰ Nebenzahl, *Maps of the Holy Land*, 63.

³¹ Harvey, *The History of Topographical Maps*, 82.

³² Nebenzahl, *Maps of the Holy Land*, 63.

1.6 The map of Christian van Adrichom

The map of Christian van Adrichom (fig. 11), a Dutchman who worked most of his life in Cologne, dates from 1584.³³ It is a rectangular map, a misconception of Josephus's description of Jerusalem. The map is oriented to the north. The most important divisions of the city, the walls and the gates are labelled. Each place of interest is numbered and keyed. The numbers of the sites on the map refer the reader to an accompanying booklet containing a text and a miniature drawing, a detailed depiction of the scenes as he imagined they had been in reality.

The list includes 270 sites dating back to the days of King David and Solomon and up to the destruction of the second Temple. A special series of scenes presents the passion of Jesus Christ, from his triumphal entry into the city on Palm Sunday, through the Last Supper, his prayer in Gethsemane, the Judgment, his way along the Via Dolorosa, and the Crucifixion on Mount Calvary. Besides these, there are many other, less important Christian traditions.

Many of the sites are drawn in the architectural style of sixteenth century Europe.

2. Map types

So far we have seen different maps of Jerusalem, created over a long range of time. It seems that some maps are more alike than others, in the way they look, in the purpose for which they were created, or in the message they convey. Let us now define a few types of maps that will enable us to classify the maps of Jerusalem and will help us understand better the meaning behind them. It is important to note that the different types of maps continued to be produced alongside each other throughout the period discussed in this paper and are not consecutive.

³³ Levy-Rubin and Rubin, "The Image of the Holy City", 370-1; Nebenzahl, *Maps of the Holy Land*, 90; Tishby, *Holy Land in Maps*, 32.

2.1 Realistic and imaginary maps

The maps of Jerusalem can be divided into two main categories.³⁴ The maps in the first category describe an imaginary historical-biblical Jerusalem, and are based mainly on the Scriptures and the works of Josephus Flavius. Their captions often relate to Jesus' or biblical Jerusalem and they are presented as part of biblical exegeses and other religious literature. Most of these maps were drawn by artists and scholars who had never visited the city. These imaginary maps are conceptual: ideological documents which reflect the Christian images of Jerusalem in the time of Christ rather than the realistic landscape of the city. A representative of this group is Adrichom's map (fig. 11).

The second group of maps, defined as 'realistic', claimed to portray contemporary Jerusalem. Some were drawn by pilgrims and travellers based on their own impressions, while others are copies and imitations drawn in Europe by people who had never seen the city but who used eye-witnesses' maps as a basis for their work. The image of Jerusalem as the Holy City, where pilgrims walked in the footsteps of Jesus Christ, was created and promoted to a large extent by the Franciscan monks of the Custodia Terrae Sanctae. This image was shaped either directly, through maps made by Franciscans who served in Jerusalem, or indirectly, through maps made by pilgrims travelling under the auspices of the Custodia. An example of this type can be seen in the map of Sebald Rieter (fig. 10).

2.2 Teaching diagrams and itinerary maps

There is a group of medieval maps that were not intended as a geographical description of a known place, but as a type of teaching diagram.³⁵ They occur the form of a plan, a map of the sites and their relationship to each other. As such, the plan does not seek to give information of the buildings' appearance, which would help pilgrims to know what they might see on their visit or remind them of it when they had returned home. But it would enable pilgrims to fix in their minds a sequence of 'stations', places where they could, as it were, stop and re-imagine events told in the Gospel in their mind's

³⁴ Levy-Rubin and Rubin, "The Image of the Holy City", 366-7; Rubin, "Ideology and landscape", 19; Ibid, 16, cf: J. Ben-Arieh and N. Elhassid, "Some notes on the maps of Jerusalem 1470-1600," in *Jerusalem in the Early Ottoman Period*, ed. A. Cohen (Jerusalem: Yad Ben-Zvi, 1979) (in Hebrew), 121-151.

³⁵ Alexander, "Jerusalem the Golden", 255-56.

eye. Such is the drawing of the Holy Places by Arculf, a Frankish bishop who visited Jerusalem in the end of the seventh century (fig. 12).³⁶ Another map of this type is the Crusader Harleian map (fig. 8), which has no pretence of accuracy but presents a graphic description of the author's conception of his journey. To viewers who had never been to the Holy Land, as well as for those who desired and hoped to go, these maps offered a mental sequence, an aid to memory. As a teaching schema, the function of memory and meditation in these maps was more important than mimetic representation.³⁷

Another type of map, in which mimetic appearance is not the objective, is the itinerary map, a kind of list of places in the order they are met with on the ground.³⁸ Like the teaching diagrams, in these maps cities are shown by conventional signs, which may perhaps suggest their relative size or importance but give no idea of their geographical features nor of their appearance. Unlike the teaching diagrams, which were meant for mental use only, the itinerary maps do try to relate to actual geographical features, such as recording measured distances.³⁹

In such representations the emphasis is on a place to be reached with effort after a long journey. Alexander suggests that in these medieval itinerary maps this is not merely a matter of practical application of where to go, but also indicates the spiritual value of the effort of the pilgrimage in terms of the miles walked and the dangers encountered. The figures and animals drawn in the landscape, for example a camel or people dressed in oriental clothing, are there to emphasize that this is alien territory.⁴⁰

The Madaba mosaic was probably based on a set of itineraries or even an itinerary map, for all the places that are named on it, apart from those that are taken from the Bible, lie on main roads.⁴¹ Kühnel too refers to it as a pilgrimage map.⁴² Further examples of this type can be seen in a map by Matthew Paris of St. Albans, in his book *Chronica Majora*, ca. 1250 (fig. 13), and also in William Wey's map of the Holy Land, 1458 (fig. 15), which is attached to the itinerary of his pilgrimage to the Holy Land in

³⁶ Alexander, "Jerusalem the Golden", 255.

³⁷ Ibid, 256, cf: Mary Carruthers, *The Book of Memory: A Study of Memory in Medieval Culture* (Cambridge: Cambridge University Press, 1990).

³⁸ Alexander, "Jerusalem the Golden", 255-56.

³⁹ Harvey, *The History of Topographical Maps*, 140.

⁴⁰ Alexander, "Jerusalem the Golden", 256.

⁴¹ Harvey, *The History of Topographical Maps*, 138.

⁴² Bianca Kühnel, "The use and abuse of Jerusalem", xxiii.

2.3 Pilgrimage maps

Some of the maps of Jerusalem present the city as it was perceived by the pilgrims, particularly emphasizing the holy places. Unlike itinerary maps, which were more abstract and meant also for mental use, the pilgrimage map are realistic, based on actual acquaintance of the city, and represent many sites and religious traditions. The city and its buildings look as they did in true life, and viewers can learn a lot about the city's appearance. Such is Breidenbach's map (fig. 14). These maps deserve the title 'pilgrim maps', owing to two outstanding features. First, they are drawn in great detail, listing tens and hundreds of sites. Second, these maps were created by pilgrims or by Jerusalemite clergymen and monks who were responsible for guiding the pilgrims to the Holy Places, among them several Franciscan members of the Custodia Terrae Sanctae.⁴³ The maps marked the various pilgrim routes in the city and its environs, guiding and encouraging the pilgrims who took this trip upon themselves. But they were also intended for Christians who were unable to undertake pilgrimages; those remaining at home in Europe, for whom the contemplation of the sites depicted in the maps served as a kind of surrogate pilgrimage. For this purpose, the maps depict the historical and religious traditions in the most picturesque way, as if one could really see the biblical events as they happened.

From the order in which the sites are described in the maps, it is quite obvious that pilgrimages proceeded along set routes. The pilgrims entered the city by the Jaffa Gate and visited the church of the Holy Sepulchre. From there, they left on several routes. The pilgrimage routes depicted in these maps were fairly common and were documented in many itineraries between the fourteenth and the nineteenth centuries.⁴⁴

⁴³ Tishby, *Holy Land in Maps*, 30,34-5; Rubin, "One city", 276-7.

⁴⁴ The list of pilgrimage routes appears in Ibid; Tishby, *Holy Land in Maps*, 34-5.

3. Cartographical and iconographical elements in the maps of Jerusalem

Let us now try to deconstruct the maps we have examined so far into separate elements, cartographic and symbolic. This will enable us to examine each part of a map of Jerusalem separately in the context of the cartographical and cultural traditions it belongs to, allowing us to fully understand the choices made by the mapmaker when representing the city. This in turn will render a deeper understanding of the meaning of the map read as a whole.

3.1 Shape

Since Roman times, the conventional way to depict a town consisted of walls forming a regular hexagon or other polygon with a tower at each angle. This stylised view of a town can be traced in a variety of contexts from Hellenistic art through the Roman period and to the High Middle Ages. It later became octagonal or circular, as in the stained glass windows in Sens and Chartres.⁴⁵

In the case of Jerusalem, the round shape can result from different traditions. It may reflect the influence of the T-O world maps, depicting the world as a round disc divided into Asia in the upper half, Europe in the lower left quarter, and Africa in the lower right quarter. The T shape represents the main waterways dividing the world into these three parts (fig. 2).⁴⁶ It could have been influenced by the common representation of Heavenly Jerusalem, which was popular even before the time of the Crusades.⁴⁷ The circle also reflects the combination of scientific and religious perceptions. Motifs traditionally connected with the scientific diagrammatic tradition appear in religious manuscripts, like the apocalypse, where they convey eschatological content: the circle is one of the dominant shapes in diagrams attached to computistical and astronomical manuscripts of the early Middle Ages, featuring the earth or the cosmos, sometimes associated with other geometrical shapes such as the square or the cross. However, it is also used in a religious context, as in folio 38 of the Carolingian Valenciennes Apocalypse, Bibliothèque municipale, Ms 99, where Heavenly Jerusalem is depicted as a

⁴⁵ Harvey, *The History of Topographical Maps*, 69-70.

⁴⁶ Levy-Rubin and Rubin, "The Image of the Holy City", 356; Levy, "Medieval Maps of Jerusalem", 420-21.

⁴⁷ Kühnel, *From the Earthly to the Heavenly Jerusalem*.

diagram, a disc of twelve concentric circles cut up by twelve gates grouped in four groups of three each, distributed symmetrically so as to make a cross.⁴⁸

The circle and the square, together with the shape of a cross embracing the whole city, were imposed on the Crusader maps of Jerusalem, as can be seen in the Brussels map (fig. 5). The walls of Jerusalem, the position of its streets, gates and buildings, become more and more abstract and symmetrical with less and less connection to the physical appearance of the city. Kühnel detects the stages of this development in two maps.⁴⁹ The earlier stage can be seen in the Haag map (fig. 6) from the twelfth century, in which the geometrical abstraction was still balanced by the irregularity and asymmetry of the streets, gates and buildings in the real city. The pick of this tendency can be seen in the Harleian map from the thirteenth century, where the walls are perfect concentric circles, pierced by gates, their number reduced to four and symmetrically distributed at the four cardinal points. The city is empty except for the key monuments of the Temple Mount and the Patriarchal Quarter connected by a strait line. The use of the circle in these maps conveys a scientific and a religious meaning, thus locating the city in the world, the universe, both geographically and eschatologically.

Used and reused in different contexts, the original scheme became *the* symbol of the salvation cycle. The city of Jerusalem and its Holy Places were absorbed into the geometrical perfection of the Christian universe; bearing witness to the Crucifixion and the Resurrection, earthly Jerusalem doubled as a heavenly creation. The medieval maps represent this dual character and the hope of salvation resulting from it.⁵⁰ The round form continued to be used even at times when the sciences of geography and cartography developed in a way that enabled realistic representations of the city. Such are the views of Jerusalem by Hartmann Schedel (fig. 16), 1493, and by Pierre le Rouge (fig. 17), 1488, created in the same period as the realistic maps of Rieter (fig. 10) and Breidenbach (fig. 14).

⁴⁸ For a thorough examination of the merging of scientific diagrams, computistical and astronomical, with religious contents, and the influence of scientific motifs on religious works of art in the Carolingian and Ottonian periods see: Bianca Kühnel, *The End of Time in the Order of Things, Science and Eschatology in Early Medieval Art* (Regensburg: Schnell and Steiner, 2003). On the representation of Heavenly Jerusalem in the Valenciennes Apocalypse see: Ibid, 206-209.

⁴⁹ Kühnel, "The use and abuse of Jerusalem", xxiii.

⁵⁰ Ibid, xxiv.

3.2 Orientation

Many of the early maps of the Holy Land and Jerusalem were drawn facing east, with the eastern places shown at the top, as for example in the Madaba mosaic map. According to Tishby, among the Semitic people orientation was principally to the east, the rising sun being founded in biblical language, with the east described as ‘forward’ (kadima), and the west as ‘behind’ or ‘towards the sea’ (referring to the Mediterranean).⁵¹ Nebenzahl suggests a more religious reason for this orientation, saying that most medieval Christian mapmakers oriented their maps towards Paradise.⁵² Thus the T-O maps, a possible influence on the Crusader round maps, could explain the round maps’ orientation, for example in the Brussels map (fig. 5). A more practical reason for this orientation is given by Harvey, saying that most medieval maps of the Holy Land place east at the top because Europeans usually approached the Holy Land from the west.⁵³

Ptolemy of Alexandria, in the second century A.D., was the first to point his maps to the north.⁵⁴ During the Middle Ages, his ‘scientific’ cartography was forgotten, and maps of the world and of the Holy Land produced in Christian Europe were again oriented to the east. In the fifteenth century, when bird’s eye views of Jerusalem begin to appear, we find that in the case of Jerusalem the most popular orientation is to the west, observed from the top of the Mount of Olives. This was for practical and ideological reasons: the Mount of Olives is the best vantage point to look at the city, and at the same time it is the traditional site where Jesus Christ stood and prophesied upon the city (Luke 19: 41-4), and is also the site of his Ascension.⁵⁵

It seems then that apart from being a cartographic convention, orientation conveyed meaning, and the choice from which ‘side’ to depict Jerusalem was also part of religious considerations. But what happens when a few important things that need to be emphasized in a map are not oriented in the same way? Orientation then turned into a flexible tool for emphasizing importance more than depicting geographical reality. And

⁵¹ Tishby, *Holy Land in Maps*, 9, cf: M. Harel, “Geographic Orientation and Its Use in Biblical Maps,” in *Israel – People and Land* 19 (Tel Aviv: Haaretz Museum, 1984) (in Hebrew), 157-67.

⁵² Nebenzahl, *Maps of the Holy Land*, 9,12,32.

⁵³ Harvey, *The History of Topographical Maps*, 56.

⁵⁴ Tishby, *Holy Land in Maps*, 17.

⁵⁵ Rubin, “Ideology and landscape”, 19.

that was true both for the orientation of the city and the orientation of specific sites inside the city. Most of the buildings on the maps, predominantly public buildings, were rotated so as to be presented from the front, with the entrance towards the viewer. In the Madaba map, this was done in order to show all the details of the buildings as clearly as possible, even if it meant that they had to be depicted upside down. In the Crusader maps and in Sanudo's map, all the buildings are turned so that their façade faces the viewer. Even in the realistic maps the Holy Sepulchre is turned so that the viewer could see the façade. A good example is Breidenbach's map (fig. 14), which depicts the Holy Land orientated to the east; in its centre the view of Jerusalem is oriented to the west, and inside the Holy City the Church of the Holy Sepulchre is oriented to the east so that the viewer will be able to see the façade. Thus we can see three different orientations in the same map. This is done in order to emphasize the Church of the Holy Sepulchre within Jerusalem, and the Holy City within the entire country, because of their holiness in the mapmaker's conception.⁵⁶

3.3 Viewpoint

There are early maps that represent cities as a plan. Such is the map of Rome, *Forma Urbis Romae*, carved on marble slabs, which was presented originally in the *Templum Pacis* in Rome (fig. 18).⁵⁷ This drawing technique appeared again in Arculf's map of the Holy Places from the seventh century (fig. 12), where everything is depicted as a ground plan. So too the map of Jerusalem by Marino Sanudo (fig. 9), which depicts the city as a target for a new Crusade.

In the Middle Ages, towns were shown in the conventional way, known and used since antiquity: polygon or circle shaped walls with towers, viewed obliquely from a height. Sometimes buildings are shown inside the town walls, sometimes figures or scenes are drawn to fit the particular illustration, but the conventional image was constant.⁵⁸

⁵⁶ Ibid.

⁵⁷ Schultz, "Jacopo de'Barbari's View", 444-5.

⁵⁸ Harvey, *The History of Topographical Maps*, 70.

Examples from the High and the Late Middle Ages combine these two projections. Geographical outlines, of rivers, streets, walls, are shown as a ground plan, while topographical details, central buildings and monuments are shown in elevation or in perspective.⁵⁹ Already the Madaba map combines two directions of viewing the earth: in general the terrain is shown as seen from above, but cities and towns are depicted either horizontally or obliquely. Most of the Crusader maps show this combination of viewpoints, depicting the city plan from above and the buildings in elevation. This way the viewer gets to see as many details and characteristics of the city as possible.

By the sixteenth century topographic maps, and more particularly fully detailed bird's eye views, came to be widely produced first by artists, then by surveyors, developing methods and techniques that distinguished them clearly from straightforward ground level pictures.⁶⁰ This tendency can be seen in the maps drawn from the top of the Mount of Olives, such as those of Rieter (fig. 10) and Breidenbach (fig. 14).

3.4 Geometrical layout of the buildings

In the early maps of Jerusalem, the buildings and sites were sometimes rearranged in the city, in order to reflect the meaning of the city in the eyes of the mapmaker. In the Madaba mosaic (fig. 1), the church of the Holy Sepulchre has been 'shifted' from its real site northwest of the tetrapylon which marks the intersection between the *cardo maximus* and the *decumanus maximus*, to the city's centre. This move was primarily intended to characterize the new Christian Jerusalem, which is centred on the tomb and Resurrection of Christ.⁶¹

In the round maps, the elements are geometrically organized to fit the shape of the city. Thus the Ecclesia Latina can be found in the south-west, when it is known that in Crusader Jerusalem it stood in the northern part of the city. This was probably done in order to fill an empty space on the map, the geometrical layout being more important than

⁵⁹ J. Schultz, "Jacopo de'Barbari's View", 446.

⁶⁰ On the development of topographic maps see Harvey, *The History of Topographical Maps*, 66,83; Ian Manners, "Constructing the Image of a City", 72.

⁶¹ Kühnel, *From the Earthly to the Heavenly Jerusalem*, 89-92.

the geographical facts.⁶² When the depictions of the city became more realistic, we see less and less variations in the layout of the city.

3.5 Statement and silence

According to Harley, interpreting cartography as a kind of knowledge, a discourse, enables us to look at maps as social world views rather than as neutral representations.⁶³ Even when the world became more objective, being measured more and more accurately, the maps remain subjective from the cultural point of view. In that sense, what is absent from the maps deserves to be studied as much as what appears on them. The cartographical contents of a map should not be studied only positively, through what is mentioned, but also through the silence, the blank areas in the map, the things that are missing, that were ignored or overlooked by the mapmaker. Instead of picking up social messages that the map emphasizes, we must search for what it de-emphasizes. Silences are positive statements and not passive gaps. They are an active human act, one which can become the significant part of the cartographical message.⁶⁴

Silences can be intentional, the result of political, economic and religious reasons, for example, religious schisms and ideological battles. Silences can also be unintentional, the result of historical circumstances, created from the social, economical, geographical or lingual context in which the map was created. Thus manipulating the name of places can lead to silencing populations as a result of censorship, acculturation, or of an unconscious rejection of the 'other'.⁶⁵

Now let us look again at the maps of Jerusalem, this time at what was not shown, to learn more about the message they convey.

Religious symbols

In Jerusalem, religious symbols are an integral part of the landscape. Mosques' minarets and churches' belfries and spires with their crescents and crosses decorate the

⁶² Rubin, *Jerusalem in Maps and Views*, 20.

⁶³ Harley, "Silences and Secrecy", 58,65.

⁶⁴ Ibid, 57-58; Harley, "Text and Context", 45.

⁶⁵ Harley, "Silences and Secrecy", 59,65-67.

city's skyline. These symbols were used throughout the city's history as elements in the competition between Christianity and Islam. A famous example of this competition is the huge golden cross erected by the Crusaders on the top of the Dome of the Rock, which was destroyed by Saladin and replaced by a crescent immediately after he reconquered the city.⁶⁶

The tension between Christianity and Islam is expressed through the existence or non-existence of religious symbols in the maps. The Crusader maps depict a Christian city ruled by Christians. The aim of the maps is not only to show the Christian city but to show a victorious Christianity. Obviously the Crusaders did not need to depict crescents in their maps. In the years after 1187 the reality changed, and Islam became once again the dominant religion in the city. The image of the city as was depicted by the crusaders was shattered, and it could no longer be represented as it was. The only new map that was created in the thirteenth century is the Harleian map (fig. 8), which is completely abstract and does not refer to any aspect of contemporary Jerusalem. It seems that at that time the silence was not only within maps, but in the creation of maps themselves. This silence testifies to the mental state of the Crusaders and their supporters.

Of the later maps of Jerusalem, some depicted crescents on top of mosques and minarets, others ignored them. It seems that under Moslem rule there were crescents on top of every minaret but no crosses on top of churches, and indeed there are not many crosses depicted in the more realistic maps.⁶⁷ In his map, Rieter (fig. 10) is not silencing the Muslim presence in Jerusalem, and he even 'answers' it with a message of his own. Crescents are depicted on top of the Temple Mount mosques and on top of two other minarets, as they probably were in reality. A big cross is depicted on top of the Holy Sepulchre, which probably did not exist in reality. It seems that Rieter tried to create some sort of equilibrium between the two religions, and the two religious foci in the Muslim city.

Sanudo (fig. 9) does not depict crescents on the buildings in his map. That corresponds to the fact that his buildings were all in European style, thus silencing not only the religious symbols of the Muslim city but its contemporary reality too.

⁶⁶ Rubin, "Ideology and landscape", 21, cf: Sylvia Schein, *The history of Eretz Israel under Moslem and Crusader rule (634-1291)* (Jerusalem, 1981) (in Hebrew), 196,328.

⁶⁷ Rubin, "Ideology and landscape", 21.

Breidenbach (fig. 14) too does not depict any religious symbols in his map. There is no crescent on top of the Dome of the Rock, which is the most prominent building in the map, but there is a small sign of the cross on top of the dome of the Holy Sepulchre.

This silence regarding religious symbols in most maps is, according to Rubin, a clear case of Christian conceptual preference, even propaganda. It might be a way to handle reality, ignoring a fact which causes too much pain, or even a sort of reshaping of history by telling a story again and again in a way that convinces the listener to accept the required outcome.

According to Nebenzahl, in the Breidenbach's map Jerusalem was depicted faithfully for the last time before 1517, when the Turks under Selim I took possession of Syria and Palestine and destroyed much of the city.⁶⁸ Adrichom's imaginary map (fig. 11), showing Jerusalem at the time of Jesus, was drawn after this destruction. Maybe the drawing of imaginary maps was a kind of silence regarding the state that Jerusalem was in, not acknowledging its Muslim rule and its non availability to Christianity.

The view of the city

The style in which the city is depicted can be divided into three groups: schematic, contemporary or European style. That includes the city's buildings, daily activities, the oriental dress of figures and the presence of animals.

Some of the round maps depict a schematic image of the city, such as the map of Paris (fig. 4). In some of these maps daily activities are depicted, like the groups of travellers and pilgrims on their way to and from Jerusalem and neighboring shrines in the Brussels map (fig. 5).

The Cambrai map (fig. 7) and Sanudo's map (fig. 9) show only the public buildings, creating an impression of an empty city. The buildings which appear on the map are in European style, as are the buildings in the Florence map, and do not reflect the contemporary look of the city.

The main sites in Rieter's map (fig. 10) are depicted quite realistically, but the rest of the houses are schematic, and do not resemble the houses of contemporary Jerusalem, nor do they represent European houses. The figures in oriental clothes, the camel and the

⁶⁸ Nebenzahl, *Maps of the Holy Land*, 63.

donkey might have been intended to give an authentic look to the city, even though the local population is not mentioned in any way.

Breidenbach's is the most realistic of the maps (fig. 14). The buildings are contemporary, and a few tiny figures are seen on the Temple Mount and its environs, walking around by foot or on a donkey.

Almost none of the maps refer to the presence of Jews and Muslims in the city, or to the daily life of its inhabitants. Rubin explains it by saying that since most maps were created by Christians for Christians, they did not pay attention to the presence of Jews and Muslims, their traditions and holy sites.⁶⁹ Later pilgrim maps, realistic and detailed, do show Muslims and their institutes. They show knowledge of the everyday life in the city, but try to ignore the fact that the city is under Muslim rule.

Site names

The early printed maps of Jerusalem contain many terms and names written in the map body or in the legend. These terms identify sites and connect them with historical traditions and are one of the means of emphasizing ideas and ideologies.

An interesting case is the naming of the mosques on the Temple Mount in the period when Jerusalem was under Muslim rule. In the eyes of Islam, the Temple Mount was the most sacred area in Jerusalem, and the third in its holiness in the world. Non-Muslims were not even permitted to enter it.⁷⁰ Nevertheless, many of the maps include anachronistic terminology, calling the Dome of the Rock and the al-Aqsa Mosque by their Crusader names – *Templum Domini* and *Templum Salomonis* – respectively. Other maps identify the al-Aqsa Mosque as *Templum Simeon* (like Breidenbach's map) or as the site of the 'presentation of the Blessed Mary'.⁷¹ The first terms are anachronistic, using twelfth century Crusader's nomenclature. The other terms represent Christian traditions which relate to the Temple Mount, referring to it as part of the Christian holdings in the city and ignoring the Muslim rule of these holy sites.

⁶⁹ Rubin, "One city", 279.

⁷⁰ Rubin, "Ideology and landscape", 22.

⁷¹ Ibid.

Choice of sites

Another aspect of silence is the choice of what sites to depict on the map, or rather what sites not to show. We have already seen that besides the mosques on the Temple Mount, which have a Christian history, the maps do not depict Muslim sites or buildings (the minarets are a part of the city skyline that cannot be ignored in the realistic maps, but they are not attributed any meaning or importance). Of the Christian sites and traditions, which are shown on the maps? As mentioned above, the Crusader maps depict the monuments and buildings of the Christian administration and of the different orders in the city, and sites of religious importance. Some maps present only public buildings, like the Cambrai map and Sanudo's map. The more realistic the maps become, the more sites and traditions they depict, especially in the pilgrimage maps. It will be interesting to go over their legends to see what was not depicted, and thus learn how the mapmaker saw the city, its inhabitants, other Christian groups and the organisation of pilgrimages. From this we may learn what the mapmaker wanted his readers to know and what he wanted to hide.

3.6 Realism and message

It seems so far that generally speaking the maps started as artistic creations conveying a certain iconographical message, and with time they became more and more realistic representing Jerusalem 'as it is'. Can it be that realism also has a meaning, that it carries part of the message of the map? The Crusader maps of Jerusalem are very diagrammatic and stylised, depicting an image of a glorious city that combines Christian tradition and Crusader reality. Still, they show real knowledge of the city's layout, intended in the maps to prove that it is the actual city under contemporary Crusader rule, which is the new kingdom of God on earth. It is not just a religious ideal but a reality achieved by the Crusaders. Even the Cambrai map manipulates realism in a way. It is one of the most accurate Crusader maps: the city walls, gates and towers are shown in full, and even though inside the walls we see only the main streets, a couple of hills, the holy places and churches, they are drawn with great realism. The point where the crusaders broke into the city is marked, and on the building we see the belfries that were introduced to the city in the early twelfth century. However, sometimes a belfry is shown where

none was built. In light of the accurate realism of the map, Harvey explains it as the anticipation of the mapmaker for future building in the city.⁷² But considering that in the context of the Crusader maps as a group, it might be explained as an attempt to create an impression of a more glorious Christian city than what was the case. In the Cambrai map this was achieved not by the use of anachronistic biblical reality, the mentioning of Christian traditions or the use of fantastic features, as was done in other maps, but by means of realistic elements.

Sanudo's map (fig. 9) represents a realistic view of the city, with the outline of the city walls, the layout of the streets and the important churches and holy places. When trying to convince the world to embark on a new Crusade, displaying a lifelike Jerusalem as a target for reconquest is an important act. As mentioned above, information on the location of the city's water sources was also referenced on the map, which is of value to those planning to reconquer the city from the Muslims. In a way, this is a military map showing the destination of a sought after campaign, and for this purpose the realistic depiction is valuable, whereas an imaginary one is completely useless.

By the late fifteenth century the idea of plans or bird's eye views of towns was spreading, and with the developments in the arts and sciences the maps became more and more realistic. For example, in its content Breidenbach's map owes very little to earlier maps of the Holy Land and a great deal to personal observation on the spot. Realism was especially important in pilgrimage maps, marking the exact routes and sites the pilgrim would encounter on his way.⁷³

However, realistic elements of the landscape continued to be represented alongside imaginary, conceptual and anachronistic elements, such as figures and scenes representing religious tradition. In several maps of Jerusalem, the Biblical scenes were portrayed as if they were a real part of the landscape and could really be seen at the time of the mapmaker. This was the image of the city in his and his readers' minds, representing their conceptual cultural and religious world.⁷⁴ In this case, in the realistic as well as in the imaginary maps, realism was used to root the Christian image of the Holy

⁷² Harvey, *The History of Topographical Maps*, 70.

⁷³ Ibid, 82.

⁷⁴ Rubin, "Ideology and landscape", 24.

Besides the cartographic and artistic convention of the time, realism had another purpose in these maps. It was used to evoke the idea of a journey, a pilgrimage, by depicting images and scenes of ships, pilgrims' arrival and landing. It was also used to answer the need to see, and if possible touch, palpable evidence of the presence of Jesus Christ on earth by drawing the topography of the city in a mimetic way.⁷⁵

Another aspect of realism that can help us understand the mapmaker's idea behind the image he portrayed is the depiction of a certain feature in the city. For example, the realistic maps depict Jerusalem as the pilgrims saw it, including the outline of its walls. With the shape of the city becoming more real and accurate, we can detect differences among the maps in the way the walls were shown, and compare them to the historical facts. For example, Sanudo gives a very accurate outline of the walls; however, in his map they stand intact even though it is well known that those walls were destroyed by the Ayyubids as far back as 1219.⁷⁶ And indeed in Rieter's map the city wall is shown destroyed and broken through in a number of places, as was in fact the case. For a map drawn as part of an effort to recruit a new Crusade, Sanudo's depiction of the city walls in a fictitious way must have meant something; perhaps after reconquering the city, it will be easy for the Crusaders to defend it against Muslim forces, something that would not be true with a broken wall.

4. The Holy Sepulchre and the Dome of the Rock

A meeting point of some of the different elements of cartographic analysis can be seen in the buildings of the Holy Sepulchre and the Dome of the Rock. According to the level of realism, the viewpoint, the orientation, and the religious identity of the sites, we can learn more about the meaning they were given by the mapmaker and induce the meaning of the map as a whole.

It seems obvious that every depiction of the city of Jerusalem will include a representation of the Holy Sepulchre, being the most important site for Christians and

⁷⁵ Alexander, "Jerusalem the Golden", 258.

⁷⁶ Levy-Rubin and Rubin, "The Image of the Holy City", 362; Tishby, *Holy Land in Maps*, 28.

Christianity. However, what version of the Holy Sepulchre? Throughout the centuries the church was rebuilt several times. Each builder added features which are unique to a certain time in the history of Jerusalem. By identifying a certain version of the structure on the map, we can learn how realistic the mapmaker intended his map to be, and if realism was not his intention, what period he chose and why.

Among the Crusader maps, some depict a symbolic church, while others represent the actual structure of their time. In the Brussels map (fig. 5), the Church of the Holy Sepulchre is depicted in a circular form, as it appeared before 1099 in its Byzantine phase.⁷⁷ Shortly thereafter, the Frankish Crusaders expanded the church to the east, joining the shrines at Golgotha and Mt. Calvary to the Byzantine rotunda. Later maps, among them the Cambrai map (fig. 7), record the gradual change in the famous church.

Sanudo depicts the Holy Sepulchre in a ground plan, hinting at the shape of the building but not presenting its different parts. His map is very realistic, but is meant to present the city not as it appears to the pilgrim upon his arrival but as a target of reconquest. Apparently, a schematic plan of the Holy Sepulchre was enough for this purpose, and there was no need to depict the actual building in Sanudo's time.

Later maps depict the Holy Sepulchre as the visitors to the city saw it, including its façade, different chapels, bell tower and courtyard, even if it meant the building had to be turned in order to be seen from the top of the Mount of Olives. Such is the case in Rieter's (fig. 10) and Breidenbach's (fig. 14) views of Jerusalem.

It might also be interesting to look at the historical buildings on the Temple Mount. Was the Jewish Temple depicted as in Adrichom's imaginary map (fig. 11), or was it the Dome of the Rock as in Rieter's map (fig. 10)? Was the Dome of the Rock presented as a Crusader palace or a Muslim mosque?

Another interesting aspect is the relationship between the Holy Sepulchre and the Dome of the Rock. In the round maps several stages can be seen. In the first years of the Crusader Kingdom the Temple Mount was considered almost as the holy of holies of Crusader Jerusalem.⁷⁸ This status is reflected for instance in the Florence map (fig. 3): the Temple Mount fills the upper half of the map, while the lower half is divided equally

⁷⁷ Nebenzahl, *Maps of the Holy Land*, 32.

⁷⁸ Sylvia Schein, "Between Mount Moriah and the Holy Sepulchre: The Changing Traditions of the Temple Mount in the Central Middle Ages." *Traditio* 40 (1984): 187.

between the quarter of the Holy Sepulchre and the quarter of the Order of St. John, and the buildings on the Temple Mount appear in greater splendour than the Holy Sepulchre. In the map of Paris (fig. 4), four 'gates' appear on the rings of the Lord's Temple; thus creating the shape of a cross, and only two or three on the rings of the Holy Sepulchre. When, in the eyes of the mapmaker, the two buildings had the same importance, they were depicted in the same size and shape, as is the case in the Brussels map (fig. 5). In some maps, there is a distinction between the two sites; the Holy Sepulchre appearing as a set of concentric rings, with all the meaning deriving from this shape, and the Lord's Temple appears as a palace or fort, signifying the centre of government.

Sanudo (fig. 9) represents the buildings on the Temple Mount as European buildings, a Palazzo and a tower, in elevation. The inscriptions read 'Area templi' and 'domus salomonis', alluding to Crusader times when the Dome of the Rock was called 'Templum Domini' and the al-Aqsa Mosque was the 'Templum Salomonis'. It makes sense that by depicting the city as a target of reconquest, it will be presented realistically, somewhat as a military target, but that its representation will include at least a hint of the reason for its reconquest. In this case, it is the Holy Places and the glorious Crusader past that Sanudo wishes to restore. The depiction of the buildings in European style obviously was not meant as a realistic view of the Temple Mount at the time. This choice might have been intended to depict the city in a more alluring way, not too foreign and intimidating in the viewer's eyes, and maybe to minimize the presence and the power of the Muslim rule in the city. Harley suggests that representing a place in a European style reflects European ambitions to conquer it. This depiction is meant as a preparation for future colonisation. Thus the viewers can see no obstacles, no local population. In his words, ethnocentric images are a part of the apparatus of cultural colonisation.⁷⁹ It might very well be the case with Sanudo's map.

It is interesting to see the difference in Sanudo's map when depicting the most important sites in Jerusalem: the Holy Sepulchre is depicted as a plan, and the Temple Mount buildings in elevation. Does that mean that the Holy Sepulchre is depicted as the rest of the map in a 'practical' form, as a target of reconquest, and the Temple Mount buildings are depicted for the purpose of igniting the viewer's imagination? Or were they

⁷⁹ Harley, "Silences and Secrecy", 70.

more important in Sanudo's eyes, and thus depicted more realistically even though their look is not contemporary? Maybe Sanudo's representation of the Holy Sepulchre alludes to the symbol of the circle while maintaining some degree of realism, and the European style of the palace on the Temple Mount hints to a possible European rule.

In the later more realistic maps, both the Holy Sepulchre and the Dome of the Rock are represented realistically, and only their relative size, names, and the religious symbols appearing on them (or not) hint at the relative importance that the mapmaker attributes to each one.

In the Rieter map, both the Holy Sepulchre and the Temple Mount are relatively big and thus important. The Holy Sepulchre is called 'Sepulcrum Christi', and is depicted realistically with all of its adjacent chapels. Thus the church appears as one of the most important sites of the Holy City. The Dome of the Rock is called 'Templum Salomonis', even though most maps call it 'Templum Domini', the Lord's Temple, and the name Salomon's Temple is usually attributed to the al-Aqsa Mosque. According to Levy, the al-Aqsa Mosque is called 'Ecclesie Sarazeni', Church of the Saracens, but according to the location of this inscription it could refer to the entire complex of the Temple Mount.⁸⁰ Above both buildings, there is a crescent and it is obvious that the city is under Muslim rule. This map represents a contemporary state. By drawing both buildings the same size, by depicting the crescents on top of the mosques and minarets, and by not using evocative Crusader names, Rieter is trying to minimize the 'Crusader' meaning attributed to Jerusalem by other maps.

5. Implementation

5.1 The Comminelli map

Let us now see how we can implement this method of deciphering maps on a different map of Jerusalem. As presented above, I will employ the second level of analysis and deconstruct the map into its different elements, analyse each part and then put them back together in order to read the map as whole. The Comminelli map (fig. 19) was attached to a Latin version of Ptolemy's *Geographia*, written in 1472 by Hugo

⁸⁰ Levy, "Medieval Maps of Jerusalem", 494-500.

Comminelli and illustrated by Petrus Massarius.⁸¹ In her essay, Levy describes the map and the different sites it depicts, but does not give a reading of the message or the perception of Jerusalem that Comminelli wanted to pass on to his readers.⁸² The map seems to belong to the realistic group of maps. It is definitely not an itinerary map or an imaginary map representing Jerusalem in the days of Jesus. The shape of the city is almost a perfect square. Even though the walls are broken in some places, and the northern part of the wall is not straight, it does not resemble the more realistic outline of the city that we find in the maps of Rieter and Breidenbach. The orientation of the city in the map is towards the west, as in all the maps showing Jerusalem from the perspective of the top of the Mount of Olives. The church of the Holy Sepulchre has been rotated so that the viewer can see the façade, and all the buildings of the city are likewise rotated so that the viewer can see their façades and one of their sides.

There are several viewpoints in this map. The city is shown from a bird's eye view, so that the viewer can see all the buildings within the city walls. The walls are depicted from above as are the square enclosures within the walls, such as the ancient palace, 'Palazo antico', and the room of the Last Supper, 'Cenaculum Christi'. The tile-roofed buildings inside the city are shown horizontally, but the flat-roofed buildings are shown from below.

The buildings are repositioned so that although they are depicted horizontally, they do not hide other buildings completely. Even some of the chapels adjacent to the Holy Sepulchre have been moved from their actual location.⁸³ The buildings are designed in European style. It is especially apparent in the Holy Sepulchre, the Dome of the Rock and the al-Aqsa Mosque. The tile roofs of the city's houses were probably inspired by European buildings.

The realism in the Comminelli map is evident in the identification and the location of the sites and the state of the walls, which are shown destroyed and broken

⁸¹ *Geographia Ptolemaei*, Scripsit Hugo Comminelli ex Francia natus composuitque Petrus Massarius Florentinus.

⁸² Milka Levy, "Medieval Maps of Jerusalem," 418-507.

⁸³ Levy, "Medieval Maps of Jerusalem", 504.

through in a number of places, as was in fact the case. It seems that the topographical elements around the city are meant to render geographical credibility. The city is full of houses and gives the impression of an inhabited city. However, other elements in the map are not realistic: the shape of the city; the absence of a wall along the entire south side of the city; the European style of the buildings, the water sources and the tombs outside the city; the absence of streets, people and animals; the depiction of the Golden Gate, inscribed 'P. aurea', with its left side open, when in fact at that time it was already closed⁸⁴. The representation of the town of Emaus is also unrealistic, marked by the conventional medieval sign for a town: a round wall with gates and towers, also in the European style.

The mapmaker chose to depict sites from every meaningful period in the history of Jerusalem. From the time of the Old Testament he mentions the palace of King David, 'Castello de david rege'. From the time of Jesus he mentions sites and traditions such as the house of Pilate, 'Domus Pilati'; the room of the Last Supper, 'Cenaculum Christi'; the Calvary, 'Monte calvario'; the Holy Sepulchre, 'S. Sepulcro'; the place where the apostles received the Holy Spirit, 'Ubi apostoli acceperunt spiritum sanctum'. Sites and traditions from Crusader times include the Lord's Temple, 'Templum dei'; Salomon's Temple, 'Templum Solomonis'; the tradition that the centre of the world is located in the Holy Sepulchre, 'Mundi medium'. The map also contains sites from the author's time, such as the 'Hospicium Peregrinorum', the contemporary version of the pilgrims' hospice that belonged to the order of St. John until the fall of the Crusader Kingdom, and an aqueduct, 'Acquae ductus', built in the time of Pilate and renovated by the Muslim rulers in 1330 and 1465.⁸⁵

It seems like some buildings were described based on contemporary observation and not based on historical knowledge. The structure that stands where Tancred's Tower stood in the past is inscribed 'ancient palace', 'Palazo antico', and not by its Crusader name, which probably signifies its contemporary appearance to the pilgrim.

⁸⁴ Ibid.

⁸⁵ Levy, "Medieval Maps of Jerusalem", 505.

Regarding religious symbols, the Comminelli map does not depict Christian symbols, which were not at that time existent. However, neither does it depict crescents, which did exist at the time, except for one on top of the Dome of the Rock. This crescent is very small and merges in the background. It seems like Comminelli acknowledged the Muslim rule in Jerusalem, but did not emphasize it as Rieter did. Nevertheless, Comminelli did try to show Christian supremacy in the city through the use of scale. The Holy Sepulchre is the most prominent building on the map. The buildings on the Temple Mount, as all the other buildings in the city, are small in relation to the huge church. Its depiction includes all its parts and, in addition to its size, Comminelli locates the centre of the world in it. It is as if he is trying to locate the church of the Holy Sepulchre itself in the centre of the city. These methods emphasize the church's importance and centrality, especially when keeping in mind that in the twelfth century the centre of the world, 'umbilicus mundi', was considered to be both in Golgotha and in the Lord's Temple.⁸⁶ To reference the 'umbilicus mundi' only in respect to the Holy Sepulchre indicates that the Lord's Temple is not as important as it was in the past. The buildings of the Temple Mount are identified by their Crusader names, 'Templum Solomonis' and 'Templum dei', which is probably a misuse of the name 'Templum Domini' used in all the previous maps. However, they are very small and do not compete with the presence of the Holy Sepulchre. It is interesting to note that the names were switched – 'Templum Domini' usually referred to the Dome of the Rock and here it refers to the al-Aqsa Mosque, and 'Templum Salomonis', which usually refers to al-Aqsa Mosque, is given here to the Dome of the Rock. This fact, and maybe also the wrong name 'Templum dei', either indicate a copying mistake, a weak acquaintance with the history of the city, or an attempt to diminish the sites' importance even more, by not giving them their full historical weight.

Comminelli's Jerusalem contains several groups of characteristics. Some of its features belong to the conventions of medieval city views. These include the perspective, a bird's eye view, which enables the viewer to look inside the walled city. Sometimes this conventional depiction also included buildings inside the walls, as is the case here. Indeed the walls of Jerusalem are not portrayed conventionally with the towers, but the classically conventional representation of the town of Emaus at the bottom of the map

⁸⁶ Sylvia Schein, "Between Mount Moria and the Holy Sepulchre", 188.

hints to the tradition this view of Jerusalem belongs to. The European style of the buildings might also be part of the medieval convention. Since medieval town images never included figures, streets or any detail besides the buildings, this can explain why there are no streets and no figures, European or local, inside the city.

The shape of the city, a square, can thus be a version of the conventional circle or polygon which was used in medieval town images. It could have come from the description of the city in the Scriptures, as is the case in Adrichom's imaginary map. Another tradition it can belong to is the visual tradition of depicting Heavenly Jerusalem in manuscripts and maps, in which the shape of a circle or a square conveyed the religious meaning of the city. The west orientation, then very popular in the depictions of Jerusalem, was probably copied from other maps or from pilgrims' description of their view of the city from the top of the Mount of Olives.

The realistic features in the map – the locations of sites and traditions, the broken wall, the attempt to convey topographical realism to the city's environs – were probably based on literary descriptions and common beliefs, which might have been inaccurate or not updated at times. This becomes more evident given: the missing wall on the south side of the city; the fact that the Golden Gate was open, evidence for an earlier stage in the history of the city; the importance of the church of the Holy Sepulchre, from which all pilgrimage routes started, and the irrelevance of the Temple Mount, to which there was no entry to non-Muslims. Since Christian pilgrims and travellers were mainly interested in Christian sites and traditions, basing the drawing of a map on their verbal descriptions can indeed lead to the inclusion of Christian sites and traditions from a variety of periods and the absence of Muslim sites in the city, besides the most obvious, the Dome of the Rock, which also has a Christian history. On the other hand, contemporary sites important to the pilgrim might appear in these itineraries and therefore on the map, like the pilgrims' hospice and perhaps the water source used by them. The mix-up in the names of the structures on the Temple Mount and the misnamed Dome of the Rock also indicate that the mapmaker used other sources on which he based his map and did not know or see the places first hand. It seems that the map was drawn in Europe, based on literary descriptions of Jerusalem and probably not on maps drawn in the Holy Land. It expresses the way Jerusalem was conceived by those who did not make the pilgrimage –

a mixture of beliefs, traditions and real facts told by those who were there. It is obviously not a pilgrimage map, since it is not realistic and detailed enough. Nor is it an itinerary map, since it is too realistic and does not supply the viewer with a defined route. The way the Holy Sepulchre is depicted in relation to the rest of the city indicates that Jerusalem was identified with the church of the Holy Sepulchre, a fact that coincides with the centrality of the church to the contemporary pilgrim to the city.

5.2 The Site of San Vivaldo in Italy as a Map of Jerusalem

Let us now try to implement the method developed above on a map of Jerusalem which is not a two dimensional picture map, but the plan of a site built in Tuscany, Italy, intended as a copy of Jerusalem. Let us see if we can figure out the message the builder of the site of San Vivaldo wanted to convey in his plan.

Between 1500 and 1516, the Franciscan Tommaso of Florence built a complex of 25 chapels, recalling 34 sites in Jerusalem connected to the life and Passion of Jesus. Inside the chapels he placed groups of terracotta statues representing episodes from the life and Passion of Jesus. The chapels were built in a form reproducing the topography of the holy places in Jerusalem; hence the name "The Jerusalem of Tuscany", or "The Jerusalem of San Vivaldo". Tommaso chose the place with great accuracy: he identified a wooded valley with the valley of Joshafat, a small hill south of the valley with the Mount of Olives, a natural flat area on the north represented the Temple Mount and a small hill to its west represented Calvary.⁸⁷ Like other copies of the holy places, San Vivaldo enabled people the choice of going on pilgrimage without actually going to Jerusalem, then under Turkish rule. In fact, in 1516 Pope Leo X issued a decree acknowledging the chapels as a pilgrimage destination, granting indulgence to those who went to pray there.⁸⁸

⁸⁷ For more information about the site, the circumstances in which it was built and the attempts to reconstruct the original plan from 1516, see Guido Vannini, "Una Gerusalemme ricostruita sui poggi Toscani," *Jesus* 9 (1987): 16-19; Franco Cardini and Guido Vannini, "San Vivaldo in Valdelsa: Problemi topografici ed interpretazioni simboliche di una "Gerusalemme" cinquecentesca in Toscana," in *Religiosità e società in Valdelsa nel basso medioevo. Atti del convegno di San Vivaldo* (Firenze: Società Storica della Valdelsa, 1980), 11-74; Damiano Neri, "La "Nuova Gerusalemme" di S. Vivaldo in Toscana," in *Il Santo Sepolcro Riprodotto in Occidente*, idem (Jerusalem: Franciscan Printing Press, 1971), 94-139.

⁸⁸ Ibid, 98.

In the absence of sufficient historical documents referring to the building of San Vivaldo, an analysis of the site as a map of Jerusalem is expected to complete some of the missing information. Based on a map by Vannini⁸⁹, the map present here of San Vivaldo as it was in 1516, shows only the places mentioned in the Papal decree of Leo X (fig. 20). This decree would serve as the legend of the map, even though the identification and location of some of the chapels that were destroyed is only assumed.⁹⁰ In the case of this map, a physical site, the first level of analysis will be used to define the type of map, and hence its use, according to its similarity to other map types.

The sites listed in the legend of San Vivaldo are solely Christian sites from the time of Jesus. This reconstruction of Jerusalem in Jesus' day leads us to think it shares the same concept of the imaginary maps, which served exegetical purposes. However, this classification is problematic, since San Vivaldo does not depict an imaginary city based on the Scriptures, but a realistic plan based on geographical observation.

Knowing that this was a pilgrimage site, perhaps created as a surrogate to the pilgrimage to the Holy City, we can assume that it was meant as a pilgrimage map. As in the realistic pilgrimage maps, the geography of San Vivaldo's Jerusalem is very accurate. But these maps list tens and hundreds of sites and traditions from Biblical times to contemporary times, including sites belonging to other religions and Christian groups. This is not the case in San Vivaldo where the legend lists only 34 Christian sites and traditions, grouped on the site in 25 chapels, non of which represent the reality a pilgrim would encounter on a pilgrimage to Jerusalem.

What we do have in front of us is a map depicting a small group of pilgrimage sites (the chapels), represented from the outside in European style and from the inside in a realistic way, including realistic 'illustrations' of the scenes connected to each site. The 'viewer' of the map is lead from one site to another in a kind of itinerary. Therefore, this map can be included in the group of itinerary maps. As in these maps, the objective is not the mimetic representation of places along the pilgrim's way but their cataloguing in the

⁸⁹ Guido Vannini, "San Vivaldo e la Sua Documentazione Materiale: Lineamenti di Una Ricerca Archeologica," in *La "Gerusalemme" di San Vivaldo e I Sacri Monti in Europa*, ed. Sergio Gensini (Pisa: Pacini, 1989), 254-5. In his map Vannini lists all the chapels of the site, indicated by the phase they were built in - the known original chapels, original chapels that were destroyed in their estimated locations, and chapels added in later periods.

⁹⁰ Cardini and Vannini, "San Vivaldo in Valdelsa", 35-53.

order to be met with on the ground. There is use of conventional signs to depict the places along the way, in this case the Renaissance architecture, which gives no idea of their actual appearance. The realism inside the chapels seems to serve like the illustrations of traditions and events on the maps of Jerusalem, indicating what the pilgrim needs to meditate or concentrate on at every location. Like the itinerary maps, San Vivaldo's map too relates to actual geographical features. That is done by recording measured distances, not by numbers but by the actual experience the pilgrim undergoes, and by supplying him with accurate information of the terrain on the pilgrimage. The spiritual value of the pilgrimage is expressed not by miles but by indulgences gained, the number of years mentioned next to each site on Pope Leo X's decree.

Thus, referring to the physical site of San Vivaldo as a map of Jerusalem can reveal missing historical information about the builder's intentions. What seemed to be a surrogate site for the pilgrimage to the Holy Land turns out to be inaccurate. Visitors to the site, the 'viewers' of the map, did get indulgences for this pilgrimage, but they were not intended to encounter the real city, but only to meditate on specific sites along a specific route, thereby conducting a mental pilgrimage. It seems like the topographical realism was designed to give a sense of pilgrimage, and not intended to recreate the actual city, as was the use of contemporary European architecture when depicting sites from the time of Jesus. Perhaps the European style was meant to stress that this kind of mental pilgrimage can be done anywhere, not just in the Holy City.

Conclusions

Looking at various maps of Jerusalem from different historical periods, and even from one period, it is obvious that they were not always intended to guide travellers or to serve a practical purpose. They were regarded rather as a means of communication, transmitting information, viewpoints, and ideas, conveying the sanctity of the city and its centrality in the eyes of Christians. The maps show the city as known, as experienced, as remembered, as imagined by different artists and copiers. Thus even though it is possible to see in these representations a growing realism, they still depict the city which existed in the hearts and minds of Christian European mapmakers and readers and not the real Jerusalem.

In order to learn what message a certain map conveys, we need to 'read' it. This reading, done by a comparative study of different maps, can refer to the type, or genre of the map, such as imaginary maps, teaching diagrams, itinerary maps, pilgrimage maps. A more detailed level of reading looks at the map's different features, the building blocks from which it is comprised, the cartographical and iconographical elements and motifs. The cartographical elements can convey 'pure' cartographical meaning, and can be imbued with historical-iconographical knowledge. Analysing the map historically, iconographically and cartographically enables us to isolate these different elements and understand their meaning within the big picture.

Among the objective cartographic elements we find the orientation of the city. In the case of the maps of Jerusalem, it seems that orientation was a fixed feature, influenced by cartographic tendencies throughout long periods of time. Jerusalem's orientation, as that of the Holy Land and world maps, was traditionally to the east. Eastern orientation originated in cultural conventions, religious perceptions on the world or, as in the case of the Holy Land, from the way it was seen when approached from Europe. This convention did not change until the sixteenth century, when owing to the growing realism in the science of cartography a western orientation was established. The western perspective, from the top of the Mount of Olives, allowed a better view of the city, and at the same time was also filled with religious significance, being the place from which Jesus looked over Jerusalem and ascended to heaven. However, despite its religious origins, this is not to claim that a religious meaning is necessarily a part of the message of every map that orientated itself from a western viewpoint. Therefore, we can say that orientation is a cartographical element, defining the time in which the map was made and not necessarily its intrinsic meaning.

The viewpoint is another cartographical element that carries little iconographic value. It seems that the use of one or more viewpoints was employed according to contemporary conventions with the intention of presenting as much information on the city as possible. Thus we find that earlier maps, such as the Madaba mosaic, the Crusader maps and the map of Marino Sanudo, combined vertical, oblique and horizontal viewpoints in order to show the walls, the façades of public buildings and the city's

overall layout. In later maps, when the cartographical demand for realism made it harder to create such images, we usually see only one viewpoint: the bird's eye view.

Some elements in maps convey both cartographical and iconographical meaning. They seem to change over time according to the developments in the science of cartography and also in accordance with the message the mapmaker wanted to convey. Such is the layout of the buildings inside the city. In the Madaba mosaic map, the church of the Holy Sepulchre is placed in the centre; thus characterizing the new, Christian Jerusalem centred on the tomb and Resurrection of Christ. In the Crusader maps, buildings are relocated so as to give the map a more symmetrical look and to avoid obscuring other important buildings. Even in the Comminelli map, from the sixteenth century, some chapels of the Holy Sepulchre are repositioned so that the church can be seen with all its parts. With time, when realism constrained this flexibility of composition, the importance of a site was expressed by employing another cartographic element imbued with iconographical meaning – scale. Already some of the Crusader maps used a larger scale to express the importance of certain sites, such as the Lord's Temple, or even Jerusalem within the Holy Land in the Harleian map. The more realistic the maps became, the more unified the scale; however, it remained one of the few elements with which the mapmaker had freedom to play in order to express his views. In Breidenbach's map, Jerusalem's scale is larger than that of the rest of the Holy Land, and in Comminelli's map, the Holy Sepulchre's scale is larger than that of the rest of the buildings. Thus this cartographical feature carries religious, political and cultural meaning.

With regard to some elements of the maps, the iconographical meaning overcomes the cartographical one, and the meaning changes solely according to the mapmaker's vision. When represented realistically, the shape of Jerusalem has no special meaning other than a true depiction of the contemporary city. When depicted differently, for example, round, it carries a wealth of religious meaning. Looking at the shape of the city, the viewer can immediately understand a big part of the message in the map without regard for the period in which the map was made, because of the intensity of the ideas

expressed by this element. This is the case in the round Crusader maps and in maps depicting a round Jerusalem made in the sixteenth century.

Another element that is used in the same way is the style of the buildings depicted within the city. Again, contemporary Jerusalemite buildings indicate the map's realism. When buildings are depicted as fantastic or European, we immediately sense a certain perception of Jerusalem that is concealed in the map: a glorious city as in the Crusader maps, a propagandistic tool used to promote certain ideas as in Sanudo's map, a European vision with no connection to the real city, as in the Comminelli map.

Some features of the maps include several of the elements discussed so far. For example, the Holy Sepulchre can be represented as a circle or in a realistic manner; in a different orientation or scale than those of the rest of the map; in one or another architectonic styles. The combination of these different aspects enhances the meaning each of them carries alone.

After studying these elements and defining the meanings they convey, we need to look at them in the context of the map as a whole. We need to check which sites are represented in a unique orientation, in a larger or smaller scale, in a certain style, from a different view point than others; we need to study the choice of names given to them in order to understand their meaning in the eyes of the mapmaker, and also which site is depicted more or less realistically when compared to others. After doing that we can look at the map as one complete work, check what was shown in it and how, and examine what was omitted. These silences can become a significant part of the cartographical message of the map. Another feature of the map as a whole is its level of realism. What is the role of realism in the message, and how is it achieved. Is Jerusalem shown as a medieval cartographic convention or as a realistic city? Is it represented as oriental or European, Christian or Muslim? Is the city describing Jesus' or sixteenth century Jerusalem? Is it aspiring to present a real target for reconquest or a mental image, the destination of pilgrimage or the result of exegesis? When putting together the various parts of the map, the narrative rises to the surface enabling us to read the thoughts, feelings and associations the mapmaker wanted to share with his viewers.

Thus, when reading a map we can sort through its various elements looking for hidden messages, ideas and perception of the mapmaker or of the culture and period he

worked in. We can also look for details that will determine historical facts about the making of the map – when it was made and where – according to cartographical conventions existing in certain places and periods.

Maps, in a way, have an advantage over literary documents as mediums of communication. By using graphic features and creating complex visual images, they have a strong influence and impact, sometimes even stronger than verbal or documentary sources in presenting values and transferring messages. We have seen that a visual, syncretistic image can capture at a glance physical appearances, religious connotations, and cultural conceptions by combining fixed and changing cartographical and iconographical schemes in various ways. Even though they are dependent on the exegetical and the socio-historical interpretations of Jerusalem at certain times of its history, visual representations are capable of adding layers of interpretation in their own visual language. Also, when using the same motif in different maps, it never results in an identical form; the context changes, the overall appearance is transformed, the message is updated.⁹¹ Thus studying the map – its different parts, type and overall appearance – cartographically and iconographically, enables us to read the ideas, conceptions and messages of the mapmaker and the culture in which he worked. Maps can thus be used as non-textual historical documents when other texts did not survive.

⁹¹ Kühnel, "The use and abuse of Jerusalem", xx-xxi.

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Illustrations