

## THE BEGINNING OF CAVE PHOTOGRAPHY IN THE CARPATHIAN BASIN

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On the ALCADI territory the first photo representing a cave interior was taken by *E. Mariot* in the Adelsberg Cave (Postojnska Jama) in 1867 (*KRANJC 1986*). The first scholarly paper on cave photography was published in 1883 by *M. Kříž* (1841–1916), the many-sided researcher of the Moravian Karst (*KŘIŽ 1883*). The author gave a detailed report on his attempts to make photos in cave and on his results. After dealing with landscape photographing for years he took the first cave photos in the Sloup Cave (Sloupsko-Šošuvské jaskyně) in the autumn 1880. Instead of the previously used colloid plate he used a silver bromide plate and worked applying a magnesium-lamp. The faint diffused light of the magnesium-lamp made the focusing difficult and the developed pictures were dim and unusable. On the basis of his experiences he realized that to make a cave photography of good quality more intensive lighting and a longer time of exposure are needed. In order to produce these circumstances he examined the possible sources of light and came to the conclusion that to take good cave photos electric light or magnesium light must be used there. He calculated the quantity and price of accessories needed to produce a suitable electric light intensity. After obtaining the necessary matters he built out a lighting apparatus working with batteries in the Sloup Cave. The members of the expedition were amazed at the strong light effect produced by electricity, and at the same time it became possible to take photos of good quality if the required time of exposure was chosen.

Later on *Kříž* came to the conclusion that expensive electric light that requires a lot of work to build out can be replaced by magnesium-lamps of suitable light with the help of other devices (mirrors). In such cases the ideal distance is maximum 4 m and the lamps should be placed on both sides of the camera in order to avoid shading. He suggested the building out of electricity only when it would be used for several

days. To support his statement he published his economic calculations. Four photos taken underground illustrate his study: three presenting the Sloup Cave, one the Ochoz Cave (Ochozská jeskyně) – and a further overground picture is also given of the Macocha chasm. It is interesting, that in his concluding words he suggests that in order to demonstrate the proportions of the cave formations it would be serviceable to put a human figure on the picture in the future.

The first significant cave photos taken on the territory of historical Hungary are linked with the name of the Divald family. *Senior Károly Divald* (1830–1897), who was born in Selmechánya as a son of a forester-miner family that resettled here from Reims, France in the 18th century. He studied pharmacy in Vienna, then he worked at Bártfa as a pharmacist. Besides being engaged in his work he began to deal with photographing. In 1863 he founded a photo studio in Eperjes, and afterwards he was active only as a photographer. He was one of the first ones who left the studio and began to take photos regularly of nature, landscape and towns. He multiplied his photos and sold them in several bigger towns. Later he opened shops at Bártfa and Ótátrafüred, too. In 1878 he founded printing houses at Eperjes and Budapest, where he began to reproduce his photos then post cards in typographical way. After his death his studios were taken over by his sons, *Károly* and *Adolf* who ran them for decades. (*SZÉKELY 1989a*) The first cave-photo was made by *Junior Károly Divald*. According to the visitors' book of the Dobsina Ice Cave (Dobšinska ľadová jaskyňa) *Junior Károly Divald*, photographer of Igló visited the cave on the 9th of September 1886, as the 1906th visitor of the year and the 24,056th one since the visitors book has been opened "in order to make photos in the cave."

*Senior Károly Divald* took photos in the Béla Cave (Belianska jaskyňa). The photos most probably were taken in 1887, and published the same year. The brown



*Béla dripstone cave in the High Tatra (photograph by K. Divald, 1887)*

pictures of 150x103 mm were stuck on cardboards of 160x110 mm and circulated in this form. Place names where the photos were taken are given on the pictures in German and in Hungarian, and on the negatives one can faintly read the inscription: Károly Divald, Budapest–Eperjes. On the back side of the cardboards the name of the cave in German and in Hungarian, the date of publication and the name of the publisher can be found. Most probably the pictures have been reedited several times. There are pictures where the inscription of the negative is invisible and the text on the back side of the cardboard is written in different colour and style than that of the 1887's edition.

Senior Károly Divald in the company of József Ferenczy and M. Dörcs (?) – also photographers of Eperjes – walked through the Baradla “from the beginning to the end” on 6th of June 1890. “I came in order to record it on photos and admired the marvel of nature” – one can read next to his name in the visitors' book (HAZSLINSZKY 1992).

The photos of Divald were the only pictures of the Baradla for decades. The series of 32 photos made of his exposures was published in the same year under the title: “Pictures of the Aggtelek Cave”. The brown photos are 120x190 mm glued on 140x210 mm cardboards with serial numbers on them, and on the back side the name of the cave and the titles of the photos are given in Hungarian, German and French next to the date of publication and the name of the

publisher. The work of SIEGMETH (1890) presenting the cave in details is illustrated with these pictures on the scale of 1:1. The list of illustrations added to the book lists 33 pictures, eventhough only 32 photos are given. The GREAT ENCYCLOPEDIA OF PALLAS (1893) gives 8 photos of Divald as an appendix to the entry-word “Baradla”, however, they are not the original photos, but green-coloured engravings prepared on the basis of the pictures. The 115x172 mm folding album “Aggtelek Dripstone Cave” in a hard decorated red cover containing 18 photos of 70x105 mm is the foregoer of post-cards. Unfortunately no date is given, only the name of the publisher and the place of publication are indicated.

The first post-cards of the Baradla, probably in 1897, were also made on the basis of the Divald's photographs. It can be concluded from the fact that in the 1897 year's account of the East Carpathian Section of the Hungarian Carpathian Society (Turisták Lapja [Review of Tourists] 1898) one can read, that “the picture cards representing the Aggtelek Cave came out so well, that further 3,000 exemplars were ordered.” Besides the decoration three cave photos were given on the first post-cards. Cards representing only one photo were published in the beginning of the century (SZÉKELY 1989b). The first colour pictures cards of the Baradla were made so that the Divald pictures were coloured by hand. Most probably, because of the colouring the pictures are not accurate to sides.

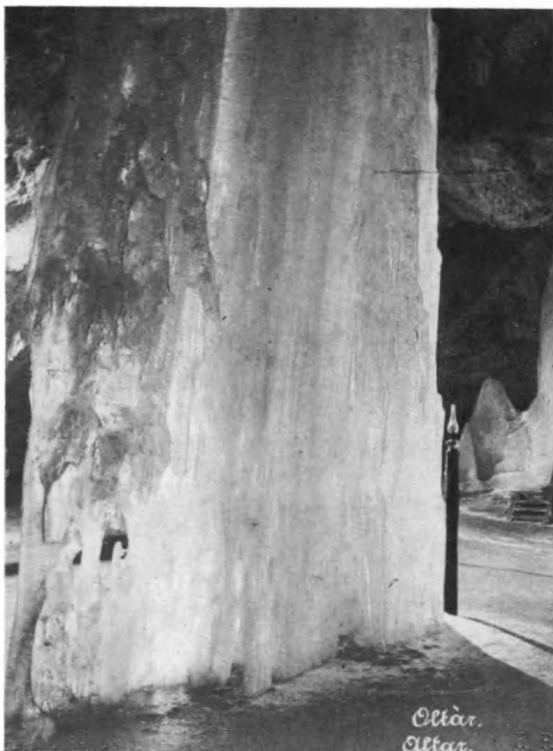
The voluminous work "The Austro-Hungarian Monarchy in Writing and Pictures" published on the turn of the century was illustrated not by photos, but by engravings made on the basis of drawings and paintings of famous artists of the age. Three pictures are added to the description of the Baradla in the XVIIIth volume: "Helmet of Minerva" painted by *Ödön Kacziány*, genre-painter (1852–1933), the entrance of the cave and the "Tower of Salamon" by *Gyula Hány*, painter, illustrator (1864–1946). All the three paintings are the copies of Divald's photos, there are only slight differences from the original ones (SZÉKELY, 1990). The bequest of photos of Károly Divald lies unworked in the Photo-Archives of the Museum of Contemporary History containing valuable material for cave research, too.

At the end of the last century the Dobsina Ice Cave was the most attractive one for the photographers. On the evidence of the visitors' book *Ferenc Kozmota* Imperial and Royal photographer of Budapest visited the cave on 22th of July 1887, *Ede (?)*, photographer of Budapest on 30th, *Dezső Benky*, photographer of Szatmár on 9th of August and *Stefany*, photographer of Rozsnyó on 30th of May 1888. Unfortunately, their photographs are unknown. In 1888 and 1889 a series of photos of the Dobsina Cave was published in Berlin on the basis of the pictures of *H. Rückwardt*, photographer. The title of the pictures in two languages, the name of the photographer and the place and year of publication are given on the brown photos of 95x155 mm glued on a 110x167 mm cardboard. The name of the cave is printed on the cardboard on the top of or under the photo in Hungarian and in German. Four of these illustrate the article describing the cave in the *Turisták Lapja* (Review of Tourists) (N.N. 1892).

A valuable photo-historical news in *Turisták Lapja* (N.N. 1896) relates that in 1895 royal prince *Frigyes* and baron *Loránd Eötvös* (1848–1919) visited the Dobsina Ice Cave and "took several photographs". Judged from the outstanding activity in the field of photographing of *Loránd Eötvös*, physicist, member of the Hungarian Academy of Sciences it can be supposed that he took pictures in several caves, too.

*János Blitz* one of the explorers of the Béla Cave must be acknowledged as one of the first photographers of the cave – after Divald. Some of his photos were published by his daughter in 1905 as post-cards without indicating the date of the photographing.

It is well known from the 1895 vol. of the *Turisták Lapja*, that *Lajos Petrik* (1851–1932), an excellent mountaineer, writer of travel books and photographer in the company of *Gyula Dóri* and *Gyula Istvánffy* visited the Deményfalva Ice Cave (Demänovska ľadová jaskyňa) in July of 1893 and "took excellent photos from several points of the cave by magnesium light" (ISTVÁNFFY 1895). It is strange, that the study is illustrated not by the original photographs (5

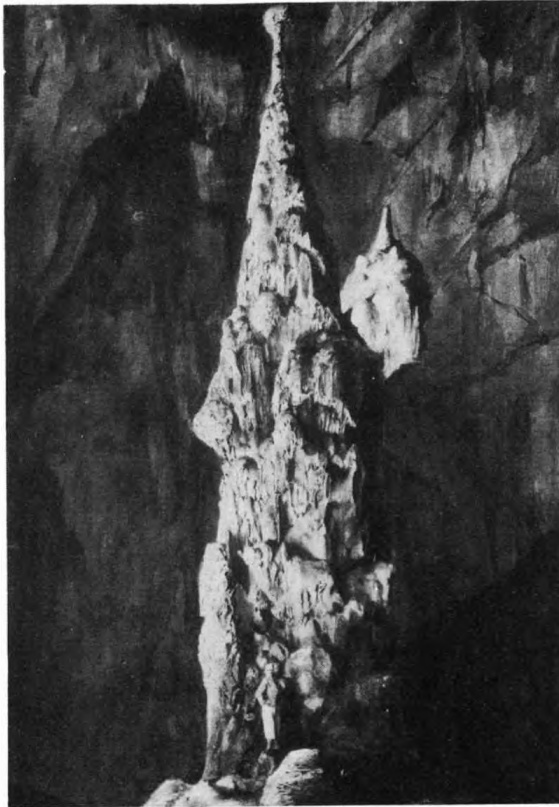


The Altar in the Dobsina Ice Cave  
(photo by H. Rückwardt, 1888)

pieces), but by drawings made by *József Déry* on the basis of the photos. Most probably, it happened because of typographical reasons.

The first photo of cave interior from Transylvania is of the Archduke József Cave taken by the photo studio of *Fekete* of Nagyvárad in 1890 (HEGYESI 1890). *Lajos Biró* (1856–1931) an entomologist, traveller, collector of ethnographical data – who was regarded to be the first Hungarian amateur photographer by *Endre Dudich* – took several photos in the caves of Bihar Mountains in 1894 and 1895. He made his pictures by candle light and acetylene light. Sometimes he made an exposure for hours, and as proved by the negatives, diapositives and positives now in the possession of the Speleological Society, his efforts resulted in very good photos. Unfortunately, these documents most probably were destroyed when a bomb damaged the office of the Society in 1944.

Returning home from New Guinea, *Lajos Biró* visited the Bihar Mts. again in the August of 1904. Besides collecting insects in the caves around Rév he made photos, too. Several of these photos are to be found in the Collection of the History of Science of the Museum of Natural History: original glass negative of 6 caves and of 2 cave entrances, 8 photos of the *Lajos Biró*, 1 of the *Kalota-Vidarét*, 3 of the *Batrina*, 1 of *Révi Zichy* and 2 identical ones of the Archduke József Cave. Two pictures could not be



*The Observatory in the Aggtelek Cave, by K. Divald, 1890 (the original photographs from K. Székely's Collection)*

identified for the lack of any inscription. Besides photos representing cave interiors there are several pictures of cave entrances in the Collection.

The 120x160 mm negatives were inscribed by Lajos Bíró himself. On the border of the negative the names of the villages and the caves, and the date of exposure are given. The photos are stuck on cardboards in highly decorated frames – the original inscriptions of Bíró can be read under the photos, too. Next to the names of the caves he frequently added what special insects can be found there.

It is a peculiarity of cave photographing that Bíró sent his own photographs to his friends as post-cards, some of them are to be found in the collection, too. He copied the exposures on photo-papers on the back of which the inscription "post-card" and the place of address were printed in advance. (The activity and photographs of Lajos Bíró will be presented at the conference by *Csaba Horváth* on a poster and he also will exhibit some of the original pictures. I express my gratitude for his kindness to put his data at my disposal in advance).

In the first years of the 20th century in several caves of Transylvania photos of good quality were taken:

in the Révi Zichy, Meziad, Komarnik, Bol, Archduke József and the Szkerisóra Ice Cave. The authors of the photos are unknown, the pictures have survived on post-cards.

The most outstanding cave photographer of the first quarter of the century was *Imre Gábor Bekey* (1872–1932), famous cave researcher, the explorer of the Pál-völgy Cave, the excellent tourist writer. He took several photos of the Pál-völgy Cave, and recorded with his camera all the important events of cave research that well developed in the tens. Scientific publications were illustrated by his photos, and several pictures of him were published as post-cards. The historic scientific collection of the Hungarian Speleological Society preserves several 90x120 mm glass negatives and diapositives of Bekey for posterity.

When speaking about the first steps of cave photography the name of *Károly Jordán*, a mathematician (1871–1959) must be remembered – unfortunately, we do not have any documentation. The outstanding mountaineer, the pioneer of cave research was an excellent photographer, as well. His photos made during his alpine tours are well known as the appendices of his papers. Unfortunately, he never wrote about his results in the field of cave research, so no published cave photo of his is known. However, we know, that there were a great number of nice cave photographs in his well organized photographic archives. Unfortunately in 1956 his office was hit by a bomb and fire consumed his library of several thousand books together with his photo collection (*SZÉKELY 1984*).

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