EDUCATIONAL TOURISM IN THE NATURAL SCIENCES MUSEUMS OF SIBIU

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Rezumat

Turism educational în muzeele de științele naturii sibiene

În condițiile creșterii gradului de informare al tinerilor misiunea muzeelor de atragere a publicului tânăr de informare acestuia este tot mai dificilă. Posibilitatea de a călători și de a vedea "in situu" diversele minunății ale naturii sunt din ce în ce mai multe și accesibile unui public aparținător la diverse categorii sociale. Şi pentru că turismul adresat tinerilor nu trebuie să fie doar de relaxare ci și educational a apărut o formă nouă de turism, care se dezvoltă cu repeziciune și la noi în țară, turismul educațional sau școlar. În această lucrarea, în contextul tematicii simpozionului, cultura sub diversele ei aspecte dorim să prezentăm un model de traseu turistic educațional prin muzeele de științele naturi din Sibiu, deținătoare de valori culturale. Traseul turistic include ca puncte de oprire următoarele muzee: Muzeul de Istoria Farmaciei, Muzeul de Științele Naturii și Muzeul de Arme și Trofee de Vânătoare "August von Spiess". Pentru ca traseul educațional să aibă continuitate vom prezenta și clădirile care au semnificații istorice și culturale pentru Sibiu.

Key words: The Natural Science Museums, educational tourism, Sibiu.

Due to its approachability, tourism has become a complex phenomenon in a process of continuous development and diversification, including new dimensions and forms, all this under the circumstances of tourism becoming ever more present in different branches of activity towards the inner country side, through its political, economic, social and cultural components. Most of the dictionaries define the concept of tourism (derived from the English word "tour") as the activity of travelling, wandering, moving in open space. The concept came up in 18th century Great Britain and referred to the action of "voyaging" (a term

borrowed from French), of travelling. The etymology of the French word is far more complex – the experts have even found its roots in antic Hebrew.

Starting with 1880, tourism specialists have pointed out the fact that the activity of travelling tends to become a phenomenon of major social and economic implications. Thus, from isolated displays, with a strict individual character and available only for the higher class, tourism has transformed throughout time in a mass phenomenon.

Cultural tourism, which mainly encompasses cultural tours (such as visiting museums, attending various cultural events, international festivals), stands out ever more lately. It is regarded as the tourism of the future, since due to the increase of the living standard, of the level of civilization and culture, man's thirst after knowledge is also increasing on a yearly basis. While travelling from one place to another, the tourist gains a significant volume of knowledge in various fields, which enables him to develop a personal perception of reality; further, coming to know and to appreciate mankind's treasures leads to emotions, facilitates and stimulates creative activities. Contemporary evolutions in different areas of human activity, alongside with the progress registered in scientific, technological, educational and sociological fields represent interesting topics from a cultural point of view for many tourists.

Given the increasing level of information of the young people, the mission of museums to attract and inform the young public is ever more difficult nowadays. The possibility of travelling and witnessing "in situu" various wonders of nature become ever more accessible to a public belonging to various social categories. And since the tourism aiming at young people should be not only a relaxation, but also an educational one, a new form of tourism is rapidly growing even in our country – the **educational** or **school** tourism. A simple navigation on internet points our various such initiatives aimed especially towards ecological education – of the mountain areas. This seems only natural since the mountain has always attracted and keeps on attracting tourists far more easier, since most of the population is from urban areas, and furthermore, this form of tourism implies not only both relaxation and education, but also health.

In this paper, we wish to present a model of educational touristic tour through the natural science museums of Sibiu, which host remarkable cultural values. We would use the generic concept of natural history museums, referring to the old sense of term which encompasses everything related to man, nature and health.

The touristic tour includes the following landmarks: *The Pharmacy History Museum, The Natural History Museum* and *The "August von Spiess" Guns and Hunting Trophies Museum* (table 1). In order for our educational tour to present continuity, we will also include

the buildings which have a historical and cultural meaning for Sibiu, as well as the minimum duration to complete the tour.

Educational tour: The Pharmacy History Museum - The Natural History Museum - The

"August von Spiess" Guns and Hunting Trophies Museum

Tour duration: 5 hours

Target group: lower and upper secondary school and high school students

THE PHARMACY HISTORY MUSEUM

Overview

The museum was opened in 1972 and through its profile and location, it represents a truly rare item on the landscape of Romanian museums. The building — which is itself a historic monument — is located in the historic center of the city of Sibiu, which was declared historic reservation. A historic and architectural monument, the building displays gothic and renaissance elements and was built in 1568. It hosted the headquarters of one of the oldest drug stores in Sibiu — "The Black Bear's". Why would one build a museum on such a topic in Sibiu? Here are some of the many reasons:

- it was in Sibiu that the first ever documentary certified drug store for the territory of Transylvania, in the year 1494, was located;
- the tradition of the very diverse and creative pharmaceutical activity, compared to other areas of the country (pharmaceutical activity in the sense of preparing remedies by one's own recipes);
- the presence in Sibiu, as doctor of the governor of Transylvania Samuel von Brukenthal, of the forerunner of homeopathy, Samuel Hahnemann.

The museum collection, either exhibited or kept in storage rooms for future display in temporary exhibitions, include 6,600 items, which re enact the evolution of the pharmaceutical science and technique. The museum is organized by respecting the pattern of a classical pharmacy: with rooms dedicated to products display, remedies sales – the office and the laboratory where the drugs were made. The office furniture, made in Vienna in 1902, belonged to another pharmacy from Sibiu – "The Black Eagle's", located in the building of the present Brukenthal National Museum. The cupboards display wooden, china, glass and crystal jars, bronze, cast iron grinding mortars (the oldest one dating from 16th century), pharmaceutical scales and weights, etc. The entire inventory process the evolution of the pharmaceutical technique and instruments. The decorations of the recipients, of all the

instruments in general, point towards the interest of those who created them in beauty, in combining utility with esthetics. All these were meant to please its visitors, who would usually be scared by disease, by the multitude of remedies and by not knowing what hides behind the medicines. On some of the jars, made of wood, one can still decipher alchemical signs which the pharmacists used to write down chemical elements, certain facts about the recipe, which were not meant to be understood by the general public.



Fig. 1. The Pharmacy History Museum (26, Piaţa Mică)

The office – laboratory passage is done through a small exhibition which displays technical – medical tools used throughout the ages, such as surgery kits, microscopes, etc. The laboratory may easily impress one, due to the richness and diversity of the instruments used to obtain the basic substances which had been used to prepare the medicines.







Fig. 2. Aspects of the office

The various scales of different types of scales, grinding mortars, machines used for crushing, grinding and spraying staple, distiller etc. which are exhibited in the laboratory, represent the starting point for the present day sophisticated machinery. The doctors who visit the museum may recognize among the exhibits the surgery instruments which resembles, with slight changes, the ones used currently.

Since it was in Sibiu that the father of homeopathy (who was chosen by the baron Samuel von Brukenthal, the governor of Transylvania, as personal physician), Samuel Hanemann, practiced medicine for one year, a room of the museum is dedicated to homeopathy and it displays the homeopathic collection of the "Angel's" pharmacy. Homeopathy, a science why was considered to be the subject of science history, owns a leading place in the public interest nowadays, perhaps as a return of mankind to the natural, fundamental elements, which make up not only himself but also the natural environment surrounding him.

Educational purpose:

- the only place in Sibiu and perhaps in southern Transylvania, too, where own can see how classical pharmacies were organized starting with the 17th century,

- getting to know the stages of producing a medicine and a thorough awareness of the necessity of respecting an specialist's advice on using them,
- the necessity of collecting information about the complementary sciences without which medicines could not be produces: chemistry, botanic, anatomy, etc.,
- the importance for one's own health of knowing the various types of remedies: allopathic, homeopathic
- the high degree of development of the pharmaceutical "industry" in Sibiu.

Educational activities:

- practical lessons of chemistry, the obtaining of various homeopathic and allopathic remedies through specific combinations

The starting point of the tour is represented by The Museum of Pharmacy History, described above. Before or after visiting the Museum, one can take a tour of Piata Mica (The Small Square), which was declared architectural reservation because it conserves the architecture of medieval buildings, since it is placed between the 1st and the 2nd row of fortified walls of the city. Besides the old buildings, which are interesting from an architectural perspective, one can also admire **Podul Minciunilor (1859** (the Liar's Bridge) – a pedestrian bridge built in order to connect the two sectors of the city center: The Lower Town and the Upper Town, in the location of a gate tower of the 2nd enclosure.



Fig. 3. The Liar's Bridge (1859)

The two sectors of the old town are different from an altimetryc point of view (they are situated on different terraces of the Cibin), but also from an architectural point of view. The building from the Upper Town, located closer to the Evangelic Church – which used to

be the center of the community, were inhabited by the nobility of the city, a fact proven also by the richness of the buildings in comparison to the ones in the Lower Town, inhabited by people with a much lower standard of living (a fact proven by the architecture and poorness of the buildings from this sector). The bridge represents a premiere in achieving a balance between the **resistance structure** and the decoration made through **trafonare**. On the side facing the city center, one can even notice the city coats of arms.

Turnul Sfatului, erected as gate tower for the 2nd enclosure of the fortress, marks the passage between the two squares, towards the 3rd enclosure. Built starting with the 13th century, it currently displays eight levels (the last one was completed in 1824) and one can notice on the side towards Piaţa Mare a Turkish cannonball in the wall, while from its top level one can admire the entire panorama of the city center.



Fig. 4. Turnul Sfatului

Piaţa Mare – a vital center of the medieval and current Sibiu, was designed in the 14th century and still hosts the old buildings built and inhabited by the nobility of Sibiu. Among these one can notice, besides the building of various architectural styles, the allegorical decorations of the ones located on the side towards the street leading down to the Ursulinelor Church. Among the important buildings for the political, cultural and religious life of medieval and present – day Sibiu, one may notice: the Brukenthal Palace (in the background), the City Hall, the Roman – Catholic Church with the former Jesuit seminar. Piaţa Mare, the cultural, political and social center (in the Middle Ages it also used to represent the location of the Sunday Fair of products) hosted special events for the history of the city: from the beheading of the Johann Sachs von Horteneck comite in 1889, the presence of the madmen' cage where those who had disturbed the public order in the previous night were kept, until the anti communist revolution of December 1989 and presently to significant cultural manifestations connected to the "Sibiu – cultural capital of Europe in 2007" celebrations.



Fig. 5. Piața Mare (the Brukenthal Palace in the background)

Piaţa Mare is also the starting point for several streets towards all the neighborhoods of Sibiu, therefore the access towards the other landmark can be made either through the Gh.Lazăr street, where the Archbishop Palace of the Evangelic Church AC and the Gh.Lazăr High School are the main cultural landmarks, or through Arhivelor street.

If one would choose the other tour option through Arhivelor street, one may notice the architectural solutions between buildings different as height and morphology. For example the connection between the houses from Piaţa Mare, the General's House with the passing tunnel and the National Saxon Archives Building, on whose front side one can see the Sibiu and Transylvanian coats of arms. Just like in all the cities from Transylvania, which still house the old medieval architectural structures, in Sibiu, too the streets converge towards a meeting point called square. Such a square can be noticed on the way towards the second landmark of the tour, the Friedrich Schiller Square, where the bronze bust of the poet (sculpted by Th. Khuen, 1905) can be noticed in a niche of the square.

THE NATURAL HISTORY MUSEUM

General overview

The intellectuals of the city of Sibiu and not only them, had also preoccupations related to the preservations of the surroundings of Sibiu, of the sites significant for natural sciences. The 18th and 19th centuries marked the period when various associations were set up, most of which had as main goal the study of the nature from southern Transylvania. The most active ones in this direction were the members of the Transylvanian Society for Natural Sciences from Sibiu ("Siebenbürgischen Vereins für Naturwissenschaften zu Hermannstadt"), who also founded the natural History Museum – as public institution and storage of the

collections gathered mainly by the Society members. Thus, on May 4th 1895, 46 years later after the Society was created, the Museum was opened to the public. One of the goals meant to be accomplished by opening it was that of educating the young generation into knowing and protecting the nature. They collected and bought museum exhibits which today add up to a patrimony of over one million items: mineralogy – petrography (19,000), paleontology (57,000), botanic (168,000), entomology (266,000), malacologie (510,000), vertebrates (8, 386). The museum items illustrate not only the natural environment around Sibiu, southern Transylvania but also areas from abroad.



Fig.6 .The Natural History Museum building (1, Cetății street)

The Natural History Museum has been renovated and reorganized three times through its existence of over one century and now presents itself to its 21st century visitors in a new conception. The display topic of the museum pieces stays the same: the evolution and system of the living world, but not in a strictly systematic presentation, just like the old exhibition used to be, but in the context of the natural environment in which that specific biologic entity lives. In this sense, the vertebrates are included, among the dioramas, in their natural environment. In order to encompass almost all the major living types, dioramas were set up for the deltaic, continental (at a different altitude), arid – Australian, arctic and tropical environments. The moment when the current paper was published, the Museum undergoes a process of renovation and the permanent exhibition has not been opened yet, and therefore not being homologates, one was not allowed to take or present pictures of it.

In its new organization, the Museum will own at the first floor, a room for temporary exhibitions, conferences, lessons etc.

Educational purpose:

- the diversity of the museum items enables the presentation of a great variety of issues related to: the biology of various organisms, ecology, evolution etc.
- the paleontological and mineralogical petrographical material enables the exemplification of the main types of mineral and rocks form the surroundings of Sibiu and not only; while the paleontological items represent starting points in palaeo geographical and chrono –stratigraphical re –enactments, etc.

Educational activities

- the technical equipment (microscopes with display transmission), beamers, museum items will allow the set up of a temporary exhibition, open lessons which may assist store, sedimentation and enrichment of the knowledge the students and pupils acquired, according to their syllabus
- through the topic they deal with, the activities will include information from biology, ecology, botanic and geography etc.

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Further, our tour takes us up Cetății street, another historical monument, where the "Thalia" Hall is located, in the **Thick Tower (Turnul Gros)**, which has been recently renovated as headquarters of the State Philharmonic Orchestra of Sibiu. The Thick Tower, which was initially meant to house cannons, was arranged as city theatre for the first time by the typographer Martin Hochmeister.



Fig. 7. The "Thalia" Hall (current headquarters of the State Philarmonic Orchestra of Sibiu)

While heading toward the last landmark of the tour suggest in the current paper, one needs to include the area of the defence towers situated on the same street. The towers (The Harquebusiers' Tower/ **Turnul Archebuzierilor**, The Potters' Tower/ **Turnul Olarilor** and The Carpenters' Tower/ **Turnul Dulgherilor**) alongside the defence walls – the third enclosure – of the medieval fortress built in the 14th century represent examples of a medieval fortress, defence mechanisms/ types, describing everyday life in a medieval fortress (the concern of the guilds for protecting the towers, preserving the food when the city was under attack etc.)



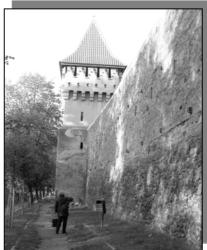
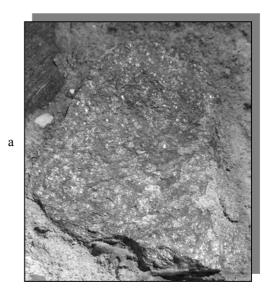


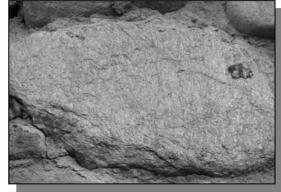
Fig.8. The defence towers and the walls of the third row of the city

Besides the historic and architectural importance of the wall, we must point out its utility in studying the geology of the local horizon. The wall was built with materials (rocks) from the areas surrounding Sibiu. One can carefully notice rocks belonging to three major categories: sedimentary, metamorphic and igneous.



Fig. 9. Details of the defence wall a.crystalline schists with granates, modified b. sericitos schist





The tour leading to the last landmark crossed an area which represents from an architectural point of view the present day or the recent times. The buildings were wither built in the second half of the 20th century or in the last year and unfortunately no longer have anything from the medieval architecture, but they are part of the new architecture of the main Romanian cities.

THE "AUGUST VON SPIESS" GUNS AND HUNTING TROPHIES MUSEUM Overview

The museum is organized in the old residence of colonel August von Spiess (born in Przemysl – Galiția, in 1884 and deceased in Sibiu in 1953) which was in 1922-1939 huntsman of the Royal house of Romania. The Museum has been renovated and re organized on several occasions, according to various requests related to museum organization but as well as due to the evolution of the knowledge of the general public; it was opened in the spring of this year in a new conception which, we hope, would attract and satisfy the tastes and requirements of as many visitors as possible.

In its temporary exhibition, it displays the richness and diversity of Romanian and African hunting. The exhibits belong to three collections which are: *The August von Spiess*

Collection, The Transylvanian Society for Natural Sciences Collection (the same society who founded the Natural History Museum), and The Emil Witting Collection (Society member).

From a thematic point of view, the museum is structured in four sectors. Thus, being first and foremost a museum of guns and hunting trophies, one can admire guns which re enact the evolution of fire guns, of the types of decoration and techniques used to manufacture various accessories related to fire guns.



Fig. 10. The "August von Spiess" Guns and Hunting Trophies Museum

(4, Şcoala de Înot – the building was doanted with the purpose of housing a museum)

In the room which connects the sector dedicated to the collectors the feather hunting is exhibited **(of water and of plane)** and the fury hunting. Awarded trophies from various global exhibitions are displayed for each type of hunting (Vienna-1910, Budapest-1911, Leipzig-1930 etc.). An important sector of the museum is dedicated to August von Spiess. According to the original images, the trophy showroom organized by Spiess was re enacted.

Throughout the exhibition tour one can admire items made by those who contributed through donations to the setting up of the collections of the museum. The works, done by A. Von Spiess and E. Witting represent pioneering works for the cynegetic literature of Sibiu.



Fig.11. Aspects of the Museums

August Roland von Spiess knew the mountains bordering the south of Transylvania and the fauna populating these mountains very well. His writings, alongside Witting's, can contribute to the re-enactment of the fauna which lived in these mountains and as to study to which degree its quality and quantity has reduced ever since. In his paper "From Transylvania to Kilimandjaro Hunters in Africa" A.von Spiess wrote down in 1942 that "faith has lead me to Transylvania, where I was welcomed by its hospitable inhabitants and where I found among its many hunters, close and friendly advisors. I have been especially interested by the Romanian inhabitants and nationality, beings for which the mountains had no secrets and who...welcomed me among them and took me along in their expeditions...To these old hunters from the mountains I owe many hours of hunting in their thick, endless forests and in their tall mountains where the hunting is very rich".

There is a particularly spectacular sector in this exhibition, dedicated to the hunting activity of A.von Spiess in Africa, in the expeditions from 1936 and 1939, where next to trophies (gazelles, antelopes, rhinoceros, zebras etc.) brought from African countries –Kenya, Tanganyca – aspect from the life of the **massai**, the ones who joined Spiess in his hunting, are presented in a diorama.

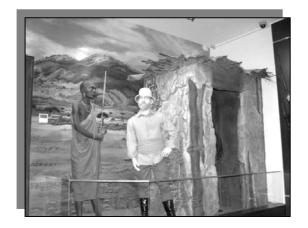


Fig. 12. A.von Spiess with the massai

Educational purpose

While visiting this exhibition one may answer several questions: is hunting a criminal act? What is the role of the hunter in the natural environment? The museum, the exhibits, their arrangements according to museum – wise, esthetic but also educational criteria points out the role of the hunter in selecting the wild animals when disequilibrium occur, whose solutions would imply a lot of time and not always positive results (ex: excessive breeding of carnivores can lead to the destruction of the animals they feed on and therefore produce huge damage for the humans). Another typical example in this direction is the excessive breeding of rabbits in Australia which destroyed the sheep pastures. By hunting gun selection one understands the elimination of the weak individuals, of those in unstable condition, which display visible defects, or are underdeveloped, regardless if this refers to the size, shape or dimension of the horns, since the basic idea is preventing these individuals which display inferior characteristics from breeding, and from passing on these defects to their offspring. That is why it is preferred that hunting expeditions are organized by those who know the biology of the wild animals and the most suitable period for selection.

From this perspective, the museum promotes the idea of organized hunting, in periods when it does not disturb the mating, the development of the cubs, of those animals which have brought their contribution to reproducing the species and in order to give a chance to the young ones to develop (ex: the bucks). The presence of traps and snares in the exhibition points out the lack of fair play of such a "hunting army" when the animals are crippled, in pain etc. and selection is out of the question. The exhibits and the items in the storage rooms can represents starting points for fauna reconstitution (quantitative – number of species, individuals and qualitative – degree of health, etc.).

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The suggested tour is meant to be an invitation to knowledge, made also to the teachers to use the tridimensional material in the subjects they teach, since it is well known that the image associated to the information contributes to a more efficient learning process. The Natural History Museums owe their existence to the kind collectors, passionate for nature but also caring for the contemporaries and willing to share what they gathered and collected with those around them.

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