

## BOOKS REVIEW – SMOTRA KNJIGA

## GJURO PILAR SYMPOSIUM

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Edited by Ivan Gušić*

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This Symposium-volume contains the texts of 18 oral presentations held on the Symposium in Slavonski Brod, which was dedicated to the 100<sup>th</sup> anniversary of the death of Gjuro Pilar.

Gjuro Pilar was an outstanding Croatian naturalist, member of the then Yugoslav Academy of Science and Arts, the first Professor of Geology at the Zagreb University, and – for many years – director of the Mineralogical-Geological Department of the Croatian Natural History Museum.

The contributions in this volume present, for the first time, an encompassing, though hardly complete, picture of Pilar's scientific and professional work, as well as of his diverse social activities. Basic facts on Pilar's life are presented by M. Herak and K. Sakač under the title »Scientific work and life of Gjuro Pilar«, with complete bibliography of Pilar's publications and an addendum of Pilar's life chronology. Katarina Krizmanić presented a large amount of data collected in various archives (Archive of the Croatian Academy, Croatian State Archive, etc.), entitled »Sources about the life and work of Gjuro Pilar«, which is a precious directional mark for everybody interested in the life and work of Gjuro Pilar.

The contribution of B. Jančiković, entitled »Contribution of Pilar's family to Croatian science and culture«, is emotionally coloured, which is easily understandable if we know that the author is Pilar's great-grandson. He presents interesting, hitherto mostly unknown or inadequately known, facts about the Pilar family, acquainting us with the information that many renowned people belonged to that family; e.g., Martin Pilar, the brother of Gjuro, was a famous Zagreb architect and the co-founder of the High Technical School (which was later to become the Technical Faculty, and still later, to branch-off into numerous technical faculties); Gjuro's son, Ivo Pilar, was a well-known historian and writer; Ivan Kerdić, a sculptor and me-

dallion-maker, etc. I. Gušić and V. Jelaska described Pilar's university lectures on geology, noting that Pilar compiled his hand-written and illustrated notes into a coherent textbook of geology, which, however, was never published. They also emphasize Pilar's unifying, dynamical, and all-encompassing (»holistic«) approach, which they miss in the present-day situation of overly multiplied specializations.

Marta Crnjaković described the »Mineralogical and Petrological Work of Gjuro Pilar«, emphasizing that he founded our first mineralogical-petrographical laboratory, for which he also acquired, among other things, the first polarizing microscope, which he profusely used in analyzing the igneous, metamorphic, and sedimentary rocks from various parts of Croatia. M. Herak, in his second contribution, entitled »Pilar's conception of geodynamics«, analyses two important papers of Pilar. In his doctoral dissertation, entitled »Les Révolutions de l'Écorce du Globe«, and published in Brussels when he was only 22, Pilar discusses the Earth's global dynamics and evolution. It is worth mentioning that that paper was translated into English and published in Washington, by the Smithsonian Institution, almost ten years later. The second paper, »Grundzüge der Abyssodynamik«, deals with basic principles and phenomena of dynamic geology.

J. Pamić described the contribution of G. Pilar to the geological exploration of Bosnia and Hercegovina, emphasizing Pilar's lion's share in pioneering geological work in the region, though it was officially undertaken by Austrian geologists.

Tamara Đerek and Sanja Japundžić described the origin and highlighted the scientific value of Pilar's paleobotanical paper, »Flora fossilis Susedana«, which is still nowadays used as a basis for similar investigations. D. Rukavina analyzed Pilar's opinion on causes of ice ages, based on a combination of Adhemar's and Croll's theories. Though not all of Pilar's observations were subsequently unequivocally corroborated, they confirm Pilar's keeping up-to-date with the then prevailing opinion on glaciation causes.

D. Skoko and E. Prelogović analyzed Pilar's contributions to the scientific interpretations of earthquakes, based on the data collected by Pilar during the 1872 Zagreb earthquake and the 1884 Đakovo earthquake, and concluded that »some of the methods and procedures adopted by G. Pilar ... could be applied even nowadays«.

The contribution of P.K. Čolić on modern view of Pilar's work »Geographic coordinates...« is the most extensive in this volume. It determines the connection of Pilar's paper with modern geodesy and points out relevant historical facts.

L. Randić described Pilar's university lectures on astronomy. Pilar's lecture notes on astronomy were, just like the ones on geology, meticulously hand-written and obviously ready for printing, which, however, did not occur. Nonetheless, Pilar's astronomy lectures considerably enriched the university education of that time.

Branka and I. Penzar report about the hitherto poorly known meteorological, aeronomic, and oceanographic observations of G. Pilar, which were until now not adequately valued. They include the tornado at Novska in 1892, his own systematic

meteorologic measurements, study of ice ages and evaporation, as well as the description and explanation of Northern lights (aurora borealis).

The remaining contributions testify of Pilar's exceptionally broad plethora of interests in different fields. Thus B. Kanaet reports on Pilar's »Elements of mining and mining law«, based on his manuscript of 1878. S. Božičević comments on Pilar's speleological contributions connected with his efforts to solve the problem of water resources in Karst. Tihomila Težak-Gregl reports on Pilar's contributions to archaeology, which she considers as an interesting contribution of a naturalist to the humanities. Pilar made a series of petrographic analyses of neolithic and paleolithic artifacts and of antique coins from the numismatic collection of the National Museum and published a paper on the use of ores and alloys in the culture of the early man.

An interesting contribution is by Z. Hernitz on »The chess world of Gjuro Pilar«. It is a detailed story about Pilar as a gifted chess-player and capable organizer of chess tournaments. Among other things, Pilar compiled the first rules for the Zagreb chess club and was active in all fields of chess playing. Ž. Poljak illustrated the participation of Pilar in founding the Croatian Mountaineering Society, which illustrates Pilar's social activity outside of his main scientific interests.

The two concluding contributions in this volume, that are not dealing with the person of G. Pilar, are by M. Šparica and K. Sakač. M. Šparica described Neogene deposits of Mt. Dilj in Slavonia, that were also the object of Pilar's research, and K. Sakač gave a review of the exhibition »A Slavonian and the Earth – Gjuro Pilar, the versatile naturalist«, which was first set up in the Croatian Natural History Museum in Zagreb to be later transferred to the Museum in Slavonski Brod, at the time of the Symposium.

All contributions in this volume have short summaries in English, ranging in length from 1/2 to 2 pages – barely enough to give the English-speaking readers just a brief glimpse of Pilar's outstanding personality, his extraordinary versatility and almost incredible activity, accomplished in a life of only 48 years.

The volume is jointly published by the Natural History Class of the Croatian academy of science and arts, the Office of the Mayor of Slavonski Brod, the Slavonski Brod Museum and the Croatian Natural History Museum in Zagreb. Editors are Ivan Gušić and Krešimir Sakač, managing editor Dragan Bukovec. Members of the editorial board are Marta Crnjaković, Zvonimir Hernitz, Božidar Jančiković, Ivan Jelić, Jakob Pamić, and Stjepan Sečen. Language editor (Croatian) is Nada Gašić; texts were processed by Sanja Japundžić and Katarina Krizmanić; photographs are by Nives Borčić and Željko Matuška. The reviewers are Velimir Kranjec and Stjepan Šćavničar, printing editor is Branko Markan.

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Krešimir Sakač, Ivan Gušić