

REINVENTING GANDHI
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Reinventing Gandhi

I

Myself Mohan Gangadhar Ambedkar. Yes, you wog bastards, you would have loved a beginning like that. It brands me as being separate from you effete intellectuals, wearing your English like corsets, ready to snigger at every mistake. Yet, think of it. The word 'myself' is a far better introduction than the word 'I'. 'I' sounds like a certificate. There is a certainty to the claim. It pins a person like a dead beetle but the introduction 'myself' is not a scientist's label; it is an invitation, an offering, a tentative listing. Myself like my garden, or my stamp album; the self not as a unitary 'I' but as a mosaic, a collage or a crossword puzzle. Myself, a word asking, inviting you to discover me.

My three names might puzzle you. They frighten me. I see it as a sentence, a burden of the national movement. Ambedkar was a lawyer and unlike most elite Indians of his time, those fussy Oxbridge dons, he studied at Columbia University. Gangadhar was Bal Gangadhar Tilak, archetypical Maharashtrian brahmin, the real lion of the nationalist movement before the advent of Gandhi. And my first name Mohan derives from the Mahatma.

Only in India would a man carry three crosses, the burden of three hallowed names. Only in India would a *dalit* father give his son such a name combining three rough *varnas*, bania, dalit and brahmin.

Dalit I might be, but I am also Hindu. Fortunately my father didn't engage in any neo-Buddhist nonsense. Like all Hindus I was a reincarnation and that is where my sorrows begin. I was Mohan Das Gandhi in my last life. When Godse shot me—remember, he

was one of the few Indian assassins who did not miss—I went to what is popularly called heaven. While India was free of the British, heaven was not. God was still Victorian and heaven was run by the East India Company. All those stuffed figures, with cruel eyes, those greedy barons, the clerks, the jaundiced surveyors and the lords who resided in grimy portraits, were all there. And the Lord God decided I would be born again for my sins. In heaven, as below, it is the bureaucrat who decides and the Lord's secretary was the old war horse, Sir J.H. Hutton.

J.H. Hutton was the last great census commissioner of India, enshrined in every sociologist's memory as director of the 1931 census, the last census in which caste was listed as an official category. Hutton, with a mind like a gazetteer and a heart like one, was one big filing cabinet of a man. It was Hutton who decided in what form Hindus should be reborn. It was he who decided with a genocidal twinkle that I would be reborn a dalit.

He confessed to me he was in two minds. He first thought I should be a Muslim. But Gandhi, he explained had, already borne the Muslim cross, first through that mad secularist, Jinnah, still pining for his Parsi wife, and then through his own son Harilal, who, to spite an authoritarian father became Mohammed Abdallah Gandhi. Poor alcoholic Harilal died soon after of rage and tuberculosis. Sir Hutton decreed that I was therefore to be reborn a dalit.

I was reborn a lower division clerk's son, condemned to a puny father who was mouse at office, lion at home. Very religious and a wife beater, my new father was also terribly ambitious for his sons. And I, the eldest, was his pride and my mother's too. Mediocre at school, I still passed with flying colours, thanks to an advance copy of the question papers, my father's proudest achievement. Through that happy lottery, the reservation system, I managed to escape home to the *chawls* of Bombay, and worked my way to a state government scholarship at Ohio State University.

Sadly, once an Indian, you are always an Indian. Everyone in America expects an Indian to be a mathematician, a Marxist or an accountant and as predictable. There is also the irony of a whole generation of Indian social scientists coming to America to study India. Third-rate characters these, they lack the crassness of the

American ethnographers or the confident orientalism of the British. Too meek to study America, they write commentaries on India. At least I was second rate and bored, desperate enough to invent anything, with an imagination stuffed full of American best-sellers from Perry Mason to *Garp*, *Catch-22* to Saul Alinsky. I was one mad salad of Americana, desperate to look at India through Indo-American eyes. My stupid supervisor, meek and forty-ish, who had served time in India on a Fulbright years ago, insisted I study the relevance of Gandhi. I was in despair. I, raised on Pynchon, Barthes, Mailer, Asimov, I study Gandhi! There is no despair akin to being imprisoned by your own history.

I fell asleep over *Experiments with Truth. Hind Swaraj* bored me. It seemed drivel, its words crystalline, regimented and boring. It read like a dull Charles Lamb to a lost Shakespearean text. I thought I would review studies on Gandhi's sexuality by N.K. Bose,¹ Ved Mehta² and Bhikhu Parekh.³ But sexuality, as Masters and Johnson proved, can be dull and duller still as social science. Sex can titillate as pornography but the Mahatma wrote his sexual experiments as if he were describing a titration, pipette in hand. English, like sex, came easy to me and his experiments sounded like a dull grammar book.

Yet, through reincarnation, this man was me and was not. He was both myself and a distant horrible Other. He was me fifty years ago and yet he was all that I despised now. There was something magical in this: this man, me and not me. Gandhi was the first Hindu who laughed at fear and did not boast about it. He looked normal but was surreal. So matter of fact and yet he was a happy self-assured Artaud ready to turn India into a large experimental theatre. Utterly good, yet someone absolutely confident before evil. I remember what he said when he reviewed Mussolini's crack troops, hundreds of fascists, marching crisply un-Italian in line: 'You all look healthy to me.'

¹N.K. Bose, *My Days With Gandhi* (Delhi: Orient Longman, 1974).

²Ved Mehta, *Gandhi and His Apostles* (New York: Andre Deutsch, 1977).

³Bhikhu Parekh, *Colonialism, Tradition and Reform: Analysis of Gandhi's Political Discourse* (New Delhi: Sage Publications, 1989).

It was then that I read Robert Payne's⁴ biography of Gandhi. It moved me in a way Louis Fischer's⁵ didn't. Fischer's was an authentic, exact, accurate study. Payne, like many Americans, wrote with an eye to Hollywood. His *Gandhi* read like a monumental film script. It was alive, real, dramatic. More fruitful than the Tendulkars⁶ and the Pyarelals.⁷ His words are visual: you can feel yourself being dragged along to Champaran and Dandi. When you read Payne describing Jallianwala, when you watch as he describes the Salt March, your blood boils, your mind races and you feel proud, proud to be an Indian. If I were Roland Barthes I would have done a semiotics of satyagraha, shown how a pinch of salt dissolved the symbolism of Empire. Semiotics, like yeast, adds fizz to social science while statistics and surveys dull the subject. What I needed was a halfway house, something distant from number crunching but something less frighteningly esoteric than deconstructing Gandhi *à la* Derrida.

I was convinced that the tragedy lay in the fact that Gandhi as a Luddite had not read science fiction. I don't mean serious books on utopia. I mean literature, that great act of story telling from H.G. Wells and Jules Verne to Ray Bradbury. I felt *Hind Swaraj* would have been more successful as a science fiction story. Imagine if Ray Bradbury or Karl Capek had written it. I was convinced I could rewrite Gandhi, at least recast him. But social scientists are not authors. They cannot invent. They conform to George Steiner's description of the critic, that when he looks behind he sees an eunuch's shadow. At best, as futurists we write scenarios. As a saving grace, we avoid catechisms—the sociology of knowledge has taught us to do at least that. Anyway a social scientist could use the

⁴Robert Payne, *The Life and Death of Mahatma Gandhi* (London: Bodley Head, 1969).

⁵Louis Fischer, *The Life of Mahatma Gandhi* (New York: Harper & Brothers, 1950).

⁶D.G. Tendulkar, *Mahatma: Life of Mohandas Karamchand Gandhi*, 8 vols. (Delhi: Government of India, Ministry of Information and Broadcasting, The Publications Division, 1960).

⁷Pyarelal, *Mahatma Gandhi: The Early Phase* (Ahmedabad: Navjivan, 1965).

science fiction 'as if' as a heuristic to ask a question: if Gandhi were to return today, how would he redo his books, particularly *Hind Swaraj*?

I was more confident of this exercise. I knew that if Gandhi were to go abroad today, it would not be to Oxford, London or redbrick Manchester but to a large American state university like mine. He could easily be my dorm-mate across the corridor, cooking food separately.

I decided to reinvent Gandhi using a social science format. Though flatter than a short story the social science format, I felt intuitively, would be more legitimate. A fictional Gandhi frightens no one, a social science Gandhi, even if duller, might.

I realized the wisdom of this when I saw the Attenborough video of Gandhi. There is an old tribal taboo about photographing anyone. They say filming a man robs him of his self, his soul. Attenborough did just that. When one sees Gandhi today, one sees the actor Ben Kingsley. Gandhi is more athletic in the film, more sensual. One misses the toothless imp with jug-ears, head as bald as a light bulb. Attenborough made Gandhi an athlete though the real Gandhi was a wizened sage. But I decided to follow Attenborough and Americanize Gandhi even more. By Americanizing a man, you modernize him a bit. That was the real question. How far would Gandhi have modernized himself today?

I spent the next month hurtling through Gandhi's collected works. Fortunately Raghavan Iyer had made it easier, culling Gandhi into three volumes. I read N.K. Bose, Bhikhu Parekh, Fulton Sheen, the Kumarappas, Lanzo Vasto, Paul Ricouer, Erik Erikson, Ashis Nandy and Pyarelal, folios of *Gandhi Marg*, and also looked through hundreds of photographs seeking a point of entry. It was then that I saw in Robert Payne's book a photograph of Gandhi in a loincloth peering through a microscope. It had a shattering impact on me. It reminded me of a picture I saw in a museum once, a Dali-like shot of a fried egg, yellow sun at the centre, with a crisp petticoat of white around it. At the centre of the yolk is an eye looking back at you. I felt that the Gandhi photograph was telling me something.

II

I continued dreamily with simple word associations. Mention the name Gandhi and people would say pacifist, satyagrahi, nationalist, anti-colonial, Luddite, Hindu, vegetarian and Congressman. All these descriptions are right and yet strangely inadequate because Gandhi went beyond the official or dictionary definition of each word. Gandhi was a nationalist who fought the nation-state, an anti-colonialist who wished to redeem the British, a Hindu who happily bypassed the *shastras*. He was a Congress leader who wanted to preside over the dismantling of the Indian National Congress, transforming it into a series of *seva sanghs*. He was a Luddite but the word Luddite embraces too many different people from Ned Ludd to Blake to the Shakers, and may be even the inventor of the computer virus. One word is missing in this list and that is the noun, 'scientist'. Gandhi was one of the great scientists of the swadeshi era. Of this period, three scientists are talked about and celebrated: Ramanujan,⁸ the mystic mathematician, J.C. Bose,⁹ the legendary plant botanist and Prafulla Chandra Ray,¹⁰ the chemist-entrepreneur. But this list is not complete without Gandhi. Gandhi, I believe, was the most inventive of them all.

Today Gandhi would have studied science rather than law in a large mid-western university in America. His shyness, quite normal in a scientist, would still have bothered him. Instead of entering into the confines of vegetarian and feminist groups, he would have joined a radical science group. But it would not be the Mahesh Yogi variety or a Fritjof Capra-like splicing cultures into instant books. It would be something more anti-nuclear and ecological. He would have initially liked groups like John Todd's, The New Alchemists, or the Amory Lovins Institute for Soft Energy Paths or may be the Gaia network comprising of scientists like Lynne Margolis and

⁸See Ashis Nandy, *Alternative Sciences* (Delhi: Allied Publishers, 1980).

⁹Ibid.

¹⁰See P.C. Ray, *Life and Experiences of an Indian Chemist* (Calcutta: Chatterjee, Chakravarty & Sons, vol. 1 [1932], vol. 2 [1936]).

James Lovelock.¹¹ These would have been the equivalents of Ruskin, Thoreau, Tolstoy, Edward Carpenter, the dissenting sages of Gandhi's own time. He would have wondered how his Hindu background and its hypotheses would blend with these western critiques of science, still unnecessarily pop-orientalist like Capra or bull-doggedly scientific like James Lovelock. He would have realized that physics was an inadequate basis for science and would have discarded the innumerable physical metaphors scattered defensively throughout his earlier works. He would have agreed with Aldo Leopold's claims that ecology functions at right angles to science, that it is a liminal threshold to a new niche of sciences.

In his encounter with the West today, Gandhi would have looked for a Christian critique of theory and technology. He would have been disappointed by the Billy Grahams of technology. Probably Jacques Ellul¹² is the only one who would satisfy him both as a Christian and critic of technology. Marshall McLuhan would have sounded too facile. Lewis Mumford,¹³ like his old master Patrick Geddes, would have fascinated him. Ivan Illich¹⁴ would have been closest to him but he would have been troubled by finding Illich more Gandhian than he himself was.

For Gandhi, technology umbilicalized man, and the blood that flowed through the new cord was not love or tenderness but only the corpuscles of dependence. He would have loved Mumford's description of the space capsule as an umbilicalizing environment and seen some of the same power-dependence syndrome in the *rathiyatras* of the Vishwa Hindu Parishad (VHP)/Bharatiya Janata Party (BJP) across India.

The combination of technology and revivalism resident in it would have intrigued him. In ancient times it was the king's horse

¹¹James Lovelock, *Ages of Gaia: Biography of Our Living Earth* (New York: Oxford University Press, 1989).

¹²Jacques Ellul, *The Technological Society* (New York: Vintage Books, 1964).

¹³Lewis Mumford, *The Myth of the Machine* (New York: Harcourt, Brace, 1966).

¹⁴See Ivan Illich, *Tools for Communitality* (New York: Harper & Row, 1973) and *Shadow Work* (London: Marian Boyars, 1981).

that was sent around as a symbol of power, now it is the white Toyota van, symbol of borrowed technology. The Toyota *rath* is dependence hidden in the trappings of Hindu revivalism. Symbolically embodying both in his person is Lal Krishna Advani, the BJP leader. While rushing through Hindu Hindi India, Advani, according to newspaper reports, found the ride bumpy during which drinking tea or any other beverage became difficult. His inventive wife, may be with a touch of unconscious irony, fitted a glass bottle with a plastic nipple. It worked perfectly. No more embarrassment of dripping, slopping tea, and suckling the bottle Advani rode to conquer India.

Gandhi would have admitted now that too much of Tolstoy had blunted his sense of aesthetics, of the purpose of art and literature in modern society. Tolstoy's question, 'What good is Shakespeare?' was too instrumental. It expected literature to perform a technological function. He would admit today that play and play alone could redeem technology.

In the America of today Gandhi would have steered clear of the world of the occult and vegetarianism. These are faddist now. Once at the time of Anne Kingsford and Annie Beasant they were archimedean points of entry into the world of the West. Bypassing even official theologians, Gandhi would have realized that it is the writers who are the true theologians. Maybe I am imposing my biases but I feel Gandhi would respond today to Ray Bradbury and Norman Mailer. Bradbury in his stories creates a world of innocence, of the blessedness of the meek. Two stories in particular would have touched Gandhi. First, *Fahrenheit 451*,¹⁵ the little novella, about a world which has banned books making it a crime to possess them. *Fahrenheit 451* is the temperature at which paper burns. A small group of dissenters decide to memorize the great books and each person is known by the title or author of the book. One is Hamlet, another Hans Anderson; the third knows Tom Wolfe by heart. It is this sense of and commitment to memory that

¹⁵Ray Bradbury, *Fahrenheit 451* (New York: Ballantine Books, 1966).

would have moved Gandhi: 'by heart' is such a beautiful coinage for memorize.

Gandhi, the satyagrahi, loved to walk and celebrated walking. He would have loved Bradbury's *The Pedestrian*,¹⁶ about a man walking, breathing in the pleasures of walking, alone in a city where every citizen is glued to the TV screen. The story ends when an electronically driven car arrests him as a dangerous dissenter. If you walk and walk alone, you might even think and act alone.

But it is Norman Mailer who has shades of the old testament prophet today. He is sensuous, angry, aware of the body and yet strangely respectful and rigorous about it. Do you remember his *Pontifications*,¹⁷ a collection of interviews where he talks about plastic? He called plastic the perfect material example, the technological signature of the twentieth century, 'a material without any grain, any organic substance, any natural colour or predictability. Plastic cracks in two for no reasons whatsoever. It bears up under killing punishments and then explodes in the night. A fibreglass hull can go through storms which would spring a leak in a wooden hull. Then one day in a modest squall, the fibreglass splits completely. Or abruptly capsizes. That is because it is a material which is not even divorced from nature but indeed has not been part of nature.'¹⁸

Gandhi would have realized that technology had transformed power into a spectacle. The map of the world is no longer the cartographic division of countries, but divided according to TV channels and TV time. It is the TV screen as spectacle, as the new polis that grants identity. Without the bureaucratic trappings of an information society, a man seems nothing. Even charisma appears a function of TV. The sheer humour and charm of this came out in an incident which would have done a Heidegger or an Alfred Schutz proud.

It is the report of an incident involving an eight-year-old school boy and the former American President, George Bush. In this truly

¹⁶Ray Bradbury, 'The Pedestrian', in *The Golden Apples of the Sun* (New York: Bantam Books, 1967), pp. 9-13.

¹⁷Norman Mailer, *Pontifications* (Boston: Little Brown, 1982).

¹⁸*Ibid.*, p. 30.

phenomenological encounter, Bush goes to a small school, meets a normal child. The President introduces himself as George Bush, king of kings, President of USA. The school boy looks at the ex-CIA official and is unimpressed. How do I know, he says. Bush takes out his identity card, 'George Bush, President, USA'. The young boy remains sceptical. Anyone can get a card. If it is possible to invade a computer or sell the Eiffel Tower, identity cards of the President should be a dime a dozen. Pointing to the athletic secret agents around him does not help Bush either. They could be the rising executives of a new mafia don. Bush points to the presidential limousine outside. No impact. Any Hertz car rental agency could do better on a phone call. What Saddam Hussein couldn't do, the young school boy did: he reduced a president to sheer helplessness. President George Bush was left feeling nude outside television. It is the idiot box that provides the trappings of empire. Gandhi would have loved the story, a modern version of the Emperor's New Clothes. It would have reminded him of Churchill's label of him as the naked *fakir*, or his own comment on meeting George V, 'that the King was wearing enough for both of us'.

It is the power of the powerless that needs to be understood. Power disempowers by splitting. It is dualism that maintains power. In the West you can conquer the head or the heart: you are either scientific or religious. For instance, Dalai Lama and Mother Teresa represent compassion, Norman Borlaug or Kissinger, power and science. There is no place for compassionate power. Machiavelli and St Francis stand across a divide. Gandhi would have remembered Tolstoy's magnificent question, 'Why can't the Sermon on the Mount have the same law-like status as Pythagoras' Law?'

I confess that writing about power, after Foucault and especially Hannah Arendt, is difficult. That damned woman sipping coffee and smoking away understood power better than any man. I could happily steal a few lines from each but Gandhi would smoothly go beyond them into a world these Europeans are afraid to touch—science. Even if not a blackbox, science for them was a privileged order of discourse. In fact Europe and even the West would regard itself as barbaric or at least medieval without modern western science. If Gandhi wanted to escape the modern West, he had to

subvert or transform science, playfully, laughingly and politically. But a degree in science is a bad way to begin.

III

Imagine Mohandas Karamchand Gandhi armed with a Ph.D in science, returning to be a CSIR (Centre for Scientific and Industrial Research) pool officer. American Ph.Ds in India are a dime a dozen. Fortunately, Gandhi finds a job in a small agricultural institute in Madhya Pradesh. There is nothing more emasculating than being a professional scientist in India. The magical world of science is in the West. CERN and Brookhaven are the new Vaticans or Disneylands. Our scientists need to keep visiting the West like Anteus touching the earth. Too long an exile from the West and your charm wears off. It is the West that certifies one a scientist. For the new Gandhi, there would be no period of experimentation. There would have been no time as in South Africa, no time to become a myth before he entered history, building as he did an uncritical reputation in Africa before he entered the Indian stage.

If he had lived today Gandhi would have felt once again the desperation of every foreign returned intellectual. India frightens with its size, its dirt, its masses, its corruption, its fetishization of the past, its pomposity. Looking for support among fellow scientists is futile. Trade unions just fight for promotions. The Bernalian radicals, Marxists in all shades of pink, merely want to carry science to the villages. Environmentalism is a drawing room discourse. You can talk of pollution or recycling as long you leave the worldview of science intact. Fundamentalism does not have to be embodied in a figure like Khomeini, it is present in the nature of the scientific method.

I want to answer only one question now. What would be the outlines of the *Hind Swaraj* Gandhi would have written today? Would he add science to his critiques of law and medicine? Skeletally, crudely, how would he challenge the dualism of knowledge and power in modern society?

IV

HIND SWARAJ—It reads like a child's essay. Gandhi's claim that modern civilization is wrong has the same simplicity as a child's statement that a cow has four legs. There is something clear, obvious and crystalline about the text. But read it again, try visualizing it and the whole thing appears surreal. It is as if there is a Salvador Dali lurking in Gandhi, a trickster inside the sage. A Dali and a dalit, a Salvador dalit. A dalit is important today. Without the dalit, India would turn sentimentally revivalist or crassly modernist. The search for equality is a trapeze act between the two. Equality needs modern technology. There is no greater sanity than tap water. Those who rhapsodize about village wells and *lotas* haven't lived it. Water in a tap spells freedom and cleanliness. Sanitation is both sanity and freedom. Utopian India is a clean tap in every house. Technology needs deeper thinking than Sam Pitroda,¹⁹ our C-Dot *guru*, with that integrated chip on his shoulder can provide.

Critics have read Gandhi's *Experiments* generally in terms of four grids of sex, diet, politics and technology. Linkages are often made across columns as between diet and sex, politics and technology, but strangely there is an absence of overall connection. Gandhi's was a fluid science. Reading him one feels both a sense of tremendous consistency and adaptability, the *langue* and the *parole* of a new ethic for technology and life. The model allows tremendous free play, transformations, twists, ambiguities. There is also a shifting scale within Gandhi's text, as between lower and higher octaves. Consider simple examples.

Gandhi was against modern medicine. Even when desperately sick, Gandhi refused to take the wonder drug of his time, penicillin. Yet he unconcernedly got his appendix removed. Consider his objections to alcohol and tobacco. He led movements against alcoholism, made it part of his political platform and was uncompromising about it. Yet when it came to smoking, Gandhi was relaxed, contending it would be stopped through persuasion and pedagogy, through example. Consider again his attitude to tech-

¹⁹Sam Pitroda was head of the Indian Technology Missions.

nology. He was opposed to technology in many forms, yet acutely sensitive to it. He was ecstatic about the sewing machine. William Shirer observes that it is in Gandhi's public meetings that the loudspeaker first entered India. In fact he admits it was the first time he himself had seen a loudspeaker used in a public gathering. There is an interesting vignette Shirer sketches on Gandhi's trip to Manchester. Visiting the mills closed by the Indian boycott, Gandhi was surprised by the low quality of English machines and remarked that it was not surprising that England could not cope with Japanese competition. Gandhi criticized the iatrogeny of modern medicine, yet this same man complained to his physician Sushila Nayyar about the lack of equivalent innovation among local *vaids* and *hakims*. Gandhi helped pilot a bill of fundamental rights and he also argued that caste could not be read within such a system. This was the man who ranted against the colonial city while he always operated politically from it, whether it was Johannesburg, Wardha, Ahmedabad, Delhi or Calcutta. This sense of fluid scale gets embodied in the Gandhi-Nehru relationship. The great Luddite nominated as his successor the great modernist. The lover of Ruskin and Tolstoy chose as his successor the Cartesian Fabian-socialist, Nehru. It was not an error of judgement. India, Gandhi realized, was a Janus-faced entity. What Gandhi wanted was that the two faces should talk. He was afraid that lacking reciprocity they would become two masks stonily confronting each other. Gandhi did not deny the Nehru in him; he only wanted Nehru and his modernists to recognize the voice of Gandhi's India. I think it was in this way that Gandhi saw *Hind Swaraj*. Even in the late forties Gandhi offered *Hind Swaraj* to Nehru as his vision of India, contending he would still not alter one line of it. He implied that Nehruvian India needed two sacred texts, the Constitution of India and *Hind Swaraj*. Why?

For Gandhi, modernity was a movement of forgetfulness, where secular, scientific, urban India dismissed its roots in the village community. The Indian modernist, like any new convert, knew his catechism but had no theological training about doubts, debates and controversies, the costs and pain of choice. Progress meant a

move away from the loincloth and the bullock cart.²⁰ More particularly, the modernist had a theory for eliminating poverty but little understanding of pain and suffering.

Poverty, for Gandhi, could be eliminated but pain and suffering needed to be lived out and understood. Not all pain was a disease or discomfort to be eliminated. If it were, altruism, restraint and asceticism, in fact love would have little play in the emerging consumer society. *Hind Swaraj* was an attempt to provide a creative unconscious for modern India, an attempt to make modernity in India more sensitive, less imitative, more confident. The Indian elite literally believed in Macaulay's statement that a shelf of western books—particularly scientific books—was worth the whole library of the Orient. Indian modernists, lacking an intellectual genealogy, adopted uncritically the ersatz pedigree of Bacon, Locke, Newton and Spencer. They thought that modernity, like rationality or formal logic, was a pellucid inheritance, with no place for pain, ambiguity or suffering. *Hind Swaraj* was an attempt to create the equivalent of this unconscious for modernity, a Gita for the modernist.

One would ask how Gandhi the scientist would have looked at tradition today. The political scientist Bhikhu Parekh provides the first part of the answer. In a thoughtful study, he stated that for Gandhi, tradition was not a blind collection of precedents, 'but a form of enquiry, a scientific adventure, an unplanned but vigorous communal science constantly tested and revised against the harsh reality of life. Far from being antithetical, tradition and science are cousins. Tradition was unplanned science and science was a tradition of unplanned enquiry.'²¹ Parekh is clear and precise in recognizing the rational and empirical nature of both exercises. If he were less restrained, he would have followed up by exploring one of the grand inversions Gandhi had performed. It is true Gandhi was a scientist in his attitude to Hinduism, playfully but rigorously bypassing the shastras, ready to gently confront the

²⁰See Shiv Visvanathan, *Organizing for Science*, ch. III (Delhi: Oxford University Press, 1985).

²¹Bhikhu Parekh, *Colonialism, Tradition and Reform*, pp. 71–106.

Sankaracharya's ire. But more importantly he was a Hindu in his attitude to science, denying high church status to any paradigm or bowing before cardinals of philosophy like Karl Popper or Rudolf Carnap.

V

Gandhi was a great pedagogue. He knew the dangers of rendering any document lifeless through certain forms of mechanical utterance. It is true that in 1945 he had told Nehru that he would not alter one line of *Hind Swaraj*. But today, he would have realized that *Hind Swaraj* needed to be even more dialogical than before, that his legacy had become dull and stereotyped, more alive in Europe and America, than at home. The satyagrahi abroad had been more inventive than the satyagrahi at home. A Lanzo Vasto or a Bayard Rustin, a Luther King, an Alan Paton or a Vaclav Havel could understand the spirit of *Hind Swaraj* more than his museumized epigoni, mothballing *khadi*. It is precisely in this spirit that he would have eliminated the stereotypical opposition between town and country, a dualism that a litany of sociologists had helped aggravate further.

Gandhi would have innovated beyond his earlier critique of the colonial city as parasitic, realizing it was too defensive, too endemically biographical, the reflections of a second-rate lawyer from a third-rate town, sourgraping about London and Bombay. He would have become one of the great exponents of the city, but not the western notion of the city which treats civitas, civilization, civics and the dreams of the polis as similar mosaics. Gandhi would have tried to revive the imagination of the Indian city: Within such a frame town and country become not impregnable, exclusive fortresses but a complicity of opposites.

In fact, if Gandhi had a western complement, it was Francois Rabelais. Both were great scientists and great students of the philosophy of resistance. Both went beyond the crowd and the mob to celebrate the citizen in the city. Satyagraha is essentially a civics in that sense.

Both Rabelais²² and Gandhi were sociologists of the body, suggesting that it was only the recovery of the body that would redeem the city. Rabelais was the chronicler of mimicry, excess, obscenity and the carnivalesque. Gandhi thrived on a celebration of limits, of a non-repressive kind. In Gandhi, the fool and the jester give way to the satyagrahi, who unlike the puritan or the revolutionary ascetic, never loses the twinkle in his eye. Both Rabelais and Gandhi linked the *polis* to the problems not only of politics but of rationality. In Rabelais, the somersaulting clown overthrows the pompous bishop and threatens the Ptolemaic world. Gandhi's construction of the body offered a different notion of politics and science. Instead of mime, laughter and parody, Gandhi talked about suffering, pain and resistance. He returned the responsibility of the body back to the victim showing how it was uncontrolled desire that allowed the invasion of the disease and the expert that followed. Gandhi seems to make suffering the site of a different kind of rationality. Science has repeatedly technologized pain and has a virtually monologic attitude towards it. In fact, pain like a slum, becomes something to be eradicated. For Gandhi pain and suffering are not merely objects to be erased or overthrown. Suffering needs languages beyond the technological. In a Heideggerian sense, it is a dwelling to be lived in and talked about. The language of resistance, of coping, must go beyond the purely technological.

The satyagrahi as citizen was also challenged by a new figure who made the Gandhian theory of the city even more imperative. The guerilla in his romantic or realist incarnations also struggled with the dialectic of town and country. In the most mechanical version, he was Pol Pot dreaming of ruralizing every city through genocide. Yet, was not Pol Pot only a more exaggerated version of the Mao of the cultural revolution who condemned or eliminated countless city intellectuals? Once the revolution is over the guerilla becomes merely an intermediate technologist offering eclectic solutions regarding the city. His revolutionary politics lapses quickly into an everyday centralism. It is the satyagrahi who has to

²²See Mikhail Bakhtin, *Rabelais and His Work* (Cambridge: MIT Press, 1969).

provide the rhythm of everyday resistance, which is both scientifically and politically innovative. Gandhi would have approached this through an agricultural theory of the city. There is no sentimentalism here, no environmentalism swooning over a park or a reservation.

In *Hind Swaraj*, Gandhi saw the city as embodying a triangle of violence. The city was the home of vivisection, racism and prostitution. The city was also the site of the parasitic professions.

Racism violated the fundamental dignity and equality of man and the call to celebrate the diversity of bodies. Strangely, Gandhi appears weakest here. His success in Africa had a slightly hyperbolic note to it. As he himself confessed, he was uncomfortable with the *kafir* and even complained when he was confined in the same cell with them or when offered the same food. But Gandhi realized how city authorities could use planning as an aid to segregation and fought this with some success. His critique of the professions was more a reaction to what colonialism had done to the bureaucrat, lawyer and doctor, turning them into third-rate mimics of western knowledge. The rapacity of the professions had also created the city as an efflorescence of touts. It was in this context that Gandhi contended that western medicine was a form of slavery and to indulge in it was sin. Gandhi's ideas on vegetarianism, his attempt to resist modern drugs, his attempts to work out a theory of fasting were celebrated attempts to work out an alternative way of looking at the body. Sometimes they border on the obsessive. Today Gandhi would have realized that all this, while important, was not enough. *Hind Swaraj* needed to be much more inventive and provide for a more playful vision of work, waste and energy in the city.

For Gandhi, the modern city was a disembodied world, the home of abstractions and the modern machine. The dynamism of the city was not of a creative kind. The city as a site of perpetual mobility lacked memory. The city as the home of the intellectual was producing third-rate work. Recovering the Indian sources of creativity demanded that we reclaim the Indian city. For Gandhi this could only be achieved through a threefold recovery of an agricultural view of the world, a naturopathic approach to life and the concept of handicraft.

VI

The modern city dualized mind and body, *lexis* and *praxis*. Such a dualism was endemic to the modern university and its basic product, the professional. Professionalization was in a deep sense the disembodiment of the craft traditions. Gandhi's critique of prostitution was not, I would like to suggest, restricted to the oldest profession. The prostituting of professions was inherent in the mind-body dualism. The disembodied mind can prostitute itself as much as the mindless body. For Gandhi, the only way to resist the commercialization of the profession was to reintegrate mind and body. It is only such an integration that allows for trusteeship.

For this Gandhi would have advocated a return to handicraft. The Gandhian notion of handicraft is positively Heideggerian. In *What is Called Thinking*, Heidegger observed:

We are trying to learn thinking. Perhaps thinking too is like building a cabinet. At any rate, it is a craft, a handicraft. Craft literally means the strength and skill in our hands. But the hand's essence can never be determined or explained by its being an organism which can grasp. The hand is infinitely different from all grasping organs—paws, claws or fangs—different by an abyss of essence. Only a being who can speak, that is think, can have hands and can be handy in achieving works of handicraft. But the craft of the hand is richer than we commonly imagine. The hand holds. The hand carries. The hand designs and signs, presumably because man is a sign. Two hands fold into one, a gesture meant to carry one into the great oneness. The hand is all this and this is handicraft.²³

Heidegger adds: 'All the work of the hand is rooted in thinking. Therefore thinking itself is man's simplest and for that reason, hardest handiwork.'²⁴ To redeem professionalism one needs to recover this pious union of language, body and thought. It is such a piety of thinking that is embodied in the charkha and khadi.

'Round the charkha, that is amidst the people who have shed their idleness and who have understood the value of cooperation,

²³Martin Heidegger, *What is Called Thinking*, quoted in Hwa Yol Jung, *The Question of Rationality and the Basic Grammar of Intercultural Texts* (Niggata: International University of Japan, 1989), p. 22.

²⁴*Ibid.*, p. 22.

a national servant would build up an anti-malaria campaign, improved sanitation, settlement of village disputes, conservation and breeding of cattle and a hundred other beneficial activities.²⁵

We have frozen khadi today and converted Gandhi's writings into an irrevocable shastra. Khadi and satyagraha were not irrevocable symbols, or abstract signs, but part of an evolving grammar of resistance in the concrete. Gandhi was fortunate. He entered the realm of technology as cook, nurse and weaver, not as a high-brow engineer. His theory of technology was a part of ethics and thus had a beautiful everydayness to it, a superb sense of the concrete and its inter-relationships. For him, technology could only remain technology by reactivating *communitas*. It is only such a notion of handicraft that can resist obsolescence. An attitude of obsolescence is endemic to the modern professional who handles equations, files and formulae as disembodied entities and can therefore easily ignore bodies and contexts. Obsolescence is unthinkable in a handicraft community. In fact, the much praised Schumpeterian innovator who rules by disruption, is a classic idiot in this context.

VII

H*ind Swaraj* was a major critique of the professions. But the one profession that Gandhi ignored would become central in any rethinking of the book. Today, a Gandhian epistemology of science would be necessary. Such an essay is beyond my abilities. What I will explore however is how Gandhi would have altered the organization of science.

Gandhi was at once a sage and a *baniya*. It is precisely these avatars of his that would become the pair of scissors pruning science to size. It is as a *baniya* that Gandhi's critique of science would have been more devastating. No *baniya* stifles work even as every *baniya* is ruthless about flabbiness and waste. And in criticizing science, Gandhi would have joined Jim Lovelock in feeling that 'science had

²⁵Quoted in Sunil Sahasrabudhhey, *Science and Politics*, (New Delhi: Ashis Publishing House, 1996), p. 27.

grown fat, lazy and corrupt and like an obese athero-sclerotic man [who] imagines more rich food will cure his condition'.²⁶ When money is a vocation, one husbands it. Also one is inventive with it. Gandhi would have realized that what science needs least is money. What it requires is a more playful asceticism, a catalytic shift whereby from being a career science returns to being a vocation.

Gandhi would have added with that other great *baniya*, James Lovelock, that 'no annual report ever asks how many students enjoyed work, how many children visited a laboratory, how many students functioned as willing apprentices'.²⁷ Transferring this playful asceticism to an Indian context, Gandhi would have asked for *ashrams* and *gurukuls* in science. It is *gharanas* and *gurukuls* that can encourage scientific genius, provide the scientist with the tacit knowledge that makes for creativity. In fact only one modern Indian scientist, C.V. Raman, successfully created a nursery of Indian scientists. Raman was cantankerous, authoritarian and unbearable but he eventually encouraged more creative scientists than the entire CSIR which he dubbed as 'tombs for the burial of scientific instruments'.²⁸ But what Raman grumbled about or ranted against, Gandhi would have formulated more systematically.

His suggestion in a Lovelockian fashion would be for the dismantling of all large laboratories. Gandhi would demand that the scientist work at home. Based on the political economy of research he would make four other arguments. He would contend that science like medicine was becoming increasingly iatrogenic. Gandhi would add that to practice western agriculture like western medicine was slavery and that the peasant was as responsible as the agricultural scientist for the ecological havoc of the Green Revolution. He would add further that the solution to the problems of science was not more investment in science. Science in its present form was subject to diminishing returns. In the Piercian sense of fin-de-siecle physics once a paradigm gets entrenched one needs more

²⁶Quoted in James Lovelock, 'The Greening of Science', *Resurgence*, no. 138, January/February 1990, p. 12.

²⁷Ibid, p. 16.

²⁸See Visvanathan, 1985, ch. IV.

and more investment to solve problems of diminishing intellectual viability. Gandhi's idea would have stemmed more from medical research. Here every cycle of drugs invented tends to be more cost-intensive and less effective than its predecessor. Hence cost-effectiveness/prudence necessitates that the patient (or the farmer) accept responsibility for illness and strengthen the body (or the soil) against the need for drugs (or fertilizers). The political economy of modern science demands that every man become a scientist and every village or city a science academy.

Gandhi was not a philistine. His calipers for measuring science were not those of relevance or productivity, the obsessions of the science policy expert and the mission-oriented laboratory. He would have met science at its own level by contending that the goal of science was creativity and then contended that modern organizations showed little evidence of it. A community should be judged 'by the number of cranks, eccentrics, mystics, inventors it has'.²⁹ A mission-oriented laboratory is hardly the place for ensuring the survival of such a species. But at the same time Gandhi would have suggested that the scientific credo of idle curiosity as an abstraction would not do. The solution to the dangers of idle curiosity is not abstract, ivory tower science. It is to return science to the community, where one interacts with everyday questions ranging from the mundane to the esoteric. When theories, like khadi, are spun at home, science would not be just abstract problem-solving. Nor would relevance be ordained by the bureaucrat. The scientist would care, heal, preserve, nurse and realize that there is an inventiveness to maintaining, preserving and preventing. The community of science would vary from city to city, village to village, studying plants, the sky, forests, wood, seasons, stone, houses, flowers, soil, tools. Yet each community would add to the ocean of alternatives. Gandhi would have loved a passage from James Lovelock's John Preedy lecture, of a vision of science as 'lean and fit, as tough in mind and heart as the nurses of Florence Nightingale's time'.³⁰

²⁹Lovelock, p. 13.

³⁰Lovelock 'The Greening of Science', p. 16.

But a science pruned by the baniya's eye alone will not do. The sage in Gandhi would see it as incomplete. Prudence is not enough. What one needs is the notion of a sacramental science which can save nature. Gandhi would suggest that the sage become an intrinsic part of the experiment. After all he took his experiments on himself seriously. He would have realized that every sage is a laboratory, that his experiments on himself can provide valuable insights for other people. Here the notion of the sage is closer to the shaman than the doctor. The sage, because of his discipline, is trained to amplify his consciousness. His forays into the body can provide new insights and then medicines more delicately attuned to it. It is this process of self-testing that would have appealed to Gandhi, where the initiate rather than an innocent guinea pig becomes the source of insight. By doing so the sage adds two new elements to science. First, the ethical and cognitive dictum that the physician as sage should experiment on himself. Second, by relying on his dreams, his subjective experiences, the sage adds to empiricist testing, the idea of revelation. The scientist becomes part shaman in his search for understanding.

Despite or may be because of the Jain elements in his philosophy, Gandhi was never sentimental about nature. He would have realized that most forms of work involve some violence to nature but one must seek to minimize it. If the theory of handicraft constitutes one aim of this, his naturopathic perspective constitutes the other. Possibly because of the influence of Kuhne, his experiments in vegetarianism, and the experience with theosophy, *Hind Swaraj* is written as an intensely naturopathic document. Essential to naturopathy is the idea of harmony. For Gandhi, the body was a microcosm of the universe and he sought a harmony of two kinds: the harmony of the body and its constituent parts and of the body and its environment, particularly earth, water, light and air. All disease is a violation of harmony. In naturopathy, one strengthens the body to resist disease. The healer is one who recognizes the wisdom of the body rather than rely on the all-conquering drug. There is no greater violation on the body than clock time. The modern city and the modern idea of work adds to the stresses that disrupt the harmony of the body, the soil and the cosmos. The

natural rhythms of life and death go to strengthen the soil, thus avoiding synthetic fertilizers.³¹ The idea of organicity redeems the mechanomorphic city. Limiting desire restricts technological capacity. Naturopathy, like traditional agriculture and handicraft, builds into the system a sense of limits, of what one can do and do no further. It is this sense of limits, of responsibility, which no modern system of knowledge possesses at the epistemic and ethical level.

Gandhi had shades of the Zen master. In that peculiar twist, he would have claimed that what the sacramental requires is a grasp of the excremental. Gandhi's writings repeatedly emphasize his preoccupation with cleanliness. He claimed that toilets should be clean enough to eat in. In another instance, he stated that the only thing India needed from the West is a drainage system. It is the sewer and the flush tank that made the modern city possible. But today Gandhi would realize that the modern flush tank is one of the most wasteful and retrograde machines known to man. It is symptomatic of modern industrial life where waste is seen as an externality.

It is interesting to note how the *Oxford English Dictionary* defines waste. Waste is a term used to refer to any space which is barren, uncultivated, untouched; all these are wastelands. Waste is also used to refer to any object which has been overutilized, to describe any thing which has been sucked out and abandoned: what has been destroyed by overuse is labelled irrelevant. The term waste also refers to decaying or dying objects. So the concept of waste falls at opposite ends of the spectrum of 'normal' life, between the underutilized and the overextracted, between the untouched and the untouchable.

Gandhi would seek to redeem an agricultural view of life by restoring waste as the central category in any system. Waste conceals under that general rubric various forms of life. In fact one has to show that there is no such thing as waste in nature, that what is called waste is part of a phenomenally complex food chain.

³¹See Albert Howard, *Agricultural Testament* (New York: Oxford University Press, 1943).

Secondly, it forces us to look at the cultural construction of waste and the forms of violence it might hide. Once the category of waste is unravelled we discover the multiple forms of life present in it. It includes shit, rubbish, dirt, snot, sweat, junk, refuse, garbage, scum, pollution, obsolescence. Modern economics, which is constructed around the axes of scarcity and waste, condemns whole life-worlds with this glossary.

Gandhi would seek to redeem both modernity and tradition by focusing on waste. He would make the scavenger the paradigmatic figure of modern India. Automatically, the brahminic world of Indian science would receive a shock. But the threat is not only to the status hierarchies of the system. For Gandhi argued that waste has not been fully thought through by city science.

Modern science by overfocusing on production has not celebrated decomposition, the reduction of manufactured goods to their original materials. If the notion of biodegradability had been celebrated, we would not have cars and abandoned plastic containers in junk-yards, let alone nuclear waste. The modern consumer too is a big mouth who forgets his even bigger anus. It is in this context that sewage rather than becoming a source of pollution would become a source of life and work. The classic example of city sewage use is Calcutta. This much maligned city uses its sewage to grow its finest vegetables.

It is in this context also that fermentation, the great folk science of Asia, as central to food as to garbage, must recapture the imagination of any third world science. The idea of bio-conversion also provides a pluralist touch. It is modest, local, culture-specific yet it does not preclude sophistication of analysis or thought. By focusing on waste, the city sciences of today can recover an agricultural view of the world.

Probably the way to understand Gandhi today is to ask how he would have looked at the Narmada struggle.

VIII

More than Chipko and Bhopal,³² it is Narmada that could represent one of the great moral struggles of our time. Chipko emphasized the necessity of seeing green but somehow lost its importance by becoming a rorschach for environmentalists who saw in it everything from subaltern politics to alternative science. Bhopal had possibilities as it raised questions of a peoples' science movement but stopped there, enmeshed in the labyrinth of litigation. Narmada, however, can link issues of cognition, survival and democracy. Yet, strangely, the struggle is seen as primarily a local problem today.

Within the media, the struggle against the proposed dam centres around two figures. The first is the stark figure of Baba Amte. Recipient of the Magasaysay Award, Amte is a legend for his work among lepers. Baba Amte seems to have subconsciously realized that dam oustees are among the lepers of development, stuck in limbo between land and market, between a world they have lost and a world they may not enter. They are never fully rehabilitated. Even when land is offered for land, it is either degraded forest land or worse. If the compensation is paid in money, the aftermath is as traumatic. The no-dam position is not extremist; it is the logical position of a people driven to extremes by a state that has never systematically rehabilitated oustees.

The second figure is Medha Patkar, who represents a slightly different position. Patkar captures the limits and possibilities of voluntary group politics. If Amte's is an ethical position (he has built his hut on the territory to be submerged and has sworn he will die there), Medha's is a more political stand. Apart from these two remarkable individuals, the accompanying bevy of environmentalists, journalists, human rights activists do not really spark the imagination. They appear less convincing than even Sanat Mehta, who, General Motors' style, virtually contends that what is good for the Narmada dam is good for Gujarat and India. Despite the

³²See Shiv Visvanathan, 'Bhopal: The Imagination of a Disaster', *Alternatives*, 11(1), January 1986.

international concern, despite the media attention, the anti-dam struggle has failed to move India as a whole, splitting up into a series of eclectic or esoteric debates. The fate of the uprooted has left the nation indifferent.

For Gandhi, this failure would have been a twofold one. It is firstly the failure of the ethical to be convincingly political. The Narmada protest seems amateurish or ineffective with the tribals resisting the dam appearing like a bit show staged by INTACH. There seems to be a lack of rhythm between the leaders and various voluntary groups. The protests in Delhi seem a ten-to-five affair. The use of Medha Patkar's fasts as a political weapon seems woefully inadequate. What is worse, the Narmada rarely seems to bother the scientific or middle-class imagination. It seems a throwback, an antiquarian piece of resistance. Basically neither the cognitive nor the ethical levels of the debate have entered into and transformed the political imagination. Mahatma Gandhi would have seen in the Narmada struggle perfect possibilities of theatre. But the language of such theatre must capture the pain and the voice of the victim. This is lost in the language of modernity, secularism, progress and cost-benefit. An accountant's ledger or a consultant's report cannot be a mourning ritual.

Gandhi would alter the language of such a debate. The damming of the Narmada would be an act of sacrilege and undoubtedly ecocidal and genocidal. What adds to the obscenity is that murder is justified as an act of consumerism. The plaintive comment 'what about electricity?' is the moral equivalent of the defence of the Emergency dictatorship on the grounds that the trains ran on time then.

Gandhi would have rescued religion from the fundamentalists, contending that the real sources of the sacred are forests, mountains and rivers rather than the Ram Janmabhoomi. Conversely, to think that the Narmada or the Ganga can be saved by an environmental board or a hobby time INTACH is also inadequate. It is the Narmada as a river that captures the unity of India, of cultures—Hindu, Buddhist, Muslim, and of ecologies that have existed side by side. All this is living memory. But it fades when the Narmada merely becomes a fragment of a dam project, a piece of ersatz

history called 'development': it becomes a victim of what Mumford has called 'the myth of the machine'.

Maybe like bad magic there is bad myth—myth that is not life giving, whose rites are not festival, whose violence conflates vivisection and sacrifice. In such a regime you need the machine and the ideology of progress; its calendars don't celebrate life cycles and seasons. All it marks are conquests and revolutions. What a strange word, revolution. It does not connote a full circle, a return or a rebirth. A revolution in history does not revive. It erases. A dam promises a revolution. Once a river is 'developed' it is no longer memory. It is merely power for irrigation, it is cusecs of water. A dam desacralizes and desemanticizes a river. The Nile was never *the* Nile after Aswan. A dam is an act of reductionism. The river no longer flows, it is harnessed and 'made to work'.

A river is not merely a physical resource. Like tradition, it is a commons of memory, a weave of different forms of life. Seeing the river as only a resource disembeds it, abstracts it, and instead of worshipping the river, we worship the dam on it. The sadness began with Nehru. Long after the idiot religion of Comte had been abandoned, Nehru revived it by calling dams and laboratories the temples of modern India.

To recover the Narmada we need myth and sacred geography. Gandhi would not have argued merely from statistics and survey maps. Body counts of development can be as pathetic as body counts of war. Gandhi would have become a pilgrim, doing a *parikrama* of the river. By retracing its course, one remembers the worlds existing side by side. It is this sense of the river that Nehruvian development has destroyed. The story of the river shrinks to the moment of the dam. Sacred geography, tradition and myth yield to secular spaces and the economic map. Destroying the river at the level of production, the tourist, no longer a pilgrim, consumes what remains, through leisure.

Gandhi would have ignored the consultant's report or the World Bank assessments and interpreted the Narmada struggle as a new *Mahabharata*. It is here that town and country, Gandhi and Nehru, critical tradition and progressive modernity come to battle. It is around Narmada that Gandhi would have restarted his

struggles against modernity. His tract on the Narmada, as the centre-piece of a transcreated *Hind Swaraj*, would literally be a Gita of anti-development.

For Gandhi, a dam was only a reified expression of modern economics and modern science. He had confessed he had not read Ricardo and Adam Smith and added that he was not bothered about it. Unlike Nehru he would not need to import consultants from the first world, be they Blacketts, Bernal, Kaldors or Joan Robinsons. Nor would he require short courses at the World Bank or Harvard to run the economy. (Not that he was averse to foreigners. Only he would encompass them within his dream. After all, he collaborated with C.F. Andrews, and the Polish engineer Maurice Frydman did design his spinning wheels.) Being a shrewd sage, he realized that modern economics was either *ego-nomics* or *ergo-nomics*. It dealt with the obsessions of the bloated maximizing individual self or the gargantuan collective self—the corporation or the state. Or it was the idolatry of efficiency which repeatedly invented scarcity or the myth of efficiency to justify expansionism.

Central to any alternative manifesto would be Gandhi's attempt to recover the moral economy of waste, work and energy.

For Gandhi, modern work no longer seemed about livelihood and living. It is seen as abstracted and separate from man, measurable as output, analysable as a science. What is even more pathetic is that nature is seen either as not working or working badly. The consultant's reports on the Narmada see the river and the surrounding forests as lazy workers producing wood and some minor forest produce.

There are shades of Victorian discourse in these technocratic texts. It is not the usual observation of nature as a resource to be mined or a woman to be raped. It is a more disturbing sense of nature itself. Nature, especially tropical nature, is constituted as excess. There is a sexual corsetting that needs to be touched upon. For the economist, nature as river, nature as water, needs to be 'harnessed'. Mere flow is excess. It is the indecency of spill-over. Excess pollutes or wastes and therefore it must be bound. So nature as seed, as forest, as river is bound and stored in banks, in reserves,

in dams. There is a disciplining of nature here. Nature as a reproductive process is being forced into a productive discourse.

But it is a myth that nature does not work. One constantly hears that it is the dam that is going to produce but nature is always working and nature is playfully efficient. Gandhi might have quoted Felix Paturi's fascinating table:

Every year terrestrial plants store 17,200 million tons of carbon, marine plants as much as 25,000 million tons. This total of 42,200 million tons of carbon is contained in 105,500 million tons of glucose which corresponds to a goods train 30 million miles long filled to the brim with glucose. It would be long enough to cover the entire railway network of the world 40 times without break. It would be 130 times as long as the distance from earth to moon. This train would contain the glucose production of one single year.⁴³

Imagine if this were the production of our public sector plants or of a multinational or a collective farm. It would be on the news, touted with the modesty of newspaper supplements on Stalin or Kim-Il-Sung. But when 40,000 hectares of forest land gets submerged at Narmada, the experts do not mourn. They see it merely as loss of timber and minor forest produce to be written off.

Nature's economy can never be caught in the present categories of political economy or market economics. The work of nature and the economists notion of work are incommensurable. The work of a large dam and the life-world called the forest are incommensurable domains. It is in 'accounting' for the latter that the sage and the baniya in Gandhi would have striven for.

Gandhi would have simply stated that all work is a form of caring. Nursing, cooking, weaving, these are forms of caring. You tend, you cultivate, you grow, you weave, you spin. All these are forms of touching and touching gently. Today, work has lost its gentle metaphors. We mine, we excavate, we bulldoze, we dam, we harness, we exploit. Work has become a form of disciplined, professionalized violence organized within the framework of brute machismo, puritanism or abstract technique.

⁴³See Felix Paturi, *Nature, Mother of Invention* (London: Thames & Hudson, 1976), p. 15.

This is partly disguised by the western idea of energy. The modern thesaurus of energy is short and bleak because energy like the western concept of God is monotheistic. It is incarnated in the calorific notion of work and efficiency. This notion of energy provides for a simple but gigantic idea of power. When energy becomes an index of progress (the new sign of grace), the state becomes a big machine for the control of energy. A mechanistic notion of energy seems statist, while biology generally seems on the side of civil society. All attempts at returning to small scale have been biologicistic.

Unfortunately, the age-old relation between energy and the state is present in Narmada. In fact Gandhi would show that the challenge to the dam is a challenge to the state. Otherwise why proscribe protest at the Narmada under the Defence of India Rules? If the dam goes, the state, or at least the current model of the state, may go too. When we cease to worship dams, the cult of the state may itself disappear. Smaller dams or tanks might mean a less powerful state or a more revitalized civil society. What Gandhi would have challenged through the Narmada is the fundamentalism of state power embodied in rituals like large dams and reactors. And it is precisely in this context that he would show that what was missing in the Narmada protest was the politics of knowledge. He would have added to the Patkars and the Amtes, someone like the scientist C.V. Seshadri.

Seshadri, like a playful Gandhian, would show that the western notion of energy, its concept of efficiency and power, is based on mechanical work done at high temperatures and gaseous states. It is modelled on the heat engine, the harbinger of modern industry. The question such a framework asks is how to obtain work at high temperatures. Secondly, its focus is on a special kind of work that can be harnessed by the market and the state. It is anchored to a parochiality that does not realize that many important processes in the world take place at ordinary temperatures and in liquid and solid states. However, once we accept the official scientific notion of energy, certain decisions follow.

Agriculture will only be improved through high-yielding seeds and synthetic fertilizers produced by the high temperature Haber-

Bosch process, shifting the control of seed and fertilizer to the corporation and the state. Similarly, once a forest is visualized in terms of modern energy markers, its multiple use as food, fodder, medicines, dwellings, myth, play is lost or devalued. The forest becomes a raw material for the energy guzzling paper industry. Simultaneously, the notion of the forest itself changes, as monocultural strands of eucalyptus plantations are regarded as moral equivalents of a traditional forest. With such a notion of work, renewability also becomes a problem as emphasis shifts to fossil fuels which require millions of years to renew themselves. So too with a dam. When a river is seen purely as cusecs of water for electricity and irrigation, the traditional notion of the river as a great chain of being, as a dwelling, as a source of food or work, disappears altogether. What Seshadri through his concept of *shakti*³⁴ suggests is that the modern concept of energy like money dissolves ecologies, and destroys wealth as other cultures see it. What Gandhi might add is that the notion of energy which is so monolithic needs to be reworked into a pantheon of concepts, by breaking energy into a *parole* of meanings. From the one universal *energetika* or the abstract energy index of planners and economists, it must break into a polyphonic sense of energy symbols. Energy must become carnivalesque as pidgin energy, mixed metaphor energy, misspelt energy. Such a notion of energy is present in Seshadri's search for an alternative idea of energy, *shakti*, but the search is not merely to replace one God with another. It is to multiply energy into a number of village deities, with innumerable concrete powers varying from niche to niche.

Gandhi would show that the Indian state itself had thought of such a move. In the era of Indira Gandhi, two outstanding scientists, Hussain Zaheer and A.N. Lahiri, of the Central Fuel Research Institute at Dhanbad had advocated that India shift its industrial base away from petroleum. Zaheer had suggested gasification of coal as an alternative. Gandhi would suggest that the entire civil society must participate in this project through acts of prudence,

³⁴C.V. Seshadri, *Development and Thermodynamics* (Madras: AMM Murgappa Chettiar Research Centre, 1982).

through bits of local inventiveness, through restricting want and multiplying the renewable sources of energy. Within such an effervescence, the somnolent indifference to the Narmada project would not be possible. Years ago, just prior to the Emergency, Jayaprakash Narayan asked the police not to participate in the atrocities of the state. Today Gandhi would ask the scientists not to participate in projects devoted to petrol and nuclear energy. He would in fact articulate a call for a civil disobedience movement in science, where scientists join the Amtes and Medha Patkars in showing that the proposed Narmada dam is scientifically and politically obscene. The first of these dissenting groups would be sustained by local communities. Years ago, during the national movement, it was money collected during the Ganapathi festivals under the leadership of Tilak that helped the Paisa Glass fund, which pioneered the glass industry in India. Today this same spirit of Swadeshism should sustain the Satish Dhawans, the Jayant Narlikars, the Siddiquis, the Seshagiris, the Kalams, the Amulya Reddys, the Visvamitras, the innumerable younger scientists—if they choose to move out of the laboratories.

In fact, the Narmada should become the equivalent of the Salt March, dissolving the new empire built around the state-science nexus. It is around the protest against the dam that a whole series of new co-operative programmes must begin: a new model of decentralization, a revival of traditional forms of irrigation and their improvement, community action to resist soil erosion, the possibility of making forests into autonomous communities, of creating new ways of science outside the corporation and the laboratory. Such an effort would also break the undialogical nature of the current struggle.

Any struggle, while emphasizing resistance, must never lose its dialogic power, a dialogicity which appeals, embarrasses, questions, offers alternatives and eventually redeems those in power. Such a struggle disables the clichés of the Indian middle class which sees science as God's truth and the bureaucratic file as divinely ordained. The alternative exists, the vision is being lived out and the struggle begins not at Harsud, the town doomed to die because of the dam, but within everyone. Gandhiji once said: 'They say that

control over the hidden forces of nature enables every American to have 33 slaves. Repeat the process in India and every Indian will be 33 times a slave.' The struggle against the dam is not an appeal to preserve and museumize; it is a call to invent, maintain, adapt. There is no need to fetishize the charkha. If khadi symbolizes co-operation and *communitas* and if these can be built around another symbol, so be it. It is around the Narmada that the new festivals of politics and science can begin. But one must realize that effervescence alone is not enough. The everydayness of resistance must continue till a new culture emerges and words like World Bank, transfer of technology and nuclear waste sound like distant echoes of a lost or forgotten civilization.