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## Tezkireci Köse İbrāhīm

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*Flourished* **Szigetvár, (Hungary), 17th century**

Tezkireci, an Ottoman astronomer and bureaucrat who settled in Istanbul, is known for having translated the French astronomer Noel Durret's (died: *circa* 1650) work entitled *Nouvelle théorie des planètes* from French into Arabic; this was the first book in Ottoman scientific literature to have been translated from a European language. The work, which was printed in Paris in 1635, was translated sometime between 1660 and 1664 and appeared under the title *Sajanjal al-aflāk fī ghāyat al-idrāk* (The mirror of the orbs with the utmost perception). In addition to containing astronomical tables, it was the first work in the Ottoman world to discuss the Copernican system and **Tycho Brahe**'s model of the Universe. The book also included the first diagrams illustrating those systems.

A bureaucrat charged with writing official memoranda, Tezkireci found the time to occupy himself with astronomy. There is little other information about his life except what we can discern from his translated book. In the introduction, Tezkireci reports that when he first showed the translated work to the chief astronomer (*başmüneccim*) Müneccimek Şekîbî Mehmed Çelebi (died: 1667) in Istanbul, Müneccimek at first disapproved saying that "Europeans have many vanities similar to this one." But eventually Müneccimek came to appreciate the work after Tezkireci Köse prepared an ephemeris based on the French tables, and Müneccimek saw that it was in conformity with **Ulugh Beg**'s *Zij* (astronomical handbook with tables). Müneccimek copied the work for himself and bestowed upon the translator a benefaction, saying, "You saved me from suspicion. Now I have full confidence in our *zîjes*."

In 1663 Tezkireci Köse again worked on the translation during his time with the Ottoman army at the winter quarters in Belgrade, this time with the encouragement of the *Kâdîasker* (chief judge) Ünsî Efendi (died: 1664). Tezkireci recalculated all the solar, lunar, and planetary mean motions of the *zîj* (originally compiled according to the meridian of Paris) and used the sexagesimal system; Tezkireci further abbreviated the tables and arranged them according to the signs of the zodiac (*abrâj*). He presented a copy of the work to *Kâdîasker* Ünsî Efendi.

Later, Tezkireci Köse would translate most of the introduction of the work from Arabic into Turkish, leaving a few explanations in Arabic. This became the final form of the work. In the introduction, after a brief account of the history of astronomy, Tezkireci presents explanations, arranged in 24 subchapters (*ta'lim*), which are followed by tables. In 1683, Cezmî Efendi (died: 1692), a judge in Belgrade, found a copy of the *Sajanjal* that had probably been given to Ünsî Efendi, and prepared another edition of the work.

From the introduction to the *Sajanjal*, we learn from Tezkireci that he had written another work about which he states: "For the proofs I compiled a different and new treatise (*risāla*), containing all operations that are easier [to use] than the *Almagest*, as well as compiled a work for ephemerides that are used internationally and that are more graceful and succinct than all [others]" (Istanbul, Kandilli Observatory Library, MS 403, fol. 2a).

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## Selected References

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