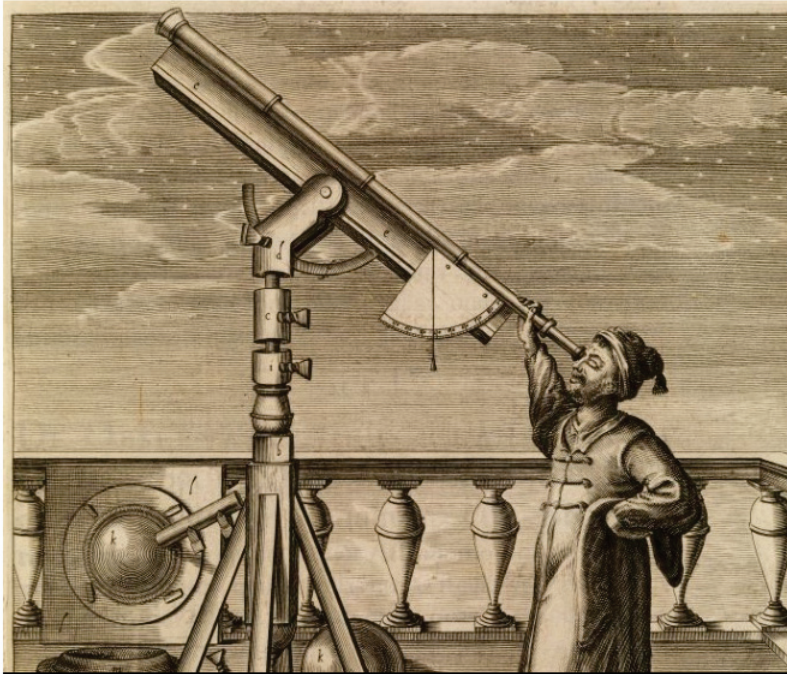




The Arabick Roots of Science, and Their Fruit to Come

By David Dobbs [✉](#) June 20, 2011 | 1:01 pm | Categories: [Neuron Culture](#), [Science Bloqs](#)



18th-century Arab astronomer Hevelius, colleague of Royal Society fellow Edmund Halley, using a telescope fitted with one of his own quadrants

If asked to trace the roots of modern Western science, most educated Westerners will point to the [scientific revolution](#) that flowered in Europe following the Renaissance, with [Copernicus's 1543 "On the Revolution of the Heavenly Spheres"](#) the main marker. There and then, it is thought, science began asserting an account of nature separate from that of religion. Study up a bit more, though, and as [Arabick Roots](#), a fine new exhibit at the Royal Society, describes, you'll find those empirical roots snaking back into the Middle East, where Arabic, Persian, and other pre-Renaissance cultures planted seeds that Western scientists have been harvesting ever since. [Copernicus](#), for instance, [relied partly on observations](#) made by [Muhammed al-Battani](#) (858-929), who had figured out the year is 365 days (and a bit more) long. Chemist Robert Boyle [cribbed heavily](#) from work done by 13th-century Muslim chemist Al-Iraqi. Royal Society physicians [learned about inoculation](#) from doctors in Constantinople and Aleppo.

How does this entwined history play out today? I'll be moderating [a panel next week](#) at the World Conference of Science Journalists in Doha, Qatar, that gathers journalists and scientists to look at this question. "Unveiling Arab Science," the opening plenary, ably co-produced by my friend and fellow writer [Mo Costandi](#), will include [Rim Turkmani](#), the Syrian-born astrophysicist who curated the Royal Society exhibit, journalists [Ehsan Masood](#) and [Waleed Al-Shobakky](#), and neuroscientist and writer [Homayoun Kheyri](#). We'll look at how Middle Eastern has given rise to modern science, how the entwined but different histories of the regions and their cultures shows itself today, and how ongoing changes in the Middle East may change science and scientific culture there.

I feel lucky to be moderating this panel. The program description is below. If you've a question you think we should consider in the panel, please [drop me a line](#) or put it in the comments below. I'll file a report here afterwards.



David Dobbs writes [features and essays](#) for publications including the *Atlantic*, the *New York Times Magazine*, *National Geographic*, *Wired*, the *Guardian*, and other publications, and is working on his fourth book, *The Orchid and the Dandelion*.