

Losing out

It's been more than two years since new government recruits moved from the old "defined-benefit" category of retirement schemes to the fiscally less problematic "defined-contribution" scheme (thus capping the government's liability on this score). So the continuing failure to get a new law passed so as to allow the pension scheme to take effect, and to have its funds properly invested, is inexplicable. The result, as a report in this paper has pointed out, is that although nearly 500,000 government employees have moved to the "defined-contribution" scheme and are being debited their pension contribution every month, the money has not been invested anywhere, on the grounds that the law is not in place! Their money is simply lying in the Consolidated Fund of India and getting an 8 per cent return. That may not be unattractive in today's debt market, since risk is non-existent, but anyone watching the stock market reach for the stratosphere would recognise the lost opportunity. So, any chance that these employees had of riding the stock market boom with their retirement funds has been lost, even as stock prices have more than doubled in the period of inaction.

What is worse, the government does not have a consolidated database on the new employees. The records only say that Rs 233 crore has been collected from 81,000 employees, but this list excludes the much larger number of employees of the railways and of organisations that get funded through the government (such as teachers), and of state governments. With such large numbers of people involved, the vital importance of foolproof accounting can hardly be over-stated. Today, that risk cannot be ruled out. Surely, since India has organisations with the experience of handling large databases, and

which are up to managing the back-office work for the new pension scheme, it is time they were brought into the picture. And the government should also consider whether, even without a new law, it can deploy the funds collected under the new pensions scheme, by involving private sector fund managers.

The last thing the employees concerned need is the service level of the Employees Provident Fund Organisation (EPFO). So it is important to note that it is not just government employees who will get covered under the new pension scheme. Any citizen who today has no option but to take what the EPFO offers, could consider the new opportunity. For, while the interest paid by the EPFO is higher than that paid on government securities, the EPFO does not invest in equity markets (as private pension fund managers would), though there are enough studies which show that stock markets offer higher returns—even on a risk-adjusted basis. Apart from the issue of higher returns, there's also the issue of efficiency that needs to be considered. The EPFO has over Rs 8,000 crore in dormant accounts (people who've moved from one job to the other but have not transferred their funds). In comparison, under the new pension scheme, each member has a unique ID that stays with him/her while moving from one job to the next. The most important factor in favour of the NPS, clearly, is its potential reach across the country—today, even if you take the EPFO's number of enrolled members (41 million) at face value, this is still just 10 per cent of the working population. In 2002-03, the mean pay-out by the EPFO to those retiring was Rs 36,000, which is enough to get you an annuity of no more than Rs 270 a month. The country should be able to do better than that for its senior citizens.

Continuing toll

The government may claim to have adopted a pro-active strategy to contain and control the bird flu at the site of the infection in Navapur, Jalgaon, and surrounding districts of Maharashtra, Gujarat and Madhya Pradesh, but the danger of it spreading to other areas is very real. This is especially so because the dreaded H5N1 avian influenza virus is no longer confined to poultry farms, where it is possible to contain the problem *in situ*, but has come out into the open, infecting birds roaming about in rural backyards. As such, there is every possibility that the virus carrier birds and the people who tend them have already come into contact with innumerable other birds, animals and human beings. And timely detection of the flu surfacing at a new point cannot any more be taken for granted, as the country's only laboratory equipped to test this kind of virus, in Bhopal, is incapable of handling all the 5,000 odd samples it receives every week. As a result, most samples have to wait for days before being tested, and many do not get tested at all.

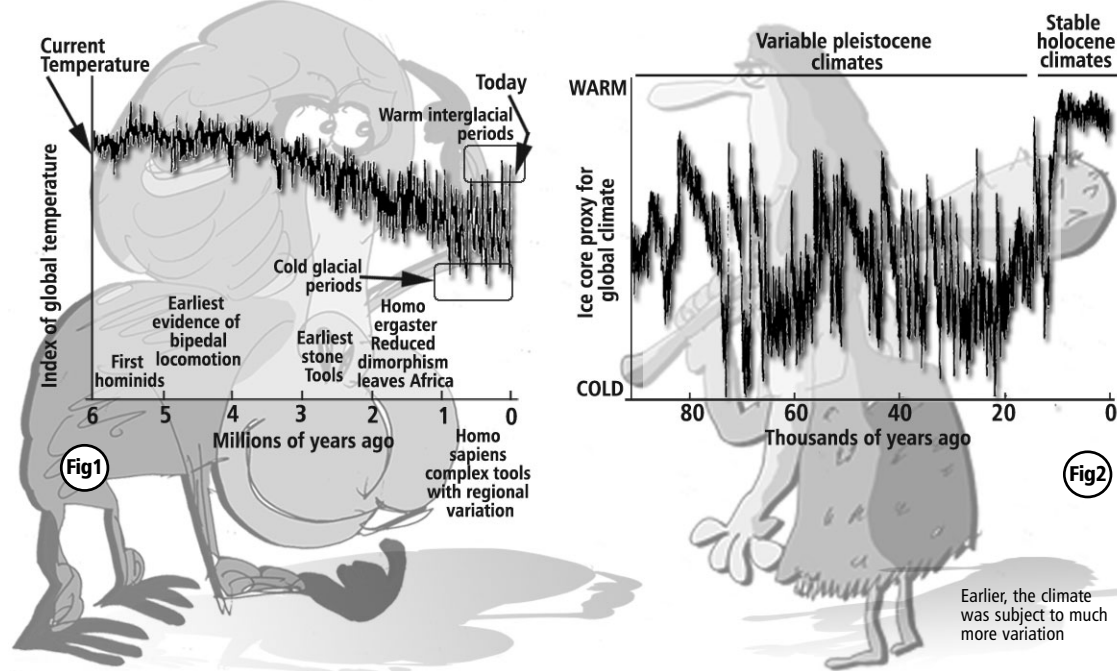
Under these circumstances, the authorities need to revisit their strategy for dealing with the problem. The reporting of any death of a poultry bird should be made mandatory, as is the case for notified diseases of cattle. And the poultry industry should take the lead in doing so. It was, indeed, the bid by a section of the poultry industry to hide the presence of the H5N1 infection in the Navapur area that probably contributed to its spread to native birds in nearby regions. Had the virus been reported immediately to facilitate timely action for its

containment, the situation may well have been different today. This apart, an awareness campaign on bird flu, on the lines and scale of the one launched for AIDS, needs to be mounted without delay. And irrespective of the costs involved, the country's testing facilities need to be augmented on a war footing. The cost of inaction on these fronts would be too heavy to afford.

Then there are the wider economic implications that go beyond the poultry sector. Going by the poultry industry's reckoning, poultry farmers have already lost around Rs 7,000 crore on account of the loss of domestic and export markets for chicken meat, eggs and other products. Worse still, this industry owes nearly Rs 12,000 crore to the commercial banks. Under the circumstances, it is far from certain that the money will be paid. Moreover, millions of workers engaged in poultry production and trade, feed manufacturing and trading units and other associated fields will be rendered jobless. The net result will be the crippling of one of the fastest-growing sectors of the economy.

What is needed, therefore, is not merely the containment of the disease among the birds but simultaneous action on several other fronts as well. For one thing, there is no need to build up an undue scare psychosis among consumers of poultry products. The fact that well-cooked poultry products (heated above 70 degrees centigrade) are safe for consumption is recognised the world over and has been officially endorsed as such even by the global bodies like the World Health Organisation.

PROCESS OF EVOLUTION



'Human' uniqueness?

Humanly modified environments are more congenial to us than to predators and parasites, and we can stay ahead by cultural adaptations, says DEEPAK LAL

Walking across the UCLA campus, my wife recently came across a bloody glove on a spade with a sign: "Salad is Murder". This anthropomorphising of Nature might appear to be part of growing New Age sensibilities in the West, but it poses a question which has exercised human minds for millennia: What is it to be human? This is the subject of a fascinating book by the historian Felipe Fernandez-Armesto (*Humankind—A Brief History*). Having lived within the animal kingdom since the Stone Age, he argues, the earliest humans recognised their kinship at least with the great apes and saw themselves as part of Nature. It was in the first millennium BC in the Axial Age when the great sages in India, China, the Near East and Greece created the world's major "religions" or cosmologies that humankind came to place itself above Nature, claiming at least trusteeship, if not dominion, over it. The Upanishads were the first to put humankind above the other animals because of their powers of reasoning and, above all, because of the claim that they alone had an eternal and immutable soul. But this still raised the question whether humans had the freedom to exploit other creatures for our benefit, or, being the stewards of Nature, we had an obligation of care for the whole of creation. For, as Ma-

havra argued, though different, the souls of animals most closely resembled those of humans and had therefore to be treated with respect.

But as greater knowledge of our closest cousins—the great apes—developed (particularly the "orang-utans", which in Malay means "man of the woods"), it became difficult to draw a sharp distinction about the uniqueness of the human ape. These close cousins were described as degenerate humans. From this, it was a small step to describe the "savage" primitive tribes like the pygmies of the Congo in similar terms, as degenerate "races", and the seeds of racism were sown. The Darwinian revolution showed that instead of apes being degenerate humans, humankind were just evolved apes, whilst modern genetics has established that there are no races, as there is barely any genetic difference between the most widely separated humans. Moreover, the genetic difference with our closest cousins, the chimpanzee, is also small.

So the next avenue explored to define the uniqueness of the human animal was cultural. But as the study of the variety of human cultures progressed with the Voyages of Discovery, their sheer diversity made any universal features hard to identify. More seriously, our closest hominid cousins seemed to share many of

the elements of "culture" which had seemed to be uniquely human. The key example is the Neanderthals. They had bigger brains than humans and similar forms of culture. They probably also had language. Thus, they engaged in ritual burials, which shows that they had the two ideas of life and death, and in these burial rituals shared the common culture of humans, who, apart from a merely instinctive valuing of life, have "a conviction that life is worthy of reverence [and], which has remained the basis of all human moral action ever since". But the Neanderthals became extinct and Homo Sapiens have multiplied and colonised the globe.

So what explains this dominance of Man, which is an empirical vindication of his uniqueness? A recent book by my UCLA colleague Robert Boyd and his long-time collaborator Peter Richerson (*Not By Genes Alone—How Culture Transformed Human Evolution*), which could well prove to be as important as Darwin's "Origin of the Species", provides a Darwinian account of the evolution of human culture and the biological basis for its uniqueness. It is what distinguishes us from our cousins in the animal world.

They argue that from the archaeological and fossil record, modern humans evolved over about 160,000 years and spread across the world 50,000

years ago. Humans, with their flexible brains, evolved in the Pleistocene. Fig. 1 shows the picture of climate deterioration, which paleo-climatologists have recently constructed, for the last 3 million years. During the last Ice Age, in the Pleistocene, the variability of climate increased markedly. The data from the Greenland ice core in Fig. 2 show this intense climatic variability when the human animal was evolving through Darwinian natural selection. Boyd and Richerson argue that, to deal with the high variability of the climate, the human animal developed a brain that provided the psychological machinery capable of the cumulative cultural change, which is unique to humans. This cultural evolution allowed social learning, which was transmitted to offspring to cope with the fluctuating environment. Unlike the other apes, human social learning consists both of imitation and learning *de novo*. This leads to cumulative cultural adaptations in a form of cultural evolution, which is more rapid than the genetic evolution and limited social learning based on imitation that most other animals have to rely on to cope with a changing environment.

The increasing variability of the Pleistocene climate also led to increases in brain sizes of other mammals, but the size of the human brain began to diverge from other mammals and it was these more complex brains that allowed the social learning, which allows a flexible response to novel environments. This behavioural flexibility also favoured a longer childhood to allow enough time to learn, and a longer life span, which allows humans to get more benefits from what they learned during their long costly childhood.

The relatively stable climate during the last 11,000 years has not led the flexible human brain to regress to its pre-Pleistocene form, because cumulative cultural change has led to rapid environmental changes introduced by humans—like agriculture. These humanly modified environments are more congenial to us than to our competing predators and parasites, and we can stay one step ahead of them by cultural adaptations. Because, in the arms race between us and other species that have to rely on slow-moving genetic evolution, we have won by faster counter-adaptations based on the much faster cultural evolution. There does, therefore, now seem to be the beginnings of a general theory that is linking biology, archaeology, anthropology and the neuro-sciences, which will provide a scientific explanation for the uniqueness of the human animal and its astounding ascendancy.

China: Not just an infrastructure story

The taxi, a Volkswagen Santana, weaves in and out of thick traffic, switching between the main thoroughfares and bylanes of Beijing. The driver is concentrating on the road, but only somewhat. From the backseat, Laxman C Hemnani is issuing a stream of instructions. And directions. We arrive at our destination. Prakash hands out the fare and thanks the driver. The entire conversation was in fluent Chinese.

Hemnani is the China head of IT training company Apteck, known locally as Apteck Baida Jade Bird Company. Sitting in his offices in the Haidian District in north-west Beijing, Hemnani explains how the IT training industry works in China.

First, a comparison. In India, Apteck, like NIIT and others, function on the fringe of the state-run education sector. In China, Apteck has a 50:50 joint venture with a Chinese company (Jade Bird). Moreover, Beijing University (called Baida) has a stake in Jade Bird. So, unlike India, where IT education and by extension firms like Apteck operate from the periphery, in China, the government seeks them out and embraces them totally. A Beijing University tag is precious to most Chinese students.

Then promoter of Apteck, Atul Nishar (he sold it to IT-training firm SSI), recalls how, after some correspondence, the Chinese minister for science & technology visited India and his office. This was Mumbai and the year 1999. On most days, the area around Nishar's office in Andheri (E) in north Mumbai is jammed

DOUBLE EDGE



GOVINDRAJ ETHIRAJ

with a constant cacophony of traffic. The air is dusty and thick with diesel smoke. This part of Mumbai is also host to hundreds of engineering workshops. And increasingly some IT companies.

Nishar says he walked into his boardroom expecting to meet with the minister and a few aides. "I was shocked. There were 20 Chinese sitting there," he recalls. Nishar says his shock turned into amazement when the minister said he would visit a few IT training centres himself. Which he did subsequently. "I didn't expect him to actually visit a centre," admits Nishar.

The minister began by saying they wanted Apteck to come to China and "help with development". The deal was signed only later. Nishar says options were a 100% subsidiary or partnering with the government. "We chose the latter. We signed a joint venture with the ministry of science & technology, which in turn assigned the venture to a company called Jade Bird."

In five years, Apteck has set up over 200 training schools in 57 different Chinese cities. The joint venture, according to the China Centre for Infor-

mation Industry Development had 19% of China's IT training market in 2005, up from around 15% in 2004. The business itself is growing close to 20% annually with total billings at \$40 million. Pramod Khera, CEO, Apteck, says they now want to build an education content development "factory" in China. "We are thinking of taking the JV public in a year's time," he says.

At the Haidian centre, close to Hemnani's office in Beijing, some 2,000 students have enrolled for either a two-year degree or a one-year network administrator's course. Hemnani explains they also work with individual colleges and universities directly. "When it comes to English and IT, they are empowered to tie up with companies like us," he adds. Not quite the case in India. I ask Hemnani about this apparent contradiction in approach. He thinks about it but refuses to be drawn in. "It's a little different here, I guess," he says.

Little is an understatement. Apteck is not just running IT-training classes through franchisees, it is also re-designing curriculum for several universities. In India, Apteck would possibly be shooed away from the gates of Delhi or Mumbai University for even suggesting something like this.

The curriculum replacement model is fascinating. Apteck plugs its two-year course into a three-year university degree in computer science. At the end, students sit for Apteck and University exams and get twin degrees. Some 50 colleges have opted for this model. The teachers are trained by Apteck. And

it's the University, not the students, that pays Apteck.

What are the lessons here? Before that, there may be many reasons why Indian universities are not joining hands with private education firms, Indian or overseas. Most may be legitimate. But the Chinese do hold their universities close to their heart. And nowhere is there talk of a foreign hand destabilising the education system.

To use Nishar's words, the Chinese are a determined bunch. In information technology in specific and lots of other areas in general. As the Chinese minister's visit demonstrated, Nishar says he still can't imagine collaborating with government-owned universities in India in this manner. "Government bodies are wary. Maybe in airports or some companies, but not quite education," he says.

Nishar says the other lesson is that in China, the government is a good partner. "They enable you and enhance your presence; they are not a hindrance." But the important thing is this. "They begin by asking whether it will help China as a country. Will it help meet with objectives? Is it in their interest?" And then they work from there.

Nishar today marvels about a new road out of Shanghai which will cut travelling time to Hangzhou. This is one of the places he is considering taking his IT services company Hexaware. But as he also realises, his former company's success in China had very little to do with roads and airports. Or the China infrastructure story.

In the late 1970s and 1980s, it was axiomatic that children's books came from elsewhere. Enid Blyton ruled the market then, as she still does (for some reason, Blyton and P G Wodehouse have continued to command faithful readers in India long after their books have fallen off the shelves in the Western world).

UK Puffins were available, but more visible were books from the erstwhile Soviet Union—our heads were full of stories about Young Pioneers, Baba Yaga and circus acrobats. Our "own" stories, from South India's beloved Thama tales to Bengal's beloved Thakurmar Jhulir stories, were trapped in the politics of language—there was no question of, say, translating *Malgudi Days* into Gujarati, any more than there was a market for the Thama stories in English.

It made me wonder, sometimes, where the Indian equivalents of L

Frank Baum and A A Milne were to be found. I wouldn't say that the children's books segment is booming just yet, but it is coming of age. Here's a look at some of the new releases this month, and what they have to offer different age groups.

Anoushka Ravishankar is probably one of the most popular children's writers today, and anyone who reads *Moin and the Monster* (Young Zubaan/ Puffin) will understand why. Her tale of what happens when a drawing of a singing, dancing monster comes to life and the complications it causes for young Moin is hilarious—it's not a very happy monster initially, because it wanted to be drawn scary but got drawn funny instead. Ravishankar's tongue-in-cheek rhymes and sense of humour is perfect for the under-10 brigade. She's been more successful at breaking away from the Five

Children's books: The Wizards of India

FINDOUTERS SPEAKING VOLUMES

(children off on an improbable adventure) than most Indian authors.

Rohini Chowdhury's *White Tiger* (Puffin, Rs 150, for the 10+ age group), which sends three children in search of a ghost tiger, is far more formulaic, but she scores with an original storyline and an abiding love of the jungle. Zai Whitaker fans will be happy to see the wildlife enthusiast return with *The Boastful Centipede* (Puffin, Rs 150), a collection of rhymes in praise of creepy-crawlies, reptiles and

other neglected beasts. TERI has just come out with a set of colourful books that discuss everything from the Chipko movement to solar energy and gulmohar trees—despite the slightly earnest tone, these are attractive books, and I can see how they would appeal to school libraries.

The real difference is visible in the teenage and Young Adult market. Payal Dhar's *A Shadow in Eternity* (Young Zubaan/ Puffin, Rs 295) is the first in a fantasy series that stars a 12-year-old schoolgirl, Maya, whose life changes when she

discovers an alternate world called Eternity, where she will train to be a Defender of the Light. Dhar doesn't have the self-referential, dry humour of fellow fantasy writer, Samit Basu, but her alternate universe where prophecies and shadow warriors might threaten time itself is quite beguiling and very carefully constructed.

An equally interesting experiment is a graphics novel from the new imprint Phantomville Comics. *The Believers*, by Abdul Sultan, p.p (Phantomville Comics, Rs 150), is an ambitious look at religious fundamentalism, which pits a self-exiled engineer returning from the US against his brother, now a religious leader in a

HOWGIH (How Opal Will Get Into Harvard), a deceptively simple question about what she does for fun sends Opal Mehta and her parents into the arms of HOWGAL (How Opal Will Get A Life). Opal figures out how to dress better, how to be popular, how to join the Haute Bitcher... until she begins to wonder whether she really likes the life she's trying so hard to get.

If it sounds too much like a dog's life, try the real thing: John Grogan's delightful *Marley and Me: Life and Love With The World's Worst Dog* (HarperCollins, \$10). If you have pets, or children, or just a nodding acquaintance with the neighbourhood strays, you'll love this account of the Labrador Retriever who was an unregenerate, omnivorous thief and professional rearguarder.

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