

## TWO SIDES OF A SINGLE ASTROLABE

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The earliest known dated astrolabe from the Indian city of Lahore was made in 1567 by Allahdad; they are more than a hundred astrolabes extant which were made subsequently by his successors. The State Museum of Oriental Art (Moscow) displays an astrolabe (IC 3674) made in Lahore in 1587/88. Until now, there was only one description of the astrolabe made 45 years ago in Russian. New research of the instrument in 2014 revealed several problems. First, there were some inaccuracies in the previous description, i.e., the diameter of the instrument was incorrectly indicated as 160 mm. The actual diameter of the astrolabe is 151 mm. Secondly, the specific details of the astrolabe are found to demonstrate two different quality levels of the workmanship. Thus, the rete with 33 stars and one tympan (Mecca and a special plate showing only the horizon for a number of latitudes) were made by a skilled master. Four other tympan and the scales on the back and geographical gazetteer on the mater do not meet even the minimum requirements of workmanship quality. Plates for eight latitudes were made "by eye". Both they and the scales of sines and cotangents are completely non-functional. The shadow square is torn and arbitrarily located. Most of the astrological information at the back, including the planetary rulers of triplicities, decans, and terms, is, nevertheless, correct. There are some common elements with astrolabes manufactured by known masters of Lahore school (e.g., boot-shaped star-pointers) but the comparison gives no positive indication as to the name of the astrolabist. One possible source of the high-quality components is an astrolabe of Mirza Baysunghur, the Turkmen ruler of the Aq Qoyunlu dynasty. Thus, an astrolabe by Mirza Baysunghar (late 15th century) brings a new element into the history of astrolabe production in India!

The present investigation will be continued.

*Sergei Maslikov is an applicant for the Candidate Degree at the Institute of History of Science and Technology (Moscow, Russia). His thesis is devoted to astrolabes. Currently Maslikov holds the position of the Director of the Large Novosibirsk Planetarium. The sphere of his research instruments is history of astronomy.*

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