

SOCIAL STRUCTURE

THE GREAT ENGINEERS OF MEDIEVAL INDIA were mainly Shudras. Members of the lowest varna in the caste hierarchy, the Shudras produced a steady supply of architects, builders, stonemasons, bronze sculptors, goldsmiths and other professionals. Sometimes called the Vishwakarma community, these artisans and craftsmen worked in hereditary guilds. They studied structural design, mathematics, material science and the artistic conventions of the day. Commissioned by kings, merchants and Brahmins—who disdained all manual labour themselves—the Shudras, aided by the labour of those considered “untouchable” and outside the varna hierarchy, built all of India’s engineering marvels, including its grand temple towns, magnificent cities such as Vijayanagar and medieval fort-palaces.

Take for instance the town of Khajuraho a thousand years ago, where Shudra artisans, in large workshops, conceived and carved their artwork and taught apprentices amid the sounds of hammers and chisels. Inscriptions show that with rising proficiency, artisans gained new titles. A skilled artisan was called *Silpin*, who sometimes inscribed his name on his creations, including on panels of erotic art with playful moods and delicate emotions. With higher skill, he became a *Vijananin*. A few became adept enough to be called *Vaidagdhi Visvakarman*, masters who went beyond mere technicalities of craft to conceiving large architectural projects and the finer aesthetics of art, winning much respect, social status and economic rewards. The Shudra domination of the engineering profession in India continued well into the colonial era.

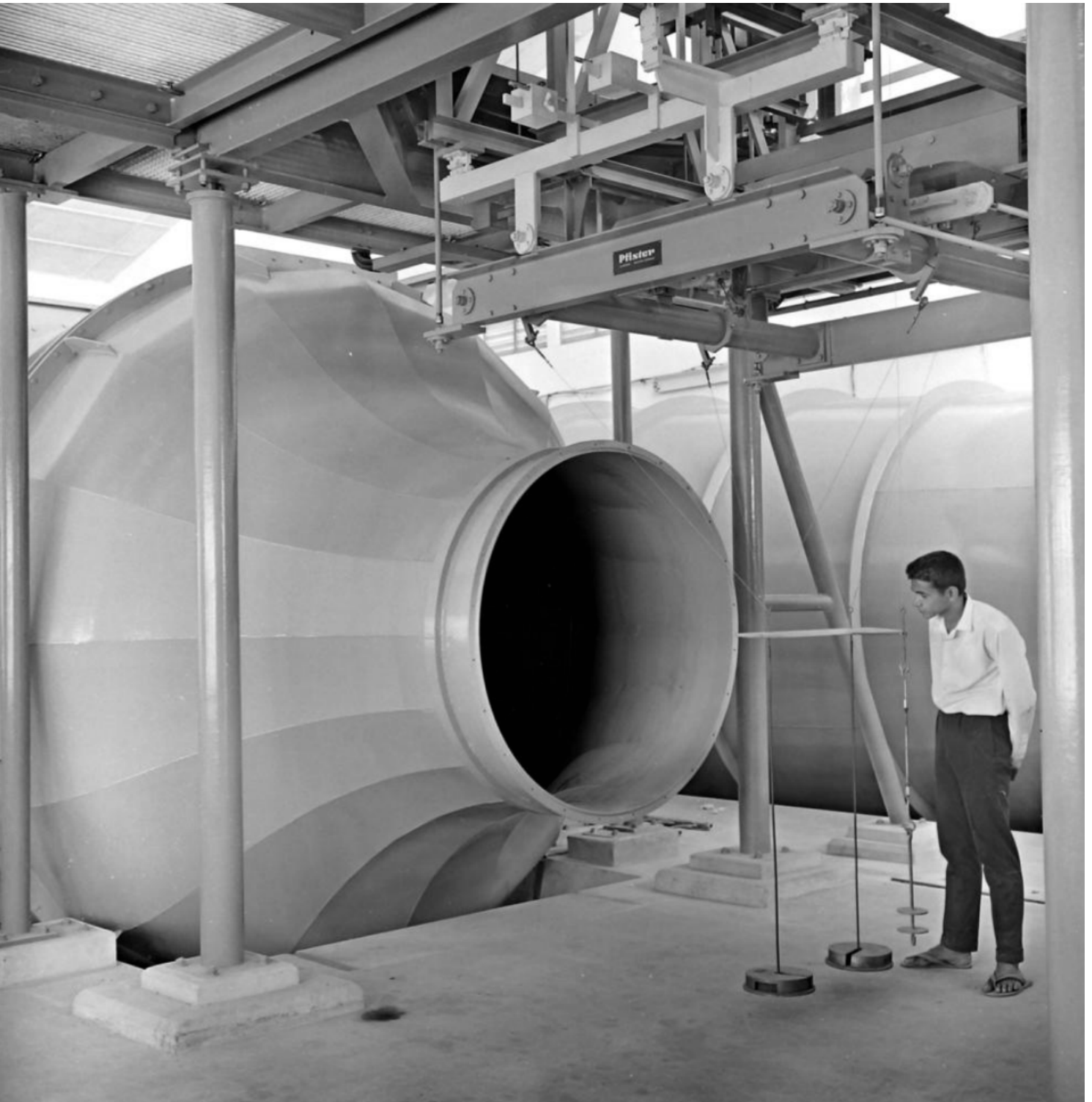
By the late-twentieth century, however, things had changed dramatically. In my incoming class of 1985 at the Indian Institute of Technology, Kharagpur—one of five IITs founded between 1951 and 1961 that had become the premier engineering colleges of India—Brahmins were by far the largest caste group. Most of the nine students I shared a hostel wing with were Brahmin, and all belonged to dominant castes. Our faculty and student body were almost entirely upper-caste, representing less than twenty percent of Indians. There were hardly any Shudras, who comprise about half of the country’s population. Moreover, this utterly ahistorical domination of engineering education by the upper castes was now accompanied by their baffling claims of “merit”—implying that they had a higher natural talent and aptitude for engineering work than others. How did this extreme professional transformation come about?



Caste and the delusion of “merit” in Indian higher education

/ CASTE

NAMIT ARORA



PREVIOUS SPREAD: A wind tunnel at IIT Madras, in 1968. Subramanian's book focusses particularly on IIT Madras, and explores the politics of caste, class and reservations.

BELOW: Students protesting against reservations in medical institutions at Shivaji Park, Mumbai, in 2006. IIT alumni also raised a big stink worldwide that year, signing petitions and organising protests against reservations at IITs.

The causes and contours of this great transformation are the subject matter of Ajantha Subramanian's *The Caste of Merit: Engineering Education in India*, an original, incisive and scrupulous work of historical anthropology that was published last year. Subramanian, a professor of anthropology and South Asian studies, locates the start of this change in nineteenth-century British India, when new social and economic forces began shifting technical knowledge "from guild to state, shop-floor to classroom, and lower to upper caste." She explains how, in less than a century, the engineering profession in India "went from being the purview of lower-caste artisans to becoming integral to state power, economic development, and upper-caste status."

With a particular focus on IIT Madras and Tamil Nadu, Subramanian explores the psychology and the demographics of India's new engineers, and the politics of caste, class and reservations. Of Tamil-Brahmin lineage herself, she exposes upper-caste stratagems to both obscure and perpetuate their inherited social and cultural capital—mainly by attributing their professional attainments to their aptitude and innate bril-

liance, or "merit." Indeed, such claims constitute a long-standing conspiracy of ignorance about the role of caste in shaping not just IIT education but all professional higher education in India.

Such claims of "merit" are abundant too. During my years in Silicon Valley in the United States, a common sentimental trope I often heard among IITians was that they had built their fortunes after starting with just two suitcases. The implication was that they were self-made and fully deserved their rewards. I found it amusing, this erasure of their place at the apex of India's social hierarchy and all the unearned social capital that had led them where they were. Their success as non-white entrepreneurs in a highly visible industry, Subramanian writes, "has deepened their investment in a narrative of humble middle-class origins in which the brain is elevated as the sole form of capital and histories of caste are strikingly absent." She notes that Indian Americans are predominantly upper-caste, with Dalits and Adivasis making up, at most, three percent of Indian immigrants. She adds that "the illegibility of caste in the United States has made it easier to draw a seamless equation between being upper



caste, being Indian, and having ‘merit.’” Indeed, “caste privilege is consistently misrecognized as middle-class labor and racial talent” and IITians in the United States are seen “simply as naturally gifted, if hardworking, Indians.” Given their ancestors’ disinterest and disdain for engineering work, how did the upper castes pull off this amazing makeover?

IN THE NINETEENTH CENTURY, colonial administrators such as Thomas Babington Macaulay and Indian modernisers such as Rammohan Roy, for their own reasons, advocated a more modern and practically beneficial education open to all—in disciplines including law, medicine and engineering—rather than education in classical literature and the arts, which at the time was pursued only by the elites. Subramanian rightly points out that, for the British, the promotion of modern education in the English language was “intimately

Subramanian explores upper-caste stratagems to perpetuate their inherited social and cultural capital—mainly by attributing their professional attainments to their “merit.”

linked to the goal of expanding the presence and power of the colonial state.”

A lively debate took place over how best to produce a new cadre of Indian engineers. Should the government create modern engineers by building upon the deep foundation of India’s native engineering traditions? This would mirror the historical process in Britain, where the leading engineers of the day had risen through a system of guild pupilage and were trained on the job—in Britain’s new factories, offices and workshops. This approach prioritised hands-on learning and honing of “technique.” A competing approach then gaining ground in Britain and other European states was a new model

of engineering training emphasising a period of textbook learning in a school. It imparted formal education in mathematics and applied science prior to the acquisition of hands-on skills. This method naturally favoured the literate classes and henceforth split engineering training into a vocational track and a university track, though even in the latter case European engineers continued to greatly value hands-on labour and skill.

Far more than in Britain, where private efforts led the way, the dissemination of modern engineering education in India became a project of the colonial state. The university approach gained ground in India from the late-nineteenth century. In “elevating the classroom as the new site of technical knowledge,” Subramanian writes, “education planners marginalized those who had technique in favor of those schooled in reading and writing.” This combination of classroom education and state employment was decisive. Engineering began attracting an elite class of Indians who coveted the status and prestige of jobs associated with the colonial state. After the first college of civil engineering at Roorkee in 1847, where students lived in style and dressed for dinner, three more civil-engineering colleges came up by 1880, in Poona, Madras and Calcutta.

But not all was well with this new crop of engineers. The British felt that they lacked “practical sense,” Subramanian writes. As a British officer put it, they lacked “the grit and common sense which mark the engineer.” This was not mere racial prejudice. “With the shift to classroom education,” Subramanian writes, the targets of this critique “were the upper castes, not the artisans whose practical orientation and technical capacity were evident. While regarded as well suited for higher education, upper castes were also seen to be singularly lacking in practical skills.” They were lured by “professional engineering programs that promised social status and well-paying careers” in the public-works departments, but they avoided “anything that smacked of manual labor.” The upper castes certainly stayed away from “vocational and industrial schools

set up by European missionaries and government officials.” Two other British officials, in their report on technical education in India in 1911, claimed that “the general disinclination for hard physical labour on the part of the average educated Indian is the chief cause of failure in the technical education of the India of today.”

Many colonial officers felt that “caste affinity and social embeddedness undermined the professionalism of Indian engineers,” Subramanian writes. “For instance, one British engineer expressed discomfort with Indian colleagues and superiors by complaining that they ‘would listen to the grievances only of fellow caste men when on inspection tours.’” Indians sought out engineering colleges “where caste practices of purity and pollution were maintained,” especially at the dining table, and where technical training was minimised. This is how modern engineering entered Brahminical society, reflecting attitudes with a long lineage—the famous Persian traveler Alberuni, for instance, had noticed in the eleventh century that even the scientists among Brahmins held on to ideas of purity and pollution.

But despite frequent British complaints that these Indian engineers devalued technical work, or that manual labour was “considered derogatory by upper class Bengalis,” class locations meant that upper-caste engineers, compared to Shudra artisans, got along better with the British. Their class even served as native informants, so they were not only tolerated but preferred by the British. Soon, the Indian members of “the two main professional engineering bodies in the British Empire—the Institute of Civil Engineers and the Institute of Mechanical Engineers ... were all upper caste and mostly Brahmin.” About the situation in Madras Presidency, Subramanian writes:

Between 1901 and 1951, approximately one-third of the total increase in urban population was in white-collar employment, and it was in this sector that Brahmin dominance was most apparent. Brahmins’ early exposure to English literacy and modern education, in part through the efforts

of Christian missionary societies, became a significant advantage with urbanization. Despite being only 3 percent of the regional population, Brahmins were overrepresented in higher education and government service, where they constituted 70–80 percent of graduates and native employees.

Around 1918, Daivasikhamani Achari, a Shudra leader, complained about “the injustice of favoring upper castes at the expense of artisans,” given “the complete dissociation of the intellectual class in the country from its industries.” He noted that the upper castes looked down on manual work as degrading and “treated with contempt the artisans and craftsmen who carried on the industrial work of the country.” Indian modernists such as the eco-

nomist nationalist Hanumantha Rao worried about this weakness among upper-caste folk and, as Subramanian writes, desired “a broader transformation of cultural prejudices against embodied labor.” Technical labour is itself a source of knowledge, Rao argued, and our cultural worldview must be transformed so it accords a high value to it, making it “foundational to both education and nation-building.” Others argued that such transformation would not occur unless upper-caste attitudes were modernised.

Such critiques, however, changed little. By 1947, Subramanian writes, engineering, anchored in civil-services jobs, had become “a coveted, high-status profession best suited to the high-born” and seen as integral to nation-building—a feat “intimately linked to its disassociation from the ‘tainted’

technical labor of the lower castes” that now powered the new industries. Looking back, I realise that this attitude was alive and well even in the late 1980s during my time at IIT Kharagpur—conceptual knowledge was still sexy, hands-on technical skill was anything but. Our freshman-year course on workshop skills was poorly received. With little experience or interest in working with tools, and a reluctance to get their hands dirty, most students approached it as an exotic challenge. Some struggled to understand the relevance of such work to their education at all. This was not quite what many mid-century modernists had hoped for.

AFTER INDEPENDENCE, many leading nationalists, including Jawaharlal Nehru, envisioned India’s economic development and self-reliance through



COURTESY NAMIT ARORA



OPPOSITE PAGE:
My hostel, the
Nehru Hall of
residence, at IIT
Kharagpur.

LEFT: The civil
engineering college
in Poona in India.
After the first
college of civil
engineering at
Roorkee in 1847,
where students
lived in style
and dressed for
dinner, three more
civil engineering
colleges came
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state-led industrialisation. Technical education and research were deemed central to this strategy. Nehru even declared the engineer as the new “nation builder.” Engineering was by then so dominated by Brahmins like himself that he idealised it as a vehicle for “the Brahminic spirit of service”—an oxymoron, Ambedkar might have said.

A committee led by NR Sarkar was set up in 1945 to review the state of technical education in India. Its interim report in 1948 astutely noted “the narrowness common among students in technical colleges.” It called for new institutions that would “integrate mathematics, science, and humanities with the specialized professional subjects” to produce “the perfect combination of mind and hand: a useful citizen, a qualified engineer capable of exercising initiative and thought, and a professional enabled and motivated to apply engineering principles in practice,” writes Subramanian. The Sarkar committee “identified the Massachusetts Institute of Technology (MIT) as the most desirable model, with its mix of practical and theoretical sciences, mathematics, and the humanities.”

Based on the committee’s recommendation, the Indian government set up five centrally administered IITs across the country, each with funding and technical knowhow from one or more international collaborators. For instance, the first IIT at Kharagpur, established in 1951, received varied assistance from the United States, Britain, the

Soviet Union and UNESCO. The IITs were well funded, autonomous, outside the existing university ecosystem and set their own entrance exam and curriculum. This conferred on them prestige, a “world class” status and an aura of exceptionalism—an engineering Hogwarts of middle-classlandia.

From the start, however, the Sarkar committee’s emphasis on fusing humanities with engineering education to produce well-rounded citizens was quietly dropped. The situation varied a bit across the IITs but, of the 56 courses we had to complete in four years, my class at IIT Kharagpur encountered only three humanities or social science courses—English for communication, psychology (warmed-up human-resources theory) and economics. There was nothing even on the history of global science and technology, let alone its evolution in India.

The Sarkar committee’s report had also attracted critics when it came out, some quite prescient. They foresaw that the IITs would turn elitist, institutionally isolated and psychologically aloof from India’s developmental challenges. Their entire faculty and nearly all students came from a very thin slice of India—upper-caste, middle-class urbanites. This continued to be true for decades—even in 2018, a right-to-information query revealed that 96 percent of the faculty at IIT Kharagpur was upper-caste; only one per-

cent were from the Scheduled Castes and three percent were from the Other Backward Classes. Their female student population stubbornly stayed below ten percent, often much below. Most students had at least one engineer or bureaucrat in their extended family. For the most part, they either attended “private, English-medium schools, most often run by Catholic orders, or central government schools catering to the children of central government services personnel,” the Kendriya Vidyalayas. From their social milieu, they had also inherited the old distaste for hands-on labour.

Early on in IIT Madras, formed with West German aid and influence, at least an attempt was made to break down this aversion to hands-on labour. The Germans had pushed through a curriculum “heavily focused on practical training in manual skills, such as blacksmithing and woodworking,” far more than in other IITs. But this, too, failed to ignite a “hands-on culture” and was quietly shelved a decade or so later. German experts at the Rourkela steel plant blamed its operational problems on “the lack of a modern work ethic” among Indian engineers, who “were unwilling to take charge and neither understood the value of labour per se nor showed the required professional ambition.” They lacked an appreciation of the dignity of labour. With such failings, the upper castes seemed particularly ill-suited—unmeritorious—to spearhead the engineering-led development of India, which may help explain the decades of unimpressive outcomes in industrial capacity-building. Walter Scheel, a German diplomat and adept carpenter, opined that India would not reach its industrial potential unless its professional classes internalised “the importance of work and craftwork, the value of the individual ... and dynamic thinking instead of static-feudalistic ways of living.” The Germans, Subramanian writes, “were more insistent on the need to link the industrialization of society to the modernization of the individual.”

But none of this deterred IITians from seeing their institutes “as islands of excellence in a sea of mediocrity,” which only took in natural geniuses like

themselves, “the cream of the crop.” They felt they had, based on their own merit, prevailed in an equal-opportunity, openly competitive entrance test. Blind to their caste privilege and inherited advantages, they never asked how much of their success was them versus their social backgrounds. Subramanian presents the work of two sociologists who studied the IITs in 1966 and concluded that the five institutes were contributing little to social mobility and had mainly become gateways of social reproduction.

Indeed, the IITs became all about funneling up academic high achievers from India’s most privileged social slice. They relied on a terribly provincial idea of merit, based on a single test score that failed to consider the social context of most jobs in the world, or the real-world aptitudes, interests and life experiences that fuel individual creativity. They ignored the critical importance of social diversity in higher education, especially among these presumed future captains of industry, governance, policymaking, investing and innovation. They unwisely assumed that a single test score was the best and only worthy predictor of a successful professional career. But any nation genuinely attempting to build a meritorious system or service in, say, public health, policing or banking, would prioritise students who understand those they serve and might respond to their needs equitably and without discrimination. Besides conceptual skills, it would also select students based on their actual interest in the subject, and their social and emotional proximity to it—none of it captured by standardised tests.

For instance, a fellow student of mine from south Bombay could only qualify for agricultural engineering, a field he had absolutely no interest in. So he spent four years biding his time and then got an MBA in finance. A more meritorious candidate—and a better investment by the state—would have been someone with perhaps lower scores but an agricultural background or evident interest in the subject. Such cases are not rare; they in fact abound. Most of my fellow IITians, including me, had been herded into the “safe” track of engineering, at the pinnacle of which lay the IITs. We

all picked the most vogueish and lucrative fields our entrance exam rank could secure us, which mattered far more than actual interest in a specific field of study, making a mockery of our “merit.” Most of us came from a social segment that increasingly equated education with professional training, success with money, and sneered at the idea of a career in the arts, social sciences or humanities.

The upper castes also glibly equated their narrow idea of merit with excellence. Ambedkar, a big believer in excellence himself, had both anticipated and forcefully questioned simplistic ideas of “merit” of the kind adopted by the IITs:

Nobody will have any quarrel with the abstract principle that [the best person for a job should be preferred]. But Man is not a mere machine. He is a human being with feelings of sympathy for some and of antipathy for others. This is even true of the best man. He too is charged with the feelings of class sympathies and class antipathies. Having regard to these considerations the “best” man from the governing class may well turn out to be the worst from the point of view of the servile classes.

The mass examination for IIT entrance, in effect, rendered what was mainly social selection as technical selection. For decades, it was offered only in English and, although it is now available in some vernacular languages, it continues to disadvantage students without an English-medium education. The exam “appeared to exist above the political fray as an objective instrument of evaluation.” Its formal openness to all led upper-caste boys to see their scores as not so much a result of social, but of natural, advantages. Subramanian’s fieldwork shows how upper-caste beneficiaries have relied on the entrance test to present themselves as “meritorious” and “casteless” and oppose any criteria other than test scores to select incoming students. In other words, as she writes, “the IITs have underwritten the capital accumulation of upper castes by reconstituting the inheritances of family and community into a form of achievement legible in the marketplace.”

Partly due to their multinational origins and curricular inspiration, the IITs possessed an outward orientation from the start. They produced little knowledge or thought leadership on how India worked, nor generated grassroots innovations. Is this surprising, in light of the people who went to these institutes? In the 1960s, Subramanian writes, “the cost of sending a student to an IIT amounted to the per capita income of almost forty people.” But, after reaping the benefits of publicly funded and missionary schools and colleges, most IITians would later come to despise the statist model of development. “In one generation,” Subramanian adds, “they have gone from being beneficiaries of the developmental state to being its most strident detractors.” Indeed, by the 1990s, most IITians I knew supported mass privatisation of the economy and a worldview in which the very idea of regulations was stigmatised.

With the passage of the Immigration and Nationality Act in the United States, in 1965, the IITs became reliable conduits for transnational mobil-

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ity—echoing the rural-to-urban mobility of their predecessors via opportunities with the colonial state. Rather than jump-starting engineering in India, the IITs have produced a steady stream of staid urban upper-caste careerists heading to the United States, which needed manpower in technical fields to advance its economy and outcompete the Soviet Union. It helped that software and IT work, more conceptual than manual, masked some of the handicaps of upper-caste engineers. During my time in Kharagpur, most of the studious kids were those on the US track; the rest took it easy. The entire application process for US universities was a well-oiled machine. Eighty percent of the students in my department went abroad, most settling down in suburbia with Silicon Valley jobs and thriving in the structured hierarchies of corporate America. I too was part of this exodus. India lacked opportunities to utilise their talent, the IITians shrugged on their way out. “Brain drain is better than brain in the drain,” was the popular

claim. (More recently, the diaspora has rebranded itself as a “brain bank.”) If the publicly funded IITs were failing to deliver on their original goal of producing nation-builders, they were certainly delivering for the upper castes, understandably making the system seem like a caste racket to others, akin to a legalised land grab. Resistance to it was inevitable and it soon came from two distinct fronts.

IN HIS ESSAY, “Caste, Class and Democracy,” Ambedkar had foreseen that once the British departed, an upper-caste elite would simply take their place. As he saw it, India needed a bold programme of socioeconomic justice—including land reform, providing universal education and health-care, fighting caste and gender discrimination and so on. But Indian elites, with hardly an egalitarian bone in their bodies, did little to enhance real equality of opportunity. Chin-deep in caste feeling, they felt innately superior to others and were least interested in building a level playing field or undercutting their own privileges. They paid lip service to meritocracy but persisted with their rigged game. Token gestures aside, in the early decades of the republic, upper-caste Indians only consolidated their domination over politics, the economy, education, cultural institutions, media and other public resources. The hegemony of the upper castes was so complete that it was practically invisible to them. Nothing seemed unnatural or objectionable. The IITs became a premier expression of this caste order.

How could this racket go unchallenged? In Tamil Nadu, even before Independence, the Justice Party and activist-politicians such as Periyar had produced powerful critiques of caste society. Through the non-Brahmin and Dravidian movements, Subramanian writes, the idea “of Brahmins as uniquely privileged and of non-Brahmins as long subjugated had acquired broad acceptance in Madras Presidency.” With Tamil Nadu as harbinger, new social-justice movements spread across India. By the 1970s, economic gains from the Green Revolution and rising political awareness led many landholding Shudra castes to begin aspiring to, and agitating for, a larger share of administrative and educational opportunities, where they were very underrepresented.

These changes led to the Mandal commission in 1979, tasked to “identify the socially or educationally backward classes” of India. Alongside, India saw the rise of a new kind of caste-based politics, different from the one the upper castes had used all along to dominate public resources. Its main driver was the utter failure of upper-caste politicians to represent the interests of the lower castes. As the latter recognised the power of their vote, new po-

litical parties, such as the Dravida Munnetra Kazhagam in Tamil Nadu, arose to focus on the interests of the non-upper-caste majority. Promising greater fairness in public life, they countered the existing caste politics of the elites with their own caste politics. Voters for these new parties coalesced along caste lines because, more than a mere matter of identity, caste still shaped one's share of opportunity, deprivation and discrimination in life. Upper-caste voters coalesced along caste lines too; they claimed that other castes formed "vote banks," but they were the most reliable "vote banks" for the Congress and, later, the Bharatiya Janata Party.

All of this democratic churn inexorably led to the first big challenge to the

The new 27-percent quota for OBCs, which included the Shudras, was much more unsettling. It was introduced in public-sector jobs in 1991 and extended to public universities in 2006—although, in practice, institutes could set their own thresholds for admission and have set them high enough to ensure that even the OBC quota has often gone unfilled, with reserved seats reverting to the "general category" as per the law in such cases.

By the 1980s, the IITians almost entirely aspired to either the Indian private sector or migration abroad. So only reservations in the IITs angered them—and the students and alumni raised a big stink worldwide in 2006, signing fiery petitions and organising

cally advantaged OBC candidates were excluded from the quota). Once inside, they had to complete the same coursework and training as all others under the same qualifying criteria.

Among the upper castes, this change—far from triggering introspection, understanding and appreciation for a more diverse student body—caused a reactionary backlash and "outrage at the disruption of the natural order of upper-caste dominance." Subramanian writes that instead of being seen as a redistributive mechanism, "reservation was widely regarded as political pandering to lower castes and a grave injustice to the meritorious." Furthermore, the idea that students who regarded themselves "as individu-



ADITYA KAPOOR

status quo: an expansion in caste-based affirmative action, or reservations, at the IITs and other publicly funded colleges. A 22.5-percent quota for SC and ST students had already been extended to the IITs in 1973, 19 years after it was introduced at other public colleges. The IITs had been exempted in their early years because they were deemed institutes of national importance. The quota allowed a five-percent relaxation in qualifying marks for SC/ST candidates and went largely unfilled in most years, making little impact on the culture of the IITs. This was because very few Dalit and Adivasi candidates were reaching high school to even qualify for the entrance exam, let alone do well in it, partly because primary education remained callously neglected.

ABOVE: A mathematics coaching class in Kota, in 2013. Coaching centres at Kota and Hyderabad began hosting tens of thousands of students in residential hostels and putting them through a gruelling multi-year training regime to "crack" the IIT entrance test.

protest events, such as a human-chain rally in Delhi supported by PanIIT, the alumni organisation representing all IITs. However, as in other public colleges, the new OBC quota was provisioned by increasing the total number of seats in the IITs such that the odds of admission in the general category did not shrink—after the added seats, the odds in fact improved. Henceforth, as in the United States, test scores would not be the sole criterion for gaining admission into public colleges; students from groups long underrepresented due to enduring structural disadvantages were given seats at the table (economy-

als or as part of modern institutional formations were now compelled to enter into caste consciousness rendered Mandal not only unjust but regressively illiberal." All of this anti-reservation rhetoric portrayed "an upside-down world where stigmatization and exclusion are the plight of upper castes and reservation is a corruption of preexisting norms of equality, fairness, and justice."

Tamil Brahmins, for instance, felt a sense "of their own victimization by a non-Brahmin majority." Fancying themselves as "casteless moderns" who had been justly rewarded for their

“merit”, they were disinclined to see caste as a big structural factor in their success. Since this was the foundational premise of caste-based affirmative action, reservations had to be delegitimised to preserve their self-affirming fiction of “merit.” And so the upper castes got busy finding new strategies to mark themselves as superior to reserved-quota entrants, many of which Subramanian documents through interviews with IIT graduates. They portrayed reserved quota students as undeserving *by definition*, and conflated the general quota with the “meritorious,” rather than with those who have caste privilege. “The semantic equivalence between the general and the meritorious reinforced the idea that those

than forcing it at the college level. But the argument reeked of bad faith—this social class, for decades, could not muster even a fraction of their rage against reservations and direct it against the failure of the Indian state and society to crackdown on caste discrimination and equalise opportunities early on in the lives of so many. Moreover, they seemed to have no interest in promoting social diversity in professional education as an important end in itself.

Another upper-caste trick was to blame reservations and “identity politics”—not the graded divisions and deep prejudices of the caste system itself—for keeping caste consciousness alive. A Tamil-Brahmin friend once told me with a straight face that there

higher educational credentials and strongholds in lucrative professions, this section believes itself to be ‘casteless’ today.”

Subramanian’s interviews and other field research lead her to the view that, “Far from giving up caste pride and superiority, upper-caste IITians have simply substituted ‘reserved candidate’ for ‘untouchable.’” This prejudice also infects the faculty and translates into both casual slights and more serious discrimination against reserved-quota students, which the upper castes are often oblivious to, or which they tend to dismiss as imagined or exaggerated. Probe a little and smug theories tumble out, especially among Brahmins, about their community’s traditional focus



who fall within the general category do so not on the basis of accumulated caste privilege but by dint of their own merit,” Subramanian writes.

Of a piece with such thinking was the idea that reservations lower professional excellence or efficiency. This idea, for reasons noted earlier, has scant support among sociologists today. In any case, caste elites have run all major institutions of independent India and still failed to deliver even basic social services to the majority of Indians—of education, health, water, sanitation, electricity and urban planning. What good was their “merit”? Other upper-caste people put forth a seemingly principled argument that the work of equalising opportunity must begin much earlier, at the school level, rather

was “no problem” with caste in Madras until “these people got obsessed with it and began berating the Brahmins.” It has always suited the privileged to wish away all talk of caste in public politics (“We’re caste-blind,” they say, “our caste is ‘Indian’”), whereas the lower castes had to insistently bring up caste to point out its pervasive injustices and to seek greater participation in public life. To an outsider, Subramanian adds, this asymmetry in strategies creates an illusion in which the upper castes seem “‘legitimate inheritors of modernity,’ while lower castes are hypervisible as the illegitimate purveyors of caste.” She quotes the sociologist Satish Deshpande: “Having encashed its traditional caste-capital and converted it into modern forms of capital like property,

on cerebral pursuits having produced superior genes or a “concentrated gene pool.” All told, upper-caste responses to reservations have been largely driven by reactionary instincts to preserve their privileges. Lately, the rising diversity in the IITs has also led them to fund new private institutions that are not required to implement any reservations. Private engineering colleges, and even liberal-arts institutions such as Ashoka University and OP Jindal Global University, are hostile to reservations and have become elite spaces for privileged upper-caste students.

The second challenge to urban upper-caste dominance of the IITs and ideas of innate “merit” came from the rise of industrial-scale coaching in the 1990s. Two “coaching factories” in par-

ticular, at Kota and Hyderabad, began hosting tens of thousands of students in residential hostels and putting them through a gruelling multi-year training regime to “crack” the IIT entrance test (Each year, the relentless pressure to perform, with little emotional support, also “cracks” many desperate teenagers who take their own lives—nineteen in 2018 in the Kota centres alone.)

This intensive approach has delivered results too. In 2016, for instance, 44 percent of the successful candidates had attended such coaching centres. These students often came from villages or small towns and belonged to newly wealthy “landed upper castes, such as the Kammas and the Reddys,” Subramanian writes, who lack “the same histories of educational capital” and comfort with English as the urban upper castes. Among the latter, these new entrants set off fresh angst and delegitimising distinctions between “the gifted” and “the coached,” separated by “raw intelligence” and “pattern-recognition skills.” It triggered talk of altering the exam itself to block these “interlopers,” seen as unmeritorious for “gaining admission to the IIT not through their innate knowledge but because they paid money for coaching classes.” In short, they were seen as “gaming” an otherwise fair-and-square system of selection.

“They’ve been groomed for a particular exam,” Subramanian quotes an IIT Madras professor as saying. “That’s what a lot of people are lamenting right now: the loss of the well-rounded individual,” the professor added, again conflating merit with caste privilege. But is this not exactly the logical end of a stunted idea of education—both of the IITs and of the modern Indian middle class that is feeding them? As Subramanian notes, “the well-rounded individual’ is not just a victim of the coaching industry. The compartmentalization of knowledge, as a result of which the humanities and social sciences are increasingly regarded as irrelevant to the making of the Indian engineer, has long been in the making.” So, while these coaching factories have indeed opened up the IITs to new demographic segments, it is a pyrrhic victory—and even a wake-up call. It is amply clear that the task of building a creative, secular,

democratic, just and humane society will require a substantial rethink of all school and college pedagogy in India.

Subramanian’s focus on caste to understand the evolution of engineering in India is refreshingly uncommon. Another recent study, *The Birth of an Indian Profession: Engineers, Industry, and the State, 1900–47* by Aparajith Ramnath, is almost entirely blind to caste. Ramnath’s engineers are simply “Indian,” who employ their resourcefulness to navigate colonial-era obstacles and incrementally “Indianise” the profession. Subramanian’s prose may seem repetitive or belaboured at times, or occasionally lapsing into academese, but these are minor flaws far outweighed by its keen insights. With moral clarity and rigour, she has revealed how caste has profoundly shaped elite engineering education in India. *The Caste of Merit* is both an astute historical study and a deft portrait of the psyche of caste society colliding with modernity, democracy, and capitalism.

IN 2003, the US news-magazine show *60 Minutes* did a story on the IITs. At the heart of this now-famous hagiographic episode was a message to Americans that “the IITs are islands of meritocracy in a socialist, low-achieving country whose best and brightest are naturally attracted to greener pastures abroad, where they are able to realize their full entrepreneurial potential,” Subramanian writes. It entirely elided the “inherited caste capital and state patronage that have gone into the making of the IITian. Instead, what we get is the image of the IITian as the product of natural selection who has an intuitive ability to ride the crest of contemporary capitalism.” She describes how IITians in Silicon Valley, seeing nothing amiss in this image, have taken it upon themselves to project the IITs into a “brand” synonymous with “Indian excellence.” By “showcasing diasporic success as the arrival of the global Indian,” she writes, “upper-caste IITians render the struggle for caste rights into a parochial—even regressive—endeavor.”

More importantly, the IITs, at both institutional and alumni-association levels, do not embody a progressive vision for India—as in, furthering a

democratic, secular, and egalitarian ethos. In fact, owing to their upper-caste demographic, non-liberal pedagogy and location at the apex of a grasping middle-class order, the IITs have come to display reactionary, nationalistic and pro-establishment attitudes. In 2015, for instance, with support from Smriti Irani, the union minister of human-resource development at the time, IIT Madras banned the Ambedkar-Periyar Study Circle, a progressive student group, for inciting “hatred” against Prime Minister Narendra Modi, even as the institute supported right-wing Hindu-nationalist student groups on campus, including the Vivekananda Study Circle, Hare Rama Hare Krishna, Vande Matram and others. On 23 January this year, as protests flared up against the Citizenship (Amendment) Act across the country, the director of IIT Bombay told its staff and students that since the institute aims to produce top-quality engineers, they must keep politics out of the campus and not criticise the Modi government. On 5 June, the registrar of IIT Kharagpur asked all employees to avoid criticising the government, and to keep their publications “free from all political tinge.” Nor have the IITs prioritised effective grievance redressal mechanisms for caste discrimination on campus, as highlighted by a student-led protest at IIT Madras last year.

Hypocrisy abounds too, especially among overseas alumni. Most IITians in the United States, in my experience, despise reservations in India even as they and their children benefit from the emphasis on diversity and multiculturalism in US institutions, both public and private. Most also seem to support the BJP’s minority-baiting Hindu nationalism, even as they support the liberal and minority-friendly Democratic Party in a country where they are religious and racial minorities. Prominent diaspora IITians deride Donald Trump, while supporting Modi and hosting gala receptions for him during his US visits.

To be fair, the IITs and their alumni are not alone in displaying such cognitive dissonance, but they are seen as the pinnacle of engineering education in India. In recent years, the number of IITs has risen from five to 23. Trendsetting elite institutes and the human material



arising out of them are precisely the right targets for interrogating a country's pedagogy.

It seems plainly true that the biggest beneficiaries of structural inequalities everywhere, as also in India, tend to be least aware of them, nor wish to be reminded of them. My IIT network abounds in those who are wilfully blind to their caste privilege, including many who harbour a range of supremacist attitudes on caste. They

refuse to see that there is no meritocracy without social mobility. Instead, they uphold a self-serving caricature of merit that breeds apathy, perpetuates their inherited advantages and stifles equality of opportunity. "Turn in any direction you like, caste is the monster that crosses your path," Ambedkar wrote. Subramanian has shown us how much this continues to be true along the path of an IIT education. ■

ABOVE: A network analyser in the electrical-engineering department at IIT Madras, in 1967.