

Dharampal, the Great Gandhian and Historian of Indian Science by D.P. Agrawal

The people, who worry about the fact that the mainstream Western Historians of Science totally ignored the great contributions India made in the fields of science and technology in the past, acutely realise the importance of the path-breaking work of Dharampal. Despite his modest means, he put in several years of hard work in unravelling the position of Indian science and industry before the British came. And the beauty was, to prove his case, Dharampal used the writings of the British themselves.

Recently, The Other India Press has brought out the *Collected Writings of Dharampal*. These are elegantly brought out paperbacks and cost less than \$30/- for the whole set of six volumes. We would bring out summaries/reviews of these works in the Outer Gate of the Mandala.

Claude Alvares, who himself has played a significant role in bringing out the importance of Traditional Knowledge Systems in India, met Dharampal by accident. We are grateful to Alvares for bringing out these valuable volumes at such an affordable price. In the first volume of these Collected Writings, Alvares has written the Preface, Making History. It brings out not only the significance of Dharampal's momentous contributions to History of Indian Science but also gives an intimate glimpse into the life of this great Gandhian, as also into the mean manipulations of the British to plunder India. It's a very illuminating piece of writing and I cant resist the temptation of giving it almost verbatim.

We give below this biographical sketch of Dharampal in Alvares' powerful words (in italics).

My (Alvares') encounter with the amazing historical work of Dharampal came about in 1976 in a most unexpected place: a library in Holland. I was at that time investigating material for a PhD dissertation, part of which dealt with the history of Indian and Chinese science and technology. While there was certainly no dearth of historical material and scholarly books as far as Chinese science and technology were concerned - largely due to the work of Joseph Needham, reflected in his multi-volume Science, and Civilisation in China - in contrast, scholarly work on Indian science and technology seemed to be almost non-existent. What was available seemed rudimentary, poor, unimaginative, wooden, more filled with philosophy and legend than fact.

Desperate and depressed, I wandered through the portals of every possible library in Holland trying to lay my hands on anything I could find. The irony of looking for material on Indian science and technology in Holland should not be missed.

However, I was doing a PhD there and had very little choice.

Then one morning, I walked into the South East Asia Institute on an Amsterdam street and found a book called Indian Science and Technology in the Eighteenth Century on the shelf. I took it down, curious. It was by a person named Dharampal whom I had not heard of before as a person or scholar active in that area of research. I took the book home and devoured it the same day. It altered my perception of India forever.

Now, more than twenty years later, I know that the book appears to have had a similarly electrifying effect on thousands of others who were fortunate to get a copy of it. It spawned a generation of Indians, which was happy to see India thereafter quite differently from the images with which it had been brought up in school, particularly English medium school.

The book also provided a firm anchor for the section of my dissertation dealing with Indian science and technology. The dissertation was eventually published in 1979 with the rather academic title: Homo Faber: Technology and Culture in India. China and the West: 1500 to the Present Day.

The same year (1976), a friend of mine from Orissa dropped in at our flat in Amsterdam. I mentioned Dharampal to him. Astonishing to relate, he turned out to be a friend of Dharampal and even told me where he lived. Next door, he said, in London. He also had Dharampal's telephone number. The following week we took a flight to London and I met Dharampal for the first time in my life. His family was with him at the time: his wife, Phyllis his two daughters, Gita and Roswita, and his son, David. The meeting initiated a relationship that has persisted the present moment. Today I am happy to head a publishing house that is bringing out his Collected Writings. I myself returned to India in 1977. Stranger events followed, thereafter.

In 1980, I was called to Chennai to join a civil liberties team probing the killing of political activists in fake police encounters in North Arcot district in Tamilnadu. Predictably, the team was beaten up by a mob set up by the police. On our turn to Chennai, where we decided to hold a press conference, we were put up at the MLA hostel. While passing by one of the rooms, whom should I see sitting there but Dharampal himself. I had to rush to the press meeting thereafter.

Before the press could arrive, however, two or three young strangers arrived to meet me. They said they were from the Patriotic and People-Oriented Science and Technology (PPST) group, which had members and sympathisers in

both Kanpur and Madras IITs. They wanted to sit with me and discuss my Homo Faber (the Indian edition had just been brought by Allied Publishers then). They also wanted more information on Dharampal, whose work they were coming across for the first time in Homo Faber. Why do you want to talk to me, I asked them, when you can very well meet Dharampal himself. They were astonished. Dharampal? Here in Madras? When I told them where I had found him, they made a beeline for the MLA hostel. That encounter initiated a long, fruitful and creative association between Dharampal and the PPST, which has also persisted, with some ups and downs, to the present day. For a few years, the PPST brought out a journal called the PPST Bulletin. In it, Dharampal and his work occupied pride of place. During this period, in fact, members of the PPST Group produced some of the finest articles ever written and published on the subjects of Indian science, culture, technology, and the relevance of Western science and technology to Indian society. Some members of the PPST later spent a considerable amount of time and energy working on the Chengalpattu data, which often recurs in Dharampal's writings.

Today, Dharampal's work is quite extensively known, far beyond the PPST Group, not just among intellectuals and university professors, but also among religious leaders including swamis and Jain monks, politicians and activists. One of the most impressive off-shoots of his research has been the organization of the bi-annual Congress on Traditional Sciences and Technologies. Three such Congresses, organized by the PPST and institutions like the IITs, have so far been held, generating an impressive wealth of primary material. Dharampal himself has been invited to deliver lectures at several institutions within India and abroad. (Some of these lectures can be found in Volume V of the Collected Writings.).

The general effect of Dharampal's work among the public at large has been intensely liberating. However, conventional Indian historians, particularly the class that has passed out of Oxbridge, have seen his work as a clear threat to doctrines blindly and mechanically propagated and taught by them for decades. Dharampal never trained to be a historian. If he had, he would have, like them, missed the wood for the trees. Despite having worked in the area now for more than four decades, he remains the quintessential layman, always tentative about his findings, rarely writing with any flourish. Certainly, he does not manifest the kind of certainty that is readily available to individuals who have drunk unquestioningly at the feet of English historians, gulping down not only their 'facts' but their assumptions as well. But to him goes the formidable achievement of asking well entrenched historians probing questions they are hard put to answer, like how come they arrived so readily, with so little evidence, at the conclusion that Indians were technologically primitive or, more generally, how were they unable to discover the historical documents that he, without similar training, had stumbled on so easily.

Dharampal's unmaking of the English-generated history of Indian society has in fact created a serious enough gap today in the discipline. The legitimacy of English or colonial dominated perceptions and biases about Indian society has been grievously undermined, but the academic tradition has been unable to take up the challenge of generating an organized indigenous view to take its place. The materials for a far more authentic history of science and technology in India are indeed now available as a result of his pioneering work, but the competent scholar who can handle it all in one neat canvas has yet to arrive. One recent new work that should be mentioned in this connection is Helaine Selin's Encyclopaedia of Non-Western Science, Technology and Medicine (Kluwer, Holland), which indeed takes note of Dharampal's findings. Till such time as the challenge is taken up, however, we will continue to replicate, uncritically, in the minds of generation after generation, the British or European sponsored view of Indian society and its institutions. How can any society survive, let alone create, on the basis of its borrowed images?

Dharampal's own description of his initiation into Indian historiography is so fascinating it must be recounted in some detail. Soon after he got associated with the Quit India movement in 1942, he became attracted to the idea of the village community. Perhaps this was partly due to his being with Mirabeen in a small ashram community in a rural area in the Roorkee-Haridwar region from 1944 onwards. But when in 1948, he heard of the Jewish Kibbutzim in Palestine, this interest was evoked again and he visited them in late 1949 for some two weeks. He came away from the visit, however, with the feeling that the Kibbutzim model was not something that could be replicated in India. Later, along with other friends, he did attempt to launch a small village near Rishikesh in which all families had an equal share of the land, etc. The village, however, could not mould itself into a community: it lacked homogeneity. It also had practically no resources at all when it began. Later, in 1960 Dharampal got to know of village communities in Rajasthan which had Bees Biswa village panchayats, and some Sasana villages near Jagannath Puri in Orissa, which were established some 700 years earlier and were still prosperous and functional in the early 1960s.

An encounter, which affected Dharampal greatly in this context, is best recounted here in his own words:

Around 1960, I was travelling from Gwalior to Delhi by a day train, a 6 or 7 hour journey in a 3rd class compartment when I met a group of people and I think in a way that meeting gave me a view of India, the larger India. The train was crowded. Some people however made a place for me. And there was this group of people, about twelve of them, some three or four women and seven or eight men. I asked them where they were coming from. They said that they had been on a pilgrimage, three months long, up to Rameshwaram, among other places. They

came from two different villages north of Lucknow. They had various bundles of things and some earthen pots with them.

I asked, what did they have in those pots. They said that they had taken their own food from home. They had taken all the necessities for their food-atta, ghee, sugar - with them, and some amounts of these were still left over. The women didn't seem to mind much people trampling over them in the crowded compartment, but they did feel unhappy if someone touched their bundles and pots of food with their feet.

And then I said they must all be from one jati, from a single caste group. They said, 'No, no! We are not from one jati, we are from several jatis.' I said, how could that be? They said that there was no jati on a yatra-not on a pilgrimage. I didn't know that. I was around 38 years old, and like many others in this country who know little about the ways of the ordinary Indian-the peasants, artisans and other village folks.

And then I said, 'Did you go to Madras? Did you go to Bombay?' 'Yes! We passed through those places,' 'Did you see anything there?' 'No, we did not have any time!' It went on like that. I mentioned various important places of modern India. They had passed through most, but had not cared to visit any.

Then I said, 'You are going to Delhi now?' 'Yes!' 'You will stop in Delhi?' 'No, we only have to change trains there. We're going to Haridwar!' I said, 'This is the capital of free India. Won't you see it?' I meant it. I was not joking. They said, 'No! We don't have time. May be some other day. Not now. We have to go to Haridwar. And then we have to get back home.'

We talked perhaps 5 or 6 hours. At the end of it I began to wonder, who is going to look after this India? , India are we talking about? This India, the glorious] of the modern age, built by Jawaharlal Nehru and c people, these modern temples, universities, places of scholarship! For whom are we building them? Those people their pilgrimage were not interested in any of this. And were representative of India. More representative of II than Pandit Jawaharlal Nehru ever was. Or I and most us could ever be.

The encounter shook Dharampal then, as much as memory of it bothers him even today. This particular experience more than any other, drove him to look for the causes of the profound alienation of India's new leaders from the preoccupations of the common people and to investigate whether this had always been so.

Similarly, fascinated by the largely intact and functioning Bees Biswa and Sasana village communities, he wished to know what it was that had kept these aspects of Indian civilization so far alive and ticking (in contrast to some of the

disintegrated and pauperised communities we encounter in the present), assumed that if the basis of these hitherto vibrant communities were understood, it might assist Indian society - particularly its intellectuals and political leaders - to divest itself of its present state of depression and disinterest with its surroundings and perhaps become lively again. The inquiry had to focus on how India had functioned before the onset of the debilitating British and European dominance. When he began, he had no clear direction in which to look. Even after he had found what he was looking for, the utter significance of it would dawn on him only late

It is important for the reader to know that till about 1964 Dharampal merely had a layman's knowledge of archives and the records and material they generally held. His first acquaintance with the archival record on India began at Chennai (previously Madras) during 1964-65 but expanded and deepened over the years. He discovered that most of the material dated from around 1700 AD and owed its creation largely to British needs, even when these archives held some Indian language materials on paper or palm leaves. (The Portuguese, the Dutch, the French, and the various European Christian as well as commercial institutions which began to come to India from the mid-16th century also maintained similar archives relating to their encounter with India but these were smaller.)

All this British archival material (most of which is presented or referred to in the Collected Writings) mostly dwells on certain aspects of India as seen and understood then by the British. The material falls broadly within three areas:

The first relates to descriptions of India, its physical landscape, the manners of its people in certain regions, their public life, festivals, cultural life and institutions, the nature and extent of Indian agricultural and industrial production, and Indian sciences and technologies.

The second pertains to the continuing British-Indian encounter, especially from around the British occupation of Arcot in 1748 to about 1858. Then the encounter is again visible from about 1875, and with its high and low spots, continues till 1947 when India got divided into India and Pakistan, and the British-created institutions and functions were taken over by their own governments.

The third begins with the unfolding of British designs and policy pertaining to India in Britain in the 1680s and thereafter, and their visible implementation and imposition on India from around 1750. The origins of these designs and policies remain mainly in Britain till the very end, while their implementation is in India, and in the areas governed in India's name from the China seas in the East to St. Helena in the West.

It would be helpful at this stage to know how this huge and very detailed archival record was indeed created. For this purpose, a little background relating to the governance of India during English colonial rule is absolutely necessary.

It is conventional doctrine (taught in most history books) that from 1600 to around 1748 the British East India Company (E.I.Co.) established itself largely in the coastal towns and cities of India, declared these places as fort towns and called them factories, i.e. store houses for trade, with the requisite military establishments. From 1748, the E.I.Co. is said to have gradually involved itself in the conquering of India and till 1858 at least was considered to be solely responsible for the plunder and violence associated with the conquest. We are further told that it is only because the British were disturbed by the company's misrule, which resulted in the great Indian Mutiny of 1857-58 - that they decided to establish direct rule in India and though governance of India was placed under the charge of a cabinet minister, named the secretary of state for India, an arrangement that eventually continued till 1947.

It is true that an E.I.Co. was established in Britain through the grant of a charter in 1600, and that it had adventurer plunderers in its ranks. But, according to Dharampal, it altogether functioned on its own. From the beginning, company had the full support of British naval forces expansion drive, and often of British state military forces as well. Also, from the beginning, the E.I.Co. contributed substantial sums (in millions of pounds sterling) to the British government treasury and also advanced amounts at low interest to the British state. From time to time, it received directions from state authorities and at times certain of its affairs were under the charge of British naval commanders who received instructions directly from the British King or the British Admiralty. It is these directions and communications that comprise the earlier archival records.

One such major case involving official supervision was the final British encounter with Admiral Kanohji Angrey of Maharashtra around 1754. The British state felt that he was a great challenge to British expansion and had to be somehow eliminated. There would have been scores of such instances between when the E.I.Co. originated and 1750, when it began to assume the role of a conqueror and sovereign.

From 1750 onwards, more and more instructions from the British were conveyed through various channels to the E.I.Co. After the British domination of Bengal from 1757 onwards, Robert Clive - a 'heaven born General' according to Lord Chatham, virtual ruler of the British then - wrote to Britain that India could only be governed directly by the British state and not any company. This and other similar advice was deliberated up some years leading to the Regulating Act of 1773 by which British state appointed the Governor General and his Council, and 11 years later, to the 1784 Act, which established a Board of Commissioners for

the Affairs of India, with a President and 6 members, one of whom in the early stages was none other than the British Prime Minister. The Commissioners then were the rulers of India. All instructions of any kind to any department of state in India, or to its three Presidencies, were cleared by them in detail (word by word, comma by comma).

Once these were final, the job of the Court of the E.I. Co. was to send these to India under the signature of their Chairman and members. Besides, a separate channel of communication was opened between the President of the Board of Commissioners and the British Governor General in India (as also with the Governors of the Presidencies), which at times even over-rode certain formal instructions conveyed through the company. The instructions in certain departments were prepared by the Board of Commissioners themselves, the signature of the Chairman of the Company obtained, and the matter sent to India from the Board's office itself. It is this arrangement, which prevailed till 1858. The change in 1858 was in fact only a change in nomenclature: the President of the Board was now the Secretary of State for India. (Thus, the E.I.Co. as such became wholly redundant in the ruling of India, or areas in its vicinity i.e., from the China seas to St. Helena, from 1813 onwards, if not from much earlier. According to Dharampal, this clarification needs to sink deep not only into Indian minds, but, into the minds of the world historical community too).

Thus, details of every occurrence in India, which came to the notice of British authority had to be communicated, at least till 1858, to London in order to obtain instructions or the approval of London on the individual issue. The British archival record therefore informs us of each and every such event.

So, if one wanted to have knowledge in any detail of the society and life of India before British dominance, the obvious thing to do was to carefully peruse these British-generated archives. This Dharampal now did. He did not have much of an income. There was also a family to support. But notwithstanding all this, he became a regular visitor to the India Office and the British Museum. Photocopying required money. Oftentimes, old manuscripts could not be photocopied. So he copied them in long hand, page after page, millions of words, day after day. Thereafter, he would have the copied notes typed. He thus retrieved and accumulated thousands of pages of information from the archival record. When he returned to India, his most prized possession was these notes, which filled several large trunks and suitcases.

It is not that others had not consulted these very records before. Dozens had. They missed the overall picture largely because they saw the material in fragments, for a particular piece of research, over a month or a year or two. Dharampal, in contrast, gave it the benefit of decades. His mind retained ever

detail of what he read with uncanny sharpness. That is how eventually he got the whole picture.

This picture that emerged from the total archival record was nothing short of stunning. Contrary to what millions of us were taught in our school text-books, it indicated the existence functioning society, extremely competent in the arts and science of its day. Its interactive grasp over its immediate natural environment was undisputed; in fact, it demanded praise. This reflected in both agricultural and industrial production. We know today that till around 1750, together with the Chinese, our areas were producing some 73% of the total world industrial production, and even till 1830, what both these economies produced still amounted to 60% of world industrial production. Even a moderately fertile area like that of Chengalpattu (Tamilnadu) our paddy production in a substantial area of its lands around 1760-70 amounted to some 5-6 tons per hectare, which equals the production of paddy per hectare in present day Japan - the current world high. A vast educational set-up -- based on a school in every village - looked after the requirements of learning of masses of young people.

The most impressive feature of the set-up was the elaborate fiscal arrangements made for its upkeep in perpetuity, if inquired. From the gross produce, amounts were allocated by tradition for the upkeep of the system, from the engineers looked after the irrigation tanks and channels to the police school teachers. In technology, we produced steel that was superior to Sheffield steel. We also produced dyes, ships are literally hundreds of commodities.

As he recorded all this, Dharampal also saw how it was being undermined, how the British in fact went about pulverising the Indian economy and society.

As he studied the sometimes fascinating, sometimes cruel record, practically every day, it held him as if bewitched. He found that the British successfully initiated an intricate system of widespread control and extortion, taking away as tax most of what the land produced, as well as the products of manufactures. He found it horrifying that this was often done at the point of the bayonet.

According to Dharampal, the British purpose in India, perhaps after long deliberation during the 17th century was never to attempt on any scale the settlement of the people of Britain or Europe in India. It was felt that in most regions of India, because of its climate, temperature range, gifted, industrious and dense population, the settling of the people of Europe would serve little purpose.

Therefore the purpose was defined as bringing to Britain and Europe, surplus products of the varied industry of the people of India, and the taxes imposed on this industry. Such a proposal, in fact, was very clearly put forward around 1780 by Prof. Adam Ferguson of Edinburgh. Ferguson was a professor of

moral philosophy. (Interestingly, he is also regarded as the founder of British sociology.)

While discussing the mode of governing India, Ferguson raised the question of the purpose of this governance. According to him, the aim was to transfer as much as possible of the wealth of India to Europe. And this task, according to him, could not directly be conducted by servants and institutions of the British state. They would be too bound by rules and state discipline to do justice to the task. The transfer of wealth to Europe, he felt, would generally require the bending and breaking of rules as no major extraction or extortion from the ruled could be effectively done through instruments of the state. He therefore felt that the direct governance of India should be in the hands of the servants of a body like the E.I. Co., where the servants could when needed disobey orders and rules. But the company should be controlled and supervised by a high-power body constituted by the state. It is this logic and arguments that eventually led to the formation of the Board of Commissioners for the Affairs of India in 1784.

Dharampal found that for long periods in the late 18th and the 19th centuries, the tax on land in many areas exceeded the total agricultural production of very fertile land. This was particularly so in the areas of the Madras Presidency (comprising current Tamilnadu, districts of coastal Andhra, some districts of Karnataka and Malabar). The consequences of the policy were easy to predict: in the Madras Presidency, one third of the most fertile land went out of cultivation between the period 1800-1850. In fact, as early as 1804, the Governor of the Madras Presidency wrote to his masters (the President of the Board of Commissioners) in London:

We have paid a great deal of attention to the revenue management in this country...the general tenor of my opinion is, that we have rode the country too hard, and the sequence is, that it is in a state of the most lamentable poverty. Great oppression is I fear exercised too generally in the collection of the Revenues.

Of course, Dharampal also found within the same archives information about the Indian civil resistance in various regions of India in the early stages of British rule, like the one in Varanasi region around 1810-11 and in Canara around 1830 and how they were contained. But such events are not taken note of in the formal record as deliberate policy. Even petitions against grievances, though invited, would not be office recorded unless the wording of the petition conveyed a sense of the petitioner's humility and of his (or her) limitless respect for authority.

Excerpts from one such rejected petition against the tax imposed in Varanasi highlight this:

...former sooltauns never extended the rights of Government (commonly called malgoozaree) to the habitations of their subjects acquired by them by

descent or transfer. It is this account that in selling estates the habitations proprietors are excepted from the sales. Therefore, the operation of this tax infringes upon the rights of the community, which is contrary to the first principles justice...

...It is difficult to find means of subsistence and the duties, court fees, transit and town duties which have increased tenfold, afflict and affect everyone rich all and this tax, like salt scattered on a wound, is a cause of pain and depression to everyone both Hindoo and Musulman: let it be taken into consideration that as a consequence of these imposts the price of provisions within these ten years increased sixteen fold. In such case how is it possible for us who have no means of earning a livelihood to subsist?..

By their methods of extortion and other similar means the British were able to smash Indian rural life and society by about 1820-1830. Around the same period, the extensive Indian manufactures met a similar fate. Because of deliberate British policy, the famed Indian village communities so eloquently described by Thomas Metcalfe around 1830, and by Karl Marx in the 1850s, had mostly ceased to exist.

Similar comments could be made about the narratives on Indian science and technology. Initially they were desired for their contemporary relevance and usefulness to the advancement or correction of their British counterparts. But soon after the British began to rule and control Indian life and society, the continuity of Indian knowledge and practice seemed to them a threat. Therefore it was something to be put aside so that it crumbled or decayed. Dharampal found that such a programme of 'making extinct' was contrived in practically every sphere of human activity, including the manufactures of cotton textiles, the production of Indian steel, and even the Indian practice of inoculation against small pox as early as A.D. 1800.

A similar fate awaited the extensive network of Indian schools and institutions of higher learning when they began to be surveyed in the 1820s and 1830s. Ironically, it is mainly through the British archival records that one becomes aware of the extensive nature of the education network, as well as its speedy decay in the Madras and Bengal Presidency, and somewhat later in the Presidencies of Bombay and in the Punjab. Of course, the view, which we get from such archival material is splintered and not integrated. But the indicators in themselves are of great value. They also provide us glimpses of pre-British life and of aspects of India's society of which we had lost track from about A.D. 1850 when society was broken up and suppressed, and an imposed alien system of education made us ignore and forget the innumerable accomplishments of our people.

Dharampal is quite clear and explicit on the uses of history. He writes:

If we investigate these records on similar aspects further, on the basis of what is available in our archaeological, inscriptional and other historical sources, and what is still retained in the memory and consciousness of our people, we ought to be able to reconstruct our social and cultural past, and hopefully to mould our state and society accordingly.

Since Independence in 1947, it is this question of reconstruction of self and society on the foundation of our priorities, values, tradition and culture that seems to have completely eluded us, particularly our scholars, administrators and politicians. We appear to have forgotten that we can look back and learn from our own past. And based on that experience, construct our own unique identity within the context of our own affairs as well as that of the rest of the world. What do we as a nation - without leaning on others' ideological and material crutches - want? Do we have ingenuity or not? Can we make our points-as against aligning with one sort or another? I have a point to make as Indians?

When Dharampal started on this monumental work around 1965-66, he had felt then that whatever these British accounts might tell us, and howsoever incompletely, they would help us if we followed them up with further detailed and intensive explorations of such material as exists in India. Further, with the association of our own people in the exploration - in most things still linked with their past and with much more vivid men of it - we should, within a generation or so, begin to reconstruct our earlier life and society, linking this with our present circumstances and needs. It is distressing to note, though, that we are yet to undertake this task. Dharampal writes further:

Today, we feel encircled by hostility - much of it in fact generated by our own ineptitude and actions. From around 1947, we have treated ourselves as cousins of the West. Dominated by the West, it may be necessary at the moment to rely on Western knowledge and products. But this can be only a short-term proposal. Very soon, whatever Western know-how or products seem essential to us, we must learn to produce them in our own way, with our own material, variations and modifications.

In the meanwhile, however, we must set our ordinary people free; remove the obstacles in their path relating to use of their local physical and material resources, encourage them to use their talents to rebuild there own shattered worlds in their own various ways (even, if required, by withdrawing those laws and rules which tend to block whatever they attempt, and keeping our advice and criticism to ourselves). Only then can other local relationships and linkages begin to come alive; societal manners and memory pertaining to specific activities to get awakened; and the rebuilding does not remain a mere copy of the past. By taking account of the world around Indian society will begin to integrate such elements of

Western or other technologies that seem to it as relevant and stimulating for its own base.

For all this to happen, a profound alteration in our attitudes towards our people and our past has to take place. We must enable our people to feel more self-assured, confident, hopeful, proud of their talents and capacities, and encourage them to regain their individual and societal dignity.

To achieve this state, they need to acquire a better awareness - especially as children and youth - of the human past of their localities, and to establish friendly relations with other beings including all kinds of animal life, bees, bushes and plants, rivers, lakes, ponds, hills, forests, soil, etc. which coexist with man. Similarly, we should begin to be aware of the linkage of each and every locality with the immediate region, of the region with the country, and of our country with other countries on this earth, and the earth's linkage with the cosmos.

These efforts would require new texts of well-told stories of localities, regions, countries, the world, and the various ideas about the beginning or non-beginning of the universe. Such knowledge and awareness would make our people feel confident and well informed and also enable them to partake of the Indian understanding of life and of natural phenomena.

It would also ground them in the elements of various sciences and technologies in agriculture, animal husbandry, forestry and crafts, as well as history, philosophy, grammar and language. Thus, by about the age of fourteen, our children - boys as well as girls - would have become competent citizens of their respective areas.

All histories are elaborate efforts at mythmaking. Therefore, when we submit to histories about us written by others, we submit to their myths about us as well. Mythmaking, like naming, is a token of having power. Submitting to others' myths about us is a sign that we are without power. After the historical work of Dharampal, the scope for mythmaking about the past of Indian society is now considerably reduced.

If we must continue to live by myths, however, it is far better we choose to live by those of our own making rather than by those invented by others for their own purposes, whether English or Japanese. That much at least we owe ourselves as an independent society and nation.

Source:

Alvares, Claude. 2000. Preface: making history. In Dharampal (author), *Indian Science & Technology in the Eighteenth Century*. Mapusa: Other India Press.