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Qāḍīzāde al-Rūmī: Ṣalāḥ al-Dīn Mūsā ibn Muḥammad ibn Maḥmūd al-Rūmī

F. Jamil Ragep

Born **Bursa (Turkey)**, ***circa* 1359**

Died **Samarqand (Uzbekistan), after 1440**

Qāḍīzāde al-Rūmī was known for his works in mathematics and astronomy, which were used extensively as teaching texts. He left his native Bursa, where his grandfather had been a prominent judge and his father an eminent scholar, and traveled to Persia in order to gain a higher level of proficiency in the philosophical and mathematical sciences. His nickname indicates his family's standing (Qāḍīzāde = son of the judge) and his origins (Rūmī = from what had been part of the eastern Roman Empire). He studied with many learned scholars in Khurāsān and Transoxiana, among whom was the famous theologian **al-Sayyid al-Sharīf al-Jurjānī** at the court of Tīmūr in Samarqand. Qāḍīzāde, however, felt that Jurjānī was deficient in the mathematical sciences. After Tīmūr's death, Qāḍīzāde found both a student and a patron in Tīmūr's grandson **Ulugh Beg**, also in Samarqand.

Qāḍīzāde joined a group of scholars in the circle of Ulugh Beg that taught mathematics and astronomy, as well as other sciences. He became the head of the madrasa (school) of Samarqand, and Ulugh Beg often attended his lectures. Qāḍīzāde also became one of the directors of the Samarqand Observatory after the death of **Jamshīd al-Kāshī** in 1429, and he undertook its observational programs assisted by **ʿAlī al-Qūshjī**, who continued the program after Qāḍīzāde's death.

Qāḍīzāde was not known for his innovations or creativity. He was most famous for his commentaries on **Maḥmūd al-Jaghmīnī**'s astronomical compendium entitled *al-Mulakhkhaṣ fī ʿilm al-hayʾa al-basīṭa* (1412) and **Shams al-Dīn al-Samarqandī**'s geometrical tract *Ashkāl al-taʾsīs* (completed: 1412); the large number of extant manuscripts of both commentaries indicates their enduring popularity as teaching texts. Therefore, it is not surprising that one also finds supercommentaries on Qāḍīzāde's commentaries written by many scholar–teachers including Sinān Pāshā (died: 1486), **ʿAbd al-ʿAlī al-Bīrjandī** (died: 1525/1526), **Bahāʾ al-Dīn al-ʿĀmilī** (died: 1621), and Qāḍīzāde's student **Fatḥallāh al-Shirwānī** (died: 1486). All of these individuals continued the tradition established at Samarqand, thereby disseminating the mathematical sciences throughout Ottoman and Persian lands. Also noteworthy is that the marriage of Qāḍīzāde's son to Qūshjī's daughter would eventually sire the famous Ottoman astronomer–mathematician **Mīram Čelebī** (died: 1525).

A number of other astronomical works are sometimes attributed to Qāḍīzāde, including a supercommentary on Ṭūsī's commentary (*taḥrīr*) of the *Almagest* and a treatise on the sine quadrant, but it is not clear which of these are authentic. The ascription of a commentary (*Sharḥ*) on **Naṣīr al-Dīn al-Ṭūsī**'s major astronomical work *al-Tadhkira fī ʿilm al-hayʾa* (Biblioteca Medicea Laurenziana or. MS 271) to Qāḍīzāde is certainly not correct; this manuscript is actually an incomplete copy of the commentary by Jurjānī.

Among Qāḍīzāde's mathematical works is a treatise on determining the value of sin 1°, for which he seems to have relied heavily on the work of Kāshī. Qāḍīzāde's only philosophical or theological work is a supercommentary

on **Athīr al-Dīn al-Abharī**'s *Hidāyat al-ḥikma*, although he intended to write a refutation of parts of Jurjānī's famous commentary on the Persian ʿAḍud al-Dīn al-Ījī's (*circa*: 1281–1355) *Mawāqif*.

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