For most westerners, and indeed for many Arabs, the spectacular achievements of Arabic-language science from the eighth through the 16th centuries come as a startling discovery, as if an unknown continent had suddenly appeared on the horizon. In mathematics, astronomy, medicine, optics, cartography, evolutionary theory, physics and chemistry, medieval Arab and Muslim scientists, scholars, doctors and mapmakers were centuries ahead of Europe. Centres for scientific research and experimentation emerged across Muslim lands—in Baghdad, Cairo, Damascus, Samarkand, Shiraz, Bukhara, Isfahan, Toledo, Córdoba, Granada and Istanbul.

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A thousand years before English emerged as the international language of science in the latter half of the 20th century, the Arabic language unified scholars across the Muslim world, generating a lively market of ideas from Samarkand to Córdoba. “A book published in Central Asia could be read in southern Spain less than a year later,” explains Roshdi Rashed, an eminent Egyptian-born historian of science, in his office near Paris. “Islamic learning was not like Greek science, which was limited principally to the eastern Mediterranean, but was spread across most of the known world.”

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Among the babel of scientists and scholars who crisscrossed the polyglot Muslim empire, the common language was Arabic.

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Even if scholars spoke Persian or another language at home, they wrote their papers in Arabic so that their colleagues in Baghdad, Toledo and elsewhere could understand them, he adds. Omar Khayyam may have penned his quatrains in Persian, but he explicated his mathematical concepts in Arabic. Correspondence among scientists—typically carried by cara- van messenger or carrier pigeon—was nearly as far-reaching in the 11th and 12th centuries as it was in the 17th, Rashed maintains.

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But despite its ultimate ascendancy, scholarly Arabic had a slow start. “Before the advent of science, Arabic was the language of poetry; it soon became the language of the new religion of Islam, but paradoxically, it did not become the language of power right away,” explains French science historian Ahmed Djebbar. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Baghdad’s Bayt al-Hikmah (“House of Wisdom”) became a vibrant center of translation. Works like Ptolemy’s *Almagest* and Dioscorides’ *De Materia Medica* were translated numerous times as scholars perfected Arabic terminology. The Greek word *parabola* was initially Arabicized phonetically as *barabula,* then subsequently refined to *qat za’id,* which literally means “thick section.” *Diabetes* was first rendered as *diyabita* then transformed to *da as-sukkar* (“sugar sickness”). Over time, Arabic scientific terms and star names were adopted into other languages, a list that includes *alkali, alcohol, algebra, algorithm, alembic, alchemy, azimuth, elixir, nadir, zenith,* Betelgeuse, Aldebaran, Rigel and Mizar.

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