The Role of the Town in Medieval and Early Modern Cartography

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For centuries cartography was limited by tradition and rigid patterns. This resulted from the special role attributed to medieval maps. Let us recall that in comparison with our contemporary concept of the map, its function was understood quite differently: not as an accurate smaller representation of certain parts of the Earth but adjusted to a didactic and moralizing function. The purpose of the map was to illustrate sacred history by presenting elements of theology, depicting places on Earth of particular importance from this point of view. The actual layout of waters and lands was not of paramount importance; space was subject to hierarchy and subordinate to a defined superior idea. One may state that at that time the map did not constitute – by what we understand today – a reflection but a depiction of the world. Town centres played a significant role among sacred places in the city, but their placement and presentation were far from the real geographical location as they only reflected the elements of the convention binding at that time.

In this situation on medieval maps we observe what we already have mentioned – a clear valuation of space – with particular attention paid to places located in the centre of the map. In short, we find two traditions in cartography of that time, one originating in Roman times, which placed Rome in the centre and the second, increasingly prominent from the twelfth century, which placed Jerusalem in the centre. The latter pattern, in particular, was applied to the *mappae mundi* for a long time but with the progress of discoveries it became increasingly questioned. Fra Mauro, a renowned Venetian cartographer from the fifteenth century, showed clear reservations about placing Jerusalem in the centre of the known world. However, he did not have enough courage to reject the church vision of space. Nevertheless, the period of the fifteenth and sixteenth centuries, which is of interest to us here, brought about fundamental changes and revaluation in geography and cartography.

The image of the town on maps, including large metropolises, derives from the way the town was treated by those in power in medieval times, in line with the popular concept of 'three strata': the ideal society comprising 'those who pray', i.e. the clergy, 'those who protect', i.e. knighthood or warriors, and 'those who work', i.e. peasants, *laboratores*, whose task was to ensure maintenance of both higher social strata. This pattern – present in Indo-European civilization and beyond – was open to modification with the emergence of what we call townspeople as an active component of the social structure aspiring to gain a significant position. The division into three categories covered all functions of the human community, so the town, forming an 'outside' element, was treated with aversion and distrust. In the light of an outlook which considered the village to be the natural place of work and life for people, this was quite understandable. Therefore, the town was quite often depicted as resembling Babylon, the hotbed of all evil. The image of the town as a heritage of Cain became quite popular at that time.

As time passed, the role of the town grew and changing opinions were reflected in cartography. Praising the towns with various elements such as admiration of architecture, diligence of their inhabitants, trade and craft together with frequently stressed patriotic elements became more and more frequent. This change in attitude is visible on maps where one of the nearly permanent elements was a depiction of terrestrial paradise (*Paradisus terrestris*) often presented in the form of a large town surrounded with sturdy walls.

The town symbol become permanent in cartography products; vignettes with the names of towns and even countries were placed within town walls. Such representations can be seen for example on German maps of Hans Rüst and Hans Sporer or in the chronicle of Hartmann Schedel. The iconography of medieval maps as well as modern ones is incredibly rich and interesting and constitutes a separate subject for research. However, at this moment we are interested in the growing significance of municipal elements at the turn of two great epochs. Obviously, as far as the precision of geographical locations is concerned we are frequently quite far from not only the ideal but also from relative accuracy.

It is worth adding, that the town symbol was diverse and not only limited to a conventional depiction of town walls. For example on the first map of Bohemia made by a doctor called Klaudian in Nuremberg in 1518 (it is interesting to note that a significant part of the cartography production of that time was carried out by doctors) amongst 280 names of towns and villages we find 37 royal towns and 53 belonging to lords. These are all marked in two ways, namely according to size and subordination to a given authority and according to denomination. The royal towns have a depiction of the crown, while those belonging to lords – a shield. Crossed keys – representing Catholic towns and a chalice – showing the supporters of Utraquism, symbolize the religious differences in Bohemia, which are a heritage after the Hussite revolution. One of the most difficult tasks of cartography in those days was obtaining data that would be at least to some extent identical with the actual geographical location of various places, with metropolises in particular. We can reconstruct the scale of such difficulties on the example of the first globe that has survived to this day and which was made by Martin Behaim in 1492. However much one might admire the appearance of this object, one has to state that as far as municipalities are concerned the globe is chaotic. Among the largest European towns Paris, Lisbon, Venice, Rome and Brno were correctly marked while for example Stockholm, Florence, Naples or Bergen were not placed so precisely. It is quite surprising that the globe does not show many renowned and significant municipalities. One cannot even find Nuremberg, the place of Behaim's birth and a most powerful town at that time. This rather strange situation could be explained by the state of conservation of the globe, so that some names may have faded away.

Apart from the world of conventions and stereotypes there was also a world of practical requirements, which due to necessity resulted in developing instruments for measurement and division of space. In this case people reached for an ancient cartographic means in the form of itineraries. At this point it is worth mentioning the Nurembergian producer of compasses - the astronomer and doctor, Erhard Etzlaub - who specialized in making maps in the form of itineraries. The so called Romweg-Karte, prepared in 1500 (probably to commemorate the 'holy' year, shows the most important pilgrim routes leading to Rome, displaying many towns of central Europe of that time. Again as an example let us mention stressing – on a vignette – the role of Cracow, the seat of Polish kings, a town with traditionally strong trade ties with various German centres. Apart from those political and trade motifs, on his map Etzlaub draws attention to the important function of Cracow as a starting point for pilgrimages to Rome, a focal point for pilgrims from the entire Polish Catholic monarchy. The map of central Europe made a year later by Etzlaub significantly enriches the information in comparison with its predecessor. It catches the eye by stressing the role of Nuremberg as the largest transport node in those times. The oldest German guidebook for travellers, created by Jörg Gails (a townsman from Augsburg) and edited in 1563 presents yet more interesting data. For example it informs us for the first time about routes leading to Moscow and Crimea. While mentioning that Novgorod is 120 miles away from Moscow, he did not forget to describe the capital role of Moscow by writing: 'Da sitzt der gross Fuerst und Kaiser in Reussen.'

It was desirable, particularly for practical purposes, i.e. commerce, pilgrimage or communication, to have not only an approximate or estimated but a precise definition of geographical locations on the map – and these obviously included towns. Although the geographical latitude could be rather precisely

established, there were more problems with the longitude. Astronomers and cartographers had to tackle this problem until the eighteenth century. Let us look at the precision in defining the latitude of European metropolises by the mathematician, astronomer, cosmographer, manufacturer of clocks and other apparatuses, the teacher of the famous Sebastian Münster and lecturer of the University in Tübingen: Johannes Stöffler. This author (living at the turn of the fifteenth century) when referring to Vienna, Prague and Wroclaw gave information consistent with our knowledge today. He made mistakes in placing Buda (the capital of Hungary) by half a degree, Cracow (the capital of Poland) by one degree; in the case of Gdañsk, the difference reached one and a half degrees, while his biggest error was in the case of Lübeck, a chief Hanseatic town – and this was two degrees.

Sometimes, the mapping of big towns resulted from political reasons. This was so in the case of the map of Vienna made in 1547 by Augustine Hirschvogel. In 1541 Austria became seriously endangered by invasions of Osman Turks, who had already conquered a part of Hungary. The Turkish army was only a few days away from Vienna, so a decision was made to fortify the Danube capital in order to create a main point of resistance. In order to implement this task well it was necessary not only to gain significant funds but also to obtain an exact representation of the old defensive system of the town as well as the fortification works underway since 1530. The royal court delegated this task to the mayor and the town council of Vienna. The Mayor Sebastian Schrancz chose the versatile artist Augustine Hirschvogel from Nuremberg, who had been living in Vienna since 1543. Hirschvogel was to be helped by Boniface Wolmuet and Benedict Kölbl. In the summer of 1547 the work had been completed and Hirschvogel received remuneration from the town council for his colour sketch in the amount of 50 guilders, paid in five instalments. In this way the oldest geometric plans of Vienna originated and no other European town of that time could boast such a document.

Although maps did not always react to changes occurring at their time, we are frequently witnesses of their conservatism (resulting chiefly from the earlier mentioned function of cartography in comparison with what it is today) but at the same time, they bring about a lot of interesting and sometimes surprising information. For example, Hans Sporer on one hand displayed towns that were centres of printing and on the other the quite recent Hussite events, because he marked Bohemia, Constance and Basel on his map. The latter town apart from being known for the ecumenical council and discussions with the Hussite delegation was also known to be a very strong centre of printing.

Although we limit ourselves to the most characteristic examples pertaining to the most important centres, it is worth mentioning the person of Johannes Schöner, a mathematician, astronomer, cartographer and cosmographer connected with Nuremberg. In 1515 he made a globe to which he added - as a comment - a dissertation entitled Luculentissima quaedam terrae totius descriptio. In it he states that Gdañsk is the best known town in Prussia. Nuremberg is the most famous town in Germany and Buda (popularly called Ofen) is also a famous town and seat of kings. Distinguishing features show the religious importance of large towns as well as their educational role. Wroclaw is a metropolitan and episcopal town, Nysa is a bishopric and Greifswald houses a famous university. Schöner (following the works of Martin Waldseemüller's Cosmographiae introductio) gave more detailed information on Prague and Cracow. Prague is a royal metropolis and bishopric also famous for its university. It is where St. Adalbert had come and where the body of St. Vitus is to be found. The capital of Bohemia is however contaminated by heresy. Cracow on the other hand houses a famous University, where in particular astronomy flourishes. It is the seat of a bishop and a place where St. Stanislaus and St. Florian died a martyr's death. Of interest – according to Schöner – is information on political history: Riga is a metropolis managed by an order of Germanic warriors, while Malbork is a seat of the Grand Master of the order in question. The hierarchy of values is not ended by business and trade achievements. Szczecin - notes Schöner - is a rich town because of the abundance of fish and closeness of the sea, Novgorod is an extraordinary metropolis, where German traders come diligently and where - as people say one may find great wealth in silver and expensive leather.

More detailed information on most important city centres was given by a doctor from Alsace, the astrologist and cartographer Laurent Fries. As a cartographer he specialised in decreasing the size and simplifying the maps of Martin Waldseemüller and making them in this way more accessible to a greater number of people. As far as the towns are concerned, of interest is the comment to the maps issued in 1525 titled Uslegung der mercarthen. The rank of particular centres results chiefly from possessing seats of secular and clerical power, or their economic position, but the author also draws his attention to the etymology of various names. And so Buda (in German Ofen) originated from Buda, the brother of Attila and means that the town is so strongly built that one could not find another one which would be stronger and more beautiful. Attila was to murder his brother because the latter dared to call the town with his own name. The capital of Poland – Cracow – is located on the Vistula River and got its name from the first prince and builder of the town called Craco. A slightly more original genesis – according to Fries – was that of the capital of Bohemia. In the olden days a controversy arose on this issue among the people. Therefore, Princess Libusza ordered that the first prince met was to be asked about his 'profession' and on the basis of his answer the name of the town was to be established.

Sometimes the information given by Fries is enough to draw an image of the everyday life of a town. This was so in the case of Vienna. The capital of Austria

possesses – as we read – a circumference of 2000 steps and large suburbs with a moat and walls. The houses are beautiful: although not covered with brick but with shingle, they are painted and beautifully ornamented. Among the incredible temples, the most distinguished is the monastery of St. Hieronimus where fallen women, who have lost their way in life, are accepted and sing in German day and night for the Lords Glory. Should one go back to her sins, she is then drowned in the waters of the Danube. However the women lead such a modest life that people may only praise them. In this town – continues Fries – there is also a university and many students come form German countries and Hungary, the number sometimes reaching about 15 000. Eighteen men are chosen to the town council. The town has vast amounts of food: enormous numbers of carts with eggs and crayfish, the best bread, meat, fish and birds. St. Martin's Square is the food centre where about a hundred carts and wagons with wine arrive daily. It is impossible to enumerate all the kinds of wine produced and drunk in this town, where the cellars filled with wine are extremely deep. The streets of Vienna are covered with hard stone and many more words could be added about the beauty of houses, household utensils and animals.

The information on various larger and smaller towns marked on maps, both in text and symbolic form or descriptions accompanying cartographic representation – also in various works of cosmography – are the same in many points as they frequently originate from similar sources. They also reflect - at least to some extent - the historical reality. Similarly to Fries, Johannes Cochlaeus, who in the 1512 published Brevis Germaniae descriptio, notices that Vienna is well supplied with wine, fish and other food – one may state it is the best among all German towns. Apart from certain standard information found in subsequent sources, we also encounter additional elements in the form of news on events that had taken place in the past. The famous Cosmographia universalis by Sebastian Münster (1550), as far as topography on Prague – for example – is concerned, repeats the knowledge already passed on by Laurent Fries. However, we find information that it was Emperor Charles IV who in line with the will of Pope Clement VI raised the bishopric of Prague to the rank of archbishopric and thereby making Bohemia independent of the metropolis in Mainz. Münster adds that in Ingelheim (near Mainz) this emperor converted the palace of the great king Charles (obviously he has in mind Charles the Great) into a monastery, where dead Bohemians were accepted. We find out about the great fascination of Charlemagne for Charles IV, which is expressed in many ways, for example by founding the Augustinian church in Ingelheim.

Maps that are separate as well as those including comments give a fascinating lesson of history to us about the times contemporary to the authors of those works. They present a lot of interesting information on municipal centres and stress their important role from the point of view of space planning, their environs, especially when we become aware that political borders – in the understanding of the term today – are brought about by modern developments. On top of that we gain invaluable information on trade, architecture, everyday life and politics. The co-existence of maps and descriptions on geographical and historical issues confirms the popular thesis in the Middle Ages – formulated in the beginning of the fourteenth century by Paolino Minoryt – on the equal value of picture and text: *Requiritur autem mapa duplex, picture ac scripture, nec unum sine altero putes sufficere, quia pictura sine scriptura provincias seu regna confuse demonstrat, scriptura vero non tamen erit sufficienter sine adminiculo picture provinciarum confinia per varias partes celi sicut determinat ut quasi ad oculum conspici valeant.*

WORKS CITED

MAPS AND COLLECTIONS OF MAPS

- Der älteste Reiseatlas der Welt: Itinerarium orbis Christiani. Ed. J.E. Schuler. Stuttgart, 1965.
- Die ältesten Karten von Deutschland. Ed. A. Herrmann. Leipzig, 1940.
- Alte Landkarten: Von der Antike bis zum Ende des 19. Jahrhunderts. Ed. I. Kupèik. Hanau/M ,1992.
- Bzinkowska, J. LuŸne mapy ziem polskich do koñca XVIII wieku w zbiorach kartograficznych Biblioteki Jagielloñskiej. Warsaw, 1993.
- -----. Mapy ziem dawnej Polski od XV do XVIII wieku w wybranych atlasach Biblioteki Jagielloñskiej. Warsaw, 1992.
- Campbell, T. Early Maps. New York 1981.

-----. The Earliest Printed Maps, 1472-1500. London, 1987.

- Dörflinger J., R. Wagner and F. Wawrik. Descriptio Austriae. Österreich und seine Nachbarn im Kartenblid von der Spätantike bis ins 19. Jahrhundert. Vienna, 1977.
- Etzlaub, Erhard. Erhard Etzlaubs Reisekarte durch Deutschland 1501. Ed. with commentary by W. Wolkenhauer. Berlin, 1919.

F ischer, T. Sammlung mittelalterlicher Welt- und Seekarten italienischen Ursprungs. Amsterdam 1961.

- Harvey, P.D.A. Medieval maps. Toronto, 1991.
- Imago Germaniae. Das Deutschlandbild der Kartenmacher in fünf Jahrhunderten. Ed. L. Zögner. Weissenhorn, 1996.
- Jäger, E. Prussia. Karten 1542-1810. Weissenhorn, 1982.
- Karten alter Meister. Ed. H. Täubert. Gotha, 1990.
- Kartographische Denkmäler der Sudetenländer. Ed. B. Brandt. Prague, 1930-36.
- Die Landkarten des Johannes Stumpf. Ed. With commentary by A. Dürst. Langnau, 1975.
- Lazarus Secretarius. Ed. L. Stegena. Budapest, 1982.

Meurer, P.H. Mappae Germaniae. Bad Neustadt a. d. Saale / Leipzig, 1984.

- Meyer, G. Alte Karten. Lübeck, 1981.
- Münster, Sebastian. Mappae Europae. Frankfurt a. M., 1536.

Petrzilka, M. Die Karten des Laurent Fries von 1530 und 1531 und ihre Vorlage, die Carta Marina aus dem Jahre 1516 von Martin Waldseemüller. Zürich, 1970.

Prikryl, L.V. Slovensko na starých mapách. Bratislava, 1982.

Purgina, J. *Tvorcovia kartografie Slovenska do pol. 18. storoèia*. Bratislava, 1972. *Schöne alte Karten*. Gotha, 1970.

Waldseemüller, Martin. Carta itineraria Europae. Strassburg, 1520.

COSMOGRAPHIC / GEOGRAPHICAL TEXTS

Apian Petrus, Cosmographiae introductio. Ingolstad, 1529.

-----. Cosmographia Petri Apiani per Gemmam Frisium ... aucta. Antwerp, 1564.

-----. Introductio geographica. Ingolstad, 1533.

-----. Typus orbis universalis iuxta Ptolemei Cosmographi traditionem et Americi Vespucceii. Vienna, 1520.

Boemus, Joannes. Omnium gentium mores. Augsburg, 1520.

- Celtis, Conrad. Quattuor libri amorum secundum quattuor latera Germaniae. Germania generalis. Ed. F. Pindter. Leipzig, 1934.
- Cochlaeus, Johannes. Brevis Germaniae descriptio. Ed. K. Langosch. Darmstadt, 1976.

Franck, Sebastian. Weltbuch. Spiegel und Bildtnis des gantzen Erdtbodens. Tübingen, 1534.

- Frenzel, M. Johann. Synopsis geographica oder kurtze Beschreibung des ganzen Erdkreises. Dresden, 1592.
- Frisius, Laurentius. Ptolemaeus. Argentorati, 1522.

Gemma, Phrysius. De principiis astronomiae et cosmographiae. Antwerp, 1548.

- Glareanus, Henricus. De geographia. Basel, 1527.
- -----. De geographia liber unus. Basel, 1528.
- -----. Descriptio de situ Helvetiae et vicinis gentibus. Basel, 1519.
- Grynaeus, Simon. Novus orbis regionum ac insularum veteribus incognitarum una cum tabula cosmographica. Basel, 1532.
- Honter, Johannes. Rudimenta cosmographica. Kronstadt, 1542.
- -----. Rudimentum cosmographiae libri duo. Cracow, 1530.
- Irenicus, Franciscus. Germaniae exegesis. Heidelberg, 1518.

Ludd, Gualterus. Speculi orbis. Strassburg, 1507.

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Mela, Pomponius. *De orbis situ libri tres*. Ed. Joachim Watt-Vadianus. Vienna, 1518.

Myritius, Joannes. Opusculum geographicum rarum. Ingolstad, 1590.

- Neander, Michael. Orbis terrae partium succincta explicatio seu simplex enumeratio. Leipzig, 1583.
- Pirckheimer, Willibald. Opera politica, historica, philologica et epistolica. Frankfurt, 1610.
- Quad, Matthias. Enchiridion Cosmographicum, dass ist, Ein Hantbüchlin, der gantzen Welt gelegenheit...begreiffende. Cologne, 1599.

-----. Fasciculus geographicus. Cologne, 1608.

Rauw, Johann. Cosmographia. Frankfurt, 1597.

Rhenanus, Beatus. Res Germanicae. Basel, 1531.

Reisch, Gregorius. Margarita philosophica. Freiburg, 1503.

Rolevinck, Werner. Fasciculus temporum omnes antiquorum cronicas complectens. Strassburg, 1488.

Romanus, Adrianus. Parvum theatrum urbium. Frankfurt, 1595.

Schedel, Hartmann. Liber chronicarum. Nuremberg, 1493.

- Schöner, Johannes. Luculentissima quedam terrae totius descriptio. Nuremberg, 1535.
- -----. Opusculum geographicum. Nuremberg, 1533.

Stobnicza, Joannes de. Introductio in Ptolomei Cosmographiam. Cracow, 1512.

- Stöffler, Johannes. Coelestium rerum disciplinae. Mainz, 1535.
- Vadian, Joachim. Epitome trium terrae partium, Asiae, Africae et Europae. Zürich, 1534.
- Waldseemüller, Martin. Cosmographiae introductio. Strassburg, 1507.
- Zell, Heinrich. Canon oder auszlegung diser gegenwertigen Mappen, Europa genant. Nuremberg, 1533.