

*Forgotten Experts: Astrologers, Science, and Authority  
in the Ottoman Empire, 1450–1600*

A. Tunç Şen

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The usefulness of a science is often measured by those who pay for it. This makes for shaky ground for those who research and practise their chosen disciplines, especially if the future of rulers, battles, or politics is at stake. In *Forgotten Experts: Astrologers, Science, and Authority in the Ottoman Empire, 1450–1600*, A. Tunç Şen recovers the agency of one such overlooked group of scientific experts: munajjims, specialists in astronomical, astrological, and mathematical sciences who served Ottoman Sultans and Pashas from the empire's origins in the fourteenth century until its dissolution after the First World War. Focusing on the pivotal period between 1450 and 1600, when munajjims were woven into the bureaucratic fabric of the Ottoman court, Şen traces how these experts navigated the fluctuating status of their profession amid changing rulers and competing disciplines.

One of Şen's central arguments is that while the reign of Bayezid II (1481–1512) was the heyday for munajjims, the later decades under Süleyman I (1520–1566) proved challenging and unfavourable. This shift from recognition and generosity to relative indifference raises the questions *Forgotten Experts* grapples with throughout: How did munajjims sustain their craft? What body of knowledge did they possess, and how did it differ from that of other scientific experts? How did they acquire their expertise? What authority did they hold? Who paid them, and why?

To answer these questions, Şen draws on an especially rich archival corpus totalling well over one hundred unpublished sources across more than forty archives worldwide. This diverse corpus includes both sources munajjims produced and texts their contemporaries wrote about them. Munajjims left behind almanacs (*taqwims*), reports on the calculation of auspicious hours, birth horoscopes (*zā'irja*), astronomical handbooks with tables (*zīj*), and astrological textbooks. Their contemporaries recorded bureaucratic documents and registers documenting salaries and status, as well as observations of and debates about their practice found in poetry, theological treatises, chronicles, and biographical dictionaries. The stories, experiences, and expertise that Şen gleans and analyses from these sources significantly change how the histories of

the astral sciences, hierarchies of knowledge, and the Ottoman Empire are understood and investigated.

Despite the quantity, variety, and richness of these sources, they have remained, until now, remarkably understudied in Anglophone scholarship. Historians have focused on astrologers predominantly in medieval and early modern Europe. Courts have proved fruitful sites, generating studies of the Bourbon, Viennese, and Milanese courts, to name a few examples. The shifting status of astrology has been well documented in early modern universities including, for example, Bologna and Kraków. Astrologers operating outside institutional bounds have also been thoroughly studied, especially the English astrologer-physicians Simon Forman and Richard Napier. Beyond Europe, historians have paid attention to medieval and early modern astral sciences in case studies of the Islamic world, Peru, New Spain, and China. Other scholars have examined astrology's place in early modern maritime activities and the adaptation of astrological practice to the 'New World'. Astrology's role in the Copernican Revolution, and indeed its Islamic roots, has sparked animated discussion over the last two decades. Against this backdrop, *Forgotten Experts* stands out not merely as the first comprehensive study of astral practitioners in the Ottoman Empire in English, but also offers a novel comprehensive framework of expertise and authority as heuristic tools. Şen's model of inquiry generates new questions about the practice, while integrating overlooked non-European practitioners into global narratives of early modern science.

Munajjims in Ottoman courts, as the book shows, were consistently the subject of controversy, facing challenges from patrons, rivals, and popular opinion. These disagreements were forged by the differing epistemological values actors ascribed to bodies of knowledge. Modern historians still debate over how to categorise 'forgotten' sciences, such as astrology, often falling back on binary frameworks: enlightened and outdated, science and superstition, native and foreign, natural and judicial. These frameworks are by no means new, and draw on earlier debates with early modern, and medieval, natural philosophy. Acutely aware of the risks associated with such frameworks, Şen suggests that munajjims should neither be granted more significance and prestige than they held nor be undervalued in the competence they possessed. Munajjims themselves understood their expertise to be both useful and controversial.

Consider Riyazi (died c. 1587), a munajjim serving Süleyman's court in the 1540s and 1550s, whose case is detailed in Chapters 4 ('Fortunes Turned') and 5 ('Occult Rivalries'). Riyazi expressed bitter disappointment at the lack of recognition he received. The ambivalence toward his practice seemed unfair given his erudition not only in astral sciences—both astronomical (*hay'a*) and astrological (*aḥkām*)—but also in history, genealogy, medicine, and philosophy. In his translation of Ibn Kathīr's (1300–1373) chronicle *al-Bidāya wa-l-nihāya* (The Beginning and the End), an exhaustive account of Islamic history from the creation of the world to his own time, Riyazi captured his frustration in the following composition:

Having acquired myriad virtues, most refined  
 My mastery and skilfulness, perfected  
 Yet banished to a corner, desolate  
 From recognition and favour, separate  
 Though in my superiority, solace found  
 Yet, where does reverence for the experts abound? (170)

Such disappointment might not be surprising when considering how his practice was both sought after and, at times, repudiated. In one episode during the 1550s, Riyazi composed a treatise on talismans in a bid for Süleyman to support new research in the astral sciences. He suggested erecting human-sized talismanic sculptures made from tin and copper—metals corresponding to Jupiter and Venus, which were thought to have been linked to the bubonic plague—to impede the spread of plague epidemics in Istanbul. For this to be efficacious, Riyazi emphasised the need for astronomical precision achieved with precise instruments and a new observational programme, feasible only with royal financial backing. His idea did not garner the support he sought. As his contemporaries explained, the populace felt aversion toward these objects as statues rather than as talismans. Şen explains the problem was one of size rather than principle, since talismanic shirts and amulets did not provoke the same hostility. Even though his sculptural talismans failed to win approval, Riyazi's proposed date for the construction of the Süleymaniye Mosque complex, penned slightly earlier around the first half of 1550, was not merely accepted but preferred over times proposed by other munajjims.

Riyazi's story, as Şen lucidly explains, captures a shift in attitudes toward astral-scientific patronage: from recognition and generosity during Bayezid II's reign in the 1480s to the early 1510s, to a contrasting indifference during Süleyman I's from the 1520s to the 1550s. This shift signified increasing ambivalence toward munajjims' practice and frames the book's broader inquiry.

It was not easy to become a munajjim. Chapter 1 ('Munajjims' Expertise') provides a comprehensive overview of the expertise munajjims held and its scope, how they acquired it, and the sites that made this possible. Standard training to become a munajjim, according to one authority of the astral sciences, al-Bīrūnī (973–1048), included the study of geometry (*bandasa*), arithmetic (*hisāb*), the science of the structure of the heavens (*hay'a*), and the science of the decrees of the stars (*ahkām*). Once completed in a prescribed sequence, this technical expertise gave munajjims the ability to compute, measure, and interpret the stars and planets. Munajjims were thus both masters of time—since calculating temporal markers such as hours, days, months, or years required an understanding of celestial movements—and of celestial interpretation, discerning what effects the heavens had on earth. The book's remaining four chapters focus on a chronological examination of the social and intellectual lives of munajjims, the stakes found in their expertise, and the challenges they faced.

Chapter 2 ('Persianate Foundations') recounts the fateful lives of two little-known munajjims, their strategies for acquiring royal support, and their self-fashioning: 'Abdurrahmān (died after 1510) and the first chief court munajjim, Khiṭābī (d. between 1512 and 1515). Both were trained in Persia and, as such, exemplify the Persianate influence on later 'indigenous Ottoman' munajjims trained within Ottoman territories. The patrons of munajjims are examined in Chapter 3 ('Heavenly Patronage'), in which Şen contends that Bayezid II was a champion of science, a view that contrasts with his more common portrayal as a pious and zealous figure who thwarted Ottoman scientific and technological advancement. Chapter 4 traces the evolving trends and preferences in experts and fields of expertise during the reign of Süleyman. Dream interpretation, mystics claiming prophetic power, geomancy ('ilm al-raml, involving the interpretation of lines of dots drawn in sand or on paper), and letter divination ('ilm al-jifr, operating through a complex nexus linking letters with numbers, elements, prophets, cyclical historical eras, and other phenomena) became the preferred bodies of knowledge for forecasting at Süleyman's court, pushing the heavenly portents of munajjims to the sidelines. Chapter 5 scrutinises a variety of textual examples of forecasting to examine who held the authority and expertise to predict the future. In comparing the competing expertise of 'occult practitioners' such as geomancers and mystics with that of munajjims, this final chapter demonstrates how seemingly analogous practices were in fact in competition and conflict rather than, as at times previously suggested, congruence.

The narrative emerging from these chapters brings lost knowledge to life while engaging questions that have been shifting the field—from recovering the importance of 'occult sciences' in the medieval and early modern world toward tracing the precise meanings, complications, and contours of those who practised and sponsored such arts. Şen scaffolds his study productively with expertise and authority as heuristic tools. Together, these serve not only as analytical categories but also as terms the actors themselves employed. This affords insights into the social relations between 'men of knowledge' and 'men of rule', allowing Şen to trace rivalries and competing assertions of authority within and between fields of knowledge and professions. In so doing, *Forgotten Experts* explains how and why Ottoman practitioners of science, in this case munajjims, should be considered integral and inextricable from global narratives of late medieval and early modern science. Ottoman episodes and agents of scientific practice, as Şen understandably contends, have often been ignored in these narratives, an oversight to which *Forgotten Experts* is an antidote.

*Forgotten Experts* is an impressive, detailed study that offers a sobering view of the realities munajjims faced in the Ottoman Empire during the fifteenth and sixteenth centuries. Şen teaches us what is at stake for authorities of knowledge in local contexts: their epistemic hierarchies, economic realities, and political pendulums. This book prompts us to rethink the tricky business—technically, socially, and politically—of prognostication in the early Ottoman sphere and the early modern world more generally. It pushes the boundaries of what we think it took to run an empire and

demonstrates what difference shifting the geographical focus away from European archives can make. These achievements will continue to encourage historians to look beyond familiar archives, reconsider established frameworks, and revisit the histories we have narrated about the people, methods, and sites in the business of scientific expertise.

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