

ARTICLES

## MAP OF EARHART ERTZLAUB - THE FIRST TOURIST MAP OF THE WORLD

AUTHOR

**Snježana Musa**

*Faculty of Natural Sciences - Mathematics and Science Education, University of Mostar, Matice hrvatske bb, 88 000 Mostar, Bosnia and Herzegovina  
snjezamusa@hotmail.com*

UDK: 912:338.48 (100) (091)

ABSTRACT

### ***Map of Earhart Ertzlaub - the first tourist map of the world***

*Start of tourist activity in the world is connected with the appearance of the first organized trip. They were mainly related to the organization of visits of pilgrims of different countries which were then related to the life of Jesus, as well as Rome, the seat of Christianity. Great controversy was, and still today is being led, over whether the pilgrims are at the same time tourists. This paper analyzes the first map that followed the journey of pilgrims to Rome, and was made to mark 1500th anniversary of the birth of Jesus. These maps were made by Erhard Ertzlaub, and by their content and artistic expression, aesthetic experience and used iconography, it can be concluded that these are the first tourist maps of the world: they are intended for passengers "passers", which in this way are oriented, they want to visit certain places, which are marked with cartographic symbols, and which are understandable and recognizable. On the same map there are signs for calculating distances between settlements-all that one tourist needs. The dilemma of whether a pilgrim is at the same time a tourist here is clear: the pilgrim is on the road more than 24 hours, on that journey he spends, and during that time he had a specially-crafted geographic map. The conclusion is simple: Map Ertzlaub is for these special passengers and is the forerunner of tourist maps. It is characterized by the properties necessary for the modern tourist maps. There are spaciousness, measurability, modelity, accuracy, integrity and aesthetics.*

KEY WORDS

*oldest tourist map, Bosnia and Herzegovina, Erhard Ertzlaub*

## **1.Introduction**

All these elements of tourist-geographical maps used in the preparation of the map to mark this important anniversary in Christianity, not only that they point out the fact that the pilgrim and tourist, but to be on this path using a special tourist map. The special value of these maps is that they have names Bosnia and Jajce written on them, even when it is a time when Bosnia, as a kingdom, was no longer existing. The map of Erhard Ertzlaub has not been recognized in our literature, and in addition to being the first tourist map of the world it is also an important clue about the existence of the past and the historical meaning of the name of Bosnia and its capital.

In the area of present-day Bosnia and Herzegovina mapping was sporadic, mainly in regard to the interests of the great powers. Among the oldest works of course is one of Tabula Peutingeriana, which contains many names of settlements, of course in Latin. The long period under the rule of the Ottoman Empire did not contribute to the development of cartography, as the Ottomans, in this part of the world, gave little attention to cartographic data. Their main sources and types of data were reports of spies on the opposing territory. Austro - Hungarian Empire in Bosnia and Herzegovina made an official survey and that's how mapping was started.

Technological development of mankind's alienated man from nature. Industrialization has made numerous positive and negative steps regarding the relationship between man and environment. Among positive developments was the need for rest, which favored the development of tourism. It caused a return to the geographical space and the development of human care for the same. Leisure modern man is engaged in making specific types of tourism in the environment.

This creates awareness of the importance of its preservation, and is the primary task of modern tourism to give the user knowledge of the unity of man and nature. Tourism is an industry of rest, fun, and learning, and the tourist map is an indispensable element of modern tourism trends, especially hiking, biking, and something that's gotten into all the itineraries of the world, and is called hiking and the trekking.

## **2.Discussion**

Many people today use maps, but few know what is mapping, which is the area of her interest and of its coverage. Not even the cartographers have a common position on understanding of cartography and so some think that cartography is the science of knowledge of the world with the help of maps; others point out

that it is, above all, a branch of technology and production of maps; third group insists on cartography as an information science, but everyone is immanent to the fact that the "map means for storing and transferring information", whether in digital or analog form. The earliest definitions of cartography are related to her supporting role in geography. Later it shows its technical domain. Over time, cartography is understood as the science, because she developed her method, shaped her research, created a theory, metatheory and epistemology, and became an organized system of knowledge.

It is the knowledge acquired by observation of processes and phenomena in nature and society. Such cartographic knowledge enabling objective, systematized and arguments explore geographic reality, forecasting phenomena and processes in it. These factors suggest that cartography is not only a collection of knowledge, but also a way of thinking and observation of geographic reality, which can be quantified and qualified, generalized, explained and evaluated.

In the scientific cartography is often used attitude that cartography is "science of reflection and study of spatial layout and the relationship between natural and social phenomena, as well as their changes over time" and thus "map is the character model of geographic reality." This attitude of Sališčeva, who pointed out that the map is not painting, but a model of reality, and as such is one of the cognitive science, since it has its methods of scientific knowledge of the world.

The task of the theory of cartography, among other things, is the study of graphic forms and their laws in terms its usage as an adequate means of presentation of qualitative and quantitative characteristics of structural models with simultaneous attention to their situation, positional and spatial cohesion. (Zivkovic, Ivankovic, 2003). Recent definitions of cartography by the International Cartographic Association (International Cartographic Association, 1995, p.1) read: "Cartography is organization and communication of geographically connected information in graphical or digital form. This can include all conditions of data prepared for presentation and use".

### **3. Contemporary tourist - geographic cartography**

One of the promising directions of development of modern cartography is geographic cartography. It is based on research geosystem as a whole, but also its components, natural, economic and social phenomena and processes. This research may be based on maps, but also on the development of of the same, and is therefore referred to reading maps or, on the other hand, the geographic mapping. Tasks of geographic mapping include cartographic interpretation of geographic data, cartographic modeling of geographic phenomena and

processes, cartographic support of environmental protection, the development of new regions and landscapes (industrial, construction, tourism, energy, etc.).

In the process of developing geographic cartography (Uvarova 2009, 144) , special cartographic area called tourist cartography was formed in the tourism industry. It deals with the development of appropriate maps for tourism. Cartography tourism should be at the service of tourists – passengers and meet their practical needs. Tourist cartography aims to monitor tourist activities. It must be continually modified, for one of its characteristic is constant updating of content online, because tourists constantly needs and requires information.

This information is primarily geographical, and it is quite clear that a real tourist journey, as well as real tourists, are nonexistent without cartographic support, respectfully. It is this detail that suggests a new possibility of cartography being part of geography, which has a task to present geospatial reality on the tourist map. According to the authors Kokkonen and Peltonen (1999) map is the most effective way to convey spatial data for decision making.

The first tourist maps, rather sketches, appeared with the first organized group of people traveling. The emergence of the first tourist guide in medieval Europe, is linked to the maps that had a geographical information related to three geographical determinants: traffic, description of space and climate. It is during VIII. century that the organized trip of French nobleman in Palestine and other Middle East countries was undertaken.

In later times, these are the voyages transformed into a medieval historical travelogues. Among the oldest itineraries accompanied by a sketch of the manuscript is one of "Walk the roses" or "Abbot Daniel in the Holy Land" and it was created in XII. century. The manuscript was published in 1888 in London as illustrated guide "The Pilgrimage of the Russian Abbot Daniel in the Holy Land from 1106 to 1107 AD" By CW Wilson ".

A great controversy is present in the science circle about whether pilgrimage travel had, and whether today have the character of tourism. According to Theilmann (1987) there is a difference between pilgrimage and tourism, one religious and the other secular activity, but nevertheless, the pilgrims enjoy sightseeing attractions and tourists are finding educational and spiritual benefits in their travels, and most importantly they spend money on these trips. Therefore, the pilgrim is a tourist, and in these circumstances the resulting maps are now a valuable document, highly ranked cultural heritage (Hardwood2006) and certainly they occupy a special place among the various types of historical and cultural monuments of every community.



Figure 1. Sketch "The Pilgrimage of the Russian Abbot Daniel in the Holy Land from 1106 to 1107 AD" By CW Wilson"  
Source: [faculty.colostate-pueblo.edu/beatrice.spade/.../daniel.htm](http://faculty.colostate-pueblo.edu/beatrice.spade/.../daniel.htm)

#### 4.Methods

The first maps that accompany organized trips appear to mark the 1500 anniversary of the birth of Christ. These are the two maps from Earhart Ertzlauba, issued in Nuremberg, an important Central European commercial and cultural center, which has become one of the largest centers of cartography in the early German Renaissance. Erhard Etzlaub is the author of two innovative and influential maps of Central Europe. These are the map "Road to Rome", published in 1500, which shows the main route from Central Europe to Rome, and "Map of the State roads" published in 1501. (Meurer, 2007).

These maps provide valuable technical and technological creations of that period, but they also show political relations on the European territory back in that time. Area of our territory is also among them, which gives us the right to analyze them in detail. Mathematical geographical scope of maps covers the area between north latitude 58 ° (Viborg, Denmark) and 41 ° (Naples, Italy). Paris appears on the western and eastern margins of Budapest.

To the south is border of Rome, and the east side is marked by the names that could be interesting to our cartography: Jajce and Bosnia. Both maps were printed in German, and not as previously in Latin. It was noted that some settlements still kept its Latinized names. Political areas are shown in different colors, but the boundaries between them are not incorporated.

Cartographic network shows that the maps were made so to preserve the equality of angles, allowing orientation using the compass. These elements indicate that it is done in accordance with the stereographic projection method, and as such, these maps Ertzlauba, are the precursor of Mercator projections (Crane, 2002).

Both maps represent the sum of knowledge about relief forms, mountain passes, the deployment of churches, and roads that existed at that time. All of this knowledge poured into a major trading Nuremberg. Ertzlaub created maps that were multifunctional (Török2007: their functionality has been described in margins, but also on separate papers- a kind of legend. On the map over 800 settlements is superimposed. For their display were used circles. The villages are in some way also categorized, and the labels for the capital further stylized. On the map "Road to Rome" a special category of pilgrimage is represented (Brunner, 2001), as well as the signs that represent the holy places, where next to the circle appears miniature church. Roads are shown in dotted lines, so that the distance between two points is a distance of one mile of German, ie. 7500 m. Distances can be measured by milestones which is located in the lower margin.

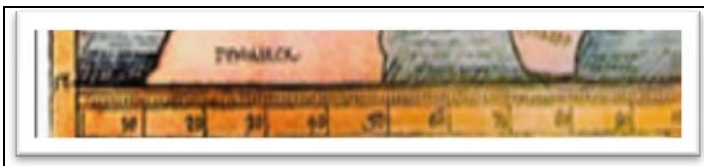


Figure 2. Part of the milestone in the margin of Ertzlaubov's maps  
Source: <http://ids.lib.harvard.edu/ids/view/2655377?buttons=y>

At the bottom of the map is an outline of the solar compass, through which one can easily orientate using a real compass.

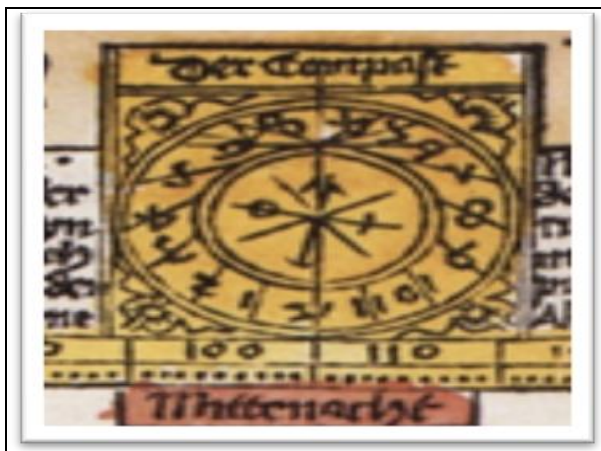


Figure 3. Compass on a Ertzlaubov map  
Source: <http://ids.lib.harvard.edu/ids/view/2655377?buttons=y>

Maps are oriented south. One of the reasons is the navigation with compass, and the second reason is the southern position of Rome with respect to Nuremberg, so Europe is "upside down" for the modern reader. From geographical content, the maps also include rivers, which are not well presented, but, nevertheless, can define their drainage. Relief is differentiated in several ways. Alps and their branches, Apennines and Dinarides are shown in brown color, while the Czech mountains, as below, are shown in green.



Figure 4. Map "Road to Rome"

Source:[http://de.academic.ru/pictures/dewiki/82/Rompilger-Karte\\_%28Erhard\\_Etzlaub%29.jpg](http://de.academic.ru/pictures/dewiki/82/Rompilger-Karte_%28Erhard_Etzlaub%29.jpg)



Figure 5. Map of state roads

Source: <http://ids.lib.harvard.edu/ids/view/2655377?buttons=y>



#### 4.Results

The Map of "The Road to Rome" was published in 1500, for the occasion of organizing the pilgrimage in the name of celebrating the 1500 anniversary of the birth of Jesus. It had, therefore, had to serve passers, and one can conclude that it was a map - a kind of travel guide. The second map is called "Map of the State roads", and was published in 1501. It is assumed that the increased interest in traveling to Rome from different users (clergy, pilgrims, diplomats and scholars) demanded restoration of the map, so it created this, almost the same map. Both maps are supposed to provide information about travel, therefore aimed at a wider audience. These first road maps of large areas of the European continent are very precise and in those days, very reliable, and can be said that they fulfill properties of metricism as well as spaciousness, modality, accuracy, integrity and even aesthetics.

In modern tourist maps (Jakovljeva 2006, 137 – 142), in additional content there are shown, more often than in other of maps, photos of attractive Landscape, objects and texts. In additional textual material are name registrars from the maps and street names with settings that facilitate their finding on a map. In addition, on a map, sometimes even on the back, can be attached short travel guides, lists and addresses of hotels, restaurants, museums other interesting objects for tourists. Tables with data about the distances between major cities entered into the traffic maps. Almost all of these elements are contained in these two maps of Erhard Etzlauba, from the text as a manual on how to use the map, to the names, categories of settlements and distances between settlements. Geographical basis of modern tourist maps has almost all the elements of topographic maps, that is, a detailed outline of the hydrological situation, extent of forests, areals, a detailed overview of all settlements and roads. In the studied maps E. Ertzlauba relief is shown in two ways; higher mountains are shown in brown pigment, lower in green, but also hydrographic web ie the river and the sea, have been displayed.



Figure 6. Display of lower Czech mountains Figure 7. Display of Apennines

Source: <http://ids.lib.harvard.edu/ids/view/2655377?buttons=y>

Out of thematic content roads with their crosses, passes, the distance in miles are presented and so they are similar to traffic maps.



Figure 8. Displaying roads, passes and signs for settlement  
Source: <http://ids.lib.harvard.edu/ids/view/2655377?buttons=y>

On modern tourist maps objects that in any way can be a tourist activity are applied. Objects related to the activity of pilgrims from 1500.g. among which they were visiting churches, inns, so on the map of Ertzlaubov there are many important churches, monasteries, and castles, mills, monuments, caves, waterfalls and others. All this suggests that the maps of Erhard Ertzlauba are the first national tourist map of the world.



Figure 9 A few signs for categorization of settlements  
Source: <http://ids.lib.harvard.edu/ids/view/2655377?buttons=y>

The number of characters that mark the settlements is nine, differently stylized images of characters that correspond to the size of the settlement.

### 5.Mention of the name Bosnia and Jajce on Etzlaubovs maps

On the map "Map of the State roads" between 45 ° and 46 ° width of the toponym Bossen that indicates Bosnia and Krabaten which indicates Croatia, Winden, which refers to the region of Dalmatia and the Istri, Istria. Area Bosnia is presented in yellow, but without plotted boundaries. Among the names of towns, Jajge or Jajce is shown in Bosnia. Among the relief structure, Dinarides are drawn and are represented with brown color. Rivers are represented in blue and displays all Sav. Flu. (Sava) and Drava Fl. (Drava). Roads are not drawn. In Dalmatia (Mlinarić 2011) there are number of cities: Spalato (Split), Sibenih (Sibenik), Sara (Zadar), Segna (Sinj), Islands Broz (Brac), Wood (Hvar), Pago (Pag) while in Istria are Pola (Pula ), paresis (Porec), Fiume (Rijeka) and others.

On the map "Road to Rome" which was released in 1500, the territory of Bosnia is also between 45° and 46° degree, but unlike the previous maps, on it are written names of the territory, or political units, which are represented only with colors. Part of the territory of Bosnia and part of today's Croatian is represented with green color, while the territory of Dalmatia was painted yellow. The territory of present-day Hungary is represented with the green color. Rivers are drawn blue line, and it can be observed to whichbasins they belong. Dinarides were presented with a series of mounds of brown color, which can be said to represent the relief represented with "caterpillar". From the settlements, which are interesting to us, there are the Agaram (Zagreb), on the All. Fl. (Sava), Spalato (Split), Sybenicho (Sibenik), Zara (Zadar), Pola (Pula), Nona (Nin), Signa (Sinj), the island of Pago (Pago), Bracia (Brac), and Das Venetisch Mer (Veneto sea), and the name Krein- Krajina.



Source: <http://ids.lib.harvard.edu/ids/view/2655377?buttons=y>

Figure10 Fragment "Maps of state roads" is possible to see the area of Bosnia and town Jajce

## **6. Conclusion**

Tourist map is geography of the local community. It is like any other geographic map, means and method: from it it is learned, and the map moves, investigates, finds. The first tourist maps were created with the appearance of the first organized trips, such as a pilgrimage to Rome. Thus, in Tourist Cartography first map that accompanies travel, has facilities that are an integral part of the tourist route, and it can be considered as direct evidence that this pilgrimage tour was tourism. Ertzleubove maps "Road to Rome" from 1500 and "Map of the State roads" from 1501 contain all the elements that one tourist map should have: settlements, their elements of recognition, distance, handbook and orientation, as well as some tourist attractions. Legends of these maps are rich in various types of signs, especially those relating to the categories of churches and settlements i.e. of cities.

From this it can be concluded that the first Ertzlaubov maps are tourist maps i.e. tourist maps of pilgrimage. The modern tourist cartography aims to track the tourist offer and the constant updating of content of the maps, because tourist constantly needs and requests information. This information is primarily of geographical character, and it is quite clear that there is no a real tourist trip, as well as real tourists, no without cartographic to support that journey. By analyzing the properties of Ertzlaubov maps it is easy to conclude that they have the same function as the modern tourist maps: they help the pilgrims - tourists on the way to their destination.

## **7. References**

- Bagrow, L., Skelton, R. A. (1985): *History of Cartography*, 2nd Ed., Orecedent Publishing, Chicago.
- Berljant, A. M. (2001): *Картография: Учебник*, Аспект Пресс. 336. с. Билич Г.С., Васмут А.С.(1984): *Проектирование и составление карт: Учебник*. М.: НЕДРА. 240 с.
- Crane, N. (2002): *Mercator – The Man who mapped the Planet*, Henry Holt and Company, New York.
- Filipović, L. S. (1983): *Kartografičeskoe modelirovanie territorialnih rekreacionih sistem*. М.: Izd. Nauka. 150 str.
- Hardwood, J. (2006): *To the ends of the Earth, 100 maps that changed the World*. Marshall editions, London, N7, 9 BH.
- Jakovenko, I. M. (1982): *Atlasnoe kartografičeskoe modelirovanie v geografičeskijh issledovanijah Krimskoj territorial'noj rekreacionoj sisemi*. Avtoref. Kand. Dis. L.. 28 str.

- Jakovljeva, S. I. (2006): Razработка universitetskog učebno-metodičkog kompleksa po discipline „Turistiskije karti“. V sb. Rekreacijska geografija: ideje, metodi, praktika. Naučna knjiga. 137 – 142.
- Jakovljeva, S. I. (2012): Turistiskije karti [Elektronij resurs]: učeb. posobie. Tver. gos. un-t – 1 elektron. opt. disk (CD – Rom 12. Bajura V. N., Motovilova M. S. Kartografičeskij metod.
- Jakovljeva, S. I. (2011): Turistiskije karti: Konspekt lekciji. Tver. gos. un-t., 62 str.
- Kokkonen, P. i Peltonen, A. (1999): Mapping Lakelands: Challenges of map design for tourism. International Geographic Conference. Ottawa.
- Kozličić, M. (1990): Historijska geografija istočnog Jadrana u starom vijeku. Književni krug. Split.
- Marković, M. (1993): Descriptio Croatiae – Hrvatske zemlje na geografskim kartama od najstarijih vremena do pojave prvih topografskih karata. Naprijed. Zagreb.
- Mlinarić, D. (2011): Zbirka Novak kao inspiracija: Osobitosti nekih rijetkih karata priboalja sjeverne i srednje Dalmacije i uloga domaćih kartografa u njihovu nastanku / The Novak Collection as an Inspiration: Characteristics of Some Rare Maps of the Northern and Central Dalmatian Coastline and the Role of Local Cartographers. Kartografija i geoinformacije, 10/16, 72 – 91.
- Pandžić, A. (1987): Stare karte i atlasi Povijesnog muzeja Hrvatske. Povijesni muzej Hrvatske. Zagreb.
- Sališćev, K. A. (1982): Kartografija: učbenik dlja universitetov. M.: „Višcaja škola“, 272 str.
- Slukan Altić, M. (2003): Povijesna kartografija – kartografski izvori u povijesnim znanostima. Meridijani. Zagreb.
- Török, Zs. G. (2007): East – Central Europe; u: The History of Cartography, Vol. 3: Cartography in the European Renaissance. Woodward, D. (ur.). The University of Chicago Press, Chicago, London., 1820 – 1828.
- Umek, D. (2002): The Anonymous and Undated Manuscript Atlas of Italy in the Bishop's Seminary Library in Padua, u: Imago Italiae – The making of Italy in the History of Cartography from the Middle Ages to the Modern Era, Lago, L. (ur.), Università degli Studi di Trieste, Associazione dei Geografi Italiani, Istituto Geografico Militare, Trieste, 509 – 535.
- Uvarova, A. K. (2009): Sostavlenije turistiskih kart: Učebnoe posobie. Almati: Kazak universiteti. 144 str.
- Rukovodstvo po sozdaniju turistiskih obzornih i maršrutnih kart. M.: GUGK. 1989.

