## ZSÓFIA TORMA The first woman-scientist in Hungarian speleology

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120 years ago, when research of prehistoric age and of palaeoarchaeology were still in an early stage not only in Hungary but all over the world, a Transylvanian woman surprised scientific circles with findings of cardinal significance, valuable even for present day research.

Zsófia Torma was born in 1840 (or in 1841) at Csicsókeresztúr (Cristeştii Ciceului) in Transylvania. His father, József Torma, a historian, was a "significant power in the revival period of public life in Transylvania". (N. N. 1882). His brother, Károly Torma (1829–1897) was the explorer of the Aquincum ruins, member of the Hungarian Academy of Sciences, an outstanding figure of the Hungarian archaeology.

She began her studies in the family. Because of the early death of her mother she was sent to a girls' boarding school in Szatmár, then for years she developed her knowledge by self-education. For a while she was busy bringing up the children of her sister at Felpestes and helped with the household, then settled down at Szászváros (Orăștie).

She inherited her interest for archaeology from her father, who made his name famous by exploring the Roman camp of the former Dacia frontier defence system at Alsóilosva (Ilişua) near to their abode Csicsókeresztúr on the Szamos.

In the beginning of her scientific carrier she was occupied merely in collecting palaeontological finds: the gastropoda fauna of County of Hunyad. However, when in 1875 Flóris Rómer (1815-1889) - whom she knew personally for years - published a notice (RÓMER 1875) calling the public to save and collect the tools of Neolithic age lying scattered on the fields, her interest turned towards the Neolithic settlement at Tordos (Turdas). She realized that the floods of the river Maros threatened with destruction the rich findspot. The same year she began regular excavations on the territory and the collection of objects that were to be found on the surface. Her work lasted for at least a decade. The results of the excavations at Tordos called the recognition of scientific circles so much, that the organizers of the International Archaeological



and Anthropological Congress held in Budapest in 1876 asked her – in spite of being a woman – to collect the data of the County Hunyad.

Her collection of 15,000 findings, the result of her geological and archaeological exploration was counted as a peculiarity at the Budapest conference, and also at the Archaeological Conference held in Berlin in 1880.

Zsófia Torma extended her archaeological research to other directions, as well. By then, it was well known, that caves are significant places of archaeological discoveries, so, her interest was arisen by the caves situated near to her abode at the village Nándor (Nandru). In 1877 she began to explore one of them, the cave with double entrance in the mountain called Deálu Peşteri (Mountain of Caves). She had excavations made both in its 11 m long entrance gallery and in the 9 x 17 m hall. Along the back wall of the hall there was a smaller, 1,4 x 1 m niche, once walled in, that she thought to be a robbed grave. According to her words: "it housed only the fragments of a thick human skull, the teeth of cave bear" (*Ursus spelaeus*) "and two splinters of jasper". She also found a ram

horn, a cup of late Copper Age, the fragment of a copper bracelet and a blade of flint, both edges of which were worked out by flaking. In front of the niche there were broken parts of earthen vessels and animal bones, among others those of the cave bear. In the hall she has found the fractions of antlers of two giant deers (Cervus megaceros) one of them was in a depth of 42 cm, the other one of 45 cm. Zsófia Torma recorded the exact stratigraphical situation of them: they were found in the cave mud covered by 10 cm humus and 12 or 15 cm layer of guano, however, she did not determine the geological age of the layer that contained the bones. Though the findings were unquestionably of Pleistocene age - she has found bones of woolly rhinoceros (Rhinoceros tichorhinus). as well - her colleagues disputed their primary position. So, it did not come into question at all, that she has found - and the more, for the first time in Hungary - the trace of Pleistocene man (i. e. these bone remains could have got into the cave only by a man). It was only two years later, in 1879, that Samu Roth made excavations in the Oruzsin Cave (Ruzin) for the first time. Today he is considered to be the recognizer of the site of Pleistocene man in Hungary.

Zsófia Torma carried out excavations not only in this cave. She visited nine smaller niches and cavities near the village Nándor, but she did not find any significant object.

Her scientific papers were published in Hungarian and foreign reviews in Hungarian and in German. The greatest recognition of her activity was that the Philosophical, Linguistic and Historical Faculty of the University of Arts and Science in Kolozsvár conferred an honorary degree on her on the 14th of June 1899 – exactly five months before her death. Hundred years ago not other woman could gain such a recognition! The success of her excavations in the Nándori Cave is proved by the fact that the same year *Gábor Téglás* (1848–1916) began a new excavation the results of which were published in the Természettudományi Közlöny [Scientific Review] (*TÉGLÁS*, 1880).

This lady, far ahead of her time, dedicated her life to science and developed herself from an autodidact to a scientist of archaeology. With her activity she earned the sincere recognition and high esteem of her Hungarian and foreign colleagues. She took part in several conferences abroad, made study tours, and was the member of several national and foreign scientific societies.

She had personal contact and carried on a large scale correspondence with the outstanding archaeological and geological experts home and abroad. The style and tone of her letters were characteristic of a free–thinking lady interested in all the results of science, whom her male colleagues treated as an equal. They took her professional advice in debated questions and asked her to make investigations on the spot. She was unsparing even of her health for the sake of work. In 1883, when *Lajos Lóczy*, the famous Hungarian geologist-geographer, asked her to investigate two

interesting finding spots of bronze and iron age, she wrote him in a letter: "My doctor sentenced me for eight weeks' cessation of work because of my extensive nervous affection, that is always the unavoidable result of overstrain intellectual work."

Her home with the rich collection in Szászváros was always open to those interested. Unfortunately, there were some who took an unfair advantage of this situation, and used the material seen in her collection without any reference (MAKKAY 1990).

Zsófia Torma was a many-sided figure, besides scientific research she took an active part in the popularization of archaeology, as well. She had a part in the foundation of the Museum in Kolozsvár. She donated the duplicates of her findings to schools, societies, in spite of the fact, that she carried out the excavations on her own expenses. She spent a lot on cultural institutions, on the building of schools. She founded a Hungarian public school on her estate.

Though being a scholar, she always remained a woman, she was fond of housework, and was as proud of a successful dinner as of her scientific successes. It was she, who always took care of the sick persons in the family. She bought even the false findings from poor people to help them in this way.

Fate favored her: she worked on her doctoral dissertation till midnight the day before her death. Her rich and successful life came to an end on the 14th of November 1899. Succeeding generations treated her unfairly. Her dream was to publish in her lifetime the results of her 20 years' observations supplemented by 2,000 figures and a catalogue. After her death it was only partly brought out after a long debate, delay and explanations (ROSKA 1941). Speleology forgot not only the fact that she was a pioneer, the first woman who carried out scientific work in cave, but it does not remember even of her name. Her rich collection was bought by the National Museum of Kolozsvár, and the manuscript of her work "Dacia before the Roman conquest" is also preserved there.

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