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Continental Atlas of Poland for Automobilists **– the first road atlas in the independent Poland**

Abstract. The 90th anniversary of the appearance of *Atlas Polski Continental dla automobilistów* (*Continental Atlas of Poland for Automobilists*) published by Continental Caoutchouc Compagnie Ltd Warsaw is nearing. The Atlas was the first publication of its kind after Poland had regained its independence in 1918.

After mentioning the earlier 19th and the beginning of 20th century road maps, mainly from the region known as the Kingdom of Poland being at the time under the rule of the Russian Empire, the author of the article discusses the Continental road atlas.

The date of publishing the Continental road atlas is not known, therefore in the article the author makes an attempt at establishing it on the basis of the map's contents: railroad lines, settlement network and administrative borders. Unfortunately, the study does not allow one to unequivocally state the date of publication due to numerous shortcomings in the map's contents. Nevertheless, the date may be estimated as the beginning of the year 1926.

The atlas consists of 20 single-sided map sheets (foldouts) at the scale of 1:1,000,000, which cover the whole territory of Poland as well as some parts of neighboring countries, and a general map showing the division into sheets. The maps' main contents consists of five categories of roads marked in red. Their background is composed of railroad lines, towns and villages in seven size classes according to the number of inhabitants, water network, some peaks and passes as well as mountain range names. Explanations of map symbols in the legend are given in five languages: Polish, Russian, German, French, English.

The atlas very clearly shows the differences in the density and quality of roads between the regions of the Prussian and Austrian partitions and the road infrastructure-wise neglected Russian partition, especially its eastern part. Apart from mileage information for roads, the maps do not contain additional information specifically for motorists. They do not even show petrol stations or auto repair shops.

What is really worth praise is the sole idea of creating such an automobile atlas and publishing it in 10,000 copies, a copy for every other Polish driver at the time! The fact speaks for the publisher's, Continental Caoutchouc Compagnie's, perspective. Despite numerous shortcomings discussed in the article, the *Continental Atlas of Poland for Automobilists* remains a unique work, which gave a beginning to a new kind of maps in Poland.

Keywords: history of cartography, Polish interwar cartography, road maps, road atlases

1. Introduction

Road atlases are one of the basic kind of cartographic documents published contemporarily in Poland. Many publishing houses annually revise and publish their own road atlases, sometimes in a few versions which differ in map scale. Considering the fact that, currently, there are 19 million registered cars in Poland, this

should not come as a surprise. Contemporary road atlases are published in many different scales and formats, the most popular of which are the scales of 1:200,000 to 1:500,000.

The very dynamic development of electronic devices, GPS and mobile internet communication based navigation software generally accessible also through mobile phones will inevitably lead in the coming years to a loss of interest in

traditional paper editions of road atlases. A decrease in demand will surely be followed by cuts in their production.

Nonetheless, currently the road atlas market is growing rapidly, therefore it is worthwhile to remember the beginnings of maps for motorists in our country. The National Library of Poland, Department of Cartography stores a vast number of cartographic publications, which undoubtedly are prototypes of later road maps and atlases.

The collection opens with postal maps, popular in the 19th century. Despite the fact that they were not created with motorists in mind, as there were no motorists at the time, they presented a considerably detailed image of roads classified according to their usage by postal service. The first one of these was Juliusz Kolberg's *Postal and Travel Map of the Kingdom of Poland and the Grand Duchy of Posen* at the scale of 1:1,400,000 published in 1817. It is also worth mentioning Jerzy Egloff's map from the year 1846 entitled *Postal and Industrial Map of the Kingdom of Poland* at 1:1,092,000, on which the author had presented hard-surfaced and common roads, railroads with stations, had marked roads to be built as well as those under construction, and gave distances in kilometers next to the more important roads. The map had numerous updated reissues (P.G. Ochman 2000).

The National Library also holds Karol Krasopolski's publication from the year 1894, entitled *The Kingdom of Poland Hard-surfaced Road Atlas Composed on the Basis of Reimann's et al Topographic Atlas*. Undoubtedly, this is the first publication which uses the expression "road atlas" and also one which is made at the scale of 1:200,000, i.e. the scale found today in the most detailed Polish road atlases. The atlas was made in the form of black-and-white itineraries along selected main tracks. Four categories of hard-surfaced roads as well as railroads were distinguished. The territory of the Kingdom of Poland was divided into four parts; the map of each was published in the form of a separate volume (17.5×11.0 cm). The National Library in Warsaw has two of them: *Part I. Western Roads*, which comprises the western part of the Kingdom from Warsaw to Wielkopolska (Greater Poland), and *Part II. Southern Roads*, which comprises the territory south of Warsaw down to Cracow. There existed another, third part: *Part III. Eastern Roads*, made for the

region extending east of Warsaw, which is absent from the collection in the National Library. *Part IV. Northern Roads* had probably never been published; it does not exist in K. Estreicher's *Polish Bibliography of the 19th Century*. The Atlas presented only the territory of the Kingdom of Poland, nonetheless it can be recognized as the oldest road atlas made on Polish territory.

In May, 1907 in Warsaw, The Motorist Society of the Kingdom of Poland was established as a branch of the Empire Automobile Club in Petersburg. It became the advocate of motor tourism in Poland. It was for the Society that, in 1914, Kazimierz Naake-Nakęski compiled the *Map of the Kingdom of Poland with the specification of towns, settlements, villages, chambers, railroads, hard-surfaced roads, postal tracks and rivers for the usage of agriculture, commerce and tourism* at the scale of 1:504,000. It is interesting to note that the map was published in the form of an atlas. It was divided into 26 one-sided and numbered "sheets" (foldouts) with hard covers, but nevertheless figuring the word *Map* in the title. Simultaneously, it was published as a loose map compiled from the 26 pages of the atlas without covers and held together with linen bindings. K. Naake-Nakęski's map was beyond doubt made with car fans in mind and can be taken as one of the first maps for automobilists. The map presents two categories of roads: ministerial and district as well as postal and country roads. On the main tracks, distances are marked in Russian versts. The National Library's collection comprises the map in both forms, the atlas and the loose map, and also includes a reprint of the atlas published in 1996 by Moto-Press Publishing and Advertising Agency.

After Poland had regained its independence in 1918 and the country borders were finally established, the first work published with motorists in mind was the already mentioned in the title *Continental Atlas of Poland for Automobilists*. The atlas contained maps at the scale of 1:1,000,000 and is considered to be the first road atlas comprising the whole territory of Poland within its newly established borders. The publisher of the atlas was Continental Caoutchouc Compagnie Ltd Warsaw, which was the agency of Continental-Caoutchouc & Gutta-Percha Compagnie, the German tyre company with a seat in Hanover. The compa-

ny's logo was put on the cover, endpapers and the title page of the atlas. Presently, almost 90 years have passed since the atlas was printed.

2. The dating of the atlas

It is difficult to establish the exact date of publication of the *Atlas Polski Continental dla automobilistów* (*Continental Atlas of Poland for Automobilists*) because the publisher, Continental Caoutchouc Compagnie in Warsaw, similarly to some contemporary map and atlas publishers, did not put either the date of publication or the date of atlas elaboration. Attempts at setting both dates on the basis of the analysis of the atlas's contents do not provide a precise answer.

Contrary to the publisher's opinion stated in the introduction to the atlas that the contents had been "based on precise material" and elaborated using "the expertise of the most prominent professionals and experts in the field"¹, which was to guarantee "the goodness of this little work", the atlas contents is not free from shortcomings, which hinder its dating.

Poland's borderline suggests that the atlas was published after the borders had been finally established, i.e. after the incorporation of the so called Central Lithuania with Vilnius (which had taken place on 24 February, 1922) and after Poland had annexed in July of the same year the plebiscite areas which had been recognized as Polish by the decision of the Conference of Ambassadors. The atlas could therefore have been published at the turn of the years 1922 and 1923 at the earliest.

The analysis of the railroad network, which apparently had been marked with great accuracy, leads to somewhat different conclusion. As we know, in the twenties of the 20th century, it was necessary to connect the three independent post-partition railroad network into one whole. This consisted in the construction of several brand new complementary railroad lines, which, assuming the work is accurate, could be an indicator of the date of the cartographic elaboration. The atlas does not include an important railroad line between Warsaw

and Poznań on the former partition borderland between Kutno and Strzałkowo near Września. The line was opened in 1921. The atlas also does not show the railroad line from Kutno to Płock operating since 1922, which could indicate the date of publication as having had place before 1921².

The image of settlement may also serve to date maps. Kartuzy and Gdynia, towns which were established in the interwar period and which received town status in 1923 and 1926 respectively, have been marked in the atlas still as villages. Also Rajgród is marked as a village, while in 1924, after 54 years, it regained town status, which would indicate the atlas was published in 1923 at the latest. However, the Warsaw suburban towns of Pruszków and Otwock have been shown as villages, whereas both had already enjoyed town status since 1916. This proves that the settlement categories have not been shown accurately and cannot be counted on in dating the atlas.

It seems that the last of the analyzed elements of contents, i.e. the administrative division into voivodeships (provinces) may be decisive. The atlas shows voivodeship borders, their seats of government and their names, although the latter only in the form of repeating the voivodeship capital's name. It is necessary to note here that the division into voivodeships in the reconstructed Poland was not introduced simultaneously in the whole country. The voivodeships were formed on the basis of Polish Parliament's acts in five stages over a period from 2 August, 1919 (the so called central voivodeships) to 20 January, 1926, when the Vilnius voivodeship was formed as the last one, transforming it into the so called Vilnius Territory (Ziemia Wileńska). The border of the Vilnius voivodeship is shown in the atlas and, although the drawing is far from perfect, it must have been created after January 1926, although one cannot eliminate the possibility that "Vilnius", the name of the administrative unit was used to denote the Vilnius Territory and not the Vilnius voivode-

¹ Unfortunately, the editor does not reveal the names of these "most prominent professionals".

² While establishing the dates of opening or closing the particular parts of railroad in Poland, Teofil Lijewski's map *The railroad network – historical growth* at the scale of 1:2,000,000, sheet 106 in the *National Atlas of Poland*, Wrocław 1973–1978 has remained a valuable source for years (J. Ostrowski 2011). Also *The Atlas of Railroad Lines in Poland 2014* made by Marcin Stiasny, printed by Euro-sprinter from Rybnik has been most helpful.

ship, despite the explanations in the legend.

Perhaps that is why, when in 2011 Continental celebrated its one hundredth anniversary of operating on the Polish market, among its achievements it mentioned the publication around [?] the year 1926 of the first atlas for automobilists in Poland. As is evident from the above discussion, the *Continental Atlas of Poland for Automobilists* is around 90 years old, but even its publisher does not remember the exact date of its publication.

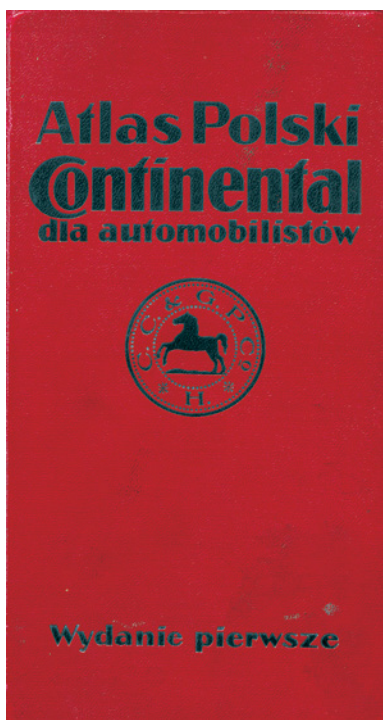


Fig. 1. Atlas cover (reduced)

It is worth mentioning that, according to statistics, by the end of 1926, there were 16.5 thousand vehicles including trucks registered in Poland as well as 3 thousand motorcycles (there were 92 cars in Warsaw!). Unlike today, the automobile was therefore a rare means of transport. All the more, the idea and the effort of publishing the atlas in 10,000 copies (more than for every other driver of the day!) must be appreciated.

3. Form and layout of the atlas

The atlas was published in a very convenient format of 23.5×13.0 cm in hard cover (fig. 1) and equipped with a practical pocket for loose pages or notes and a bookmark in the form of a tape.

The atlas opens with the Introduction, where “the goodness of this little work” is praised and instructions for using the atlas are given. The explanation of symbols (the legend) follows. It is given in five languages: Polish, Russian, German, French and English. Selected elements of the legend are also repeated on the margins of several sheets of the atlas and, what is interesting, with slightly different explanations.

The cartographic part is composed of 21 fold-out one-sided color maps. The “general map” at the scale of 1:5,000,000, which today would be called the index, presents the division of the territory of Poland into the sheets of the main map with the most important towns and roads in the background.

Apart from the index, the atlas comprises 20 sheets of maps at the scale of 1:1,000,000 (fig. 2), which cover the territory of the then Poland and partly also of the neighboring countries, i.e. Germany, a large part of Lithuania and a considerable part of Czechoslovakia. Even Vienna is included. The individual sheets of the atlas are numbered and each given the name of the main town. Each page is also marked with an abbreviated title of the atlas: *Continental Atlas of hard-surfaced roads*. It is necessary to note here that the scale of 1:1,000,000 is no longer used in road atlases today because it is too small and does not allow to present either a dense network of roads or numerous elements of road infrastructure. Let us remember, however, that in 1926, the number of hard-surfaced roads in Poland was low, especially in the east. Moreover, there are no additional elements of contents for drivers, no petrol stations or auto repair shops, so, although the scale is not large, the maps are not overloaded with contents. The authors concentrated on the roads and their categorization.

The ending of the atlas is composed of eight black-and-white pages with advertisements of automobiles, materials for their maintenance and German tyre producers, which is probably due to the fact that the agency of the German

Continental company was the publisher of the atlas in Poland.

4. The scope of the contents

According to its purpose, the main contents of the atlas consists of the presentation of roads. There are five categories of roads; the following explanations of categories are given as they were originally written in the main legend of the atlas (fig. 3) and, in parenthesis, in a slightly different version as they come on the margins of each sheet of the atlas:

- Main state roads for automobilists with dis-


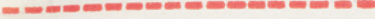
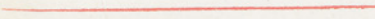
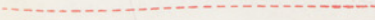






Objaśnienia.	
	Główne drogi (szosy) państwowe dla automobilistów z podaniem oddalenia w kilometrach. Podane oddalenia należy rozumieć jako przestrzeń między czerwono nakreślonymi miejscowościami.
	Wschodnia sieć dróg, która ma być w najbliższych latach całkowicie rozbudowana; obecnie na wschód od 24-go stopnia długości droga ta jest jeszcze dla jazdy bardzo niedogodna. Znaki kilometrowe i mosty już są postawione.
	Drogi boczne co do jakości równe z silnie czerwono nakreślonymi szosami.
	Drogi poboczne w większości wypadków zdatne także dla automobilistów.
	Ścieżki.
	Linje kolejowe z pociągami pociągami pociągami.
	Linje kolejowe bez pociągów pociągów pociągów.
256	Wysokość w metrach.
II	Przejścia górskie.
	Miasta ponad 50 000 mieszkańców.
⊙	Miasta ponad 25 000 mieszkańców.
⊙	Miasta ponad 10 000 mieszkańców.
○	Miasta niżej 10 000 mieszkańców.
○	Miejscowości wiejskie z więcej niż 10 000 mieszkańców są odpowiednio oznaczone.
○	Wsie.
○	Mniejsze wsie.
	Granice państwowe.
	Granice województw.

Fig. 3. Symbol explanations (reduced)

larger towns and on only main roads, however with praiseworthy accuracy of up to 0.1 km.

Among the above categories of roads, it is the “eastern road network” that draws attention. The category denotes nothing more than roads under construction (“signs and bridges have been constructed”) and those being planned. All of them are located in the east of the country, where the road infrastructure was most neglected.

On the sheets of the atlas, one can clearly see wide differences in the density of road network and their categorization, i.e. the quality of roads, between the territories of the Prussian and Austrian partition and the neglected eastern territory of the Russian partition. The difference between the partitions can still be seen today on many thematic maps, which shows how difficult it is to eliminate the differences in the development of a country divided for over 120 years among three partitioning powers.

The road network is complemented with the railroad lines, which have been divided into two categories:

- Railroad lines with express trains,
- Railroad lines without express trains.

Railroads have been presented with very thin black lines, which do not interfere with the red network of roads, but are considerably imprecise, as has already been indicated above. In the atlas, they have been treated as a secondary element of contents not demanding special focus.

However, special attention has been given to the settlement network, i.e. towns, connected by automobile roads presented in the atlas. There are seven categories of towns with the division into cities and villages including the population number. It is difficult to evaluate the reliability of the presentation, but the few cases analyzed to establish the date of the publication of the atlas indicate that the presented information is not always consistent with facts.

Serving as background to communication routes and the settlement network are: the quite detailed for a road map in this scale water network, elevation points, which should rather be called mountain peaks, because they are marked only in mountainous regions, and mountain passes. Some peaks and passes have been furnished with proper names just like the more important mountain ranges. The map also

features voivodeship borders and names, as mentioned earlier, and country borders and names as well as the geographic coordinate grid counted from the zero longitude line in Greenwich.

On the frame are directions of the main roads with distances to nearest towns. In the margins the numbers of adjoining sheets are shown to facilitate usage of the atlas. Each of the 20 foldouts has a description of a selection of elements from the legend on the bottom margin: roads, railroad lines, elevation points and mountain passes.

A slight fault of the atlas, which makes using it a little hard, is the fact that the contents of adherent sheets does not overlap but sticks precisely.

5. Comparison with similar publications

If we compare this first road atlas to contemporary ones, we see the scarcity of its content. As far as information for automobilists is concerned, it shows only roads and mileage on the main routes. Today, road atlases and maps present road numbers, localization of petrol stations, auto repair shops and car parks as well as tourist and landscape sites along the routes. Contemporary atlases also include city plans, passage routes and larger scale close-ups of the largest urbanized areas. Many of these elements of contents can be found in prewar road atlases. This kind of information was of course impossible to be shown in 1926. Auto repair shops and service stations were scarce and located only in biggest cities; outside cities one could at most take advantage of a blacksmith's services. Petrol stations were few and car parks were not even dreamt of. One could stop at an inn or a restaurant, which by the way are not shown in the atlas. In comparison to its neighbors in the west and south, Poland on a road map seemed like a desert. In the following years, this was to change quickly for the better as is shown by the “eastern network” of main roads to be constructed and in planning, which are highlighted in the legend. The plans were to be only partially realized until September 1939.

Against other publications for automobilists done by Continental, the Polish atlas looks modest but not bad. For instance, the *Conti-*

mental Atlas für Kraftfahrer Deutschland (accessible in a number of editions in the collection of the National Library in Warsaw) printed at a twice bigger scale of 1:500,000 at roughly the same time boasts a much richer contents; additionally, it features the more prominent upward and downward slopes of roads, train stations along railroad lines, forests and tourist/landscape sites: walking trails, scenic overlooks, castles, ruins, selected churches. These additions were possible because of the bigger scale, and using a bigger scale was in turn necessary to picture the much denser automobile road network of Germany. The atlas also features one hundred very useful city plans with arterial roads highlighted. These practical solutions came into being through the experience of several editions. Our atlas, as the first in Poland, without an established tradition, presenting a territory with a considerably poorer road network and in smaller scale does not look bad in this context.

6. Conclusion

Concluding, it must be said that, despite its modest form and contents, small scale and a few shortcomings, the *Continental Atlas of Poland for Automobilists* is a valuable and useful publication. If we consider the number of cars and consequently the number of potential buyers of the atlas as well as the small number of paved roads that could be used by automobiles at the time, the venture of creating a road atlas

of Poland by Continental means that the company was looking ahead, which is to be admired. This was undoubtedly an unique work, that gave way to a new kind of map in our country. To a certain extent, this is acknowledged in the short review written by Józef Wąsowicz in the Lvov "Polish Cartographic Review", shortly after the atlas was published. In the review, the author states that the atlas provides "undoubtedly a good and correct survey of road communication in Poland". Józef Wąsowicz criticizes only language mistakes, which he calls "a slighting of the Polish language" and which appeared due to the fact that the atlas was in all likelihood elaborated outside of Poland (J. Wąsowicz 1926).

There exists no information about possible reissues of the atlas in the following years. Despite the emphasis of the phrase "First edition" on the cover, there most likely was no second edition. Road maps in the form of an atlas were not popular among editors in the interwar period. In the collections of the National Library of Poland, the next such Polish publication is Wojciech Walczak's *Road Atlas of Poland* published already after World War II by "Przełom", a publishing house from Cracow, in 1947 (J. Ostrowski 1998)³.

³ All the maps and atlases from the collections of the National Library in Warsaw mentioned in the article can be found in digital form in POLONA, a section of the Library's website.

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