



TRABZON ÜNİVERSİTESİ İNSAN VE TOPLUM BİLİMLERİ FAKÜLTESİ

ULUSLARARASI KATILIMLI

# YAVUZ SULTAN SELİM (BİLİM, DÜŞÜNCE, SANAT) SEMPOZYUMU

08-10 MAYIS 2025

## BİLDİRİLER KİTABI



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## MİRİM CHALABÎ, HIS GRANDFATHER ‘ALÎ AL-QŪSHJÎ, AND THE PRINCIPLES OF ASTRONOMY

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Mîrim Çelebi'nin astronomi biliminde felsefi prensiplere ihtiyaç olup olmadığı hususunda dedesi Ali Kuşçu'yla aynı fikirde olmadığı yaygın biçimde kabul edilegelmiştir. Bilindiği üzere Kuşçu, Naşîrüddin Tûsî'nin **Tecrîdü'l-İ'tikâd**'ı üzerine yazdığı şerhte böylesine prensiplere ihtiyaç olmadığını ileri sürmüştür. Mîrim Çelebi ise Yavuz Sultan Selim'e ithaf ettiği ve dedesine ait **Risâletü'l-Fethiyye** üzerine yazdığı şerhinde doğa felsefesi, metafizik (ve matematik) alanlarından gelen prensiplerin astronomi için gerekli olduğu yönündeki genelgeçer görüşü yinelemektedir. Ancak bunun Kuşçu'ya aykırı bir görüş olduğu yönünde bir şey söylememektedir. İşin doğrusu, dikkatli bir okuma, Mîrim Çelebi'nin dedesine ait yaklaşımdan haberdar olmadığı izlenimini uyandırmaktadır. Bu durum, Kuşçu'nun pozisyonunu elinin tersiyle iten çağdaşı Abdülalî Bircendî'yle belirgin bir tezat oluşturmaktadır. Kuşçu'nun görüşlerinin, **Fethiyye** üzerine daha önce bir şerh kaleme almış olan öğrencisi Gulam Sinan tarafından iyi anlaşılmış olmasıysa dikkat çekicidir. Bu makalede Mîrim Çelebi'nin, dedesinin serdettiği radikal görüşlerden görünürde habersiz oluşunun taşıdığı muhtemel anlamları irdelleyecek; Kuşçu'nun **Tecrîd** şerhinde sergilediği yaklaşımların, İran dünyasında gördüğümüzün aksine Osmanlı bağlamında ne ölçüde ele alındığına dair bazı mülâhazalarda bulunacağız.

When ‘Alî al-Qūshjî arrived in Istanbul as a permanent resident in early 877 H/1473 CE, he had less than two years to live. Yet in that brief time, he would make major contributions to the intellectual life of the Ottoman world whose influence would last for centuries.<sup>6</sup> One of these contributions was an Arabic astronomical work entitled **al-Risāla al-Fathīyya**, which was presented to Sultan Mehmed II in Rabī‘ I 878/August 1473 at the time of the Sultan’s victory over Uzun Hasan at the conclusion of the Otlukbeli war. The work belonged to a genre of astronomical writings called **hay’a**, works that provided a theoretical overview of Ptolemaic astronomy and mathematical geography.

Thanks to Hasan Umut, we now have a critical edition and English translation of the **Fathīyya** as well as important information regarding its context and influence (Umut, 2019). One of the interesting aspects of the work is its omission of an introductory section setting forth the natural philosophical and metaphysical principles of astronomy, something that one finds in almost all other **hay’a** works. This exclusion is consistent with Qūshjî’s stated position in his commentary on Naşîr al-Dîn al-Tûsî’s **kalām** treatise, **Tajrîd al-İ’tiqād**, where he explicitly states that astronomy does not need Aristotelian natural philosophy and metaphysics; rather, astronomy can be based solely upon mathematics, observations, and rational assumptions such as the economy of nature (Ragep, 2001). Qūshjî’s stance found few adherents, but it did generate considerable discussion. For example, ‘Abd al-‘Alî al-Bîrjandî (fl. 913/1507) provides a

<sup>6</sup> On Qūshjî’s life and works, see now the excellent overview by Hasan Umut (2019: 7-112).

paraphrase of Qūshjī's position (without naming the author) and then states that excluding natural philosophical and metaphysical principles is not possible for astronomy.<sup>7</sup>

One of Bīrjandī's contemporaries was Maḥmūd ibn Muḥammad ibn Mūsā Qāḍīzāde, better known as Mīrim Çelebī, who was a grandson of 'Alī Qūshjī. Mīrim wrote a commentary on his grandfather's **Fathīyya**, entitled **Sharḥ al-Fathīyya fī al-hay'a**, which was completed in 925/1519 and dedicated to Yavuz Sultan Selim. In the introduction to his commentary, Mīrim states the standard view that the principles of **hay'a** are either **taṣawwūrāt** or **taṣdīqāt**. **Taṣawwūrāt** are conceptualizations that are proven within the discipline itself; **taṣdīqāt** are higher-level verifications that come from other sciences and are accepted without proof within **hay'a**.<sup>8</sup> These **taṣdīqāt** principles that are not in need of proof within **hay'a** come from 3 disciplines: geometry, natural philosophy, and metaphysics.<sup>9</sup>

Now this obviously is in contradiction to 'Alī Qūshjī's exclusion of natural philosophy and metaphysics. Mīrim realizes that his grandfather did not have the standard introductory section on natural philosophical and metaphysical principles. However, his explanation for the omission seems misleading, not to say disingenuous. Here is his comment on Qūshjī's lemma: "The introduction of that in need of being presented before commencing [our main] objective."

These being the conceptual (**taṣawwuriyya**) principles of the science. He [i.e., Qūshjī] avoided presenting the verified (**taṣdīqiyya**) principles, I mean the propositions proven in the three disciplines [i.e., geometry, natural philosophy and metaphysics], as some authors in this science have persisted in doing; [this was done] by a desire for brevity.<sup>10</sup>

There are several things that can be said here. First and foremost, Qūshjī clearly was not seeking brevity but, as explicitly stated in the **Sharḥ al-Tajrīd**, did not believe natural philosophical and metaphysical principles were necessary for the discipline of **hay'a**. Obviously Mīrim Çelebī disagrees with this but does not engage his grandfather with a rebuttal, something that is in sharp contrast to Bīrjandī's rebuke in his **Sharḥ al-Tadhkira** (Ragep, 2024: Appendix II, 138-39). Second, Mīrim's rather brief presentation of the principles is far shorter and less nuanced than what one finds in Bīrjandī's commentary. As noted above, Bīrjandī also explicitly

<sup>7</sup> For Bīrjandī's text and an English translation, see Ragep, 2024: 138-39. As discussed in the article, the disagreement between Qūshjī and Bīrjandī had implications for many aspects of astronomy, in particular the question of the Earth's motion.

<sup>8</sup> (Mīrim Çelebī, Feyzullah 1347, f. 7b; Garrett 507H, f. 5b)

فإن كانت تصویریة تبین فی ذلك العلم وإن كانت تصدیقیة تبین فی علم آخر وتستعمل فی ذلك العلم على أنها مسلمة

<sup>9</sup> (Mīrim Çelebī, Feyzullah 1347, f. 8a; Garrett 507H, f. 5b)

ومبادئها الغير البينة يتعلّق بعضها بالهندسيات وهو المأخوذ من الأصول والرسائل المتوسطة بينه وبين المجسطي والبعض بالطبيعيات والإلهيات

<sup>10</sup> (Mīrim Çelebī, Feyzullah 1347, f. 8a; Mīrim Çelebī, Garrett 507H, ff. 5b-6a)

المقدمة فيما يحتاج إلى تقديمه قبل الشروع في المقاصد من المبادئ التصورية للعلم وأعرض عن إيراد المبادئ التصديقية أعني القضايا المتبينة في العلوم الثلاثة كما هو دأب بعض المصنفين في هذا العلم روماً للاختصار

confronts Qūshjī's position by providing numerous examples that show that natural philosophical and metaphysical principles are needed in the science of astronomy.

We can gain a bit more insight into Mīrim's position regarding the principles of astronomy from a marginal note in Feyzullah 1347, f. 8a, which is an autograph of Mīrim's commentary on the **Fathīyya**. The note begins by saying: "I found this statement in the margin of the manuscript that the author drafted (**sawwadahā**), written in his handwriting." This evidently refers to Qūshjī's statement regarding the content of his **Fathīyya**, namely that "I arranged it according to an introduction and three parts." As Hasan Umut has noted, this sentence occurs only in the final version of the **Fathīyya**. Interestingly, this addition can also be found in the margin of the Mashhad copy of the **Fathīyya**, which may well be in Qūshjī's hand. As such it may be the marginal note Mīrim is referring to.<sup>11</sup> Mīrim's marginal note in Feyzullah 1347 continues:

There is no need for the apology by one of those who has undertaken a commentary on this book, namely his saying that he (Qūshjī) strangely abandoned the familiar methodology, pointing to the book being extremely abbreviated and exceedingly condensed, despite this methodology not being strange as well as being similar to what some authors have done, such as the author of the **Miftāḥ** and the author of **Bahā'īyyat al-Hisāb**,<sup>12</sup> among others.

To understand Mīrim's point, we need to know what he is reacting to. Since the only previous commentary of Qūshjī's **Fathīyya** was that of Ghulām Sinān (d. 912/1506), who was actually a student of Qūshjī, it would seem that he is the object of this objection.<sup>13</sup> And we can confirm this by quoting from Ghulām Sinān's commentary. After briefly describing the subject matter of the three parts of Qūshjī's **Fathīyya**, he then states the following:

This is what an examination of [the content of] his words in the second and third [parts] leads one to, even though he did not state it as such at the beginning of his book, desiring brevity with [just] a reference to what is to come. Such is not rare in the writings of [certain] authors, in particular in the **Miftāḥ** of al-Sakkākī in the beginning of **al-Ma'ānī wa-al-Bayān**.<sup>14</sup> However, it would be clearer to make an introduction of a first [part] that is separate from the three [other] parts, because it would be an introduction to the entirety of the discipline of **hay'a** according to what was declared in the commentary on the **Tadhkira**, not just [to] the first part.<sup>15</sup> The

<sup>11</sup> According to Hasan Umut's critical edition of Qūshjī's **Fathīyya**, the sentence "I arranged it according to an introduction and three parts" occurs only in the third, i.e., final, version and is missing in the first two (Umut, 2019: 354, n. iv); it is in the margin of Mashhad Dānīshkade-yi MS 746 (Umut, 2019: 458-59). Ghulām Sinān does not include this lemma in his commentary, but he may be referring to it in his statement that Qūshjī has a "reference to what is to come" (see n. 11 below for the text).

<sup>12</sup> The two works referred to are Sakkākī's **Miftāḥ al-'Ulūm** and (probably) Ibn al-Khawwām's **al-Fawā'id al-Bahā'īyya fī al-Qawā'id al-Hisābiyya**; I owe the latter reference to Mehmet Arıkan.

<sup>13</sup> On Ghulām Sinān and his commentary on the **Fathīyya**, which was dedicated to Bayezid II, see İhsanoğlu, 1997: 1:68.

<sup>14</sup> The reference is to the third part (**al-qism al-thālith**) of Sirāj al-Dīn al-Sakkākī's **Miftāḥ al-'Ulūm**, where he introduces this part with a separate introduction (**muqaddima**) to **'ilm al-ma'ānī** and **'ilm al-bayān** (Sakkākī, 1987: 161-62).

<sup>15</sup> Ghulām Sinān may be referring to al-Sharīf al-Jurjānī's commentary on the **Tadhkira**, where Jurjānī states that "[the definitions and rules] are placed at the beginning of those books, because becoming

phrasing of the author is amenable to this, inasmuch as he did not state the phrase “the first part” nor did he explicitly state the introduction was its [i.e., the first part’s] introduction as he stated explicitly in the third [part]. Further, the introduction to the discipline according to what is found in the commentary on the **Tadhkira** is extensive; however, what is most in conformity with **hay’a** are the conceptual principles that are connected with the fields of geometry, not natural philosophy. For that reason, the author chose [to include] the first and leave out second.<sup>16</sup>

Mīrim’s main objection to Ghulām Sinān’s comment seems to be that there is no need to criticize the lack of a general introduction to **hay’a**, one that would presumably have included not only a mathematical introduction but also one dealing with natural philosophy. In defense of his grandfather, Mīrim notes that other authors, e.g. al-Sakkākī, also left out a general introduction. Indeed, that is the case as noted by Ghulām Sinān. And both in the **Tadhkira** and in the **Fathīyya**, the part of the book dealing with sizes and distances has an introductory section containing preliminary propositions [**muṣādarāt**], which is analogous to Sakkākī’s introduction to the part of his book dealing with **al-ma’ānī wa-al-bayān**. But what Mīrim does not deal with is Ghulām Sinān’s more general point that in fact Qūshjī does provide a geometrical introduction but leaves out anything on natural philosophy, which Ghulām Sinān understands is in conformity with his teacher’s position regarding the principles of astronomy. Again, as before, we have the odd situation that Mīrim does not acknowledge his grandfather’s position and instead attributes the lack of a natural philosophy introduction to “brevity.”

Where does this leave us? There are several possibilities. Perhaps Mīrim does know his grandfather’s position but does not want to engage in a public dispute, having provided his own contrary belief in the importance of natural philosophy and metaphysics for astronomy. He could thus circumvent the entire issue by claiming that Qūshjī left out those things, “desiring brevity.”

Another possibility is that Mīrim does not know or understand his grandfather’s position. That would mean that he has not read Qūshjī’s **Sharḥ al-Tajrīd**, or at least the parts where he discusses the principles of astronomy. This may seem far-fetched, but let us consider Mīrim’s scholarly output. As far as we know, Mīrim did not write anything on **kalām** or any of the other religious sciences; his writings are confined to astronomy, astrology, and optics (Fazlīoğlu, 2005: 30: 160-61). As such he may have had a minimal interest in **kalām** with only a superficial knowledge of his grandfather’s commentary on the **Tajrīd**.<sup>17</sup> It may be worth mentioning here

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acquainted with them singularly is easier than becoming acquainted with them when mixed up with the subject matter” (al-Jurjānī, Commentary on Tūsī’s **Tadhkira**, Intro. [4], Fatih 3399, f. 3b.)

<sup>16</sup> Here is the full passage, based on Carullah 1504, f. 2a-2b and Halet Efendi 537, f. 2a-2b.

اعلم أَنَّ الأستاذ عليا القوشجي رحمه الله رتب رسالة الفتحية من الهيئة على ثلاث مقالات وجعل الأولى في بيان هيئة الأفلاك وما يتعلّق بها والثانية في بيان هيئة الأرض وما يتعلّق بها والثالثة في معرفة مقادير الأبعاد والأجرام ورتب الأولى على مقدمة وستة أبواب يشتمل سادسها على أربعة فصول والثانية على عشرة أبواب والثالثة على مقدمة وستة أبواب هذا ما يقتضيه النظر إلى كلامه في الثانية والثالثة وإن لم يصرّح به في أول كتابه روماً للاختصار مع الإشارة إليه بما سيأتي ومثله ليس بعزيز في كلام المصنّفين خصوصاً في مفتاح السكّاني في أول المعاني والبيان لكنّ الأظهر أن يجعل مقدمة الأولى خارجة عن المقالات الثلاث لأنّها مقدمة تمام فنّ الهيئة على ما صرّح به في شرح التنكّرة لا المقالة الأولى فقط وعبارة المصنّف قابلة لهذا الجعل حيث لم يذكر لفظ المقالة الأولى ولم يصرّح بكون المقدمة مقدّمتها كما صرّح به في الثالثة ثمّ إنّ مقدّمة الفنّ على ما وقع في شرح التنكّرة كثيرة لكنّ الأصل بالهيئة هي المبادئ التصوّرية المتعلّقة بالهندسيات لا بالطبيعيّات فلذلك اختار المصنّف الأولى وترك الثانية

that Mīrim does not seem to know all the revisions Qūshjī made to the **Faṭḥiyya**. As noted by Hasan Umut:

While Ghulām Sinān's commentary is based on the **Faṭḥiyya** text that includes the latest version of parameters, Mīrim Chalabī uses the one that has mostly the earlier parameters. Thus, one wonders how Mīrim Chalabī, a descendant of Qūshjī and one of the most eminent astronomers of his period, was not informed of Qūshjī's latest revisions. As mentioned several times before, Ghulām Sinān studied the **Faṭḥiyya** with Qūshjī, and it is likely that he was more aware of the development of the **Faṭḥiyya** text (Umut, 2019: 530).

A third possibility is admittedly speculative and more general in scope. Not only is Mīrim's seeming ignorance of his grandfather's position puzzling, it is also curious that it is not brought up by Mīrim's onetime student Aḥmad Ṭāshkubrīzāde (d. 968/1561) in his discussions of **hay'a** and Qūshjī. In the discussion of **kalām** in his **al-Shaqā'iq**, Ṭāshkubrīzāde actually lists Qūshjī's commentary on the **Tajrīd** first and describes it in quite laudatory terms (Ṭāshkubrīzāde, 1975: 97-100). There are, however, no specific examples given that might elucidate his high praise. In his **Miftāḥ al-Sa'āda**, he also has occasion to mention Qūshjī's works. In fact, he describes the **Faṭḥiyya** as extremely beneficial and provides the interesting tidbit that Mīrim wrote his commentary on it during the time he studied it with him (Ṭāshkubrīzāde, 1985: 1:349). He also mentions there the **Tajrīd** commentary, noting the dueling glosses on it by Jalāl al-Dīn al-Dawānī (d. 908/1502) and Ṣadr al-Dīn al-Shīrāzī (d. 903/1497) (Ṭāshkubrīzāde, 1985: 2:159). However, again we are left without any clear idea of what issues were matters of contention.

Of course, the lack of detailed analysis by Ṭāshkubrīzāde might mean little, especially given the genres of bio-bibliographical and encyclopedic works represented by his **Shaqā'iq** and **Miftāḥ**. On the other hand, one has the example of Tahānawī's thesaurus of technical terms, **Kashshāf İştīlāḥāt al-Funūn**, dated 1158/1745, where one finds, under the listing for **hay'a**, an extensive quotation from Qūshjī's **Sharḥ al-Tajrīd** dealing with his insistence that astronomy does not need natural philosophy and metaphysics (al-Tahānawī, 1862: 1:48-49). This last example brings up an interesting possibility. Tahānawī is South Asian and most likely reflects the traditions of learning in Iran, Central Asia, and South Asia. From a cursory review of the glosses and supercommentaries on Qūshjī's **Sharḥ al-Tajrīd**, it is not hard to conclude that the vast majority of their authors also come from Iran, Central Asia, and South Asia.<sup>18</sup> What is striking is the lack of such works among Ottoman authors. Obviously, Ottoman scholars knew of Qūshjī's commentary, and there are a fair number of extant manuscripts of the work in modern Turkish manuscript collections;<sup>19</sup> however, the lack of engagement through the

<sup>17</sup> Robert Morrison has a different view: "Despite Mīrim Çelebī's acknowledgment of astronomy's dependence on philosophy, a number of remarks about astronomy's suppositions situated Mīrim Çelebī's commentary on **al-Risāla al-Faṭḥiyya** in a conversation with **kalām**" (Morrison, 2021: 321-26; quotation is on 323). But the examples Morrison provides can be understood as coming from earlier **hay'a** authors (who did engage with **kalām**) rather than with his own scholarly engagement. And in any event, the fact that Mīrim does not acknowledge perhaps the most important conversation of **hay'a** within the context of **kalām**, that of his own grandfather, speaks volumes

<sup>18</sup> For a convenient listing, see <https://islamsci.mcgill.ca/RASI/docs/pipdi.htm#dd34>. The listing there of a commentary by Ṭāshkubrīzāde is most likely a mistake.

<sup>19</sup> I once counted (roughly) 40 copies in the card catalogue at the Süleymaniye Manuscript Library.



commentarial process indicates, perhaps, that it was not of primary interest in Ottoman madrasas.<sup>20</sup>

In conclusion, the question to consider is the extent of Mîrim Çelebî's knowledge of his grandfather's radical position. From the above evidence, it would seem that he either did not understand, or did not know, of his grandfather's ideas and instead adopted a fairly conventional view of astronomy and its principles.

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<sup>20</sup> This is of course speculation on my part; my hope is that further research might shed light on this question.