

all R and D projects pertaining to medical instrumentation. It also insisted upon a mission mode approach to overcome the bureaucratic hurdles which can set at naught a nascent industry.

On the whole the book provides a clear and delete candid account of the Indian endeavour in science and technology – the tasks achieved, challenges ahead, potential capabilities and countervailing factors. The fact that the views presented are based on experience and reflections of the insiders lends the work an added significance. It deserves to be read by the practitioners of science and technology in our context. Also, it is an indispensable text for a core course in 'Science, Technology and Society' Studies programmes in India. However, one feels the conspicuous absence of papers by historians of science and sociologists of science. There is hardly any critical discussion in the book on the historical factors, pre-colonial or colonial, that have a bearing on the current situation in Indian Science and Technology. Secondly, we do not have a well worked out response to the negative reception by grass- roots workers and some sections of our society to some of the technological applications to the domains like agriculture and health. Thirdly, one expects an informed position regarding the conditions under which the deployment of a technology becomes economically viable. For instance, one needs to know within what limits nuclear technology is economically viable and in what ways it needs to be supplemented by alternative energy sources like, say, solar energy, the research work on which should have been started long back. Fifthly, though none of the authors believe, we may be sure, in the naïve 'Use-abuse' theory of science and technology (i.e. the discredited view that science and technology are in themselves good though they might have been misused / abused by some vested interests), there is hardly any reflection on the lessons we have learnt from the western experience that shows how science and technology can be easily made to serve, with impunity?, the interests of the military – industrial complex that can undermine democratic ways of life, individual and collective. More surprising is the complete silence regarding how far science and technology in India have promoted the goal of national self – reliance which was top on the agenda of independent India. Even more importantly, the reader is not enlightened about the role of modern science and technology in India in delegitimising non-modern knowledge systems that still sustain the lives of the bulk of our people and which were so well anchored in the material and cultural practices of our people that even the imperialist onslaught could not decimate them. Finally, a reader interested in the theme expressed by

the title of the book has to look elsewhere to get some clues regarding the organic link between the kind of science and technology we promote and the kind of society we envisage. It is because of the issues such as these that questions about science and technology are too important to be left only to scientists and technologists. Is it not time that the potential members of science and technology profession in India be exposed to such seminal issues right from their graduate training?

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Jagdish N. Sinha, *Science, War and Imperialism: India in the Second World War*, Leiden and Boston: Brill, 2008, Pp. iv + 278, \$ 79.00 (paperback)

"This is an extremely lucid and significant work, which elaborates certain aspects of "Organising for Science" in a new way. It focuses on the elaborate linkages between the colonial state and the appearance of elite cadres of scientists who established the paradigms of Science as an aspect of nation building. The new readings Jagdish Sinha provides us is with regard to the background to this endeavour, which is located around the questions of the significance of agriculture to the colonial government. The emphases on agriculture which Lord Curzon insisted on, was then replaced historically during the years of the Second World War, by the technological drive to a scientific domain which was seen to be consistent with modernism. It now made no distinction between peace and war in the quests of science as progress. The history of institutions is carefully mapped in this new book for new readers. The colonial government establishes links with dominant industrial families. "While these measures led to an unprecedented industrial growth and expansion, they did not necessarily imply any significant innovation and research," (p. 70). However, Ramaswamy Mudaliar realised the value of industrial research, and set up Board of Scientific and Industrial Research in 1940, under the department of commerce. J.N. Sinha tells the story in a detailed way, with many footnotes and references, each allowing the reader to follow up the complex trail for himself or herself. It may not be an original work, drawing on both well known classics in the Sociology and History of Science Policy, but it is a major work, where the art of splicing and configuring secondary as well as primary materials, leads us to important questions about the new canvas, that the Sociology of Science increasingly leads us to. Unfortunately Brill has overpriced the book, as a statement on the neocolonialism in academia and the

dissemination of materials, so an Indian publisher will have to come forward to take the book to the larger audience in third world countries where the intelligentsia of the local peoples in Paulo Freire's terms, will have to negotiate with the ways in which colonialism and science do not go away!

The subject of who is the intelligentsia of the people will always be of interest to the historian. In an interesting paragraph, J.N.Sinha writes,

After virtually maneuvering the removal of the Director of the Institute, Nobel Laureate, Sir C.V.Raman, the Government of India wanted to have a British as the new Director. The Council of the Institute however opposed the move and wanted to have an Indian instead. Knowing this, the government entered into a secret liaison, among others, with the Dewan of Mysore State, Sir Mirza Ismail – a Muslim who disliked Bengalis, the British Resident in Mysore, and the Tatas, the Tatas and Mysore State being the principal founding trustees of the Institute. While authorities received enthusiastic support from the Dewan and the British Resident, the Tatas declined to interfere with the decisions of the Council. The official maneuver failed as a result, and J.C. Ghosh, another Indian scientist of repute who espoused the cause of science for national reconstruction, was eventually appointed Director. This episode makes two points clear. First, the refusal of the Tatas to toe the official line proves how the Indian Industrialist, despite their association with the government and the global system of capitalism, had come closer to the local scientific leadership on the question of managing science in the interest of the country. Secondly the Indian Scientific leadership was no less concerned and jealous of their rights and independence than their counterparts in politics (p.50).

C.F. Andrews, as a former teacher of St Stephen's college, always believed that learning from History was important for reconnaissance with the present. When the scion of the Tata house embraces Narendra Modi to enhance a deal, which will statistically in terms of mobile-metal, clog up the roads, we know that the corollary of economic actions, which are for immediate personal gratification will cause intense disruption of the ecological system. Decades ago, Shiv Visvanathan argued that there is no such thing as peaceful use of nuclear energy, because the problem of waste and societal surveillance will always be larger than the problem of immediate energy gratification. Many social scientists and millions of grass roots activists have argued for the right of peasants to survival, so that ecology must be foregrounded as the natural right of local communities. Today, Bharat Jhunjoo, with his team, fights for the recognition of the Ganga as the right of the people to survive on her banks. Peoples' movements have always believed that the co-existence of industry and agriculture is possible. In fact the work of people like Uzamma and Laila Tyebji, of Dastkar, has set up the symbioses of traditional knowledge groups and artisans, and IIT trained activists

to recover indigo as an agricultural and craft commodity.

If we are to understand the impact of people's struggle to make sense of their environment in the new contexts of globalization, where the malls and the waste generated are the new idioms of imperialism in the 21st century, the recovery of these debates that Sinha brings to us are crucial. That Binayak Sen gets arrested and charged for sedition is the symptom of what is seen to be the real syndrome, thirty percent of India as the Ministers at the Centre says, is in the hands of Maoists. Why is it so? The PUCL and the PUDR will have a great deal of mobilization to do, before they too become banned. Hunger and poverty are very visible details of life, the wealth of the earth spills out spite of its commercialization, and when treated as the spoils of one group or community, the human context of life becomes decimated. Binayak Sen is very well loved in Vellore, where he trained as a Doctor, and where he came to recuperate when he was released on bail. If he spent his life working with the poor, then that is what he will be remembered for. Community Health has always depended on those who gave their time, so JNU scholars too will have a lot to say about new forms of hegemony!

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Ernst Furlinger, *The Touch of Sakti: A Study in Non-dualistic Trika Shaivism of Kashmir*, New Delhi: D.K. Printworld, 2009, Pp. 288, Rs. 690.

The so-called 'Kashmir Saivism', more correctly the non-dualistic Shaivism of Kashmir or Trika with its philosophy of Recognition or *Pratyabhijna*, has been studied in the last few decades in its various dimensions: philosophical, historical, Tantric exegesis, aesthetical, and the traditions and texts involved are so rich and varied that there is much scope for further detailed studies. The present study focuses on a very specific concept, or rather symbol, the Sanskrit word *sparsa*, 'touch', and more specifically *saktisparsa*, 'the touch of the divine energy'. Although it seems to refer to a limited area, this concept can be used as a key to the understanding of the spirituality of the school, as the author aptly shows.

Professor Andre Padoux, eminent scholar of Tantra and Kashmir Saivism, especially of *mantrasastra*, has contributed a very perceptive Foreword to the book *The Touch of Sakti: A Study in Non-dualistic Trika Shaivism of Kashmir* by Ernst Furlinger. The author in his Introduction gives a survey of the history and literature of Kashmir Saivism, mainly based on the extensive historical and