## Unstructured Learning in Structured Learning Environment: a Personal View\*

Амітавна Вадсні\*\*

## **Abstract**

In this lecture I present some thoughts on the unstructured world of spaces and ideas that develop around the structured process of education. The lecture is based on my meditations on my own long experience of being a student and on my shorter experience of being a teacher. Briefly touching upon the school as a spatial and temporal entity that configures the student's world, I discuss the figure of the teacher both as a source of values—positive as well as negative—for the student and as an individual navigating a complex terrain.

I have been thinking for a while about how the institutions we affiliate ourselves to—maybe our 'admit' us to, or social pressures force us into-as students affect us, form us, shape us, turn our lives decisively down one of the many roads available to us. This question: Am I a product of the institutions I attended? falls in the family of questions engendered by the basic question: What makes me who I am? This question often precedes the perhaps more fundamental question—Who am I?—and is not so easily answered. After all, our lives are produced by a complex interplay

of factors, some determined in advance such as—race, class, gender, geography, personality, biology and some random and contingent. The lens of science fails in the face of this complexity.

But the novelist, unlike the scientist, has a different relationship to questions. His job is not to answer them. His job is to put them into play. The unanswerable question is one of the basic tools of the storyteller's trade. Let me give you an example: Should Ram have made Sita take an *agni pariksha* because of what the washerman said? This question, so simple to state, is a

<sup>\*</sup> The written text of NCERT's Second Golden Jubilee Lecture delivered by Dr Amitabha Bagchi at NCERT, New Delhi on 27 May 2011.

<sup>\*\*</sup> Assistant Professor, Department of Computer Science and Engineering, IIT, Delhi.

vortex that begins spinning slowly, but then it widens and becomes stronger and stronger. As we argue and debate, it sucks in ship after ship of the fleet of human experience. What facet of a man's life belonged to the realm of his duties? How far does the power of love extend? What constitutes fidelity in a marriage? What is the nature of trust? Keep answering these questions, and like the asura Raktabija, who had a wish granted by the God that every time a drop of his blood fell to the ground a new Raktabija was born, a new set of questions emerges with each answer. The novelist's job, then, is to set questions into play, ornament them and lead them through the lives of people, and watch as they draw those lives into their fold.

And so as a novelist, I find myself asking this question—Am I a product of the institutions I attended?—in an attempt to open out a field of questions, in an attempt to add to the form of human knowledge that is full of errors and poetry, and that form of human knowledge that is most intimate and personal.

used Having the word personal—let me start by saying that in the years since I left school I never thought that I would get an opportunity to thank NCERT for the impact it has had on my life. I could probably find a number of things to say in thanks, but let me just focus on one. In all my English textbooks since Class IX, I always found at least one story or play by a writer called William Saroyan. His stories of a young Armenian boy's life somewhere in the central part of California made a deep impression on

me. In the years since, I have derived many things from those few stories I read. I learned that there is a deep sadness that lies right at the heart of the immigrant experience—something that the now fashionable generation of immigrant writers has never fully captured. I learned that a gentle kind of realism is the best way to describe the lives of people trying to live a dignified life in the face of hardship. I learned and this is the one realisation on which my brief writing career so far has rested, and, I suspect, whatever I write in future will also rest on thisthat the strength of weak people is the stuff of literature. But it was only when I moved to California in 2002 that I learned that Saroyan is all but forgotten in his home country. That's when I really thanked the people who decided to put him into an NCERT textbook for almost every year since Class IX.

Class IX was also my first year at a prominent school in South Delhi. Those among us who live in Delhi think of it as a flat region but every here and there we do come across small hills and this school is located on one such hill. So it happens that when I think back about this school and my days there, I often find myself thinking of walking up an incline towards the large metal gates, manned by a chowkidar. I had been to other schools before that one, whose topography was as flat as the rest of the city's, but somehow when I think of a school, I think of walking up a gentle slope, I think of a mass of grey boxy buildings sitting on a hill. Perhaps the fact that it is harder to walk up a hill than it is to walk on flat

ground has something to do with it. When you reached those gates, there was an invisible membrane you passed through, like a scene from Star Trek where you stepped through a portal and you reached another dimension. Those gates were a valve, easily entered but hard to exit through. Those gates separated the world within the school from the world outside. Inside those gates we were safe from things we did not even know existed outside them. Within them lay a world of classrooms and corridors, playing field Principal's office, labs and the library. And in each of these spaces there was a protocol, an acceptable way of carrying yourself, and an unacceptable way.

So, school then is the place in which we learn what decorum is, and that each space has its own notion of decorum. But we learn this in what is to my mind the wrong way. We learn that decorum is linked to policing. That we should not be walking down a school corridor without an excuse during class time because a teacher may accost us. We learn that we should not talk too loudly in an unattended classroom because someone may come in and drag us off to the Principal's office. And this structure of learning engenders another learning. We find those distant corners of the football field where cigarettes may be smoked. We figure out which shadows under which staircase are best suited for stealing kisses with our new love. We share stories of rules broken without consequence, we aspire to create narratives of ourselves as clever lawbreakers. We begin to value duplicity and deceit. Perhaps this

process could redeem itself if it helped us lose our fear of authority. I have always believed that fear of authority causes psychic damage that weakens human society, and that the social control we get in return does not justify what we lose. But the problem is that plotting and scheming to undermine authority because it is a subcultural imperative—as it becomes in these situations—does not rob us of our fear of authority. We remain fearful. And we become sly.

School was not only a spatial category, it was also a temporal one. School was the world of 7.40 a.m. to 1.30 p.m. It was a division of the first part of the day into neatly ordered chunks of time, never shorter than twenty minutes, never longer than forty-five. I have sometimes wondered about the daily routines, and their fixed nature. At first, rather unfairly, I used to think that social control was best enforced by controlling a person's time. Marx, in his own take on this matter, wrote about the centrality of the working day to the capitalist project. Not as theoretically developed Marx's but I too had—and still have—a rebellious schoolboy's approach to the regimentation of time. But then I also began to think of it in another way. Is unplanned time as threatening as unmapped space? School, the place where space was made safe for us, was also a place where our time was organised: the day was chopped into a sequence of intervals, each interval to be used in a particular way.

I was one of those people who stayed on the straight and narrow, but in my school bus there were two elder boys who revelled in informing students like me of their escapades. These escapades involved getting off the school bus just like the rest of us, but walking off in the other direction, through the government houses that neighboured our school, onwards to a South Indian restaurant on Rao Tula Ram Marg. They had their breakfast there, it took about half an hour, and then walked leisurely past Moti Bagh to the Sarojini Nagar railway station, reaching there around a quarter to nine. Then they boarded the Ring Railway that took about two hours to take them around the city and bring them back to where they began. Getting off the train they would head towards the now demolished Chanakya cinema, reaching in good time for the eleven o'clock show. That would last till around 1 p.m., a convenient time to take a bus back to school, getting there just before the school bus left for home. It took me a while to realise that although these not-so-orderly schoolboys had rejected the school's way of organising the morning hours, they had not rejected the notion that the morning hours needed to be organised.

Those two boys fell neatly into one category of the taxonomy we informally maintained in my academicallyoriented school. They were what call as bad students. After that category good students and brilliant students. There were other classifications too: some students were there to improve the school's results, some to fill its coffers and some to ensure that Delhi's political class looked upon our school favourably. But the various categories that we had in my school in Delhi—it was one of what we still call the 'good' schools of Delhi—were to prove wholly inadequate when I graduated and found myself at college in IIT.

When I entered IIT Delhi in the early nineties, I happened to be assigned the same hostel that my cousin who had entered IIT in the middle of eighties had lived in. When given a choice between attending class and spending his time in the hostel's music room, I was told by some of my seniors who had known him that he preferred the latter. In this music room, he told me when I asked him, used to live a large collection of cassettes on which generation after generation of hostel residents had painstakingly recorded, from whatever source available, a fund of music that comprehensively represented the popular musical production of the American sixties and seventies. Rock musicians who were long forgotten in the United States lived in recordings that were revered in our hostel at IIT. That music room formed the person he was, and the person he continues to be today. But, oddly enough, of the trove of music the music room had housed there remained but three tapes when I got there. I used to go there to study sometimes, because no one seemed to have any use for that space. Outside that room, in the rest of the hostel, instead of long discussions over the superiority of Deep Purple over Led Zeppelin, now arguments raged between those who worshipped Madhuri Dixit and those whose hearts beat for Urmila Matondkar. In the common room next door, the newly installed cable TV was firmly tuned to the one or two channels that had discovered a business model built around twenty fours hours of *Chitrahaar*.

At IIT we complain about the influence of the coaching class culture on the quality of our intake. But anecdotal evidence makes it amply clear that the rise of the coaching class culture meant the end of the dominance of English-speaking elites from urban centres at IIT, i.e. The end of the dominance of people like me.

If someone were to look at the grade sheets from my first year they would conclude that I didn't learn much that year, but the truth of the matter is that I learned a lot. I learned, for example, that I loved carrom board and I was really good at it. I spent hours and hours playing carrom. In the process I made friendships with other people who spent hours and hours playing carrom. One day I was partnering a boy who was one year senior to me, and we were playing against two others from his year. One of them, Gauray, from a 'good' school in Chandigarh, pointed to my partner and asked: Do you know what his name is? An odd question, I thought at that time. Of course I knew what his name was, I saw him every other day at the carrom room. His given name was Sumer Lal and his surname was one that I had learned by that time was shared by other people who got into IIT on the Scheduled Caste quota. "I know his name," I said. Gaurav, who hadn't a trace of any negative sentiment in his voice, said: "I didn't find out his name till the end of my first year." Gaurav, who probably became friends with the Rohits and Amits and Viveks within days of reaching the hostel, spent almost twelve months there before he learned Sumer Lal's name.

One of the interesting things we were all made to do during ragging was to read certain texts in Hindi written by a person whose name was always Mast Ram. The technical term for this literature was uttejak sahitya. We all had to read it, especially those of us who found it objectionable. I didn't find it objectionable, but for me a different task was assigned: I was made to translate it. Me and those few others who, the assigner of the task knew, would have trouble translating it. I knew the dirty words, that was not a problem, but I still struggled with the translation, stumbling over the heavily idiomatic language, the richly-textured euphemisms that seemed to come so naturally to Mast Ram. It was probably the first time it stucked me that my school Hindi textbooks had done me a disservice, and that the Hindi Cell style signage that I saw around the city was a total misrepresentation of a living, breathing language. In those early days in the hostel, when I was keen to offer friendship to whoever IIT had arbitrarily chosen to put along with me in the hostel, I struggled to cross a barrier of language that my education in Delhi had created for me. But the people on the other side appreciated the fact that I did struggle, at least I think they did. And even if they didn't, several years later when I picked up and read end to end my first Hindi novel-Shrilal Shukla's Raag Darbari—I had to them thank for showing me that Hindi had a colloquial richness, a richness that would serve as a magnet for a person who loves language. And that magnetic attraction could take me to places I would not have otherwise chosen to go, shown me things about the country of my birth that I would not have otherwise chosen to see.

When I was in school, my mother would sometimes go shopping at one of the prominent fresh produce markets of Delhi. On occasion we would stop at a South Indian dhaba that sat at the mouth of this market. Much to my astonishment sometime into my stay at IIT, I found that the dhaba was owned by the family of one of my closest friends at IIT—he is now a leading computer scientist in a prominent research lab in the United States. I cannot forget the day he came to me, sometime in our third year, and asked: "Bagchi, tu dose bana leta hai?" Before I could answer this question in the affirmative or negative, he told me that his father was thinking of locking out the 'labour' at the dhaba. "Ek do din maalik logon ko hi kaam karna padega." I nodded my agreement at the kind of prospect that I, the son of a civil servant father and school teacher mother, had never contemplated in my brief life. The thought of crossing the counter that I had sat on the customer side of, sent a thrill up my spine. Unfortunately, or fortunately, the labour came around by that evening and I never did get to make dosas on the large tavas the dhaba had, but for a brief moment there I teetered at the edge of it, and I had to project out of my own world into another world where shop owners and labour squabbled while dosas waited to be made.

I cannot claim that the life I live now is fundamentally different in its everyday rhythms from the lives that the other English speaking students, I went to school with, live. I cannot claim that what I learned in the years I was thrown into close contact with people who I had only seen from a distance before transformed me, because I have no way of knowing what I would have been like if I had not had that experience. But I do know that while I treasured what my teachers taught me at IIT—and treasured it enough to have joined their ranks today-I treasure equally, if not more, what I learned in the hostel's carrom room, in the canteen and in the corridors.

It is not my contention that we all learned to get along. Please do not think that I am trying to portray IIT as some happy melting pot of India's diversity. It was not that. It was as riven with casteism, communalism, classism, sexism and all the other ugly 'isms' that our society nurtures. How could it not be? But by pretending that these things didn't matter, that exams and grades and job interviews were more important than all these things, it gave an opportunity to those who were willing to learn to get along with people who weren't like themselves. It gave a quixotic notion of an India populated by Indians a chance. Indians who were consumerist, overambitious, selfimportant technocrats perhaps, but who were, nonetheless, more Indian than anything else. And the fact is that this learning was not part of any of the curricula at IIT. But, as all of us who have been teachers for even a short while know, all we can do is give people an opportunity to learn. And if they don't learn, we can give them another opportunity, and another. Because the truth is that in a class of one hundred, there will only be four or five who get it the first time, only ten or fifteen who understand it in outline, and the remaining will take it in one ear and let it out of the other. I know people who still use the word "shadda" to refer to people who got into IIT through the SC/ST quotas, despite having played hard-fought games of volleyball in the same team as some of them, despite having stayed up long bleary-eyed hours preparing for exams along with them, despite having drunk too much and thrown up with them. Some people never learn. That is the teacher's frustration. But some people do learn and that is the teacher's reward. And, a priori, we teachers never know which is which.

It's a complex and random process, this interaction with young people that we teachers do for a living. It has many sides. Like so many other teachers, I spend a lot of time thinking about my students, and, also like many other teachers, I don't spend enough time thinking about what they think of me. But when I do, I am forced to remember how I saw my teachers. Physically I saw them through a forest of darkhaired heads—I always preferred to sit near the back of the class, though not in the very last row. I saw them standing up on the raised platform at the front of the class, on which the short looked tall and the tall looked taller. I took their careful grooming for granted—not realising that if one of them turned up looking slovenly I would probably have been as upset or offended as the school's principal. I associated a certain amount of selfpossession with them. And I thought of them as older. A small anecdote here: In Class IX, I entered a CBSE school and took Sanskrit instead of Hindi. My mother was concerned that I wouldn't be able to cope so she went to meet my teacher. Afterwards I asked her how the meeting went and she said: "Your Sanskrit teacher is a very sweet girl." I realised that my mother was probably fifteen or twenty years older than my Sanskrit teacher, and senior in the same profession, but still the idea that my teacher could be thought of, by anyone, as a "girl" was very difficult to comprehend. So difficult that I still remember that statement, long long after, I'm guessing, my mother forgot all about it.

So there you are, you poor teacher, frozen in eternal adulthood, even on those days when you wish you could just curl into a fetal position and suck your thumb instead of having to stand up and talk for an hour to a room full of young people who are looking at you, or at least should be looking at you. Sometimes in the nitty-gritty of the syllabus, the announcements about exams and homework, the clearing of the last class's doubts, you forget about the current that emerges from your body and flows out into the class. You forget what you mean to them.

I was lucky to have some excellent teachers at IIT Delhi, and I am not just saying that because some of them are my colleagues now. Let me explain with a story why I thought well of them. In my second year, I had a class in computer architecture. Before the first semester exam, being somewhat lazy didn't memorise certain assembly language keywords their meanings. When the exam paper came there was one big question that involved explaining what a fragment of assembly language code did. It was impossible to answer without knowing the meaning of those keywords. One of my friends from the hostel who knew I hadn't memorised the keywords looked at me and snickered. Stung by this I decided to take a risk. I raised my hand and called the professor. "I don't know what these keywords mean," I said. He looked down at the paper, thought for a moment, then went to the board and wrote out the meanings of all the keywords. Right there, on the spot, he decided that this question was not a test of memory, it was a test of understanding. Not only did I snicker back at the friend who had laughed at me, I also never forgot the lesson. I apply it in my classes even today.

I knew from around the age of nineteen that I wanted to be a professor. I was thirty when I actually became one. In those eleven years, especially towards the end of that period, I often used to daydream about the time when I would stand in front of my first class. When I dreamt about it I always saw myself standing in a particular lecture

room at IIT Delhi, Block VI, Room 301, where most of my lectures in the latter part of my stay had been held. I would see myself standing up on the platform of VI 301 about to say my first words to my first class, and I knew I would be feeling something. I just didn't know what it was. As it turned out, my first teaching job was at IIT Delhi and when I got the room assignment for that first semester I found out that the class I was teaching would meet in VI 301. I walked up the one floor from my office, my stomach fluttering. I turned into that familiar door, carrying the attendance sheets, the sign of my authority, in my right hand, and walked onto the podium. I put the attendance sheets down on the table and turned towards the class. I looked up at them, seventy something of them, sitting in those long desks where I had so often sat and would never again sit. I looked at their faces and suddenly I felt the pain they would experience in their lives. It came running through me, unexpectedly, this thought: There is so much you all will go through in your lives. Sometimes when I feel I am forgetting what my students mean to me and what I mean to them, I remind myself of this moment, when I learned something about myself and about the life I had chosen for myself.