

Sir, we've scripted the interview as follows, so please give it a look and edit it if necessary. please include your views regarding religion. sajjad khan

Editor

karakoram English section

Ayub medical college Abbottabad

"THE SNAPSHOT OF A SCIENTIST" - DR. PERVEZ HOODBHOY

WHO?

Pervez Amirali Hoodbhoy is professor of nuclear and high energy physics, and teaches at the School of Science and Engineering (LUMS, Lahore) as well as at Quaid-e-Azam University, Islamabad. He received his BS (electrical engineering), BS (mathematics) MS (condensed matter physics), and Ph.D (nuclear physics) degrees from the Massachusetts Institute of Technology, and remains an active physicist who often lectures at US and European research laboratories and universities. Dr. Hoodbhoy received the Baker Award for Electronics and the Abdus Salam Prize for Mathematics.

Over a period of 25 years, Dr. Hoodbhoy created and anchored a series of television programs that dissected the problems of Pakistan's education system, and two other series that aimed at bringing scientific concepts to ordinary members of the public, "Bazm-e-Kainat" and "Asrar-i-Jahan". He is the author of "Islam and Science - Religious Orthodoxy and the Battle for Rationality", now in 7 languages. As the head of Mashal Books in Lahore, he leads a major translation effort to produce books in Urdu that promote modern thought, human rights, and emancipation of women. In 2003 he was awarded UNESCO's Kalinga Prize for the popularization of science. Also in 2003, Dr. Hoodbhoy was invited to the Pugwash Council. He is a sponsor of The Bulletin of the Atomic Scientists, and a member of the Permanent Monitoring Panel on Terrorism of the World Federation of Scientists. Over the years, he produced and directed several documentary films that have been widely viewed on national television which deal with political, nuclear, and scientific matters. He is frequently invited to comment on these issues in Pakistani and international media.

In 2010, Dr. Hoodbhoy received the Joseph A. Burton Award from the American Physical Society and the Jean Meyer Award from Tufts University. In 2011, he was included in the list of 100 most influential global thinkers by Foreign Policy magazine.

WHEN?

Friday, May 25th 2012, 3pm

WHERE?

Physics Dept. QAU, Islamabad. In a small and simple office with numerous articles, tags, reminders, a few excerpts from the poetry of Faiz and Hafiz, family photos and a panoramic photo of destruction of Hiroshima on the walls, a green board with some strange physics stuff scribbled on it. And lots of books... "Now that is a scientist's office"!

BY WHOM?

Moiz, Sajjad, Hussain, Iftikhar, Danial, Sobia, Farwa

WHAT?

The interview...

Editorial Board: Sir, tell us something about your early education.... And how did you develop interest in physics?

Dr. Hoodbhoy: I was born in Karachi and went to Karachi Grammar School. I was a very naughty boy in school with little interest in studies until I started thinking and dreaming about magnets. Soon I developed a passion for electricity and this led me towards electronics and then science and mathematics. I started making little gadgets using various things collected from "kabari" shops that had various junk parts, including those collected from planes that had crashed years ago. I found all gadgetry fascinating and that's how I developed an interest in electronics. As I was finishing school, I got a scholarship to study at MIT. Although I had intended to pursue electronics, in my very first semester I came to know that the world was much bigger and wider than I had imagined. Physics became my passion, and that has never changed.

Editorial Board: What is your particular field of interest with in Physics?

Dr. Hoodbhoy: Earlier I worked in the nuclear physics, and then switched to the harder and more interesting field of particle physics. Now after teaching for nearly 40 years at QAU, I have retired and am learning condensed matter physics. I hope to do research and then later take students for Ph.D. in this field.

Editorial Board: Apart from being a scientist you are a political analyst as well. When did the political matters catch your eye?

Dr. Hoodbhoy: In 1969, when I went to MIT I had no interest in world affairs. But there I saw a new thing – students of MIT were raising their voices against their own government. They were protesting the relentless American bombing of Vietnam. My notion of patriotism had been that no one could, or should, be against the country he was born in. But when I listened to what they were saying, it made a lot of sense. Then in 1970 the people of East Pakistan started protesting against West Pakistani domination and were butchered by the West Pakistani military. Seeing what Americans students were saying about the inequity of their own society, I became sensitized to the inequity of what existed back home. For the first time the problems faced by a common man in Karachi hit me as indicating there was something deeply wrong. Soon I was a different person. I resolved never to settle in America. Now I only wanted to be a revolutionary.

Editorial Board: Why do you think the scientific and rational spirit is stagnant in today's youth?

Dr. Hoodbhoy: Science owes to an attitude – that of questioning everything and anything, and not being satisfied without a complete logical explanation. But our culture expects and rewards obedience, not questioning. Everywhere, including TV and books, we see people trying to impose their thoughts and referring to some higher authority rather than convincing us with logically argued reasons. A teacher expects obedience when he enters class. His goal is to make students remember and to obey authority. It is commonly said that “ustaad baap ki tarah hai” and, in our family system, you don't talk back to your father. But I think your teacher is not at all like your father. In a modern society a teacher has to be just a means for transferring knowledge, and for creating a mindset that is receptive to learning. So ultimately the stunted development of the scientific and rational spirit comes about because of the way we Pakistanis bring up our children.

Editorial Board: The world was an open place for you... you could serve in top universities of the world... Why Pakistan then?

Dr. Hoodbhoy: Very simply, it is because I was born and grew up here. If I had been born elsewhere, I would have gone there. Also, I like the people and feel more comfortable here. Would I feel comfortable in Egypt or Japan? No. As for India, I'd feel okay but not totally comfortable. As for America, I still feel like an outsider there even though I have studied and lived there. Also, there's a lot more that I can do here in Pakistan than there – things that carry meaning for me.

Editorial Board: How do you see the future of sciences in our country, keeping in mind the education system and the prevailing mindset?

Dr. Hoodbhoy: There are lots of intelligent people here, and individuals in Pakistan now have the possibility of doing very well personally. They live in the age of the internet and are plugged into whatever happens elsewhere. So the present is a lot different from the past. But our scientific institutions and educational standards are in very bad shape.

Editorial Board: It is common in our setup that children end up pursuing the same profession as their parents; either out of interest or because their parents wish so... did any of your kids join the same field as you?

Dr. Hoodbhoy: I think the choice of profession should be for individuals to make and parents should not force themselves upon their children. After all, it is the children who have to live the rest of their lives, not the parents. Of course, it is okay for parents to have preferences and make suggestions. I wanted my 2 daughters to study physics but they chose their own paths and I am okay with it. (Pointing to one of his daughters' childhood picture) This daughter of mine now has a son 4 years of age; she is doing her Ph.D in social sciences from Oxford. And this one (pointing to another picture) is teaching Gender Studies here in the same university.

Editorial Board: Just a fantasy oriented question... What is the physics perspective of time travel and apparition? Is it possible?

Dr. Hoodbhoy: One thing is absolutely true that if a person travels close to the speed of light, his

clock will appear moving slower as compared to me; that is called the time dilation. This has been checked a million times for particles. Einstein's point was that time is not something fixed. But if your real question is that if we can go back in time, then I don't really know. This involves General Relativity, together with quantum mechanics. The answer is probably not; but I can't say for sure because there are many different ways of formulating that question. But yes, serious physicists do talk about time travel as a serious possibility.

Editorial Board: How do you see religion and faith?

Dr. Hoodbhoy: Like your nationality, it's basically it's a matter of where and when you were born. People keep the religion of their parents 99.9% of the time. But there's no harm in having faith provided one realizes that this all accidental and you did not choose your parents. Remember that although you like to think that you were born into the "right religion", those born into the "wrong religion" also think the same. If everyone understands this, then we can all keep our respective faiths and yet live together without declaring each other as bad.

Editorial Board: Having a look at your office, we can see you have some great literary taste. What are particular favorites in such books?

Dr. Hoodbhoy: I have read some very beautiful books in Urdu; I would say the ones that made an impression on me were Udaas Naslein and Aag ka darya. I also have read a lot of old English authors like Dickens and Jane Austen, as well as some French literature. I particularly became fond of Flaubert. Now that I have so much work to do, reading novels has become a luxury for me.

Editorial Board: What about music?

Dr. Hoodbhoy: Yes I like music – lots of different kinds. From Abida Hussain to Nusrat Fateh Ali Khan to Begum Akhtar to Mehdi Hasan. Also the Beatles and Joan Baez!

As Dr. Hoodbhoy was expecting some guests, with this we bade good bye to him with lots of thanks for his precious time!