
Editorial

The Iranian Connection

In an editorial entitled ‘Time to Connect’, the editors of the magazine *Nature*¹ extended an invitation to Iranian scientists to connect with their western counterparts in various scientific fields in a spirit of cooperation. The subject alluded to in that article concerned Iran’s nuclear energy program, which is so charged by political issues on both sides that I am sure they had little response from Iranian scientists in that respect. We Iranians fully realize that we are considered a pariah state and are thus ostracized by the international community as they rightly mentioned in their editorial. It is unfortunate that in this light, all our historical achievements in science, poetry, or statesmanship are ignored and mocked with historically incorrect depictions.

In order to ‘connect’, there must be mutual respect on both sides of the divide, and some glaring misunderstandings must be cleared so that we can start on level playing fields. As Iranians we are a very proud nation but we share many faults, including pride, with those other nations that are quick to judge us.

Historically, Iran is one of the longest surviving sovereign states in the world and naturally we jealously guard that sovereignty. Any perception of an outside threat will only precipitate a ‘closing of ranks’ as evidenced by the popular opinion that access to nuclear energy for peaceful purposes as well as modern rocket and satellite technologies are inalienable rights of the Iranian people. As the authors correctly mentioned in their editorial, the memory of the 1953 overthrow of Dr. Mohammad Mossadegh by an Anglo-American engineered coup and more recently the Iraqi invasion of Iranian soil add to the wariness of the Iranian people at this historical juncture.

In order to connect, it would be helpful to clear some basic misunderstandings by some Western scientists and scholars regarding the historical contributions of Iranians to various branches of science. From the three centuries (9th – 11th CE) that are sometimes known as the ‘flowering of Islamic science’,² the names and works of mathematicians and astronomers including

Kharazmi, Biruni, and Omar Khayam, and in medicine and chemistry, Razi (Rhazes), Ahwazi (Haly Abbass), and Abu-Ali Sina (Avicenna) are well known in the West. All these and many more are referred to as Arab scientists whereas they were all Iranians who wrote in Arabic, which was the *lingua franca* in all Islamic countries as was Latin in all of Christian Europe. No European scholar who wrote in Latin was ever referred to as ‘Latin’ or ‘Roman’ but were all known by their country of origin.

Iranians are extremely sensitive and take umbrage at being referred to as Arabs and it would be helpful if Western scientists could appreciate this seemingly simple fact and give credit where it is due. I shall give but a single example of this misunderstanding. The erudite polymath, Freeman Dyson, who is a mathematical physicist, and who I admire as a scholar and have learnt much about science from his writings, made such a *faut pas* in his essay and lecture ‘the Scientist as Rebel’.³ Dyson who prides himself as a lover of poetry since his schooldays at Winchester School in England, refers to Omar Khayam as an Arab mathematician and astronomer and goes on to quote one of Khayam’s quatrains translated by Fitzgerald. Although Khayam’s mathematical and astronomical treatise were largely written in Arabic, but his quatrains were only ever written in Persian (Farsi) and never in Arabic.

On the issue of scientific connection, there are several international conferences in various scientific disciplines held in Iran every year wherein several invited guest scientists from Europe and North America attend. Many Iranian scientists travel to the West to present papers and exchange views despite difficulties with visa and airport immigration authorities.

Historically, it is true that after 12th century CE science declined in the Islamic world. Steven Weinberg correctly mentions in his article ‘Without God’⁴ that Imam Mohammad Ghazali, the Sufi sage, was instrumental in extinguishing the torch of scientific learning in the Muslim world, which did not recover to the present day.

In Iran it was only in the 1960's and 1970's due to the return of Iranian students from Europe and North America, and aided by petrodollars, that there was the beginning of a resurgence of scientific institutions but it came to an abrupt halt following the Islamic Revolution and the eight year long Iran-Iraq war.

Many institutions of scientific learning in Europe and the US have been established for at least 200 years, whether within universities or governmental establishments, with a wide infrastructure for research. They have attracted so many of the world's brightest scientific minds, whether young and ambitious or mature and established.

In recent years Iran has attempted to establish fledgling institutions of learning and some of the brightest young scientists have been sent to the West for further education, but sadly few return as they envisage no future opportunities in their native institutions as compared with their Western counterparts.

Iran is a third world country, with a first world past and a middle world ambition for the near future. We realize that in science we cannot, in the

near future, compete with the West but we may be able to contribute modestly to the world of science. Our ambition is to be self sufficient in most areas of modern and future technologies and for this we require a modicum of basic scientific institutional foundations. It is in this modest ambition that we require 'connecting' with co-operation and mutual respect in the international scientific community.

"The evil that men do lives after them; the good is oft interred with their bones."⁵ Let it *not* be so with Iran.

References

- 1 Editorial, Time to connect. *Nature*. 2008; **452**: 1 – 2.
- 2 Khochbin S. Correspondence. Persian role in flowering of Islamic science. *Nature*. 2000; **405**: 14.
- 3 Dyson F. *The Scientist as Rebel*. *The New York: Review of Books*; 2008: 3 – 4.
- 4 Weinberg S. Without God. *New York Review of Books*. September 25, 2008; 73 – 76.
- 5 William Shakespeare. *Julius Caesar*. Act 3: scene 2.

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