

SHORT HISTORY OF SPELEOLOGY IN TRANSYLVANIA TILL 1914

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Transylvania (Erdély) is a geographical unit encircled by the mountain ranges of the Carpathians in the middle of today's Rumania. The mountains situated around its border, the Eastern and Southern Carpathians, the Transylvanian Middle Mountains (Erdélyi Középhegység, Munții Apuseni) include carbonate rocks rich in caves and other karst features. Beyond these ones the Eocene limestone of the Szamos (Someșul) Plateau (near Kolocșád/Cuciulat) has several caves. The 1982 Rumanian cave cadaster contained 6816 caves 949 of which are to be found in the Eastern Carpathians, 2502 caves in the Transylvanian Middle Mountains and 101 on the Szamos Plateau.

The Transylvanian caves were first mentioned in the 18th century and their research began also at that time. Six caves were mentioned by *János FRIDVALDSZKY* (1767) in his work describing the minerals of Transylvania. In his book published in Vienna *Elek NEDETZKY* (1774) presented the Funacza Cave (Fonóházi-barlang, Peștera de la Finate; Peștera henceforth abbreviated P.) situated in the valley of the Fekete Körös (Crișul Negru). In his work: "Picture of the till now mostly unknown wonder-cave of the Transylvanian Grand Duchy" published in Haarlem of the Netherlands *József BENKŐ* (1774) mentioned the cave of Homoródalmás (P. de la Merești), Búdös Cave of Torja (Torjai Búdös-barlang, P. Pucioasa de la Túrria) and beyond them the caves of mountain gorge of Torda. *János KLEINKAUF* (1793) enumerated the caves of Barcaság (Burzenland) and Székelyföld (Székely-land or Szekler-land) in his work published at Nagyszében.

Scientific research in the Carpathian Basin started at the beginning of the last century and the first cave surveys were carried out also at that time. *István Fekete*, the land-surveyor of Udvarhelyszék explored the cave of Homoródalmás in 1835 and drew the first



Entrance of the Funacza Cave (published in "Vasárnapi Újság", 1861. 15. p. 172.)

cave plan of Transylvania. The results of his research work were published in a modest book at Kolozsvár in the next year (*FEKETE 1836*). During his Transylvanian travels *John Paget*, an English traveller domiciled at Hungary visited the cave of Almás (Homoródalmás) in 1836 and described in his book (*PAGET 1842*). The hand-signs of Fekete and Paget can be seen on the gallery walls of the cave even today.

Auguste de GÉRANDO (1846) and *Ferenc HAUER* (1863) also mentioned the cave of Homoródalmás and the Búdös Cave of Torja in their works on the geological conditions of Transylvania.

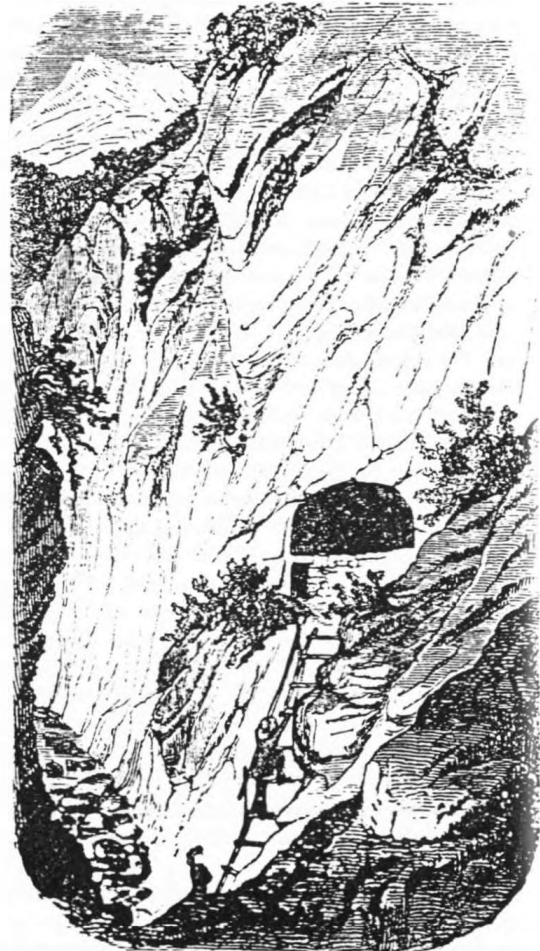
From the 1850-es on the caves of Bihar Mountains (Western range of the Transylvanian Middle Mountains) have become better and better known. The most frequented one of them was the Szkerisóra Ice Cave (Szkerisórai-jégbarlang, Ghețarul de la Scărișoara).



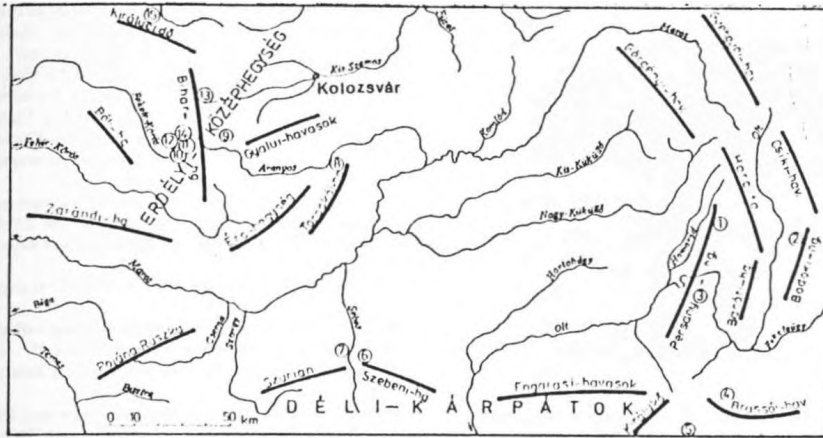
In his works published in Kolozsvár, *László Kőváry*, a distinguished expert on Transylvania, presented twenty caves (*KŐVÁRY 1853*). *Adolf Schmidl*, university professor in Buda, the most outstanding scientific speleologist of his age studied the caves of Bihar Mountains between 1858 and 1862. His last work was "Das Bihar-Gebirge" published in Vienna (*SCHMIDL 1863*). *János Hunfalvy*'s monograph of Hungary in three volumes (*HUNFALVY 1864*), and *Balázs Orbán*'s work on the Székely-land (*ORBÁN 1868-1871*) did not neglect the most famous caves, either. Both authors discussed in great detail the well known caves of that time. In his "Description of the Székely Land" Balázs Orbán told the historical events and folk legends related to the cave of Homoródalmás and published the cave plan prepared by István Fekete, mentioned above.

Plan of the cave of Homoródalmás, surveyed by I. Fekete in 1835. The above variation of the original plan was published in the Yearbook of Transylvanian Carpathian Association, Vol. VI. Kolozsvár, 1886.

Original explanatory notes in German: 1. Zugang zur grossen Höhlenmündung. 2. Im Jahre 1884 hergestellter Nebenweg für Hochwasserzeiten. 3. Eingang in der Mauer, die die Mündung der Höhle abschliesst. 4. Vorhöhle, vom Tageslicht noch gut erhellt. 5. Grosse Halle mit schwacher Tagesbeleuchtung. 6. Nebenöffnung an der senkrechten Felswand, daher von aussen nicht zugänglich. 7. Nebenhöhlen, welche teils nur auf dem Bauche kriechend, teils gar nicht mehr zugänglich sind. 8. Erste Stelle, die in stark gebückter Haltung durchkrochen werden muss und Beginn der absoluten Finsternis. 9. Wilde Schutthalden (alte Deckenbrüche) von riesigen Blöcken gebildet, durch Tropfwasser und aufgeweichte Fledermausexcrete oft glitschig. Vorsicht geboten! 10. Steiler 10-12 Meter hoher Absturz der Deckenbrüche, von hier bis 12 grossartigster Teil der ganzen Höhle (Magnesiumbeleuchtung fast unentbehrlich zum Besichtigen des Riesenraumes). 11. Von der Decke frei herabhängender Felsblock ("függökő"). 12. Letzter grosser Schuttberg, massenhafte Fledermausexcrete, sehr viel Tropfwasser, ziemlich viel Stalaktitenbildung. 13. und 14. Knochenhöhlen, reich an Knochen von *Ursus spelaeus*, *Bos urus* und anderen Wiederkäuern. 15. Schwer zugängliches Ende der Höhlengänge; bei 16. kleines Bassin kristallklaren Tropfwassers (Jordánkút).



Entrance of the Homoródalmás Cave (Hungary and Transylvania in pictures, 1857)



Geographical localization of caves mentioned in the study

1. Cave of Homoródmálmás (Homoródmálmási-barlang, Peștera de la Merești). 2. Búdös Cave of Torja (Torjai Búdös-barlang, P. Pucioasa de la Turia). 3. Tolvajos Cave of Apáca (Apácai Tolvajos-barlang, P. Hoților de la Apața). 4. Ördög-völgy Cave (Ördög-völgyi-barlang, P. din Valea Dracului). 5. Monastery Cave (Kolostor-barlang, Jalomica-barlang, P. Ialomitei). 6. Csoklovina Cave (Csoklovina-barlang, Cholnoky-barlang, P. Cioclovina Uscată). 7. Nándori Cave (Nándori-barlang,

P. Nandru). 8. Bedellő Cave (Bedellői-barlang, P. de la Grosji). 9. Szkerisóra Ice Cave (Szkerisórai-jégbarlang, Ghețarul de la Scărișoara). 10. Biharkapu Cave (Biharkapui-barlang, Porțile Bihorului). 11. Schmidl Cave (Schmidl-barlang, P. lui Schmidl). 12. Funacza Cave (Fonóházi-barlang, P. de la Finate). 13. Oncsásza Cave (Oncsásza-barlang, P. Zmeilor de la Onceasa). 14. Archduke Joseph Cave (József főherceg-barlang, P. Măgura). 15. Igric Cave (Igric-barlang, P. Igrita).

From that time on more and more caves have been surveyed and maps were drawn of them. In 1863 *Wastler* made the plans of the caves of Funacza (Fonóháza, Finate) and Szkerisóra (Scărișoara), in 1871 *Pošpeny* surveyed the Schmidl Cave (Rézbánya Cave, P. lui Schmidl) and the Biharkapu Cave (Porțile Bihariei), in 1880 *Daday* took the map of the Igric Cave (P. Igrita), *Téglás* surveyed the Nándori Cave (P. Nandru), while in 1887 *Hazay* plotted the József főherceg Cave (P. Magura).

The rich palaeontological remains of the Transylvanian caves were noticed at an early time. Systematical excavations were carried out in the Oncsásza Cave (P. Zmeilor de la Onceasa), Igric Cave (P. Igrita), Bedellő Cave (P. de la Grosi) and in the caves of Pietrosz mountain. The excavations brought archaeological finds to light, as well. *Ede THEMÁK* (1871), *Antal KOCH* (1876, 1877, 1893) and *György PRIMICS* (1886) presented the results of these researches in their works.

The excellent speleological activity of *Gábor Téglás*, a teacher of Déva, deserves special mentioning: he published his results in 34 papers. Beyond the survey and description of the Transylvanian Ore Mountains (Erdélyi Érc-hegység, Siebenbürgisches Erzgebirge, Munții Metaliferi, the Southeastern range of the Transylvanian Middle Mountains) and the caves of Hunyad county (Southern Carpathians) he wrote about the palaeontological and archaeological finds of these places, as well.

The first biospeleological researches were carried out by *Imre* and *János Frivaldszky* in the caves of Bihar Mountains. *János Frivaldszky* published his results in a monograph (*FRIVALDSZKY 1864*).

Meteorological survey in caves was started by *Adolf Schmidl* in the Szkerisóra Cave. *Lajos Ilosvay* made the chemical and physical examinations of the air in the Búdös Cave of Torja (*ILOSVAJ 1895*). *Albert E. Bielz*, a teacher of Nagyszeben, compiled the first cadaster of the Transylvanian caves. He described 65 caves in detail and gave a bibliography of them, too (*BIELZ 1884, 1885, 1886*).

Under the influence of the above mentioned studies and papers the attention of tourists turned more frequently toward these caves at the end of the century. Dripstone caves of perfect beauty of that time have become the target of several tourist excursions.

Gyula Czárán, a landowner, spent all of his income on the exploring of caves of Bihar Mountains, he sponsored the installation of caves for tourism, the working up of tourist routes and look-out places. It was he who described and named the dripstone formations popularizing them in his popular scientific publications in the journals "Erdély" (Transylvania), "Turisták Lapja" (Tourists' Review). He wrote a tourist guide book for excursions in Bihar Mountains. He offered his whole life and all his money to get to know and to make know the Bihar Mountains.

After the turn of the century the survey of two other caves was carried out: the Tolvajos Cave (P. Hoților de la Apața) in the Persány Mountains by *Kálmán PÉTER* (1905) and the Ödön Zichy Cave (Zichy-barlang or Révi-barlang, P. Vadul Crișului) by *Gyula Monok* in 1907.

Márton Roska reported on his archaeological research and finds in the Csoklovina Cave (Cholnoky Cave, P. Cioclovina Uscată) of Hunyad county (*ROSKA 1912*).



Entrance of the Kolostor (Monastery) Cave
by G. Hering, 1839 (in J. Paget's book)

In 1908 Ferenc Pódek, a research worker of the Burzenländer Sächsischen Museum (Saxon Museum) in Brassó (Kronstadt, Braşov) began the scientific exploration of the Homoródalmás Cave and the caves of Vargyas Canyon from palaeontological and archaeological point of view. Beyond the Nagy-barlang (Big Cave) and Lócsür Cave known till then he discovered more than twenty caves of the valley (PODEK 1911, 1914). Pódek also studied and drew maps of the caves around Brassó (f. i. Ördögölgy Cave, 1912).

Commissioned by the Speleological Section of the Hungarian Geological Society Gábor Strömpl with the help of Pódek visited Vargyas Canyon where he carried out speleological and geomorphological researches (STRÖMPL 1912, 1913).

The Kolostor Cave (Monastery Cave, P. de la Schitul Ialomitei) worths mentioning here that, by then, was situated near the border of that time in the Bucsecs Mountain (Masivul Bucegi) in Ialomita (Jalomnitza) valley. It was visited by several Hungarian tourists and naturalists.

This promisingly developing organized speleology in Transylvania was tragically broken by the First World War. After the war, because of the changed political situation the speleological activity in Transylvania was completely separated from the researches carried out in Hungary and it began to develop on its own way.

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