

SCIENCES of Difference



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PROJIT BIHARI MUKHARJI

In 1935 Hemendrakumar Ray gave us a disturbing glimpse into an uncanny future. In a novel that is more a moral treatise on national science than histrionic pulp fiction, Ray described a fictional nation of Bengalis in the deepest heart of east-central Africa. An ancient shipwreck, he narrated, had left a hapless but plucky group of Bengalis in the deeply forested region. Undaunted, they had proceeded to build an incredibly advanced and supremely powerful civilization. They had not only remade their hostile environs, but indeed had remade themselves. Their bodies, tastes, reproductive modes—all had been modified to make them more efficient. Efficiency and national progress had been established as the sole criteria for all walks of life. Individual likes and dislikes were entirely expunged. Worst of all, basic human sympathy and fellow feelings had been subordinated to the cult of scientifically mandated efficiency.

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Of all the myriad branches of science the one where this transformative potential of science was most conspicuous was Anthropology, more specifically Physical Anthropology. It claimed for itself the ability to adjudicate and clarify the knottiest of human conundrums: who are we? How do we relate to our neighbors? Etc. Indeed, the object of this science were not things, but beings. Fellow human beings. Yet, ironically, the way in which these human subjects were studied turned them into little more than objects. Measured, bled, quantified, and classified, with little reference to their individuality or their biography, in the hands of physical anthropologists at the time, their subjects became little more than biological objects. Rather than their dignities, desires, dejections, distresses, or dreams, these subjects came to be defined by a series of bodily measurements that could be used to determine their placement in one classificatory category or another.

Of the deluge of bodily

group A had likely originated in Europe and blood group B in South Asia. Hence, a higher proportion of group A in a population, to the Hirsfelds, meant a closer biological connection with Europeans.

Though the specific conclusions of the Hirsfelds were frequently refuted, their basic method quickly caught on and, in less than a decade, gave rise to the entirely new discipline of seroanthropology. Between 1919, when the Hirsfeld study was published, and 1939, in a mere twenty years a whopping 1,158 seroanthropological studies were published in the UK, US and France alone. Many other studies were published in Germany, Japan, British India and elsewhere.

The twenties and thirties were epochal decades in the history of Bengal. The end game of empire played out slowly and with unexpected twists and bloody turns. On the one hand, the scientific services and state bureaucracies were progressively 'Indianized' after the WWI. This allowed a lot of Indian scientists to work within, rather than outside or on the fringes of, the state.

On the other hand, the nature of mass politics and electoral democracy introduced by the Government of India Acts of 1919 and 1935 gave rise to bitter and often violent clashes along communal and caste lines. As a result, there emerged a tension amongst the educated classes.

The promise of science, enconced firmly within the state apparatus, stoked hopes of a technocratic future. A future where science, now deployed in the interests of national uplift rather than imperial subordination, would lead to the future prosperity of the nation as a whole. Contrapuntally, the nature of electoral democracy, pegged as it was to identities of caste and religion, produced bitter disputes about the very boundaries of future national groupings. Rival nationalisms—Indian, Bengali, Hindu, Muslim etc. competed with class and

political visions. Mahalanobis emphasized that all Bengalis, irrespective of caste or religion, were biologically closer to each other than people from neighboring provinces. Guha refused to even count most of the so-called lower caste and tribal groups as 'Bengalis', reserving that label only for upper caste—though including both Hindu and Muslim—Bengalis. Yet, where Guha and Mahalanobis and many others agreed was that they thought various sorts of bodily measurements, and often seroanthropology, could settle the issue.

This technocratic dream inspired political parties to directly invest in and publish anthropometric surveys. The Maha Gujarat Society, a group demanding the break-up of the erstwhile Bombay State into separate Gujarati-speaking and Marathi-speaking regions, for example, employed a Cambridge-trained Bengali anthropologist, D.N. Majumdar, to determine whether the tribal peoples of the Dang forests were closer to

A major stumbling block in the perpetuation of such fictions was the fact that as Bengalis themselves, many of the scientists would have known of numerous examples of how such perfect endogamy does not work in practice. Upwardly mobile families for instance, if they managed to become affluent, were often able to marry into higher-status groups. Migrants too were often able to marry locally. Practices such as adoption or levirate were also known to exist. Finally, no matter what the community rules exhort, there is hardly any human community where reproduction is entirely limited to the marital family. Extra-marital liaisons, particularly between affluent men and poorer women, have long been part of rural societies. All of this would have been well-known to most of the researchers. Yet, when they sought to approach community identities as discreet biological facts, it was as if they had to willfully suppress their own social memories.

The tragedy of this forgetting emerged in a little Bengali book authored by Sasanka Sekhar Sarkar. Sarkar was one of the most prolific and inveterate seroanthropologists. Eventually becoming a professor of the Calcutta University, he did much to establish seroanthropology as a popular academic discipline. Yet, late in life, he authored a book titled *Lokgatha*, a collection of folktales and stories collected throughout his life. Introducing the collection, he recalled his own grandmother and the stories she would tell. He insisted that it was these stories that were the true history and heritage of mankind and insisted that they could not be isolated as belonging to any one discrete community or the other. He lamented that Bengali grandmothers no longer had as large a stock of stories as they once did and neither could contemporary grandmothers narrate these stories with as much verve as those of yore. It seemed as though, having spent a rich and successful career insisting that humans

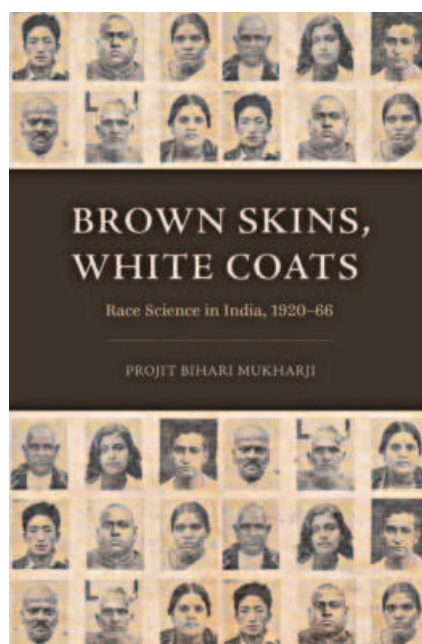
could be defined entirely by their measurable biological inheritances, Sarkar at the end of his life was grasping for an alternate vision: a vision of kinship that was not simply genetic, but rather built upon a stock of shared stories and memories of telling stories.

Ray's *Amanushik Manush* shared a similar vision. Deeply influenced by Tagore and a close friend of Kazi Nazrul Islam, Ray had authored works of science fiction as well as the supernatural. Like Tagore he was smitten by science's ability to stoke our curiosity and wonder, but he was equally suspicious of its humbug and wary of its ability to disenchant complex social worlds.

Amanushik Manush was not a very successful novel. Few today, beyond *kalpabigyan* aficionados, know of it. By contrast the technocratic dreams for determining and shaping political futures thrived. Under Mahalanobis and Guha, leading scientific institutes such as the Indian Statistical Institute and the Anthropological Survey of India, conducted largescale biological studies of group difference in postcolonial India. Social groupings were refigured as biological differences. As seroanthropology evolved into technologically more sophisticated population genetics, castes and communities were reimagined as 'gene pools'. Faced with this ascendant faith in technocratic definitions of human identities, Ray's exhortations appeared quaint at best and inconsequential at worst.

Today as genetics, increasingly institutionalized through legal cases on paternity, immigration etc., progressively becomes the dominant way to define kinship, Ray's forgotten dilemma continues to haunt us. Who is an *amanushik manush*? Is it one who has forgotten to see their neighbors as complex human beings? Or is one who has been reduced simply to a biological assemblage of genetic traits? Is it the scientist or the subject who is studied that loses her humanity in the end? Indeed, what is it that makes us human or inhuman? Is it our biology? Or our history?

Projit Bihari Mukharji is a Professor of History and Head of the Department of History at Ashoka University, as well as a Professor of History of Science at the University of Pennsylvania. Currently, he is a Guggenheim Fellow.



(L) Polish medical couple Ludwig and Hanna Hirsfeld, working with British and French troops during WWI, claimed to have discovered a link between blood groups and racial identity. (R) Cover of the book 'Brown Skins, White Coats'.

People, especially those who were marginal to the body politic, were considered expendable and subjected to deadly scientific experimentation. With the decay of the softer, nobler sentiments had also come a hubris. So much so, that these advanced Bengalis had come to mock and look down upon the Bengalis who had remained back in Bengal and not partaken of these tremendous technological advances. Ray, tellingly, called his novel *Amanushik Manush*.

However farfetched the dystopian Bengali colony in Africa might seem, the moral and ethical tensions articulated by Ray were incredibly cogent to mid-twentieth century Bengal. An enthusiasm for science and technology had grown with leaps and bounds across the subcontinent. But since many of the flagship educational institutions of the colonial era were situated in Bengal, predictably this enthusiasm was perhaps greatest amongst Bengalis. Most of the scientific professions of the late colonial period were dominated by Bengalis. This enthusiasm had also

measurements that cascaded through early and mid-twentieth-century Physical Anthropology, one that stood out most in terms of its novelty, future promise, and claims to scientific objectivity, was blood group frequencies. Blood groups had first been discovered in the first decade of the twentieth century. The First World War and the need for blood transfusions on the battlefields had helped refine and develop the knowledge about blood groups. It was during these widespread experimentations with blood grouping on the battlefield that a Polish medical couple, Ludwig and Hanna Hirsfeld, working with British and French imperial troops claimed to have discovered a connection between blood groups and racial identity. The Hirsfelds claimed that the frequency with which different blood groups, i.e., A, B, AB and O, appeared in each racial group varied. Based on this they formulated a racial scale called the 'Biochemical Race Index'. Based on this index, they further hypothesized that blood

caste based political movements, in defining distinct and different visions of a political future.

Faced with these orthogonal tendencies, many scientific men thought that science could supplant the messiness of politics in settling questions of group identity and political belonging. The polymath Sir Brojendra Nath Seal had long-advocated a scientific approach to settling issues of national composition and future development based on concrete, measurable numbers. But he had never gotten further than the idea. The challenge of how to turn something as complex as human political identities into simple numbers was left to his juniors to work out. Two young men in particular were drawn to Seal's suggestions. Both would go on to be scientific stalwarts in their own right.

One was the eminent statistician, Prasanta Chandra Mahalanobis. The other was the founding director of the Anthropological Survey of India, Biraja Shankar Guha. Mahalanobis and Guha had distinctly different

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