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*Traditional means of
transportation -
from the preservation of the
heritage to its promotion:
digitization between
necessity and challenge*

http://bcu.ulbsibiu.ro/Calatorind_prin_Sibiu/

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Project of the "Lucian Blaga" University of Sibiu
carried out through the University Library



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Introduction

The publication is constituted as a result of the project entitled *Traditional means of transportation – from the preservation of the heritage to its promotion: digitization between necessity and challenge*, which aims at the valorization of the cultural heritage regarding the means of transportation used in Sibiu. The project has been initiated by “Lucian Blaga” University of Sibiu, carried out through the University Library during the months of April – November 2016, being co-financed by the Local Council and City Hall through “The Cultural Agenda 2016”.

With reference to the Sibiu municipality, we had in view the valorization of *transportation*, that is, of one of the four pillars of civilization: *the nourishment, the house, the clothing and the transportation*, by creating a dedicated website, *Digital Library available on the internet*, a few itinerant exhibitions with digital materials, as well as elaborating an extended essay concerning the history, evolution and diversity of the means of transportation.

Since the perimeter of investigation is that of the current Sibiu municipality, we are appealing, even briefly, to some historical data. In this sense, the first landmark would be the first documented mention of the city of Sibiu on December 20th, 1191, in an official document issued in Rome by Pope Celestine III (1191-1193), given *in the first year of our pontificate* (Dumitrescu – Jipa, Nistor, 1976: 27-28). In a document from 1223, the locality appears under the name of Villa Hermanni – from there Hermannstadt, the German name of Sibiu (*Documents*, 1975: 199-200) – and the Latin name Cibinium would give the today's name of Sibiu.



A town with an urban character, such as Sibiu, has developed a very well-articulated transport system from an early age, with the resources specific to that time; the 1458 document stands as a reference for this, mentioning the existence of 896 householders (which did not include their family members), as well as the 1510 record, which registered 1311 houses. An arch over time places in front of us the periodical *Siebenburger Zeitung* from 1784, wherein a serial was published from June until September (in the numbers 52-71 and 74-76) entitled *Historisch-Topographische Beschreibung der Königlichen freien Haupt-Hermannstadt/* “The topographic – historical Description of the Capital Sibiu, Free Royal City, containing *information about the geographical location, historical founding of the city, defense walls, public buildings and educational establishments* (Lungu, Popa 2015: 19). *The Calendar of Sibiu city of the year 1790* edited and printed by Martin Hochmeister gives, with certainty, the number of houses from the inner city as being 1145 and 492 in the suburbs. The population was reaching a total amount of 14.000 souls, but the author of the guide-

calendar states that, *given that the current war* (the Russian-Turk one from 1788 – 1789, Christian Austria and Russia fighting against the Crescent), *which has brought many imperial and royal clerks, the number of the city's inhabitants can be estimated at 16.000, grouped in 2.374 families and 866 in the suburbs* (Lungu, Popa 2015: 21).

This guide from 1790 places at our disposal valuable information about one of the defining moments for the town's extension, one that is particularly important for the Romanian population. At his first visit in Transylvania, made in 1773, the future king Joseph II (1780 -1790), gave the permission that the city, protected and tight-laced by fortifications, to extend in the area in front of Cîsnădiei Gate, in such manner that there *can be erected constructions on a land from the southern part of the town, left deserted*. The land was divided into plots, the area being filled with buildings and gardens, and *the suburb that rose up on that place is called "Iozeфин"* – today, its main artery being Victoriei Boulevard – *and, in the last 10 years, it increased enormously* (Lungu, Popa, 2015: 21). Anyway, by the end of the 18th century and the beginning of the next one, the communication and transportation systems were able to meet the challenges of a city with a population of *18.000 souls* (Popa, 2010: 63, n. 159).

In the 18th century and the beginning of the 19th century, the administration's efforts have been concentrated mainly around the maintenance of the existing buildings from the inside of the fortification. In the 19th century, the old fortress of Sibiu will be gradually opening towards the surrounding areas, a process sustained by a series of demolitions of the constructions with a defensive character: the bastion in front of Tower's Gate in 1852, Ocnei Gate in 1857, Elisabeth Gate in 1865, and the bastion in front of Ocnei Gate, followed by the segment stretched between Hochmeister Theatre (from Thick Tower, inaugurated in 1787) and the barrack built in front of Cîsnădiei Gate.

At the end of 19th century and the beginning of 20th century some of the extensive properties will be divided into plots: 1891, plotting of the Haller meadow (167 plots the sale of which shall begin in the year 1893, the areas of the Blaga, Noica streets-Klein 2010), followed next year by the plotting of the Konrad meadow (the current Cluj Square) and in 1898 the plotting of the Binder ground, finalized in 1899 (Moldovan, 2009: 22).

However, the plotting continues at a fast pace in the 20th century as well. In this context, in 1925 the administrative-urbanite legislation is adopted, based on which Sibiu will benefit from a *Plan of systematization and extension*, in 1928. In the introduction there are mentioned the general principles that lie at the basis of this accomplishment: *traffic, hygiene, economy and beauty*. At that date, the population of the city was around 45.000 inhabitants, and a future increase to 100.000 inhabitants was forecasted. Within the general functional zonation, maintaining of historical Centre as the commercial and representative core of the city (with the main secular and religious institutions) was provided; for industry it was foreseen the development in the North–East area, behind the railroad, in the area behind the Cibin river and the East area for small houses with *courtyard and stable*. The extension of the city toward Southwest, towards Dumbrava forest, was reserved for the privileged residential class, where were going to be build villas and houses for clerks, officers, etc. (Moldovan, 2009: 23).

From an economic standpoint, in the second half of the 19th century, in Sibiu started to appear the first constructions with an industrial function: Rieger's Plant (1868), Boilers' Plant (1873), Leather's Plant (1890), and Scale's Plant (1897). The development of standardized production has been sustained by the infrastructure, both that of traffic, as well as, especially that of the railways, the latter appearing in Sibiu in 1872 with the part that connected the city to Copșa Mică (Moldovan, 2009: 31).

The Horse, a Means of Transportation and Recreation

In general, it is considered that equitation can be a new modality of relaxation, of discovering new beautiful places, of living new experiences, and, especially, to make a new friend. The connection between the human being and the horse is old and throws you into the mists of time. The middle ages came with its armies of knights, and then, in the “symbiosis” between the noble knight and his noble horse, the equitation was born; it was the era when nobody was talking about war, but about the art of war, and, likewise, nobody was talking about hunting, but about the art of hunting.

During the centuries closer to us, the people of today, equitation is the sport of riding, of the way in which a horse is correctly ridden. The social segment mostly able to cultivate equitation was the military, which was quite numerous even from the period of the Habsburg Transylvania. Later, on May 15 1891, Emil Sigerus records that the army has finished the arrangements of the riding path leading from Sub Arini to Steaua (Sigerus, 1930; 54). Sibiu's military garrison was so important that, later, on June 27, 1928, respectively on June 28, 1929, King Michael and Queen Mother Elena are taking part in the equestrian races of the Cavalry Officers` School (Sigerus, 1930: 63).

One of the closest and most useful of man's friend is the tamed horse. The French zoologist Georges Louis Leclerc, Count de Buffon (1707 – 1788), has described the horses as being *man's most splendid conquest*.

Coaches, Carriages



Although it is still not clear whether we are dealing with an intelligent animal, the fact is that the horse can be extremely receptive and cooperative, reasons for which people always had a great amount of respect towards it. Throughout history, the horse was used for a variety of activities: plowing, transporting goods, passengers, even for chasing game. The four-legged animal was also used by the cavalry in battles, from Antiquity to the middle Ages and during the two world wars.

If horse riding was regarded as an exclusive sport, in exchange, the use of carriage or coach over the course of entire centuries, introduces the element of utility regarding the use of the horse. Dictionaries define *the coach* as a four-wheeled vehicle, on springs, horse-drawn, used to transport people (DEX online). It must be retained that, within this



context, Sibiu will experience, on April 24, 1858, in the Big Square, a new phenomenon, namely the founding of a station for two coaches, known under the name *Fiaker* (Sigerus, 1930:43). Later on, from February 15, 1869, two postal coaches are leaving to Alba Iulia, providing this way the connection with the train, because the City of Sibiu is connected to the train only in 1872 (Sigerus, 1930: 46). We cannot ignore the existence of a different kind of coach, the carriage, an elegant coach on very flexible springs. In general, there are many opinions regarding the origin of the name: possibly from the Czech language, where it appeared under the form *kolesa* (from *Kolo* “wheel”) (DEX online).

A reference point for our project is the publication at the end of the 18th century, of a *Calendar* of Sibiu for the year 1790, entitled *Hermannstadt im Jahre 1790* (“the City of Sibiu in the year 1790”), a genuine city guide *ante litteram*, published by the editor and librarian Martin Hochmeister. From the abundance of information of this calendar, we bear in mind just the dates regarding the means of transportation. Therefore, from the heading “*The Usual Arrivals of Mail in Transylvania*”: the mail coach, the so-called *diligenta* arrives once a month in Sibiu from Vienna, through Buda and Timișoara and it takes not only passengers, but also money and jewelry and other dispatches. Its usual stop in Sibiu is, depending on the circumstances, for two, three, even four days, and in the summer as long as eight days, and after which it is going back again through Timișoara to Buda.

The passengers are paying for every station, 30 kr[eutzer] during the summer and 45 Kr[eutzer] during winter, and they may carry with



them luggage weighing up to 50 pounds [1 pound = 0,5 kg] (Lungu, Popa, 2015:72).

The main *riding post*, through Timișoara to Vienna *is leaving daily and is coming back daily to Sibiu*, from where it takes over the letters and small parcels for Vienna, *for the Kingdom* [Prussian Kingdom] and for abroad. The internal post to the most important cities, such as Cluj, Brașov, Bistrița, Făgăraș, Sighișoara, Dumbrăveni, etc., *is leaving twice a week*, on Tuesdays and Fridays, and is coming back to Sibiu just as often. The letters to Bukovina and Galicia are sent on the same days (Lungu, Popa, 2015: 73).

In addition, as an era's interesting fact, *the passengers that are using a special post pay for a simple mail coach, one florin for each horse. For the coachman's tip and the coach's greasing, the following fees were set:*

Tip for the coach with:

- *Two horses: 15 kr. Simple post; 22 ½ kr. One and a half; 30 kr. Double*
- *Three horses: 22 kr. Simple post; 33 cr. One and a half; 44 kr. Double*
- *Four horses: 30 kr. Simple post; 45 kr. One and a half; 1 fl. Double, etc.*
- *The greasing fee for the two horses coach (no fee is paid)*

For the greaser, for his own vehicle:

- *Simple coach: 4 kr.*
- *One and a half: 4 kr.*
- *Double coach: 4 kr.*



The tax for greasing included:

- *Simple coach: 12 kr.*
- *One and a half: 12 kr.*
- *Double coach: 12 kr.* (Lungu, Popa, 2015: 74).

Since the moment when the Transylvanian military body entered Walachia, to be exact, from November 1789, the correspondence was sent to the South of Carpathians, also, twice a week, Wednesday and Saturday (Lungu, Popa, 2015: 74). Subsequently, by virtue of the *Circular* letter from March 3rd, 1806, the marching troops will have the obligation to facilitate the travel of the couches that they will meet on their way (Munteanu, 1980: 22).

A trip with the post chaise was at the same time difficult and dangerous, because crossing of roads bogged down in mud was putting the two or even three pair of horses to a great test. There were many cases when they had to use oxen to get out of the mud, only that this meant an increase of the costs of the voyages and of merchandise. The handiest example is the one of Martin Hochmeister who, in November 1790, was put in the situation to spend half of what he had earned in Târgu Mureș to pay for his trip back from there to Sibiu (Schaser, 2000: 163).

To keep ourselves in the field of printed work that contains information about transportation, the periodical *Neu und Alter Siebenbürgischer Provinzial-Kalender*, emerged in Sibiu in the chronological arch of the years 1797–1891, and for who is interested, it provides various data and information regarding this field. The calendar in question is valuable also due to the fact that it was edited by a “dynasty” of Transylvanian Protestant Saxons from Sibiu – the Barth family, to which, when they no longer had any male heredity, a son-in-



law was added, von Closius – known for the merit of having had edited school and religion books of the Orthodox Romanians from Transylvania. Going through the calendar's pages, we learn in the issues of the year 1798 – that is, eight years after Hochmeister's publication - the routes with the localities that the Sibiu mail was going through, mentioning that, in brackets, we are keeping the original graphic.

Sibiu–Bistrița: Slimnic (Stolzenburg), Șeica Mare (Marktschelken), Mediaș (Mediasch), Dumbrăveni (Elisabethstadt), Sighișoara (Schässburg), Bălăușeri (Ballawasar), Baia (Baja), Târgu Mureș (Maroswascharhely), Reghin (Szassregen), Teaca (Deckendorf), Bistrița (Bistritz).

Sibiu-Cluj: Mag (Mack), Miercurea Sibiului (Reissmarck), Sebeș (Müllenbach), Alba Iulia (Carlsburg), Teiuș (Töwisch), Aiud (Enyed), Unirea (Felwintz), Turda (Thorda), Vâlcele (Banyabit), Cluj (Clausenburg)

Sibiu-Brașov: Bradu (Giresau), Porumbacu (Bornbach), Sâmbăta (Sombothvalwa), Sarkany (Șercaia), Vlădeni (Vladany), Brașov (Kronstadt).

Sibiu-București, via Pasul Turnu Roșu: Boița (Boiza), Câineni (Kinen), Titești (Titeschty), Sălătrucu (Seleruk), Argeș (Argis), Slatina (Slatina), Găești (Gayeschty), Florești (Floreschty), București (Bukarest).

These respective routes are kept unchanged many years, the first modification arising in 1821, when the order is modified in the sense that Sibiu-Cluj goes on the first place, followed by the Sibiu-Bistrița route, the other ones remaining unchanged. Concurrently, at Sibiu-Cluj, the Mag (Mack) village disappears, being replaced with Săcel (Szetsel) village.



We are visiting the City of Sibiu of the first decades of the 19th century through the diary of a young lady from Vienna, Louise von Hackenau, a diary entitled *Aus dem Tagebuch einer jungen Dame* which covers the years 1819-1826. Thus, we learn that, in the spring of 1819, Court Advisor Franz Fleischhackel von Hackenau of the sovereign court of



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Vienna was named consul of Austria in Bucharest. Neither he nor his wife, who is a descendent of the noble family von Hartenfels, were happy at all with such a promotion, since, for them, Bucharest was situated at the end of the world and the voyage was not an attractive perspective. Not for the two of them, but for their two daughters, three weeks on the road meant an endless and unexpected adventure. After two weeks, the suite of the new consul arrives in Sibiu, and in the respective halt, the guests made, in accordance with the customs of the time, a series of courtesy visits to the city's notabilities. Louise, *the diary's* author, even made some friendships, one of these being with the charming Louise,



baroness von Brukenthal, the elder daughter of the provincial councilor Josef von Brukenthal.

In that beginning of the 19th century, *let alone the unbearable heat and the waves of dust, Bucharest was visited [...] by an unwanted visitor: the plague. In consequence, right after the intense heat started to install over the city, the high society was leaving for Brasov or for Sibiu. Although, due to pressing issues, the sovereign agent had to remain in service, he was accompanying, year by year, up to the border, his family, which was going back with pleasure to Sibiu, to spend there the hot months* (Popa, 2013: 67-68). Their host was a banker by profession, descendent of the famous Constantin Hagi Pop, who had a roomy house in the Big Square (Popa, 2013: 69).

In a note from November 9, 1826, Louise wrote: *tomorrow, at 12:00 o'clock we are invited to the baron Sachelarie to see his new house. I'm very curious, because for many days now the people of Sibiu have been walking there to admire this palace. On October 10, Louise writes down the following: we left around noon (with the carriage!), with baronesses Geringer and Papp to the baron Sachelarie, where had already gathered an entire society, all of them admiring the beautiful house* (Popa, 2013: 69).

The Omnibus

In general the dictionaries are in agreement in specifying that the term omnibus (Romanian pl. *omnibuse* and the old form *omnibusuri* – Dex online) has a Latin origin, meaning, initially *to all/everyone*– *sol lucet omnibus*, “the sun lights everyone” (Petronius, Satyricon, 99) – and, with reference to transportation devices, it is about a vehicle, initially pulled by horses, meant to transport persons. In an initial phase, the omnibus was a kind of carriage with several seats, similar to a mail coach, which served for common transportation of travelers on fixed routes, either inside some big cities, or in between two close places.

However, about the history of the omnibus, as the people from prior centuries knew it, we can find from the book *Omnibuses and Cabs. Their Origin and History*, published in London in 1902, author being Henry Charles Moore (Moore, 1902). The author claims that the first naming of these vehicles was *carrosses à cinq sous*, being seen for the first time on the streets of Paris in 1662. The originators were the duke of Rouanès, governor in Poitou, the marquise of Sourches, the marquise of Crénan and Blaise Pascal, the

author of *Provincial Letters*. In fact, the idea was Pascal's, but he, not having resources, has presented his ideas to his rich and influential friend, the duke of Rouanès. His noble friend has proposed the creation of a



company that would be in charge with the idea's development, and

together with the above-mentioned friends, he succeeded in obtaining from King Louis XIV the decree of establishment. The result was that seven blue vehicles, with the coat of arms of the city, transporting eight persons each, appeared on the date of March 18, 1662, the departure of the first being programmed for seven o'clock in the morning. At the ceremony of inauguration, the authorities have insisted on the utility of these *carrosses à cinq sous*, pointing out that the transport schedule will be respected, in the sense that they will depart with punctuality, regardless whether there are or not travelers (Moore, 1902: 3-5). At the beginning, both the aristocrats and the bourgeoisie crowded to use them, but later the simple employees also, only that, when the interest of the first category has decreased, the others, being poorer, have ascertained that walking was healthier (Moore, 1902:6-7).

After the *carrosses à cinq sous* episode, a century and a half has passed until on the streets of the capital of France appeared new vehicles which, for good reason, were catalogued as being omnibuses. There was the year 1819, when Jacques Laffitte, banker and politician, becoming later minister during the time of Louis Philippe (1830-1848), has introduced the respective means of public transportation, each having the ability to receive between 16 and 18 persons, the route being from one end of Paris to the other. It is worth mentioning that Laffitte cannot be credited for being the parent of the term *omnibus*, this privilege falling to an former French officer, Baudry, who used it for the first time in 1827 (Moore, 1902: 7-8). The Laffitte business prospered, despite the fact that other omnibus competitor lines appeared. For fear of being beaten by the competition, he employed an Englishman settled in France's capital, by

the name George Shillibeer, a famous carriage constructor, to design a new type of omnibus. Only that the Englishman considered that what worked in Paris, would surely work in London as well, and thus, Shillibeer became “the parent” of the new means of transportation of London, since, in the morning of July 4, 1829 the first two omnibuses were brought into service (Moore, 1902: 11-12).

In time, the electrically driven omnibus will replace the one pulled by horses. The idea to introduce in Sibiu and towards Rășinari an electrically driven mean of transportation belonged to the journalist, politician and economist Carl Wolf (1849-1929), who, in the lecture entitled *The Electric Tram Hermannstadt – Dumbrava Forest – Rășinari*, sustained on June 6, 1893 within the *Electrical Exhibition*, gave arguments for his statement. However, on objective accounts, the project was delayed. The discussion was continued in 1904, only that, meanwhile, a more economical solution appeared, more precisely, the one of an omnibus without railways, wherefore the investments were lower, and the profitability was higher (Stancu, 2014: 121-124).

Therefore, Sibiu was the first Transylvanian town that would experience this type of means of transportation, the inauguration having taken place on August 3, 1904, the event being depicted by the local press as follows: “*The inauguration of the electric tram (of omnibus – AN) took place, with punctuality, this morning. In the wagons there were many passengers, matter owed probably, greatly, to curiosity. Apart of insignificant stops – initial difficulties, which shall soon be removed - everything works well. The tram driver and conductresses wear very coquette uniforms, and the check man shines of gimps.*”

In large, the omnibus looks well and grants to the streets of our town almost a metropolis appearance. In the name of those who do not use this mean of transportation, we ask for the heavily watering of the roadway, since the heavy wagons, with their wide wheels, create, because of the speed and of the wind resulting from that, an horrendous dust, damaging to the lungs“ (Siebenburgisch-Deutsches Tageblatt, no. 9308, August 4 1904, p. 823).

It shall relatively soon be given up, more precisely on October 17 of the same year (Sigerus, 1903: 52), from reasons which, likewise, we can find in the daily press: *On the date of October 15, the wagon no. 2 of the electric omnibus was thrown off of the asphalted and wet roadway of Sporer street (Gen. Magheru – AN) in the building corner of the State Gymnasium (Gheorghe Lazar – AN) from the Reissenfels street (Gh. Lazar – AN). Because of this accident, which, aside from the deterioration of the wagon and a mild hand injury of the tram driver, had no other consequences, but which could have caused a disaster. The police chieftaincy of the city requested from the Joint Stock Company of the Electrical Enterprise of Sibiu, by way of the note 8407/1904 from the 17th of the current month, sufficient guarantees so as “such accidents to not be repeated in the future. Otherwise, the traffic shall have to be stopped for security reasons”. Because the requested guarantees could not be given by the engineers of the General Society of Electricity from Berlin, found here [...] The Electrical Enterprise has decided, for the time being, the suspension of the electric omnibus circulation (Siebenbürgisch-Deutsches Tageblatt, no. 9372, October 19, 1904, p. 1131).*

The Tram



The omnibus failure has determined its replacement with the electrical **tram**, inaugurated on September 8, 1905 on the route Railway Station – Sub Arini Park (Sigerus, 1930: 59). Having a capacity of 16 places seated and 14 places standing, the trams were equipped with two 25 horsepower engines, generating a speed of 10 km/h. Regarding the tram's speed, there was a joke going about. It was telling that, next to a tram station, the tram driver told an acquaintance: *climb up and come with us! Thank you, but I cannot. I'm in a hurry!* – came the answer (Stancu, 2014:125-128). Not long after that, more precisely on May 15, 1910, the tramline is extended up to the limit of Dumbrava Forest (Sigerus, 1930: 61), that is, up to the end of today's Bahluiului Street. On August 10, 1912, the line from the railway station, through the Lower

Town, up to Sawmill/Tower/Sagtor Gate (Sigerus, 1930: 62) is inaugurated. On May 15, 1915, the line that was passing through Upper Town will be extended up to Dumbrava Inn, and from September 26, 1927, that from the Lower Town will be extended up to Cluj Square, after that follows a new extension, from September 1, 1929, up to Turnișor Railway Station (Sigerus, 1930: 63). On the day of August 30, 1916 – in other words, shortly after Romania had entered the war – the tram's circulation is suspended until October 21, 1916 (Sigerus, 1930: 64). In 1964, after more than three decades of activity, the line from Lower Town was dissolved, and on March 31, 1970, after almost seven decades, the Upper Town line is renounced as well (https://de.wikipedia.org/wiki/Stra%C3%9Fenbahn_Hermannstadt)





The Trolley Bus

The Trolley Bus – the omnibus' “grandchild” – is an electric vehicle for public transportation, which has, in large, the characteristics of a bus, only that it is propelled by one or more electrical engines, and the necessary power of the engine function is provided by two aerial lines of contact.

During the years 1981-1982, the municipality achieved, in collaboration with The Institute of Research and Design Timișoara, *The Study of General Traffic in Sibiu Municipality*, and the conclusions they reached were favorable to trolley bus introduction *for taking over the flows of travelers*. On August 17, 1983, the first blue trolley buses were coming out in probation on the arteries of the municipality situated on Cibin river. This way, Sibiu adheres to the important cities that were benefiting by the trolley bus public transportation: Bucharest, Timișoara, Brașov, Cluj-Napoca. The first lines, T1 Cemetery – Railway Station and T2 Mihai Viteazu Boulevard – Railway Station, have been brought to service on August 19. (<http://sibianul.gandul.info/sibiu/un-sfert-de-secol-de-la-prim-cursa-cu-troleibuzul-in-sibiu-2935988>). The network extension has known more phases over the course of the years 1985, 1987 and 1989 (http://www.tursib.ro/page/istoric_trleibuze).

From the press of Sibiu on April 10, 2009, we learn that *after 26 years of activity, the trolley buses from Sibiu will be dissolved on November 15, this year*. The local counselors had elected the liquidation of all trolley bus lines and their replacement with buses, because of the precarious technical condition of the fleet due to being over twenty years old and the high mileage (<http://sibiu100.ro/sibiu-100/1015-adio-troilebuze>). From their introduction until today new lines have been added, so that, since September 12, 2016, there are three main routes of busses, ten secondary, eight professional, and one touristic, to Păltiniș (<http://tursib.ro/trasee>).

The Automobile

The *automobile* history begins in 1796, together with the creation of the vehicle with steam engine, which could transport persons on board (acc. Eckermann, 2001). In 1806, appear those equipped with internal combustion engines, engines that were working with liquid fuel, and around the year 1900, appear the vehicles with electrical engine. The first model running on steam may be considered to have been realized around the year 1672 by the Flemish Jesuit monk Ferdinand Verbiest. That was a kind of toy for the emperor of China, so unable to transport passengers. Instead, on January 29, 1986, the world had the occasion to celebrate something very remarkable: the automobile was 100 year old. A century ago, the engineer Carl Benz (1844-1929) from Mannheim received the patent for the first vehicle propelled by an internal combustion engine. Not even the capable Benz could have suspected that this document was going to be later considered the birth certificate of the automobile, and not even the fact that his patent was about to become the headstone manufacturing billions of cars around the world. The automobile patented by Benz was not alike the today's automobile, but rather like an open carriage, as the ones pulled by horses (http://ro.wikipedia.org/wiki/Istoria_automobilului).





For Sibiu, the day of July 6, 1899 is important, because on this date it is recorded the apparition of the first automobile in town (Sigerus, 1930: 52). This is how the event is depicted in press: *After the telegraphic notice, the engineer Klein from Braşov arrived yesterday afternoon with his elegant carriage with motor [...] offering to inhabitants the possibility to admire the vehicle of the future [...] The news was spread with the celerity of lightning, and the numerous audience was headed for the parking place, to see from close range the strange phantasm [...] The average speed is 40 km/h, so higher that the average speed of a passenger train, and on the flat and good streets the speed of 50 km/h may even be exceeded [...] It cannot be denied that the price of this impeccable vehicle, 4000 fl [florin], is very high for our financial situation, but it must be taken into account that it makes a saving of two horses and a coachman. The vehicle owner may be right when he states that in only five years, Sibiu will be under the sign of the engine* (Siebenbürgisch-Deutsches Tageblatt, no. 7768, July 7, 1899, p. 721). The predictions of the temerarious engineer have come true in full, taking into the account the richness of representation in the case of automobile agencies from the inter-war years.



Aerial Means of Transportation

I think that man's desire to fly manifested together with his own emergence, but it fructified only after thousands of years. The written and verbal documentary sources contain much data and images referring to man's attempts and possibilities to copy the birds' flight and, moreover, to cross the distance from the earth to the most familiar celestial body, met so many times in poetry and fairytales, the moon. (Atomei, 2004: 4).

In the first half of the 16th century, Conrad Haas – Austrian born in Dornbach, near Vienna, in 1509, deceased in Sibiu in 1576 and who was leading, at that time, the Arsenal of the city – built the rockets. In capacity of officer at Imperial Court from Vienna, Haas was sent on a mission to Sibiu in 1551, when he was 42 years old, to be in charge with the town's arsenal, which would be heavily equipped by the Habsburg army. The Arsenal had its seat in *Kempel Barracks*, in the current Armelor Square no. 10, the first construction dating from 1427. Conrad Haas introduced terms such rocket, launching pad, rocket batteries, rocket chains, but,



probably, the most important aspect consists in the fact that those rockets, which were designed to function with solid fuel, were imagined as being means of transportation in space (Todericiu, 1969).

Hermann Oberth

Hermann Oberth (Sibiu 1894 – Nürnberg 1989) is part of the constellation of founding parents of the rocket and astronautics, next to the Russian Konstantin Tsiolcovsky (1857-1935) and the American Robert Goddard (1882-1945). Although the three had never actively collaborated, the results of their researches, independent one from the other, were proven to be identical. Hermann Oberth, at the age of 11, was passionate about flying to space, thanks to the Jules Verne books, *From Earth to Moon* and *Travel Around the World*, the first one he confessed that he had read many times, until he came to almost knowing it by heart. The teenager's feelings and his own suppositions have made him believe that Jules Verne's ideas were not totally fantasy, and as a result of those suppositions he realized an initial project for a rocket by the time he was only 18 (http://ro.wikipedia.org/wiki/Hermann_Oberth).

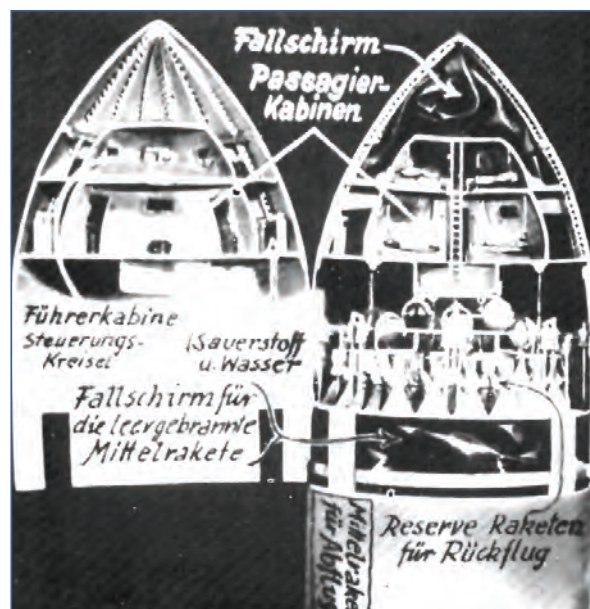
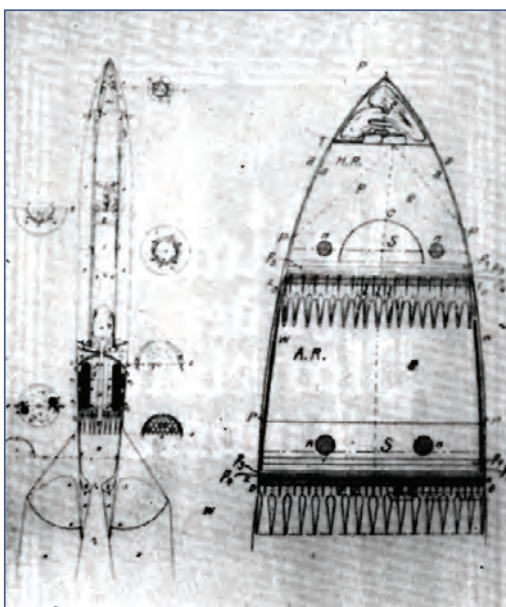
Although being a student of medicine in Munich, Oberth attended as well, classes in math, astronomy, physics, and aerodynamics. Moreover, he experimented on his own body conditions and situations similar with imponderability. After the war, the studies pursued are those in math, and astronomy at University of Cluj, Munich, Göttingen and Heidelberg, at the last one designing a spatial rocket of a hundred tones and proposing a dissertation about spatial flight, but rejected by the scientists.

He experiments the first rocket engines with liquid fuel, discovering, in 1930, the Oberth effect. The year 1929 is a productive one, because he is patenting three works in Berlin, namely: *The Process of Propulsion of Vehicles through the Reaction of Rejected Burned*

Hermann Oberth

Gases, followed by *Method and Device of Burning for Rockets*, respectively *Method of Rapid Combustion*. A year later he experimented the burning in the conic motor, and in 1931, at Bucharest, he patented *Method and Device of Rapid Combustion* (Atomei, 2004: 24).

During the Second World War, Hermann Oberth worked in Germany, at Peenemünde. There, he participated in the construction of the first rocket of big dimensions in the world, named A4, but known today under the name of V-2, rocket for which have been used 95 of his inventions and recommendations. After the War, the savant took part at the American space program, and in 1962, at the age of 68 he retired. The oil crisis from 1977 made him focus on alternative sources of energy, these merging to the conception of a plan for a windmill. Hermann Oberth passes away in Germany, on December 28, 1989, at the age of 95.



Aurel Vlaicu

In the fall of 1911, more precisely, on September 24, **Aurel Vlaicu** (1882-1913) performed a demonstrative flight near Sibiu of that time with the airplane “Vlaicu II”. He was accepting the invitation of the ASTRA Association, since the flight was made on the occasion of ASTRA's Days. The local publications were particularly active in inviting the population to the event which was about to take place. For example, the president of the Association, Andrei Bârseanu, made, in “*Foaia Poporului*”, the following urging: *We address all our people who can appreciate the importance of the cultural problem, asking them all to hurry and to come, and to call all Romanians from the surroundings to take part to this beautiful celebration. The plane has been parked in Gesellschaftshaus hall, Schewis street (Victoriei Boulevard – AN) near the Financial Administration and near the Barracks of the artillery regiment and it can be seen from 8 in the morning till 6 in the evening. For students, pupils, soldiers, and peasants the tax is 50 bani. No Romanian from Sibiu and around must lose the occasion to see this airplane, which is the skill of the virtue and of the enlightened mind of a Romanian.*

After that, the same *Foaia Poporului* told the manner in which the flight was carried out, showing that it took place on the field for military exercises. The numerous audiences was composed of the people from Sibiu, the inhabitants from the villages and cities from the surroundings, such as Făgăras, Mediaș, Săliște, even people arriving from Râmnicu Vâlcea,

Aurel Vlaicu

Călimănești, Brezoi. The paper was estimating the presence of over 50000 eyewitnesses that have bought tickets, and of another 10000 without tickets.

Despite the fact that the wind was blowing hard, Vlaicu was preparing for flight at 5 pm, and when the plane was taken out from hangar, the people started to applaud impetuously. Then, in those moments, the admiration and curiosity were blended with the fear, and many started to whisper *God, if only nothing would happen!* By the way, as a measure of precaution, an automobile was brought, which was supposed to pursue the aviator to be able to jump to his aid in a hurry, in case of disaster. The moments prior to the takeoff are depicted in a particularly suggestive manner: *Vlaicu was in airplane, the propellers started to whizz, the engine was in full boiling and power when suddenly it disappeared from sight. It ran a few meters on land and then, in a handclap, it was floating in the air. Unfortunately, the wind power was great, so that, after it rose up to over 100 m, seeing the wind power, he decided to turn back.* After the event, the same paper creates the eco of the manifestations of joy owed to that historic flight. (<http://www.turnulsfatului.ro/2013/10/13/umbra-ariilor-lui-aurel-vlaicu-inca-dainuie-in-sibiu/>).



The Zeppelin

In 1890, at the age of 52, Ferdinand Count of Zeppelin (1828-1917) found the time to dedicate to his passion, the realization of some aircrafts. Thus, in 1892, together with Theodor Korber, he made the first prototype. On July 2, 1900, the first aircraft, LZ 1, ascended to an altitude of 400 m, transporting five persons and 350 kg of ballast, flying about 6.5 km. There was the moment of debut in the history of zeppelins, because all the dirigibles built after those were named like this. Their success, in comparison with other types of dirigibles, became so big that the maker has attracted a significant number of investors, therefore being able to increase the aircraft dimensions and to make serial production. The respective airships have been used, in between the years 1900-1940, insofar for persons and merchandise transport, but also for military purposes (<http://www.wasistwas.de/archiv-technik-details/der-erste-zeppelin.html>).

In 1929, the zeppelin with the number LZ 127 accomplished the first and the single travel around the world, year in which it arrived above Sibiu as well, over flying it (Ohnweiler, 2004). The event that took place on October 16, 1929, has not been left unmentioned by the local press of the time. In the article “*The Count Zeppelin above Sibiu*”, the paper *Siebenbürgisch-Deutsches Tageblatt* is coming not only with details, but also with a beautiful description: *The people wish to participate to a feathered and free action, liberating them from the heavy inertia, making them rise suddenly. Yesterday morning the whereabouts of “The Count Zeppelin” were not known, since only the piece of news published a day before in the journal from Friedrichshafen, according to which the*

The Zeppelin



airship was to cross Sibiu, too, during its second Balkan travel. Therefore, the first impatient people have set out at 6 in the morning, in order not to lose a pleasure that they had not had yet, namely to contemplate a huge flyer; just that, even the probability calculus requires a certain precision. The excursionists turned back home from Gușterița's hill at about noon, time at which the news service of our paper had already transmitted that the aircraft would arrive soon after noon at Bucharest, from where it would depart after two-three hours to Sibiu. However, not even this news had relieved the waiting fever, and at around two o'clock, in the Big Square, an old woman addressed a group of pedestrians with the ascertainment that the pigeons were already very agitated.

The Zeppelin

At three o'clock, all the elevated points from the city were already occupied to the brim. On the viaduct near the railway station covers were swinging, and the old binoculars were focused, and in lack of more interesting targets, on the goods trains which were stationing lazily. On the field stretched near Calea Nocrichului (today str. Ștefan cel Mare – AN) gathered little by little an agitated crowd, with many children, and the automobiles, after they had emptied their contents, either stopped in a long line near the motorcycles and other means of transportation, or were turning back to bring a new load of curious persons. The same picture of joyful waiting may be seen at Livada Măcelarilor (Strand District of today – AN) as well, on Poplăcii Plain (today the area of Calea Poplăcii – AN) in gardens painted in the colors of fall and on the lawns from Gușterița's hill.

At about 5 o'clock, the roofs were populated. Daring ladies were swinging from the sills of Agricultural Credit Bank; on some roofs from the Small Square, on the building of the House of Transylvania Insurance from Cîsnădiei street (Bălcescu – AN) and on Romanian Seminary from Măcelarilor street (Mitropoliei – AN) groups of acquaintances met; here and there a camera, whose delicate nickel parts shining in the light, is prepared for the event.

Twenty years ago exactly, the restoration works of the evangelic church tower were completed. That was a good occasion to see the town from the bird's flight perspective. It is pleasant to climb the convenient stairs in the semi-dark space of the tower. It would be ideal to conquer this place only once every two decades. Here there are even other guests, genuine people of Sibiu, who climb in the tower for the first time.

The Zeppelin

Young people, students step in large numbers through the narrow little gate. We enter the bells chamber just when the first chimes ring, announcing that the aircraft has left Braşov and is heading to Sibiu. Under the bell, on a wide oak bench, sits a tall man, with broad shoulders, a true giant, whose head is covered with a cap of blue wool. He strikes with force the bell clapper to its bowl, then he stops and in a short time, he repeats the signal that usually produces thrilling, because it announces a fire. The sound is propagating beyond the stone windows, the stair trembles, and we continue the vertical course.

In the four corner towers the people already swarm. The gazes are headed eastward, towards the mountains. The fog, which in the morning until after the noon had wrapped the plain and mountains, disappeared. Through the mists, we catch a glimpse of the wide ridge, covered by snow, of Suru peak, and over Guşteriţa's hill and Daia's hill, the fall clear sky stretches. The little falcons are flying around the little windows. At five and twenty-three minutes, over the Guşteriţa's hill, appears a small round spot, a kind of little dark cloud. For the moment, uncertainty prevails, but after only a few seconds, it is evident that the circle is growing and growing, the pin's head becoming a well-contoured disk of light blue color. Again, it rings the bell chime, and from below factory sirens answer. In the streets and in squares the people start to fret. Under us, on roofs the first little white flags appear, "The Count Zeppelin" is headed straight towards the tower. Now, it does not seem round anymore. We start seeing the gondolas. The bluish flying apparition has limbs, little arms or legs which give it life and which seem

The Zeppelin

to move. The animal roars regularly and loudly. Arrived at the town limit, with a majestic movement, the aircraft turns southwards, showing us for the first time his imposing body in profile. It is flying above houses and gardens, over it the round full moon shows, in the background Suru shines in the sun, and the clouds, which gathered towards Turnu Roșu Pass, are adorned with light color on their margins. The view is impressive and unforgettable. There are heard acclamations, and the sirens sound louder. “The Count Zeppelin” descends to around two hundred meters, over flying the Rosenfeld terrain and the field stretched near Calea Nocrichului, where it throws a small parcel and it is greeted by the crowd. Then, in a large arch, it is heading towards the city's center, sliding gently over the Big Square, as well by the church tower. On its front side, the words “Graf Zeppelin” are inscribed with red letters, and on the massive body, it bears the black letters D.L.Z. The cover of the color of steel vibrates lightly. On the bottom of the airship, a little flag with the Romanian tricolor can be seen. A gondola's passenger window is illuminated; from another window, two figures are waving, and from a lateral gondola, someone sticks out an arm that is shaking, also in sign of greeting, a piece of textile material. We return the greeting.

Arrived above the Lower Town, the airship takes a new huge turn, moves down even lower and turns towards the Rosenfeld terrain. It is over flying, at around a hundred meters, the Brukenthal Palace and the City Hall, vanishing then in the North-West direction. At six o'clock, a bluish point is fading away into the evening's gloom.

The parcel thrown in the area of Calea Nocrichului was wrapped with a cloth painted in the colors of Germany's flag, and it had a letter

The Zeppelin

attached to it, expressing the request to be handed over to the nearest post office. The Colonel Capșa from the local commandment, who had assisted to this spectacle, took the parcel and drove his personal automobile to the post office, to deliver it in person. It has been noted that it contained around two hundred postcards, with addresses for Friedrichshafen town [the hometown of the aircraft, AN], a letter for Bucharest, and a postcard for Budapest, all correctly stamped with Romanian

postage stamps.

While “Graf Zeppelin” was rotating over Sibiu, the local radio amateurs picked up through the “Vienna wave” the following message from the commander: “Hello, hello, here is Zeppelin. We salute the city of Sibiu and thank you...” Unfortunately, for technical reasons, the rest of the message could not be understood. (Siebenbürgisch-Deutsches Tageblatt no. 16888, October 17, 1929, p. 4).



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The Sibiu Airport



In 1943, it took place the inauguration of the Sibiu Airport at its current location, an area of 174 ha, on a terrain located west from the border of Turnișor village. The first airships, Lockheed type, owed by Lares Company, flew on the routes Bucharest – Sibiu – Arad and Bucharest – Sibiu – Oradea. In 1944, they introduce internal civil flights through Bucharest, Brașov, Deva, Oradea, Târgu Mureș. The airport terminal will be given in use in 1959, this being composed of ground floor, first level, control tower, waiting room with an operating capacity of 50 people per boarding-disembarking flow, as well as a storehouse. In 1970, the concrete running track is built, of 2000 m in length and 30 m in width, at the same time, to the airport have been brought improvements that have permitted its functioning during the night. From 1992, the airport will be open to international traffic, the first destinations being Stuttgart and Munich. Considering that in 2007 Sibiu was to become European Cultural Capital, important works of development and modernization have been performed at the airport. Meeting the conditions provided by the international legislation, Sibiu would become an international airport, being the third in Romania with this status ([Http://www.sibiuairport.ro/istoric.html](http://www.sibiuairport.ro/istoric.html)).

Means of Recreation



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Bicycles



At all times the people of Sibiu had a disposition for exercise, for amusement and means of recreation, and this disposition was manifested throughout the entire year. The photographic images are the witnesses of both the bicycle rides in town or in the surroundings as well as by boat on the mirror of the lake of Sibiu's Dumbrava. The hibernal scenes with skaters, skiers, and sleds do not lack either.

A road vehicle with two wheels disposed in line, one behind the other, put in motion through two pedals operated with the feet, the bicycle is equally a means of recreation, as well as utilitarian movement; in addition, it is estimated that the biking is three times more efficient from an energetic point of view than walking, and the speed is three - four times higher. Being invented in Europe in the 19th century, the bicycles are now more than a billion in number, providing, in many regions, the



main means of transportation. They were adapted for usage in the most diverse fields of activity and recreation (<http://ro.wikipedia.org/wiki/Biciclet%C4%83>).

Locally, the day of January 20, 1896 was a memorable one, because a velocipede, which was bought by an officer from Paris with 400 Fr., made a splash on the streets of Sibiu (Sigerus, 1930: 46). Since, on April 21, 1886, the Bicyclist Club was founded, it is another proof that this sport has been successful in our town. Moreover, in the year 1897 was born the bicyclist association Șoimii (“Die Falken”) with its seat in the Big Square no. 38 (Sigerus, 1930: 52).





Skating

In Sibiu, the art of skating, has been cultivated, as well, and the perfume of the time travels up to us through some writings of talent: *Under the white brilliant light of the huge electrical lamps, the graceful teenager girl slides with speed on the smooth surface of the ice, on her shining “Jaksons” [Jackson AN], while the military brass band sings waltz music. These rhythmic movements of the gracious girl skaters offer a nice image, especially in the magical center of the circle; only the privileged masters from both sexes are accepted, hurrying in the exercise of their high art. Around them less talented mortals are moving, and “the ice little fleas” spin around unhindered in all directions [...]. To these, it is added the pavilion in a very good taste, with its coatroom pleasantly heated, the educated attendants dressed in livery, the ice surface well prepared – it is known the fact that we had successfully studied in the sports world of certain big cities situated more to the west of us.*

Does the teenage girl really know how did her grandparents have fun on ice half of century ago? Hard to believe, reason for which she shall be briefly told what the situation was in the 50's of the previous century, to realize the great transformations that happened in the meantime. Then, there was neither skating association nor skating ring. The Cibin river was flowing near the town only that it had more water and in that time, it was terribly cold. The teenager boys on skates, since at that time the beautiful sex was not practicing this sport, had, upstream and downstream of the two bridges of the Cibin river, their free skating ring, which, when the snow or other impediments were impeding the formation of ice, was helped by volunteers by evening flooding.



Only towards the end of 60's it was set up, on the vast lake, upstream from the dam from Sub Arini, a surface of ice. The studious youth was undertaking, upstream the Cibin river up to Turnisor, and more downstream, through Gușterița and Bungard, admirable Viking travels. The ice holes were simply jumped over or avoided. The skates in those times were attached to the feet through some cross tightened belts, and some will remember the feet pain provoked by that method.

Then there were organized celebrations, the so-called days of sledging, which were carefully organized, the girls from the dance courses being ceremoniously invited, together with their mothers. Three or four sleds of the Coetus [students associations from the German high schools AN] taken with the prefect's approval [leading function in the Coetus] from their holding place [...]. Young and less young representatives of the beautiful sex were taken out in the sleds by gallant teenage men, until dark, the closing usually being done with tea and dance in one of the hospitable bourgeois houses. Sometimes, in the evenings, rides with sleds pulled by horses and illuminated with torches were organized. Those rides, which are no longer practiced today, were beloved hibernal amusements of townspeople, they still having horses and carts in those times.

The change in this patriarchal institution came at the end of the 60's, along with Halifax skates, which, due to their wise design, allowed a better attachment and, at the same time, the execution of freer, more artistic movements on ice. Until then, the supreme art of skating consisted in back sliding and jumps. Great was the wonder when Dr. Gustav Linder presented for the first time in Sibiu the art of figure



skating. What big progress has been registered in the manner of skating, from Merkur to Jakson, and what perfection has witnessed the art of skating, but especially what spreading has known this nice and healthy winter sport, recommended with warmth in schools as an exceptional means of body development! (Siebenburgisch-Deutsches Tageblatt, no. 9470, February 13, 1905, 5).

It is appropriate for the above text to be completed with some more precise data as well. Thus, on January 13, 1860, the city magistrate disposes the flooding of a lawn from Sub Arini Park to be used as skating ring (Sigerus, 1930: p. 43), then, on December 13, 1876, the Skaters Association is founded. A year later, on December 23, the skate ring from Schewisgasse/ Victoriei Boulevard, near Brunnenmeisterhof (Sigerus, 1930: 51) is opened. Skiers shall not lack either from Sibiu scenery, since they are seen for the first time on December 6, 1892 in the area of Calea Poplacii/Poplaker Heide (Sigrus, 1930: 52).



Transport Infrastructure



Sibiu, in its historical evolution, has become to be developed on the two banks of Cibin river and the connection between them, through the means of *bridges*, was a necessity. We learn from *The Chronicle of Sibiu City* that on October 24, 1864, the small bridge over the Cibin river, from the right of Ocnei Gate/Burgertor is inaugurated (Sigerus, 1930: 44), probably replacing an older one. At its turn, this will be replaced by a modern stone bridge, inaugurated on June 26, 1908. A year later, more precisely on July 1, 1909, we witness the commissioning of a new bridge over the Cibin river, this time the one from Joagărului/Turnului/Sagtor Gate (Sigerus, 1930: p. 60), close to the later Cibin Market (which will be replaced with a new one in 2015). On the day of December 22, 1912, the viaduct over the railway station was inaugurated, facilitating the transport to Lazaret and Gușterița (Sigerus, 1930: 62), and between 2003 and 2005 the viaduct in discussion was demolished and reconstructed.

The Liars' Bridge



The Liars' Bridge of Sibiu, inaugurated in 1860, connected the Small Square

with Huet Square, being built over Ocnei street, street that connects the Lower Town with Upper Town. The Liars' Bridge is the first cast-iron bridge from the territory of current Romania (Sigerus, 1930: p. 43). These categories of bridges have appeared in Europe in the middle of 18th century, with the industrial revolution, which determined the iron mass production. The first cast-iron bridge was built in the British Islands, in the area of Severn River, from Wales, which is in use from 1781 until today, being declared technical monument with value of a one of a kind item, protected and promoted as such. In the Habsburg Empire, this type of bridge appears for the first time in Silesia, after that, in the city of Baden, near Vienna, which had collapsed right at the inauguration festivity from 1814. (Wollmann, 2014: 181).

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The readers are invited to view the results
of the project on the dedicated website
http://bcu.ulbsibiu.ro/Calatorind_prin_Sibiu/
respectively on the Digital Library of LBUS
<http://digital-library.ulbsibiu.ro/dspace/community-list>



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The "ASTRA" National Museum Complex of Sibiu

Locomotive Depot of Sibiu - The Museum of the Steam Locomotive

The Brukenthal National Museum - Altemberger House: The History Museum

"ASTRA" Journal Brasov

S.C. TURSIB S.A. - local public transportation company of Sibiu

The County Service of National Archives Collection

Collection Alt-Hermannstadt in Ansichtskarten, Fotos, Gemalden und Grafiken public group

Nekar/The Image Archive of the Transylvanian Institute attached to the University of

Heidelberg, Gundelsheim pe Nekar

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