

WHERE SHALL PAKISTAN BE IN YEAR 3000?

Will Pakistan ultimately be able to provide prosperity, freedom, and human dignity to its citizens? Or is it destined to land into the dustbin of history as a failed state? Which road we travel upon will be largely determined by the extent and speed with which modernity and science are accepted as part of culture. At the turn of the century there is cause for worry. Today, like most Arab countries, Pakistan combines insatiable greed for the gadgetry produced by Science together with a profound antipathy for the method and philosophy of Science.

The "trouble" with Science – as seen by many both in this country and elsewhere – is that it is predicated on the primacy of reason on the one hand, and experimental verification on the other. It recognizes no authority except its own internal logic, has no sages or prophets, and its truths transcend geographical boundaries, cultural divides, and faiths. Finding these facts distasteful, some have insisted on pursuing the chimera of "Islamic Science" even at the end of this millenium. Readers may be aware of yet another fruitless conference on this subject, hosted last month by the International Islamic University in Islamabad. Progress becomes difficult, if not impossible for peoples who mistake the past for the future.

Many take comfort in arguments seeking to prove that Science is limited, incomplete, and lacks permanence. Yes, it is certainly true that Science, as it progresses, keeps imposing limits and constraints upon its own power. Einstein's theory of special relativity forbids any material particle, and even information, from travelling faster than the speed of light. Quantum mechanics forbids exact knowledge of the microrealm. Chaos theory, a relatively new development in physics, forbids certain phenomena (like weather) from being predicted with certainty. Kurt Godel's famous theorem forbids asking certain questions within any defined mathematical framework. And evolutionary biology forbids us from assuming that we humans have a purpose any different from that of apes or green peas.

I am sure these frank admissions must please quite a few readers, reassure others. Some will triumphantly cry out that they knew this -- doesn't everyone know already that Science is incomplete and insufficient? Nevertheless any admission of weakness by the enemy is, of course, considered welcome. Thanks to propaganda disguised as education, and the relentless efforts of Pakistan Television, Science finds few defenders and still fewer practitioners in this country to take up cudgels on its behalf.

Unfortunately for those who think that the self-limitations imposed by Science show up the soft underbelly of the beast, exactly the opposite is true. Unremitting honesty and objectivity, and strict respect for law, is precisely why Science is so absurdly strong. A Deity is certainly free to violate any law of nature, but woe to the poor physicist who disrespects, for example, the law of conservation of energy. It was the uncompromising demand that this law hold always and everywhere that made possible lathes and locomotives, lasers and lunar landings. The law-abiding nature of Science separates it from magic, which knows no limits, as well as the supernatural.

Whether we like it or not, Science is getting not just stronger, but immensely stronger. Societies that refuse to concede this are fated for marginalization in the centuries to come. Darwin told us this a long time ago and it is time we listened closely.

Humans and apes, the smart and the dumb, come from two branches of the same evolutionary tree. Please don't for a moment think this tree has stopped growing and branching; if anything it is speeding up. Human intervention is compressing eons into millennia, centuries into months.

Comes the year 3000. How then shall the world look? The Smarts will be merrily flying around the solar system, occasionally taking a vacation to Mars, establishing contact with distant civilizations, and perhaps travelling by way of worm-holes and time warps to distant galaxies. The primitive Internet that existed a thousand years ago will have been replaced by a vast system of distributed quantum computers with protein molecules serving as memory chips. The Smarts will have conquered disease, modified the aging gene, devised beautifully nuanced modes of expression far subtler than exists in the best of today's poetry and music. With minds symbiotically connected to massively parallel systems, they will create ever more beautiful systems of mathematics and resolve problems of physics much too deep for us to even imagine today.

And the Dumbos? They will be the neo-Taliban of all faiths, religions, and countries. This bunch of fragmented and fractious groups, consumed by hatred for the Smarts as well as each other, will fight out blood feuds and disputes with origins thousands of years into the past. They shall be helpless in the face of global pollution and drug resistant microbes because their education shall be no more than singing of past glories and safeguarding ideological frontiers, even as the rest of humankind is crossing frontiers of

outer space. Like the present ones across our western border, who shoot down supersonic aircraft with American Stingers and run jeeps fuelled by Shell gasoline, the Dumbos will continue to live off what the Smarts invent and are willing to part with. Their morality will continue to centre on matters related to procreation. As always they will blame fate, believe the cause of their misery is deviation from the True Faith, energetically purge unbelievers from their midst, and revel in the past.

The logic of Evolution is unforgiving, merciless, terrifying. Apes don't have much of a future on planet Earth. Nor do Dumbos. Isn't it time to wake up to this reality and get Smart?

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