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THE ASTRONOMICAL OBSERVATORY OF THE BELGRADE UNIVERSITY BETWEEN 1926 AND 1941

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ABSTRACT: The paper deals with the historical development of the Belgrade Astronomical Observatory in the period 1926-1941.

After coming from Nice, where he should have directed the Service of the Ephemeris-and-Orbit Calculation for the minor planets and comets at the Astronomical Observatory, to Belgrade, where he was elected Professor of Practical Astronomy at the Faculty of Philosophy and became the Director of the Astronomical Observatory, Prof. Mišković also took part in the work of the Commission of Astronomical-Service Organisation in our country (Protić- Benišek and Djokić, 1989). The work of this Commission, founded by the Faculty of Philosophy in the first half of 1925 and directed by Prof. Milanković, was concentrated to the finding of a suitable location for the purpose of building an astronomical observatory where the instruments obtained from Germany after the First World War as war reparations due to the efforts of Prof. M. Nedeljković would have been installed and activated. At first Avala (511 m), a mountain very near Belgrade, was borne in mind as a location for building the observatory, but this project remained as a foreseen possibility. The real actions were going in two directions, almost simultaneously. Following the instructions of the Commission mentioned above passed in the very beginning of 1927 Prof. Mišković took some steps to find a suitable place for observatory building on the range of Fruška Gora. As such Prof. Mišković chose the top of Lišaj (490 m) on plateau Zmajevac. Following Prof. Mišković's proposal the Commission with jurisdiction in the organisation of astronomical service accepted this location and Prof. Mišković, himself, was authorised by the University to initiate negotiations concerning the possibility of leasing this land on Fruška Gora. Since the owner of the land was the Monastery of Rakovac (one of many Serbian Orthodox monasteries there) and the land, itself, had been already leased by the Mountaineer Society "Fruška Gora" from Novi Sad, it was necessary to get the assent of this Society for concessing the lease (Pakvor, 1989). A corresponding contract concerning this transaction, dated on July 17, 1927, was made between the Belgrade University and the Monastery of Rakovac but it remained unsigned by the contracting parties. The advantage of this location compared to that at which the Astronomical Observatory of Belgrade University would be finally built, according to the climatological data, is that it has about 25 clear days more a year and that the amplitude of annual variations in the air temperature is lower (Simić, 1954; Milosavljević et al., 1973).

According to the necessities in the teaching and in the general development of the Astronomical Observatory as an institution Prof. Mišković initiated an action for building a pavilion on the land which belonged to the Astronomical Observatory

after the splitting of the old Observatory into the Astronomical and Meteorological ones in 1924. The work concerning the building of this pavilion with a dome of 6 m, in which the mounting of a Zeiss 200 mm refractor was foreseen, was given through a public auction, according to the Belgrade- Astronomical-Observatory archiv data, to engineer Siniša Švabić with a preliminary price of 97 000 dinars and it was finished in the following year (1928). On the same location two additional wooden pavilions were built: for the transit instrument of 100 mm and astrolab (Ševarlić and Arsenijević, 1989). With regard that the contract concerning the land lease on Fruška Gora for the purpose of building an astronomical obseravtory was not realised and that the space on the old location of the Astronomical Observatory was obviously insufficient to its progress, and especially that this insufficient space was menaced by the General Plan of City Development, a new contract was made on June 8, 1929 between the Borough of Belgrade and the University which foresaw that a land of 40 000 m2 on the Laudanov šanac (East Vračar) would be given to the University by the Borough, but followed by a condition that the land on West Vračar, used by that time by the Observatory, would be given back to the Borough on free disposition. In this connection one should consider the ruining of the 200 mm refractor pavilion in 1936 (Janković, 1984).

For the purpose of building the Astronomical Observatory on the new location was approved a State Bank credit of 9 557 000 dinars in total amount, to be payed during 25 years. Based on Prof. Mišković's drafts architect Jan Dubovi closely cooperating with him (the cooperation lasted 17 months) did the detailed plans according to which the Observatory was built. Following Prof. Mišković's proposal the authorised bodies established Dubovi's fee (comprising his part of the work) to 120 000 dinars.

After finishing the building the old observatory was left and the new one was moved in on July 1, 1932.

It is emphasized in the modern considerations concerning the building of the astronomical observatory that the effort of performing this task as qualitative as possible was evident. "The natural values of the terrain and the functional specifity were the initial advantage. The large location enabled to pay attention to each object and to include it into a urbanistic entirety." In these considerations one also finds for the main observatory building that "it, certainly, does the nucleus of this complex and all other objects are strongly directed to it." In the connection to this statement one should emphasize that the main building was the initial element from which the total complex should have been developed already in Prof. Miskovic's original draft. Its strict symmetry was especially expressed in the case of the main, southern, entrance to the building and "there is no element of the architectural tradition except the wide stairs and four simple columns but nevertheless your impression is as if you were entering a temple." The sentence on the frieze of the main building "Omnia in numero et mensura" has been said to, probably, in a way as brief as possible expess the value of the total Observatory Complex (Djurdjević, 1989). In this object, such as it is, the whole future activity of the Astronomical Observatory, as institution, would be developed. This activity within the time interval here borne in mind would occur uniformly but always followed by problems of financies and staff which as the initial problems, already from the time of the foundation of the Great-School Observatory,

would remain to be present forever. The activity of the Astronomical Observatory in the period here considered involved many calculational, observational and editorial efforts and it was reduced by the events of war in early 1941 to see its restitution already in the early postwar period.

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