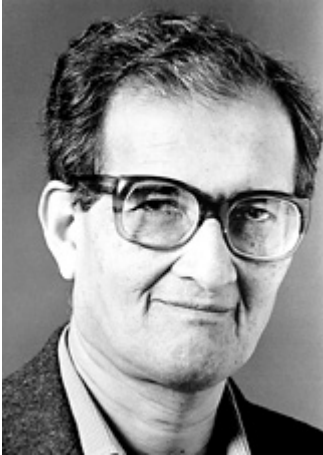


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eates/1998/sen-autobio.html](http://nobelprize.org/nobel_prizes/economics/laur<br/>eates/1998/sen-autobio.html)

## Autobiography



I was born in a University campus and seem to have lived all my life in one campus or another. My family is from Dhaka - now the capital of Bangladesh. My ancestral home in Wari in "old Dhaka" is not far from the University campus in Ramna. My father Ashutosh Sen taught chemistry at Dhaka University. I was, however, born in Santiniketan, on the campus of [Rabindranath Tagore's](#) Visva-Bharati (both a school and a college), where my maternal grandfather (Kshiti Mohan Sen) used to teach Sanskrit as well as ancient and medieval Indian culture, and where my mother (Amita Sen), like me later, had been a student. After Santiniketan, I studied at Presidency College in Calcutta and then at Trinity College in Cambridge, and I have taught at universities in both these cities, and also at Delhi University, the London School of Economics, Oxford University, and Harvard University, and on a visiting basis, at M.I.T., Stanford, Berkeley, and Cornell. I have not had any serious non-academic job.

My planned field of study varied a good deal in my younger years, and between the ages of three and seventeen, I seriously flirted, in turn, with Sanskrit, mathematics, and physics, before settling for the eccentric charms of economics. But the idea that I should be a teacher and a researcher of some sort did not vary over the years. I am used to thinking of the word "academic" as meaning "sound," rather than the more old-fashioned dictionary meaning: "unpractical," "theoretical," or "conjectural."

During three childhood years (between the ages of 3 and 6) I was in Mandalay in Burma, where my father was a visiting professor. But much of my childhood was, in fact, spent in Dhaka, and I began my formal education there, at St. Gregory's School. However, I soon moved to Santiniketan, and it was mainly in Tagore's school that my educational attitudes were formed. This was a co-educational school, with many progressive features. The emphasis was on fostering curiosity rather than competitive excellence, and any kind of interest in examination performance and grades was severely discouraged. ("She is quite a serious thinker," I remember one of my teachers telling me about a fellow student, "even though her grades are

very good.") Since I was, I have to confess, a reasonably good student, I had to do my best to efface that stigma.

The curriculum of the school did not neglect India's cultural, analytical and scientific heritage, but was very involved also with the rest of the world. Indeed, it was astonishingly open to influences from all over the world, including the West, but also other non-Western cultures, such as East and South-East Asia (including China, Japan, Indonesia, Korea), West Asia, and Africa. I remember being quite struck by Rabindranath Tagore's approach to cultural diversity in the world (well reflected in our curriculum), which he had expressed in a letter to a friend: "Whatever we understand and enjoy in human products instantly becomes ours, wherever they might have their origin... Let me feel with unalloyed gladness that all the great glories of man are mine."

### **Identity and violence**

I loved that breadth, and also the fact that in interpreting Indian civilization itself, its cultural diversity was much emphasized. By pointing to the extensive heterogeneity in India's cultural background and richly diverse history, Tagore argued that the "idea of India" itself militated against a culturally separatist view, "against the intense consciousness of the separateness of one's own people from others." Tagore and his school constantly resisted the narrowly communal identities of Hindus or Muslims or others, and he was, I suppose, fortunate that he died - in 1941 - just before the communal killings fomented by sectarian politics engulfed India through much of the 1940s. Some of my own disturbing memories as I was entering my teenage years in India in the mid-1940s relate to the massive identity shift that followed divisive politics. People's identities as Indians, as Asians, or as members of the human race, seemed to give way - quite suddenly - to sectarian identification with Hindu, Muslim, or Sikh communities. The broadly Indian of January was rapidly and unquestioningly transformed into the narrowly Hindu or finely Muslim of March. The carnage that followed had much to do with unreasoned herd behaviour by which people, as it were, "discovered" their new divisive and belligerent identities, and failed to take note of the diversity that makes Indian culture so powerfully mixed. The same people were suddenly different.

I had to observe, as a young child, some of that mindless violence. One afternoon in Dhaka, a man came through the gate screaming pitifully and bleeding profusely. The wounded person, who had been knifed on the back, was a Muslim daily labourer, called Kader Mia. He had come for some work in a neighbouring house - for a tiny reward - and had been knifed on the street by some communal thugs in our largely Hindu area. As he was being taken to the hospital by my father, he went on saying that his wife had told him not to go into a hostile area during the communal riots. But he had to go out in search of work and earning because his family had nothing to eat. The penalty of that economic unfreedom turned out to be death, which occurred later on in the hospital. The experience was devastating for me, and suddenly made me aware of the dangers of narrowly defined identities, and also of the divisiveness that can lie buried in communitarian politics. It also alerted me to the remarkable fact that economic unfreedom, in the form of

extreme poverty, can make a person a helpless prey in the violation of other kinds of freedom: Kader Mia need not have come to a hostile area in search of income in those troubled times if his family could have managed without it.

### **Calcutta and its debates**

By the time I arrived in Calcutta to study at Presidency College, I had a fairly formed attitude on cultural identity (including an understanding of its inescapable plurality as well as the need for unobstructed absorption rather than sectarian denial). I still had to confront the competing loyalties of rival political attitudes: for example, possible conflicts between substantive equity, on the one hand, and universal tolerance, on the other, which simultaneously appealed to me. On this more presently.

The educational excellence of Presidency College was captivating. My interest in economics was amply rewarded by quite outstanding teaching. I was particularly influenced by the teaching of Bhabatosh Datta and Tapas Majumdar, but there were other great teachers as well, such as Dhiresh Bhattacharya. I also had the great fortune of having wonderful classmates, particularly the remarkable Sukhamoy Chakravarty (more on him presently), but also many others, including Mrinal Datta Chaudhuri (who was also at Santiniketan, earlier) and Jati Sengupta. I was close also to several students of history, such as Barun De, Partha Gupta and Benoy Chaudhuri. (Presidency College had a great school of history as well, led by a most inspiring teacher in the form of Sushobhan Sarkar.) My intellectual horizon was radically broadened.

The student community of Presidency College was also politically most active. Though I could not develop enough enthusiasm to join any political party, the quality of sympathy and egalitarian commitment of the "left" appealed to me greatly (as it did to most of my fellow students as well, in that oddly elitist college). The kind of rudimentary thinking that had got me involved, while at Santiniketan, in running evening schools (for illiterate rural children in the neighbouring villages) seemed now to be badly in need of systematic political broadening and social enlargement.

I was at Presidency College during 1951 to 1953. The memory of the Bengal famine of 1943, in which between two and three million people had died, and which I had watched from Santiniketan, was still quite fresh in my mind. I had been struck by its thoroughly class-dependent character. (I knew of no one in my school or among my friends and relations whose family had experienced the slightest problem during the entire famine; it was not a famine that afflicted even the lower middle classes - only people much further down the economic ladder, such as landless rural labourers.) Calcutta itself, despite its immensely rich intellectual and cultural life, provided many constant reminders of the proximity of unbearable economic misery, and not even an elite college could ignore its continuous and close presence.

And yet, despite the high moral and ethical quality of social commiseration, political dedication and a deep commitment to equity, there was something rather disturbing about standard leftwing politics of that

time: in particular, its scepticism of process-oriented political thinking, including democratic procedures that permit pluralism. The major institutions of democracy got no more credit than what could be portioned out to what was seen as "bourgeois democracy," on the deficiencies of which the critics were most vocal. The power of money in many democratic practices was rightly identified, but the alternatives - including the terrible abuses of non-oppositional politics - did not receive serious critical scrutiny. There was also a tendency to see political tolerance as a kind of "weakness of will" that may deflect well-meaning leaders from promoting "the social good," without let or hindrance.

Given my political conviction on the constructive role of opposition and my commitment to general tolerance and pluralism, there was a bit of a dilemma to be faced in coordinating those beliefs with the form of left-wing activism that characterized the mainstream of student politics in the-then Calcutta. What was at stake, it seemed to me, in political toleration was not just the liberal political arguments that had so clearly emerged in post-Enlightenment Europe and America, but also the traditional values of tolerance of plurality which had been championed over the centuries in many different cultures - not least in India. Indeed, as Ashoka had put it in the third century B.C.: "For he who does reverence to his own sect while disparaging the sects of others wholly from attachment to his own, with intent to enhance the splendour of his own sect, in reality by such conduct inflicts the severest injury on his own sect." To see political tolerance merely as a "Western liberal" inclination seemed to me to be a serious mistake.

Even though these issues were quite disturbing, they also forced me to face some foundational disputes then and there, which I might have otherwise neglected. Indeed, we were constantly debating these competing political demands. As a matter of fact, as I look back at the fields of academic work in which I have felt most involved throughout my life (and which were specifically cited by the Royal Swedish Academy of Sciences in making their award), they were already among the concerns that were agitating me most in my undergraduate days in Calcutta. These encompassed welfare economics, economic inequality and poverty, on the one hand (including the most extreme manifestation of poverty in the form of famines), and the scope and possibility of rational, tolerant and democratic social choice, on the other (including voting procedures and the protection of liberty and minority rights). My involvement with the fields of research identified in the Nobel statement had, in fact, developed much before I managed to do any formal work in these areas.

It was not long after [Kenneth Arrow's](#) path-breaking study of social choice, *Social Choice and Individual Values*, was published in New York in 1951, that my brilliant co-student Sukhamoy Chakravarty drew my attention to the book and to Arrow's stunning "impossibility theorem" (this must have been in the early months of 1952). Sukhamoy too was broadly attracted by the left, but also worried about political authoritarianism, and we discussed the implications of Arrow's demonstration that no non-dictatorial social choice mechanism may yield consistent social decisions. Did it really give any excuse for authoritarianism (of the left, or of the right)? I particularly remember one long afternoon in the College Street Coffee

House, with Sukhamoy explaining his own reading of the ramifications of the formal results, sitting next to a window, with his deeply intelligent face glowing in the mild winter sun of Calcutta (a haunting memory that would invade me again and again when he died suddenly of a heart attack a few years ago).

### **Cambridge as a battleground**

In 1953, I moved from Calcutta to Cambridge, to study at Trinity College. Though I had already obtained a B.A. from Calcutta University (with economics major and mathematics minor), Cambridge enrolled me for another B.A. (in pure economics) to be quickly done in two years (this was fair enough since I was still in my late teens when I arrived at Cambridge). The style of economics at the-then Cambridge was much less mathematical than in Calcutta. Also, it was generally less concerned with some of the foundational issues that had agitated me earlier. I had, however, some wonderful fellow students (including Samuel Brittan, Mahbub ul Haq, Rehman Sobhan, Michael Nicholson, Lal Jayawardena, Luigi Pasinetti, Pierangelo Garegnani, Charles Feinstein, among others) who were quite involved with foundational assessment of the ends and means of economics as a discipline.

However, the major debates in political economy in Cambridge were rather firmly geared to the pros and cons of Keynesian economics and the diverse contributions of Keynes's followers at Cambridge (Richard Kahn, Nicholas Kaldor, Joan Robinson, among them), on the one hand, and of "neo-classical" economists sceptical of Keynes, on the other (including, in different ways, Dennis Robertson, Harry Johnson, Peter Bauer, Michael Farrell, among others). I was lucky to have close relations with economists on both sides of the divide. The debates centred on macroeconomics dealing with economic aggregates for the economy as a whole, but later moved to capital theory, with the neo-Keynesians dead set against any use of "aggregate capital" in economic modelling (some of my fellow students, including Pasinetti and Garegnani, made substantial contributions to this debate).

Even though there were a number of fine teachers who did not get very involved in these intense fights between different schools of thought (such as Richard Stone, Brian Reddaway, Robin Matthews, Kenneth Berrill, Aubrey Silberston, Robin Marris), the political lines were, in general, very firmly - and rather bizarrely - drawn. In an obvious sense, the Keynesians were to the "left" of the neo-classicists, but this was very much in the spirit of "this far but no further". Also, there was no way in which the different economists could be nicely ordered in just one dimension. Maurice Dobb, who was an astute Marxist economist, was often thought by Keynesians and neo-Keynesians to be "quite soft" on "neo-classical" economics. He was one of the few who, to my delight, took welfare economics seriously (and indeed taught a regular course on it), just as the intensely "neo-classical" A.C. Pigou had done (while continuing to debate Keynes in macroeconomics). Not surprisingly, when the Marxist Dobb defeated Kaldor in an election to the Faculty Board, Kaldor declared it to be a victory of the perfidious neo-classical economics in disguise ("marginal utility theory has won," Kaldor told Sraffa that evening, in commenting on the electoral success of a Marxist economist!)

However, Kaldor was, in fact, much the most tolerant of the neo-Keynesians at Cambridge. If Richard Kahn was in general the most bellicose, the stern reproach that I received often for not being quite true to the new orthodoxy of neo-Keynesianism came mostly from my thesis supervisor - the totally brilliant but vigorously intolerant Joan Robinson.

In this desert of constant feuding, my own college, Trinity, was a bit of an oasis. I suppose I was lucky to be there, but it was not entirely luck, since I had chosen to apply to Trinity after noticing, in the handbook of Cambridge University, that three remarkable economists of *very different* political views coexisted there. The Marxist Maurice Dobb and the conservative neo-classicist Dennis Robertson did joint seminars, and Trinity also had Piero Sraffa, a model of scepticism of nearly all the standard schools of thought. I had the good fortune of working with all of them and learning greatly from each.

The peaceful - indeed warm - co-existence of Dobb, Robertson and Sraffa was quite remarkable, given the feuding in the rest of the University. Sraffa told me, later on, a nice anecdote about Dobb's joining of Trinity, on the invitation of Robertson. When asked by Robertson whether he would like to teach at Trinity, Dobb said yes enthusiastically, but he suffered later from a deep sense of guilt in not having given Robertson "the full facts." So he wrote a letter to Robertson apologizing for not having mentioned earlier that he was a member of the Communist Party, supplemented by the statement - I think a rather "English" statement - that he would understand perfectly if in view of that Robertson were to decide that he, Dobb, was not a fit person to teach Trinity undergraduates. Robertson wrote a one-sentence reply: "Dear Dobb, so long as you give us a fortnight's notice before blowing up the Chapel, it will be all right."

So there did exist, to some extent, a nice "practice" of democratic and tolerant social choice at Trinity, my own college. But I fear I could not get anyone in Trinity, or in Cambridge, very excited in the "theory" of social choice. I had to choose quite a different subject for my research thesis, after completing my B.A. The thesis was on "the choice of techniques," which interested Joan Robinson as well as Maurice Dobb.

### **Philosophy and economics**

At the end of the first year of research, I was bumptious enough to think that I had some results that would make a thesis, and so I applied to go to India on a two-years leave from Cambridge, since I could not - given the regulation then in force - submit my Ph.D. thesis for a degree until I had been registered for research for three years. I was excitedly impatient in wanting to find out what was going on back at home, and when leave was granted to me, I flew off immediately to Calcutta. Cambridge University insisted on my having a "supervisor" in India, and I had the good fortune of having the great economic methodologist, A.K. Dasgupta, who was then teaching in Benares. With him I had frequent - and always enlightening - conversations on everything under the sun (occasionally on my thesis as well).

In Calcutta, I was also appointed to a chair in economics at the newly created Jadavpur University, where I was asked to set up a new department of economics. Since I was not yet even 23, this caused a predictable - and entirely understandable - storm of protest. But I enjoyed the opportunity and the challenge (even though several graffitis on the University walls displayed the "new professor" as having been just snatched from the cradle). Jadavpur was quite an exciting place intellectually (my colleagues included Paramesh Ray, Mrinal Datta Chaudhuri, Anita Banerji, Ajit Dasgupta, and others in the economics department). The University also had, among other luminaries, the immensely innovative historian, Ranajit Guha, who later initiated the "subaltern studies" - a highly influential school of colonial and post-colonial history. I particularly enjoyed getting back to some of the foundational issues that I had to neglect somewhat at Cambridge.

While my thesis was quietly "maturing" with the mere passage of time (to be worthy of the 3-year rule), I took the liberty of submitting it for a competitive Prize Fellowship at Trinity College. Since, luckily, I also got elected, I then had to choose between continuing in Calcutta and going back to Cambridge. I split the time, and returned to Cambridge somewhat earlier than I had planned. The Prize Fellowship gave me four years of freedom to do anything I liked (no questions asked), and I took the radical decision of studying philosophy in that period. I had always been interested in logic and in epistemology, but soon got involved in moral and political philosophy as well (they related closely to my older concerns about democracy and equity).

The broadening of my studies into philosophy was important for me not just because some of my main areas of interest in economics relate quite closely to philosophical disciplines (for example, social choice theory makes intense use of mathematical logic and also draws on moral philosophy, and so does the study of inequality and deprivation), but also because I found philosophical studies very rewarding on their own. Indeed, I went on to write a number of papers in philosophy, particularly in epistemology, ethics and political philosophy. While I am interested both in economics and in philosophy, the union of my interests in the two fields far exceeds their intersection. When, many years later, I had the privilege of working with some major philosophers (such as John Rawls, Isaiah Berlin, Bernard Williams, Ronald Dworkin, Derek Parfit, Thomas Scanlon, Robert Nozick, and others), I felt very grateful to Trinity for having given me the opportunity as well as the courage to get into exacting philosophy.

### **Delhi School of Economics**

During 1960-61, I visited M.I.T., on leave from Trinity College, and found it a great relief to get away from the rather sterile debates that the contending armies were fighting in Cambridge. I benefited greatly from many conversations with [Paul Samuelson](#), [Robert Solow](#), [Franco Modigliani](#), Norbert Wiener, and others that made M.I.T such an inspiring place. A summer visit to Stanford added to my sense of breadth of economics as a subject. In 1963, I decided to leave Cambridge altogether, and went to Delhi, as Professor of Economics at the Delhi School of Economics and at the University of Delhi. I taught in Delhi until 1971.

In many ways this was the most intellectually challenging period of my academic life. Under the leadership of K.N. Raj, a remarkable applied economist who was already in Delhi, we made an attempt to build an advanced school of economics there. The Delhi School was already a good centre for economic study (drawing on the work of V.K.R.V. Rao, B.N. Ganguli, P.N. Dhar, Khaleq Naqvi, Dharm Narain, and many others, in addition to Raj), and a number of new economists joined, including Sukhamoy Chakravarty, Jagdish Bhagwati, A.L. Nagar, Manmohan Singh, Mrinal Datta Chaudhuri, Dharma Kumar, Raj Krishna, Ajit Biswas, K.L. Krishna, Suresh Tendulkar, and others. (Delhi School of Economics also had some leading social anthropologists, such as M.N. Srinivas, Andre Beteille, Baviskar, Veena Das, and major historians such as Tapan Ray Chaudhuri, whose work enriched the social sciences in general.) By the time I left Delhi in 1971 to join the London School of Economics, we had jointly succeeded in making the Delhi School the pre-eminent centre of education in economics and the social sciences, in India.

Regarding research, I plunged myself full steam into social choice theory in the dynamic intellectual atmosphere of Delhi University. My interest in the subject was consolidated during a one-year visit to Berkeley in 1964-65, where I not only had the chance to study and teach some social choice theory, but also had the unique opportunity of observing some practical social choice in the form of student activism in the "free speech movement." An initial difficulty in pursuing social choice at the Delhi School was that while I had the freedom to do what I liked, I did not, at first, have anyone who was interested in the subject as a formal discipline. The solution, of course, was to have students take an interest in the subject. This happened with a bang with the arrival of a brilliant student, Prasanta Pattanaik, who did a splendid thesis on voting theory, and later on, also did joint work with me (adding substantially to the reach of what I was trying to do). Gradually, a sizeable and technically excellent group of economists interested in social choice theory emerged at the Delhi School.

Social choice theory related importantly to a more widespread interest in aggregation in economic assessment and policy making (related to poverty, inequality, unemployment, real national income, living standards). There was a great reason for satisfaction in the fact that a number of leading social choice theorists (in addition to Prasanta Pattanaik) emanated from the Delhi School, including Kaushik Basu and Rajat Deb (who also studied with me at the London School of Economics after I moved there), and Bhaskar Dutta and Manimay Sengupta, among others. There were other students who were primarily working in other areas (this applies to Basu as well), but whose work and interests were influenced by the strong current of social choice theory at the Delhi School (Nanak Kakwani is a good example of this).

In my book, *Collective Choice and Social Welfare*, published in 1970, I made an effort to take an overall view of social choice theory. There were a number of analytical findings to report, but despite the presence of many "trees" (in the form of particular technical results), I could not help looking anxiously for the forest. I had to come back again to the old general question that had moved me so much in my teenage years at Presidency College: Is reasonable social choice at all possible given the differences



between one person's preferences (including interests and judgments) and another's (indeed, as Horace noted a long time ago, there may be "as many preferences as there are people")?

The work underlying *Collective Choice and Social Welfare* was mostly completed in Delhi, but I was much helped in giving it a final shape by a joint course on "social justice" I taught at Harvard with Kenneth Arrow and John Rawls, both of whom were wonderfully helpful in giving me their assessments and suggestions. The joint course was, in fact, quite a success both in getting many important issues discussed, and also in involving a remarkable circle of participants (who were sitting in as "auditors"), drawn from the established economists and philosophers in the Harvard region. (It was also quite well-known outside the campus: I was asked by a neighbour in a plane journey to San Francisco whether, as a teacher at Harvard, I had heard of an "apparently interesting" course taught by "Kenneth Arrow, John Rawls, and some unknown guy.")

There was another course I taught jointly, with Stephen Marglin and Prasanta Pattanaik (who too had come to Harvard), which was concerned with development as well as Policy making. This nicely supplemented my involvements in pure social choice theory (in fact, Marglin and Pattanaik were both very interested in examining the connection between social choice theory and other areas in economics).

### **From Delhi to London and Oxford**

I left Delhi, in 1971, shortly after *Collective Choice and Social Welfare* was published in 1970. My wife, Nabaneeta Dev, with whom I have two children (Antara and Nandana), had constant trouble with her health in Delhi (mainly from asthma). London might have suited her better, but, as it happens, the marriage broke up shortly after we went to London.

Nabaneeta is a remarkably successful poet, literary critic and writer of novels and short stories (one of the most celebrated authors in contemporary Bengali literature), which she has combined, since our divorce, with being a University Professor at Jadavpur University in Calcutta. I learned many things from her, including the appreciation of poetry from an "internal" perspective. She had worked earlier on the distinctive style and composition of epic poetry, including the Sanskrit epics (particularly the *Ramayana*), and this I had got very involved in. Nabaneeta's parents were very well-known poets as well, and she seems to have borne her celebrity status - and the great many recognitions that have come her way - with unaffected approachability and warmth. She had visits from an unending stream of literary fans, and I understand, still does. (On one occasion, arrived a poet with a hundred new poems, with the declared intention of reading them aloud to her, to get her critical judgement, but since she was out, he said that he would instead settle for reading them to me. When I pleaded that I lacked literary sophistication, I was assured by the determined poet: "That is just right; I would like to know how the common man may react to my poetry." The common man, I am proud to say, reacted with appropriate dignity and self-control.)

When we moved to London, I was also going through some serious medical problems. In early 1952, at the age of 18 (when I was an undergraduate at Presidency College), I had cancer of the mouth, and it had been dealt with by a severe dose of radiation in a rather primitive Calcutta hospital. This was only seven years after Hiroshima and Nagasaki, and the long-run effects of radiation were not much understood. The dose of radiation I got may have cured the cancer, but it also killed the bones in my hard palate. By 1971, it appeared that I had either a recurrence of the cancer, or a severe case of bone necrosis. The first thing I had to do on returning to England was to have a serious operation, without knowing whether it would be merely plastic surgery to compensate for the necrosis (a long and complicated operation in the mouth, but no real threat to survival), or much more demandingly, a fresh round of efforts at cancer eradication.

After the long operation (it had lasted nearly seven hours) when I woke up from the heavy anaesthesia, it was four o'clock in the morning. As a person with much impatience, I wanted to know what the surgeon had found. The nurse on duty said she was not allowed to tell me anything: "You must wait for the doctors to come at nine." This created some tension (I wanted to know what had emerged), which the nurse noticed. I could see that she was itching to tell me something: indeed (as I would know later) to tell me that no recurrence of cancer had been detected in the frozen-section biopsy that had been performed, and that the long operation was mainly one of reconstruction of the palate to compensate for the necrosis. She ultimately gave in, and chose an interesting form of communication, which I found quite striking (as well as kind). "You know," she said, "they were *praising* you very much!" It then dawned on me that not having cancer can be a subject for praise. Indeed lulled by praise, I went quietly back to my post-operative sleep. In later years, when I would try to work on judging the goodness of a society by the quality of health of the people, her endorsement of my praiseworthiness for being cancer-free would serve as a good reference point!

The intellectual atmosphere at the LSE in particular and in London in general was most gratifying, with a dazzling array of historians, economists, sociologists and others. It was wonderful to have the opportunity of seeing Eric Hobsbawm (the great historian) and his wife Marlene very frequently and to interact regularly with Frank and Dorothy Hahn, Terence and Dorinda Gorman, and many others. Our small neighbourhood in London (Bartholomew estate, within the Kentish Town) itself offered wonderful company of intellectual and artistic creativity and political involvement. Even after I took an Oxford job (Professor of Economics, 1977-80, Drummond Professor of Political Economy, 1980-87) later on, I could not be budged from living in London.

As I settled down at the London School of Economics in 1971, I resumed my work on social choice theory. Again, I had excellent students at LSE, and later on at Oxford. In addition to Kaushik Basu and Rajat Deb (who had come from Dehli), other students such as Siddiq Osmani, Ben Fine, Ravi Kanbur, Carl Hamilton, John Wriglesworth, David Kelsey, Yasumi Matsumoto, Jonathan Riley, produced distinguished Ph.D. theses on a variety of economic and social choice problems. It made me very proud that many of the results that

became standard in social choice theory and welfare economics had first emerged in these Ph.D. theses.

I was also fortunate to have colleagues who were working on serious social choice problems, including Peter Hammond, Charles Blackorby, Kotaro Suzumura, Geoffrey Heal, Gracieda Chichilnisky, Ken Binmore, Wulf Gaertner, Eric Maskin, John Muellbauer, Kevin Roberts, Susan Hurley, at LSE or Oxford, or neighbouring British universities. (I also learned greatly from conversations with economists who were in other fields, but whose works were of great interest to me, including Sudhir Anand, Tony Atkinson, Christopher Bliss, Meghnad Desai, Terence Gorman, Frank Hahn, David Hendry, Richard Layard, [James Mirrlees](#), John Muellbauer, Steve Nickel, among others.) I also had the opportunity of collaboration with social choice theorists elsewhere, such as Claude d'Aspremont and Louis Gevers in Belgium, Koichi Hamada and Ken-ichi Inada in Japan (joined later by Suzumura when he returned there), and many others in America, Canada, Israel, Australia, Russia, and elsewhere). There were many new formal results and informal understandings that emerged in these works, and the gloom of "impossibility results" ceased to be the only prominent theme in the field. The 1970s were probably the golden years of social choice theory across the world. Personally, I had the sense of having a ball.

### **From social choice to inequality and poverty**

The constructive possibilities that the new literature on social choice produced directed us immediately to making use of available statistics for a variety of economic and social appraisals: measuring economic inequality, judging poverty, evaluating projects, analyzing unemployment, investigating the principles and implications of liberty and rights, assessing gender inequality, and so on. My work on inequality was much inspired and stimulated by that of Tony Atkinson. I also worked for a while with Partha Dasgupta and David Starrett on measuring inequality (after having worked with Dasgupta and Stephen Marglin on project evaluation), and later, more extensively, with Sudhir Anand and James Foster.

My own interests gradually shifted from the pure theory of social choice to more "practical" problems. But I could not have taken them on without having some confidence that the practical exercises to be undertaken were also foundationally secure (rather than implicitly harbouring incongruities and impossibilities that could be exposed on deeper analytical probing). The progress of the pure theory of social choice with an expanded informational base was, in this sense, quite crucial for my applied work as well.

In the reorientation of my research, I benefited greatly from discussions with my wife, Eva Colorni, with whom I lived from 1973 onwards. Her critical standards were extremely exacting, but she also wanted to encourage me to work on issues of practical moment. Her personal background involved a fine mixture of theory and practice, with an Italian Jewish father (Eugenio Colorni was an academic philosopher and a hero of the Italian resistance who was killed by the fascists in Rome shortly before the Americans got there), a Berlinite Jewish mother (Ursula Hirschman was herself a writer and the brother of the great

development economist, Albert Hirschman), and a stepfather who as a statesman had been a prime mover in uniting Europe (Altiero Spinelli was the founder of the "European Federalist movement," wrote its "Manifesto" from prison in 1941, and officially established the new movement, in the company of Eugenio Colorni, in Milan in 1943). Eva herself had studied law, philosophy and economics (in Pavia and in Delhi), and lectured at the City of London Polytechnic (now London Guildhall University). She was deeply humane (with a great passion for social justice) as well as fiercely rational (taking no theory for granted, subjecting each to reasoned assessment and scrutiny). She exercised a great influence on the standards and reach that I attempted to achieve in my work (often without adequate success).

Eva was very supportive of my attempt to use a broadened framework of social choice theory in a variety of applied problems: to assess poverty; to evaluate inequality; to clarify the nature of relative deprivation; to develop distribution-adjusted national income measures; to clarify the penalty of unemployment; to analyze violations of personal liberties and basic rights; and to characterize gender disparities and women's relative disadvantage. The results were mostly published in journals in the 1970s and early 1980s, but gathered together in two collections of articles (*Choice, Welfare and Measurement and Resources, Values and Development*, published, respectively, in 1982 and 1984).

The work on gender inequality was initially confined to analyzing available statistics on the male-female differential in India (I had a joint paper with Jocelyn Kynch on "Indian Women: Well-being and Survival" in 1982), but gradually moved to international comparisons (*Commodities and Capabilities*, 1985) and also to some general theory ("Gender and Cooperative Conflict," 1990). The theory drew both on empirical analysis of published statistics across the world, but also of data I freshly collected in India in the spring of 1983, in collaboration with Sunil Sengupta, comparing boys and girls from birth to age 5. (We weighed and studied every child in two largish villages in West Bengal; I developed some expertise in weighing protesting children, and felt quite proud of my accomplishment when, one day, my research assistant phoned me with a request to take over from her the job of weighing a child "who bites every hand within the reach of her teeth." I developed some vanity in being able to meet the challenge at the "biting end" of social choice research.)

### **Poverty, famines and deprivation**

From the mid-1970s, I also started work on the causation and prevention of famines. This was initially done for the World Employment Programme of the [International Labour Organization](#), for which my 1981 book *Poverty and Famines* was written. (Louis Emmerij who led the programme took much personal interest in the work I was trying to do on famines.) I attempted to see famines as broad "economic" problems (concentrating on how people can buy food, or otherwise get entitled to it), rather than in terms of the grossly undifferentiated picture of aggregate food supply for the economy as a whole. The work was carried on later (from the middle of 1980s) under the auspices of the World Institute of Development Economics Research (WIDER) in Helsinki, which was imaginatively directed by Lal Jayawardena (an old

friend who, as I noted earlier, had also been a contemporary of mine at Cambridge in the 1950s). Siddiq Osmani, my ex-student, ably led the programme on hunger and deprivation at WIDER. I also worked closely with Martha Nussbaum on the cultural side of the programme, during 1987-89.

By the mid-1980s, I was collaborating extensively with Jean Drèze, a young Belgian economist of extraordinary skill and remarkable dedication. My understanding of hunger and deprivation owes a great deal to his insights and investigations, and so does my recent work on development, which has been mostly done jointly with him. Indeed, my collaboration with Jean has been extremely fruitful for me, not only because I have learned so much from his, imaginative initiatives and insistent thoroughness, but also because it is hard to beat an arrangement for joint work whereby Jean does most of the work whereas I get a lot of the credit.

While these were intensely practical matters, I also got more and more involved in trying to understand the nature of individual advantage in terms of the substantive freedoms that different persons respectively enjoy, in the form of the capability to achieve valuable things. If my work in social choice theory was initially motivated by a desire to overcome Arrow's pessimistic picture by going beyond his limited informational base, my work on social justice based on individual freedoms and capabilities was similarly motivated by an aspiration to learn from, but go beyond, John Rawls's elegant theory of justice, through a broader use of available information. My intellectual life has been much influenced by the contributions as well as the wonderful helpfulness of both Arrow and Rawls.

### **Harvard and beyond**

In the late 1980s, I had reason to move again from where I was. My wife, Eva, developed a difficult kind of cancer (of the stomach), and died quite suddenly in 1985. We had young children (Indrani and Kabir - then 10 and 8 respectively), and I wanted to take them away to another country, where they would not miss their mother constantly. The liveliness of America appealed to us as an alternative location, and I took the children with me to "taste" the prospects in the American universities that made me an offer.

Indrani and Kabir rapidly became familiar with several campuses (Stanford, Berkeley, Yale, Princeton, Harvard, UCLA, University of Texas at Austin, among them), even though their knowledge of America outside academia remained rather limited. (They particularly enjoyed visiting their grand uncle and aunt, Albert and Sarah Hirschman, at the Institute for Advanced Study in Princeton; as a Trustee of the Institute, visits to Princeton were also very pleasurable occasions for me.) I guess I was, to some extent, imposing my preference for the academic climate on the children, by confining the choice to universities only, but I did not really know what else to do. However, I must confess that I worried a little when I overheard my son Kabir, then nine years old, responding to a friendly American's question during a plane journey as to whether he knew Washington, D.C.. "Is that city," I heard Kabir say, "closer to Palo Alto or to New Haven?"

We jointly chose Harvard, and it worked out extremely well. My colleagues in economics and philosophy were just superb, some of whom I knew well from earlier on (including John Rawls and Tim Scanlon in philosophy, and Zvi Griliches, Dale Jorgenson, Janos Kornai, Stephen Marglin in economics), but there were also others whom I came to know after arriving at Harvard. I greatly enjoyed teaching regular joint courses with Robert Nozick and Eric Maskin, and also on occasions, with John Rawls and Thomas Scanlon (in philosophy) and with Jerry Green, Stephen Marglin and David Bloom (in economics). I could learn also from academics in many other fields as well, not least at the Society of Fellows where I served as a Senior Fellow for nearly a decade. Also, I was again blessed with wonderful students in economics, philosophy, public health and government, who did excellent theses, including Andreas Papandreou (who moved with me from Oxford to Harvard, and did a major book on externality and the environment), Tony Laden (who, among many other things, clarified the game-theoretic structure of Rawlsian theory of justice), Stephan Klasen (whose work on gender inequality in survival is possibly the most definitive work in this area), Felicia Knaul (who worked on street children and the economic and social challenges they face), Jennifer Ruger (who substantially advance the understanding of health as a public policy concern), and indeed many others with whom I greatly enjoyed working.

The social choice problems that had bothered me earlier on were by now more analyzed and understood, and I did have, I thought, some understanding of the demands of fairness, liberty and equality. To get firmer understanding of all this, it was necessary to pursue further the search for an adequate characterization of individual advantage. This had been the subject of my Tanner Lectures on Human Values at Stanford in 1979 (published as a paper, "Equality of What?" in 1980) and in a more empirical form, in a second set of Tanner Lectures at Cambridge in 1985 (published in 1987 as a volume of essays, edited by Geoffrey Hawthorne, with contributions by Bernard Williams, Ravi Kanbur, John Muellbauer, and Keith Hart). The approach explored sees individual advantage not merely as opulence or utility, but primarily in terms of the lives people manage to live and the freedom they have to choose the kind of life they have reason to value. The basic idea here is to pay attention to the actual "capabilities" that people end up having. The capabilities depend both on our physical and mental characteristics as well as on social opportunities and influences (and can thus serve as the basis not only of assessment of personal advantage but also of efficiency and equity of social policies). I was trying to explore this approach since my Tanner Lectures in 1979; there was a reasonably ambitious attempt at linking theory to empirical exercises in my book *Commodities and Capabilities*, published in 1985. In my first few years at Harvard, I was much concerned with developing this perspective further.

The idea of capabilities has strong Aristotelian connections, which I came to understand more fully with the help of Martha Nussbaum, a scholar with a remarkably extensive command over classical philosophy as well as contemporary ethics and literary studies. I learned a great deal from her, and we also collaborated in a number of studies during 1987-89, including in a collection of essays that pursued this

approach in terms of philosophical as well as economic reasoning (*Quality of Life* was published in 1993, but the essays were from a conference at WIDER in Helsinki in 1988).

During my Harvard years up to about 1991, I was much involved in analyzing the overall implications of this perspective on welfare economics and political philosophy (this is reported in my book, *Inequality Reexamined*, published in 1992). But it was also very nice to get involved in some new problems, including the characterization of rationality, the demands of objectivity, and the relation between facts and values. I used the old technique of offering courses on them (sometimes jointly with Robert Nozick) and through that learning as much as I taught. I started taking an interest also in health equity (and in public health in particular, in close collaboration with Sudhir Anand), a challenging field of application for concepts of equity and justice. Harvard's ample strength in an immense variety of subjects gives one scope for much freedom in the choice of work and of colleagues to talk to, and the high quality of the students was a total delight as well. My work on inequality in terms of variables other than incomes was also helped by the collaboration of Angus Deaton and James Foster.

It was during my early years at Harvard that my old friend, Mahbub ul Haq, who had been a fellow student at Cambridge (and along with his wife, Bani, a very old and close friend), returned back into my life in a big way. Mahbub's professional life had taken him from Cambridge to Yale, then back to his native Pakistan, with intermediate years at the World Bank. In 1989 he was put in charge, by the United Nations Development Programme (UNDP), of the newly planned "Human Development Reports." Mahbub insisted that I work with him to help develop a broader informational approach to the assessment of development. This I did with great delight, partly because of the exciting nature of the work, but also because of the opportunity of working closely with such an old and wonderful friend. Human Development Reports seem to have received a good deal of attention in international circles, and Mahbub was very successful in broadening the informational basis of the assessment of development. His sudden death in 1998 has robbed the world of one of the leading practical reasoners in the world of contemporary economics.

### **India and Bangladesh**

What about India? While I have worked abroad since 1971, I have constantly retained close connections with Indian universities, I have, of course, a special relation with Delhi University, where I have been an honorary professor since leaving my full-time job there in 1971, and I use this excuse to subject Delhi students to lectures whenever I get a chance. For various reasons - personal as well as academic - the peripatetic life seems to suit me, in this respect. After my student days in Cambridge in 1953-56, I guess I have never been away from India for more than six months at a time. This - combined with my remaining exclusively an Indian citizen - gives me, I think, some entitlement to speak on Indian public affairs, and this remains a constant involvement.

It is also very engaging - and a delight - to go back to Bangladesh as often as I can, which is not only my

old home, but also where some of my closest friends and collaborators live and work. This includes Rehman Sobhan to whom I have been very close from my student days (he remains as sceptical of formal economics and its reach as he was in the early 1950s), and also Anisur Rehman (who is even more sceptical), Kamal Hossain, Jamal Islam, Mushairaf Hussain, among many others, who are all in Bangladesh.

When the Nobel award came my way, it also gave me an opportunity to do something immediate and practical about my old obsessions, including literacy, basic health care and gender equity, aimed specifically at India and Bangladesh. The Pratichi Trust, which I have set up with the help of some of the prize money, is, of course, a small effort compared with the magnitude of these problems. But it is nice to re-experience something of the old excitement of running evening schools, more than fifty years ago, in villages near Santiniketan.

### **From campus to campus**

As far as my principal location is concerned, now that my children have grown up, I could seize the opportunity to move back to my old Cambridge college, Trinity. I accepted the offer of becoming Master of the College from January 1998 (though I have not cut my connections with Harvard altogether). The reasoning was not independent of the fact that Trinity is not only my old college where my academic life really began, but it also happens to be next door to King's, where my wife, Emma Rothschild, is a Fellow, and Director of the Centre for History and Economics. Her forthcoming book on Adam Smith also takes on the hard task of reinterpreting the European Enlightenment. It so happens that one principal character in this study is Condorcet, who was also one of the originators of social choice theory, which is very pleasing (and rather useful as well).

Emma too is a convinced academic (a historian and an economist), and both her parents had long connections with Cambridge and with the University. Between my four children, and the two of us, the universities that the Sen family has encountered include Calcutta University, Cambridge University, Jadavpur University, Delhi University, L.S.E., Oxford University, Harvard University, M.I.T., University of California at Berkeley, Stanford University, Cornell University, Smith College, Wesleyan University, among others. Perhaps one day we can jointly write an illustrated guide to the universities.

I end this essay where I began - at a university campus. It is not quite the same at 65 as it was at 5. But it is not so bad even at an older age (especially, as Maurice Chevalier has observed, "considering the alternative" ). Nor are university campuses quite as far removed from life as is often presumed. Robert Goheen has remarked, "if you feel that you have both feet planted on level ground, then the university has failed you." Right on. But then who wants to be planted on ground? There are places to go.

From *Les Prix Nobel. The Nobel Prizes 1998*, Editor Tore Frångsmyr, [Nobel Foundation], Stockholm, 1999



This autobiography/biography was written at the time of the award and later published in the book series *Les Prix Nobel/Nobel Lectures*. The information is sometimes updated with an addendum submitted by the Laureate. To cite this document, always state the source as shown above.