DEĞERLENDİRME / REVIEW ARTICLE

Response to Nir Shafir*

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I wrote *Science without Leisure* as an accessible monograph for people who are interested in Ottoman science. Part of my intended audience were historians of science and Ottoman historians who perhaps did not have science in their analytic toolkit. Although the subject has become more approachable, perhaps even somewhat fashionable, in recent years, there seemed to be little in the history of Ottoman science to attract broad scholarly attention merely a decade ago. Even classically trained historians of Islamic science have avoided the topic more or less entirely. Anyone who takes a close look at histories of science that include the Ottomans will note that the year 1600, give or take, is a common endpoint. When they do not end around 1600, the assumption on display is that things just kept going as they did before 1600. Many of these works read the lack of a theoretical leap as theoretical continuity, while *Science without Leisure* proposes that maybe there was no theory to keep or break.

Nonetheless, I also try to bring out the kernel of truth in this earlier historiography with a high level of source-representation for Ottoman science. I was lucky to have some excellent scholarship at my disposal. I had a good bird's eye view and I saw nothing that would have whetted the appetite of a historian of science fifty years ago. But, I saw a lot that would whet the appetite of a contemporary historian of science. What I tried to understand was why all the things

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I am, we are, used to reading under the heading of Islamic science seemed to have been completely absent in Istanbul for at least 70 years – realistically, much longer. And, why, on the other hand, did Istanbul share so many practical genres and concerns with other geographies? Why was it that there was a slew of drug recipes, but no theoretical reflection on them? Why were there so many almanacs and instrument manuals, but practically nothing on modelling celestial motion? It was like the Scientific Revolution, except without the science. I employed a pan-comparative framework to locate Istanbul. I looked north, south, east, west, but also forwards and backwards in time. As a trained historian of science, I was also curious about how the example of Istanbul spoke to the last several decades of history of science scholarship. I compared older and newer approaches to past science to reach what may be called a theoretical approach to early modern science in general.

While the genuine orientalist explanation for the scarcity of theoretical pursuits in early modern Istanbul is conservatism, opportunistically defined either as adherence to medieval theories or as anti-science sentiment, there was practically zero evidence for either. What is more surprising, the city had an unusually high number of *medreses* and the historiography that I was used to reading made *ulema* sound like they were living the good life. Most scholars seemed to agree that these people were extremely powerful elites and the *ulema* usually appeared as antagonists in most modernist narratives. But where were all the books? Why was it so hard to detect this massive epistemocratic machinery that seemed to halt or slow other pretenders to knowledge? What I found instead was that the *ulema*, specifically the professors, were a relatively populous and very poor group in Istanbul. Most of them wrote nothing at all. They could probably neither stop nor start an intellectual movement.

How did it get to be this way? This is not what you would see if you looked back at sixteenth-century Istanbul. If conservatism was not the answer, where else might one look? Political economy seemed enticing. Although we have known for a long time that the Ottomans endured hyperinflation for decades around the end of the seventeenth century and although we have known that professors had their salaries written into their titles (50-akçe professor, 60-akçe professor and so on), no one had put these two together. The juxtaposition showed me two things: One, the economic situation of the professors had vastly deteriorated since the sixteenth century; and two, money was an extremely important aspect of the profession – and, as these things go, money became more important as the

salaries shrank. Although I am no apocalypticist, it was almost like the foretold Islamic apocalypse had happened in Istanbul and the *ulema* were making do in a post-1000 AH world.

Foucauldian historians may project similar material realities onto a symbolic plane, may trivialize the role that money plays in making and breaking institutions and, may even forget that poor people do not necessarily experience poverty symbolically. In my humble opinion, economic history should play a greater role in the cultural history of the Ottoman Empire, partly because the Ottomans themselves seemed to be obsessed with money. That professor titles would contain the salaries is just a minor indication of a *mentalité* that is waiting to be probed deeper. We would all like to forget about money, but that has at least as much to do with our material conditions as it does with our ability to control our thoughts.

In Science without Leisure I tried to come up with the most parsimonious and, in my view, the most straightforward argument based on the totality of the evidence, including economic evidence, at my disposal. I also relied on my own personal experiences and observations. While that might not make me the consummate historicist, at least I did not write like a historian who had never met a single real person. I asked what happened when the Ottomans did not pay their professors, but I also asked what happens when you do not pay your professors today. I found that what you lose is the belief in the intrinsic worth of knowledge. And, I went beyond the idealism that such an assertion might entail to ask why anyone ever believed that knowledge was worth anything. There are many spiritual schools around the world that put value on learning, but their endorsements generally do not extend to the anatomy of the chicken egg, the movement of Jupiter, or a general and empirical description of the physical world. The Hellenic teaching profession, where you will find the greatest number of believers in the intrinsic worth of all types of knowledge, also happened to be a profession where you made money by selling knowledge. That profession also became the basis of both the university and the medrese. Thus, the clearest indication of the absence of belief in the intrinsic worth of knowledge seemed to be the absence of theoretical concerns of the Greek variety.

And, the best of my faculties directed me to the notion of practical naturalism as I sought to explain what I observed in Istanbul. Historians of science have long abandoned the classic demarcation between science and pseudo-science, but

that does not necessarily mean that science cannot be demarcated in other ways. How can one type of knowledge that takes years and decades to acquire be mistaken for other things, maybe other types of knowledge, that also take years and decades to acquire? Why does science education exist? Why are teaching and learning broadly recognized as work? By presenting practical naturalism, the defining quality of which is the absence of theoretical concerns, I also attempted to normalize or at least help normalize a phenomenon that was extremely widespread around the globe in the seventeenth century – and, it is a phenomenon that is still with us today in some ways. And, surely, we are living through a global experiment in shrinking the material circumstances of the teaching profession. What do we expect will happen as governments keep squeezing educators? I present some ideas in the conclusion.

Science without Leisure may be somewhat uncomfortable to those who are not cold-hearted social scientists. It may even pose a mild challenge to historians of science, intellectual historians, Ottomanists, Europeanists, early modernists, modernists, sociologists or anthropologists. In the book, I do not adopt a proscience stance, but I also do not adopt an anti-science stance. I present a case for decline of science in an arguably Islamic city and invoke debates on the decline of Islamic science. Following decades of (mainly American) scholarship fighting the notion of Ottoman decline, I bring Ottoman decline back in specific and concrete ways. But, I also suggest that what seems like the scientific revolution may actually have to do with Europe's continuing access to Greek categories of inquiry via scholastic institutions. It was not innovation or genius, but rather the accumulation of knowledge that separated Europe from most other places. And, instead of asking why new philosophies took hold in seventeenth-century Europe, I ask why new things happened to look like philosophy at all. In doing so, I try to sort out what was global and what was local in European and Ottoman science, perhaps suggesting the opposite of what people are used to hearing about both. I also try my hand at the existing notions of Westenization and modernization, again, with some conclusions that may not make everyone happy. I am also shameless in suggesting that leisure is crucial for many science-related activities. Who can freely talk about leisure in a world where even "living wage" is too uncomfortable to the ear? Pierre Bourdieu, from whom I borrowed some of my theoretical framework, usually deployed leisure to criticize scientists who had it. I tried to picture naturalists who did not have it. Finally, I am perhaps also putting a thorn on the side of recent scholarship on scientific practice by probing the

limitations of practice. I wrote it all for the seminar table. My honest thinking on a lot of different issues, disciplines and historiographies is on the pages of *Science without Leisure*. It was the best I could do with the resources, the mind and the time I had. I was not hoping to get a medal, but I also did not foresee the kind of loathing that I found in Nir Shafir's review.

Nevertheless, I would like to thank Shafir for his deep reading of my book. It is not often that an author is fortunate enough to be taken seriously enough that a reviewer takes time away from more rewarding work to write a thirty-page review. Shafir is certainly entitled to his generally negative opinions and I am certain other readers have formed their opinions also. I do not much appreciate the comments about my professional identity, but people who have thin skin do not write books like *Science without Leisure*. What I find the most problematic about the review is that it presents the reviewer's protest as the author's scandal. The counter-evidence Shafir presents is trivial and occasionally misleading.

Let me start at the end, because how my work interacts with about twenty years of Islamic studies scholarship on Ottoman intellectual life is possibly the greatest question for most readers. In a word, I do not think Islamic intellectual history explains Ottoman thought. This should be obvious in some ways. A lot of Ottoman thinkers were not Muslims, but our field usually compartmentalizes intellectuals by religion without always asking whether religion was a meaningful boundary for, say, naturalistic pursuits. To be clear, I recognize that Islamic intellectual history exists -- and I certainly don't think it's generally bad or poor -, but my work has allowed me to see the social and economic limits of intellectual and cultural history in an environment where economic circumstances were especially oppressive to Muslim intellectual and cultural life. I noticed quantity and quality patterns in the extant sources that no other work to date has addressed. But, I was also left without analytic tools because we really do not know how to work with rather than reject the notion of "less" in culture. I think the effort to turn everything, including the absence of specific types of acculturation, into deliberate features of culture has also made those of us living in fecund corners of the West sadly forget that something like science is not just a cultural trait, but an edifice that is kept up generation after generation with great effort and at great expense. Not all polities were or are epistemocracies. Knowledge may or may not be power. It also may or may not be present. I was not at all Eurocentric but I also recognized that those of us who critique Eurocentrism may sometimes overlook the fact that resources available to some European scholars and scientists resulted in

a net advantage. Some people enjoyed such advantages in their pursuit of knowledge, could devote more time to intellectual work and could get better results. If I said that I have better access to knowledge resources at an elite university and thus have a material advantage over my peers in many other places, this would not be problematic. It would even serve the cause of justice. I do not think ignoring simple material differences in the past serves justice. It sparks a gratuitous and unrewarding culture war.

Nowadays, our job as historians is to root for the underdog and to shore up evidence of lower registers of culture – that's our usual problem, our daily exercise. But what happens when the things that are missing are higher registers of culture, as in Elias's *Bildung*? What happens when you do not have an epistemic elite? Since all our analyses nowadays peg knowledge to power, we do not even have the right tools to deal with knowledge that is obviously not power. Americas top universities are filled with struggling faculty who continue to insist that they are elites, teaching genuine economic elites who firmly reject that they are elites all the while. A direct look at Istanbul in the seventeenth century dispels the notion that there is always a well-articulated and exclusionary elite culture.

Shafir believes he is on sound footing when he says: "[s]cholars in the seventeenth and the seventeenth and eighteenth centuries actually complained that their students and colleagues devoted too much of their time to studying philosophy," adding that what they are studying is hikma. Frankly, this elusive hikma has been a beacon of (what I believe is false) hope in the field. What is hikma? Is it the same as Ottoman hikmet? I can give some very grounded Ottoman uses of hikmet: Derviş Hasan Mehdi's Esrar-ı Hikmet (Mysteries of Philosophy) from the end of the sixteenth century, where Avicenna roams the countryside performing magic tricks; Levazimü'l-Hikmet (discussed in the book), which is a book of drug recipes, or perhaps, most famously Ali Çelebi's Divan-1 Hikmet, which is an alchemical work. Alchemy, medical recipes and magic were all called *hikmet* and, by the period that I discuss in my book, they had all shed their philosophical baggage. I can, I have, put down many pieces of evidence that attests to the ubiquity of practical naturalism where hikmet is freely used to name the many medicineand alchemy-related pursuits of my protagonists, if they can be called that. Shafir seems to use the twelfth century (largely Persian) meaning of hikma (meaning falsafa or Greek philosophy) to say something about seventeenth-century Istanbul, but the field of Islamic intellectual history has not presented a single protagonist, now for almost twenty years, of this alleged seventeenth- and eighteenth-century

turba philosophorum in Istanbul. Where are the missing hükema? While Shafir is quick to ask for a prosopography from me, he readily settles for just one of the three very brief and not terribly specific or well-informed complaints (from Ahmed Dede, Muhammed Saçaklızade and Fazlızade Ali) about the ubiquity of hikmet as proof of hikma. My hypothesis is that evidence has not come forward because it does not exist. I am ready to stand corrected once it does. My book raises the possibility that perhaps there was no hikma left in hikmet.

Shafir presents copy evidence to support his point but appears reluctant to consider that the copy evidence may have the opposite of the desired effect. And, underestimating the invisible labor that I put into the book, casually mentions that Süleymaniye has fifty copies of the Qanun of Ibn Sina. I would let it slide if Shafir was not grossly misleading his readers. First, Süleymaniye lists fifty items, not fifty copies. Multi-volume copies have multiple entries and a few of them are actually Ibn Nafis's commentaries. Of the "fifty," only two are from my period. They are both made for elite libraries, as any reader of my book could have guessed. By 1660, regular scholars had long been priced out of the Islamic intellectual tradition. I can also present some reminders and share some of my observations on the copies of earlier philosophical and scientific work. The Ottoman Empire lasted six hundred years and acquired many of the earlier copies as the empire expanded in the fifteenth and the sixteenth centuries. Consequently, a fair portion of copies predate the Ottoman Empire. Many "copies" made during the Ottoman centuries are extremely incomplete and we sometimes don't even know where and how they were kept until they appeared on the Süleymaniye Catalogue. A few copies of older philosophical texts were made for the usual suspects in the seventeenth century - the Köprülüs and Feyzullah Efendi - and a few were sold as commodities to (mainly European) collectors, but the general distribution invariably points to some well-used sixteenth century copies, some unmarked or supercificially-annotated eighteenth century library copies and many more nineteenth century copies. Furthermore, a full Turkish translation of the Qanun appeared in 1767 and it preceded Persian and Urdu translations by centuries. The only comparable translations were into Hebrew and Latin and, the Turkish translator Tokadi claims that the Turkish translation was far superior to anything in Hebrew or Latin because it made use of a long tradition of commentaries (none of them Ottoman, unfortunately). The copy that Tokadi preferred dated from the fifteenth century and came from Ahmed III's library. The other copy that he used was the sixteenth century Medici print, which Tokadi did not like

very much. Obviously, a diligent philologist like Tokadi, writing in the relatively rich medical setting of Istanbul, had no recent Avicennan legacy on which he could build.

We are also reminded by Shafir that the worst of the inflationary trends was over by the early 1600s. Sure, but the relative easing of inflation in the early seventeenth century would have put an end to the sad state of teaching only if there was a parallel proliferation of 200-500 akçe professorships. That did not happen. Instead, what happened was scholars took on side gigs to make ends meet. And, just like the janissaries, they shelved their calling and started selling services. This economic picture is not some projection of the modern university. It is about the value placed on the work that is teaching. If teaching was always meant for the well-to-do or as one part-time job among many or as a means to tax exemption, as Shafir suggests, why did medreses ever pay good money? Why did professors complain about pay when things were better earlier in the sixteenth century? Could it be that things got very bad and remained very bad for such a long time that everyone forgot that one could make a living as a professor? Such considerations, and not some gross oversights, have led me to write a book is not "all about the money," but about political economy -- the redistribution of monetary resources according to priorities that may or may not transcend the acquisition of even more money - and the place of scholarly leisure in political economy. Perhaps there was no choice during the economic crisis of the early seventeenth century, but one would expect to see money injected into scholarly pursuits once inflation subsided. It still has not come forward to this day, because the legacy that many Ottomans – like modern Turks – they inherited from that inflationary period is an understanding of science and scholarship as low-pay, low-register and "public" facing pursuits. The absence of a massive and broad correction in professor salaries also suggests that flying high in the Islamic scholarly orbit was not a priority for Ottomans who had money and power. Then, perhaps the poverty of Ottoman scholarship was ultimately the result of elite preferences, if we are trying to read as much agency as possible into the past. And, such a claim leads to the conclusion that there is at best a tenuous connection between Ottoman history and Islamic intellectual history.

Staying somewhat cool under the small umbrella of Ottoman legal practice, fiqh and logic could flourish, to a limited degree. But, where are the many great tafsirs and hadith books (or commentaries, or supercommentaries) of the seventeenth century? Why is it that people who studied logic did not smoothly slip

into physics and metaphysics? Isn't what they should do in the intellectual – also pedagogical and also Greek – structure (the *ulum-i akliye* or the *rational sciences*) for which logic is implicitly serving as a proxy? If logic is to be taken solely as one of the so-called instrumental sciences, for what science was it instrumental? I appreciate the path of logic, but I do not see it leading anywhere except legal practice in this period. As Shafir sings the praises of Istanbul's urban and legal culture, I believe he might be overlooking the possibility that other places, such as London, also had very lively legal cultures and had other outcomes, like scientific facts. I suppose Shafir makes sense if we reduce *medrese* to just a manifestation of a broad urban and legal culture, but, again, that was not what the *medrese* was about in the earlier periods. This was the sort of transformation that came out of the economic decline of teaching.

And, even so, Istanbul's scholarly participation in logic was much weaker than what you would find elsewhere in the empire. How many Istanbulite logicians can we name in this period? And why only two? Shafir says all such works are in Arabic. But what exactly was in Arabic? We won't know for sure until broad surveys are attempted, but impressionistically I can say that the work in Arabic that is coming out of Istanbul are mostly grammar texts – the first and last engagement with the language for many Ottoman scholars -, brief commentaries on some popular sections of the Koran, some hadith florilegia, some moral works and some Sufi texts. In absolute terms, scholarship coming out of Istanbul was not up there even much smaller Muslim towns from earlier centuries. Just to remind the readers Istanbul was not city with ten or fifteen professors like what one may find in many European cities. We are talking about hundreds of scholars who concurrently inhabited Istanbul. Once you factor in the size of the scholarly field, the situation becomes even more puzzling. I won't insist that the "almighty akçe" or on an extreme pragmatism that makes Western pragmatic philosophy look funny was the cause, but I would expect a good critique to present an alternative explanation. If we are talking about a city that is really leaning into its Sunni identity, should we not expect tafsir and hadith to soar just as pesky Greek genres crash into oblivion? Where is the Bukhari or the Tabari of seventeenth century Istanbul? Shafir also downplays the absence of new works during the period covered in my book. Does he consider what the lack of new works over a period of seventy years in a large city with many educational institutions means? Shafir says it's lack of interest and I wholeheartedly agree. But what does it mean to be uninterested in the vast majority of one's alleged intellectual legacy? What

kind of hiatus is seventy years? I am sure there are some very creative ways to circumvent these questions, but *Science without Leisure* does not follow any of them.

Shafir also thinks that my treatment of scholars is "all hypothetical." I would invite him to take a headcount of scholars who appear in bibliographic dictionaries and put the number against the number of teaching positions in the city. He would find, as I did, that we know nearly nothing about perhaps ninety percent of the professors. They lived and died without leaving a scholarly trace. Why? I realize Shafir would have preferred a biography of a specific müderris or two, but that would be the real hypothetical exercise. I do not present my narrative from the proverbial horse's mouth, but I could – anyone who looks at the evidence can - make out the contours of a mature, generations-long misery in the teaching profession. Professors who complained about money seemed to live earlier on, when everything was much, much better. Shafir thinks that the absence of complaints means things had improved in the seventeenth century. I think Monty Python's Dead Parrot Sketch. Plainly put, no personal account of the kind Shafir is expecting to see would survive the simple and casual accusation of cherry-picking. The realization that informs my work is that Istanbul in the seventeenth century was no cherry orchard. Rather than insist that one person who lived and died well makes history, I tried to put down the social and economic bones as best as I could because economy and society are the challenges for anyone writing a history of scholarship in Istanbul. He believes that I have over-generalized when I based my thinking on how much the very top professors in fact made from teaching. Readers may judge for themselves. Unearthing a good set of biographies was not the task that I set for myself, nor are such biographies critiques of my work. At any rate, the one biography that Shafir cites is from the latter half of the eighteenth century. The handful of Istanbul scholars from 1660 to 1732 whose life we can recount with any satisfying detail pose a representation problem that is best addressed at a methodological level. And, yes, a prosopography of scholars is desirable - Science without Leisure is a prosopography of practical naturalists, if I may suggest-, but that is another project, another book.

The easiest way to criticize me is to find large groups of scholars who are doing the kinds of things I claim they are not doing. At this time, we simply don't have the baseline by which to judge whether the person we are studying as a proxy for Istanbul's intellectual history was broadly representative, an "exceptional normal," or simply a very exceptional figure. I presented a general picture of naturalistic fields and read my sources in a way that was consistent with the general

picture I presented. My narrative does not "fall flat." It is flat, as in it sticks firmly not just to the evidence of my choice, but to the totality of the evidence that I had seen and leaves the vacuous panegyrics outside. And, although Shafir claims my book is a house of cards, I at least build a structured argument that is open to critique. What Shafir prefers is perhaps an account that deliberately falls short of a serious hypothesis.

Shafir thinks I approach recent scholarship "glibly," but that's not what I am doing at all. To the contrary, I have taken all the empirical evidence seriously, but I was often left with the question of representation. I may be better attuned to the question of representation because that was the question I was persistently asked as someone who worked mostly on translations from Western languages. It is a burden of proof that I have carried and I do not think it is particularly distasteful to ask others to share this burden. What it takes to explain normal things and what it takes to explain exceptional things are different. In my book, the framework of decline throws into high relief many intellectual histories that would be very ho-hum if one assumes – as some have – a considerable level of educational and intellectual continuity between the sixteenth and the seventeenth centuries and across the Islamic geography. In my narrative, people who manage to preserve a field of knowledge are the heroes, and not the regulars, because simply preserving a good level of knowledge about anything was such a high achievement. Our field's reluctance to discuss decline has robbed such heroes of the credit that they deserve and has rendered many studies of Ottoman intellectuals uninteresting. What some Ottoman intellectuals did may have been as good as nothing in a "vibrant intellectual atmosphere," but in a less than vibrant atmosphere, there are epics to be sung about them. The current positive inflection in the field also makes some critical voices like Katip Çelebi sound like madmen mumbling to themselves or like contemptuous elites who were also ignorant of the rich Islamic knowledge traditions flourishing around them. People who sought to go to or who just praise European universities in the seventeenth century sound plain foolish. Why not just study your seven hundred dense folios of the Qanun fit-Tibb in Istanbul, where so many know it so well, instead of going off to Padua or Bologna to read a poorly rendered Liber Canonis Medicinae? Why look at some derivative European astronomy textbooks that will not hold a candle to the Almagest while you can have your pick of *Tahrir al-Majisti*s in Istanbul? And why translate European university textbooks in the eighteenth century when

their content should have been largely familiar to an average *medrese* student in the sixteenth century?

And, although Shafir thinks that I claim that the medrese was the hotbed of theorizing about nature, I absolutely made no such claims. My whole framing had to do with necessary and sufficient conditions. I claim that medreses where some old and boring theoretical texts could be studied were necessary - fifteenth and sixteenth century Ottoman history shows that plainly -, but may or may not have been sufficient. The same misunderstanding of my argument also leads Shafir to suggest that I should look at the court. Courts can patronize science when you have people with good command of science already floating around, but courts cannot create such knowledge in an instant. Education produces the floaters. And many histories of European science have developed the analytic tools that they have developed simply because they can take a relatively healthy higher education for granted. And what happens if you can't? Should you panic and check poor scholars' pockets for lint? Leverage scant evidence on the distant fulcrum of better days? Smudge geographies and chronologies to avert embarassment? Pretend insipid apologetics can really push the envelopes that need to be pushed? Or, perhaps, it is time that we start developing our own analytic tools, not just to explain our material, but also to help our colleagues in other fields who may be struggling with similar evidence.