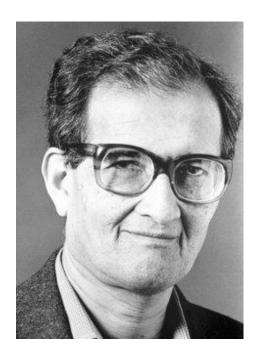
Amartya Sen

Professor of Economics. Born 1933.

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1. Early Life

The following chapters were archived in 2021, with acknowledgement and thanks, from the Nobel Prize website at www.nobelprize.org. They are an autobiographical account of his life written by the Nobel Prize winning economist Amartya Sen.

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."

2. 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.

3. 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).

4. 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 enroled 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 neoclassical 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 neoclassicist 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.

5. 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.

6. 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 on 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).

7. 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.

8. 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.)

9. 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.

10. 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.

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11. 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.

12. 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.

13. Harvard Gazette Interview

The following chapter was archived in 2021, with acknowledgement and thanks, from the website of the Harvard University Gazette at www.news.harvard.edu. It was published in June 2021.

Amartya Sen's nine-decade journey from colonial India to Nobel Prize and beyond.

Coming from a long line of Hindu intellectuals and teachers, Amartya Sen enjoyed advantages and freedoms that few others did in a deeply-stratified India of the 1930s, during the waning days of the British empire.

Teaching was in his blood, and from an early age, Sen was struck by the stark economic inequities he saw all around him under the British raj. Identifying and understanding the causes and effects that inequalities, like those surrounding poverty or gender, had on people's lives would become a lifelong intellectual lodestar for the political economist, moral philosopher, and social theorist.

Many economists focus on explaining and predicting what is happening in the world. But Sen, considered the key figure at the convergence of economics and philosophy, turned his attention instead to what the reality should be and why we fall short.

"I think he's the greatest living figure in normative economics, which asks not 'What do we see?' but 'What should we aspire to?' and 'How do we even work out what we should aspire to?' said Eric S. Maskin '72, Ph.D. '76, Adams University Professor and professor of economics and mathematics.

Over his 65-year career, Sen's research and ideas have touched many areas of the field. He's credited as one of the founding fathers of modern social-choice theory with his landmark 1970 book, "Collective Choice and Social Welfare." The book took up the late Harvard economist Kenneth Arrow's ideas from the early 1950s about how to combine different individuals' well-being into a measure of social well-being, intensifying interest in and expanding upon Arrow's work.

"It was really Amartya who made the field what it became," said Maskin, a 2007 Nobel laureate in economics who has taught with Sen, the Thomas W. Lamont University Professor and professor of economics and philosophy, since the 1990s.

Sen's 1970 paper, "The Impossibility of a Paretian Liberal," was deeply influential on philosophy and economics. In it, he pointed to an inherent conflict between individual liberty and the principle that making people better off is always desirable.

His work on famines and his novel view that in order to accurately evaluate people's well-being, economists needed to consider information beyond just income has reshaped thinking in development economics and welfare economics. Known as the "capabilities approach," the study of how policy affects a person's life opportunities, an area of economics that's grown in recent years, "is very much based on ideas that Amartya developed years and years ago," said Maskin.

In 1998, Sen received the Prize in Economic Sciences in Memory of Alfred Nobel for his theoretical, field, and ethics work in welfare economics and for his research advancing the understanding of social-choice theory, poverty, and the measurement of welfare.

He has received top civilian honors around the world, including France's Légion d'Honneur (2012) and India's Bharat Ratna (1999), as well as more than 100 honorary degrees from institutions on five continents. Sen received an honorary Doctor of Laws from Harvard Law School in 2000 and is a senior fellow in the Society of Fellows at Harvard.

At 87, Sen, who lives near Harvard with his wife, Emma Rothschild, the Jeremy and Jane Knowles Professor of History, has no interest in resting on his considerable laurels. In addition to teaching one course each semester, either in economics, history or philosophy, Sen is a sharp, frequent critic of contemporary Indian politics. He recently completed a new book, "Home in the World: A Memoir" set for release in July in the U.K., with a U.S. release soon to follow.

GAZETTE: Tell me a little bit about your family and life growing in India in the 1930s.

SEN: I come from a family with an academic background. My father was a professor of chemistry in Dhaka University, which is [located in what is] now the capital of Bangladesh. My mother had a mixture of professions. She was quite a successful dancer once, but she was also an editor of a magazine that she edited for about 30 years. Her father was a very famous professor of Sanskrit at Visva-Bharati University established in Shantiniketan, which is a small town about 100 miles from Calcutta. I spent quite a lot of time as a child with my grandparents in Shantiniketan when the war was going on with Japan. I studied there from the age of 7 to the age of 17.

They were not particularly strict. They were rather progressive parents. They themselves came from an academic background on both sides. They'd all been to the universities, and even though they had professions of other kinds, not always teaching — my paternal grandfather was a lawyer and a judge — I think they were just interested in academia quite a bit. My father was a natural scientist and a chemist; whereas on my mother's side, they were much more interested in humanities.

GAZETTE: Why were you living with your grandparents and not your parents?

SEN: I was with my grandparents because the war was going on at that time between Japan and the Allied forces. The Japanese army came all the way into the eastern side of India from Burma. So that was the reason for me to be not in a big town like Calcutta or Dhaka, but in a small university town where my grandfather was teaching Sanskrit. Japanese bombs would not come down on a university town, but they could come down in Calcutta, in Dhaka. In fact Dhaka didn't get any bombing at all; Calcutta did get some, but not very much really.

I liked the university town atmosphere. I loved the fact that my school was progressive. It was a coeducational school with an almost equal number of boys and girls. The library was open shelf, so I could go all the time up and down and look at my own books. That's why I spent an incredible amount of time in the libraries. It's a kind of life that suited me.

GAZETTE: The Visva-Bharati school was established by the Nobel laureate novelist, poet, playwright, philosopher <u>Rabindranath Tagore</u>, an associate of your grandfather's who had a skeptical view of Western education. How unusual was the school's curriculum and approach to education for the era?

SEN: It was unusual in many ways, even for it to be coeducational. In fact, my college at Cambridge, Trinity College, was the first single-sex educational establishment I studied at. But it was progressive in many other ways too, in terms of the freedom of choice that the students had. My mother, who went to the same school as me, learned, while in school, judo and other things which girls very often didn't really do in those days.

She also appeared on stage as a dancer. Established, middle-class families often hesitated in India to go on stage, but she did. She didn't maintain her career as a dancer, though she was quite successful in that, but she stopped it when I was growing up. So it was a progressive school. We didn't have formal exams and marks. When there were exams, the exam marks were not taken very seriously at all. There was no pressure to work.

When I was six, I did go to a school in Dhaka, in the capital of Bangladesh, which was a missionary school called Saint Gregory's. That was a very disciplined school and academically quite excellent. So I did go there for a little over a year. And before that, between the ages of three and six, I was in Burma, in Mandalay, where my father had gone for three years as a visiting professor to teach chemistry.



Amartya Sen at Pratichi, Shantiniketan, his home in West Bengal.

GAZETTE: Outside of class, what were some of your passions as a young boy?

SEN: I was quite social and spent a lot of time chatting with people. Among activities, chatting with people is quite high on my list. I was a bicyclist of quite an extreme kind. I went everywhere on bicycles. Quite a lot of the research I did required me to take long bicycle trips. One of the research trips I did in 1970 was about the development of famines in India. I studied the Bengal famine of 1943, in which about 3 million people died. It was clear to me it wasn't caused by the food supply having fallen compared with earlier. It hadn't. What we had was [a] war-related economic boom that increased the wages of some people, but not others. And those who did not

have higher wages still had to face the higher price of food — in particular, rice, which is the staple food in the region. That's how the starvation occurred. In order to do this research, I had to see what wages people were being paid for various rural economic activities. I also had to find out what the prices were of basic food in the main markets. All this required me to go to many different places and look at their records so I went all these distances on my bike.

And when I got interested in gender inequality, I studied the weights of boys and girls over their childhood. Very often, it would happen that the girls and boys were born the same weight, but by the time they were five, the boys had — in weight for age —overtaken the girls. It's not so much that the girls were not fed well — there might have been some of that. But mainly, the hospital care and medical treatment available were rather less for girls than for boys. In order to find this out, I had to look at each family and also weigh the children to see how they were doing in terms of weight for age. These were in villages, which were often not near my town; I had to bicycle there.

GAZETTE: You were quite young during a time of tremendous political upheaval and change in India's history. Violent clashes between Hindus and Muslims broke out before the British withdrew from India in 1947. What do you recall of that time?

SEN: The British didn't do much to stop the Hindu-Muslim riots. In fact, some people took the view that the British were actually encouraging these riots because that made them indispensable in India. So there were a lot of critics who saw the divide-and-rule policy as being the imperial policy.

GAZETTE: The violence erupted quite suddenly?

SEN: It did. There was very little Hindu/Muslim conflict until about the age 7 or 8 in my life. And then suddenly, it appeared from nowhere, but dramatically, strongly. It took over one's life almost fully. You couldn't go outside your home for [fear] of being assaulted. On one occasion, I must have been about 10 or 11, I was playing in the garden when I saw somebody had come in through the outside gates of our compound, a very stricken man who had been clearly knifed in the back, and he was bleeding profusely. He came to the house asking for help and some water. I went running around, getting water, getting my dad to take him to the hospital, which he did, of course. Unfortunately, they couldn't save him. He still did die. He was knifed by some Hindu thugs. He was a Muslim laborer, therefore, a prey for Hindu thugs, just as the Hindu laborers were prey for Muslim thugs.

I did talk with him a bit while he was getting weaker and weaker. He said with great sadness it was because the children had no food at home that he had to go out to get a little income — so he could buy some food for the children. For that, he lost his life.

While the assailants and victims came from different religions, Hindu or Muslim, the victims were all from the same class, or nearly all. They were poor laborers. Because they didn't have any shelter at home, it was very easy to break into their homes, very easy to find them on the street, like this person who came to our house for help. Similarly, there would have been Hindu laborers being assaulted by Muslim murderers all over the city. It came suddenly around 1943, 1944, and after 10 years or so, it was gone. India was divided.

GAZETTE: Did that experience help shape your later career choices?

SEN: Yes, of course, it did. I was particularly involved in violence and premature death. In this case, it came from murder and criminal violence. In some other cases, it came from famines and people dying of starvation or from illnesses associated with famine. So I was concerned with this rather morbid aspect of human life. And then later on in my life, I did some work on that.

GAZETTE: Was economics an early interest?

SEN: I did not have much interest in economics when I was young. It developed much later. Academically, I was interested in math and Sanskrit and physics.

"There was very little Hindu/Muslim conflict until about the age 7 or 8 in my life. And then suddenly, it appeared from nowhere, but dramatically, strongly. It took over one's life almost fully."

GAZETTE: What was the appeal for you?

SEN: I was reasonably good at math, and I liked doing it, so that was the main reason for doing math. I also liked abstract reasoning. So, along with my interest in reading math from India, where my knowledge of Sanskrit was a great help, I was interested in the early Greek mathematics also as to how, axiomatically, they pursued it.

I was interested in Sanskrit. I liked the language and still do, but I also enjoyed the fact that with my Sanskrit, I could both read great poetry, great novels, great plays in particular, but also great scientific and mathematical writings which were, in ancient India, in Sanskrit.

When the Nobel committee after you get your prize asks you to give two mementos or two objects connected with your work, I chose two. One was a bicycle, which was an obvious choice. And the other was a Sanskrit book of mathematics from the fifth century by Aryabhata. Both I had a lot of use for.

GAZETTE: You were 23 when you got your first position teaching college-level economics in 1956. How did you become interested in teaching?

SEN: I was very interested in teaching from the time when I was a student. I used to run a night school. We set up a night school for the tribal children. There were a lot of local tribal people who had no schools at all around their homes. So some friends and me started these night schools. There were three or four of us who were interested in that, and we used to go there from about the time of sunset — when we could work with lanterns. And on the weekends, on Sundays in particular, we did day classes. I taught math, mostly. And there were others who taught English and Bengali.

GAZETTE: You come from a highly educated and privileged family. How did you first become fascinated with the economic conditions and choices of the poor?

SEN: I was always interested in the economics of the poor people. I was interested in the lives of people who were very short of income and prosperity — how do they cope? Mainly, as I ran the night schools, the people I was mixing with were students from the tribal villages in the neighborhood. They were very poor. And we very often talked about how they earned their income or how their parents earned their income, and how do they manage, how do they plan their future, and all that. So I got interested in that. And I didn't think I would have much money to invest, and I didn't. But I did think I might have a great deal of interest in the politics of poor people. So that played a big part in my getting involved with that kind of economics.

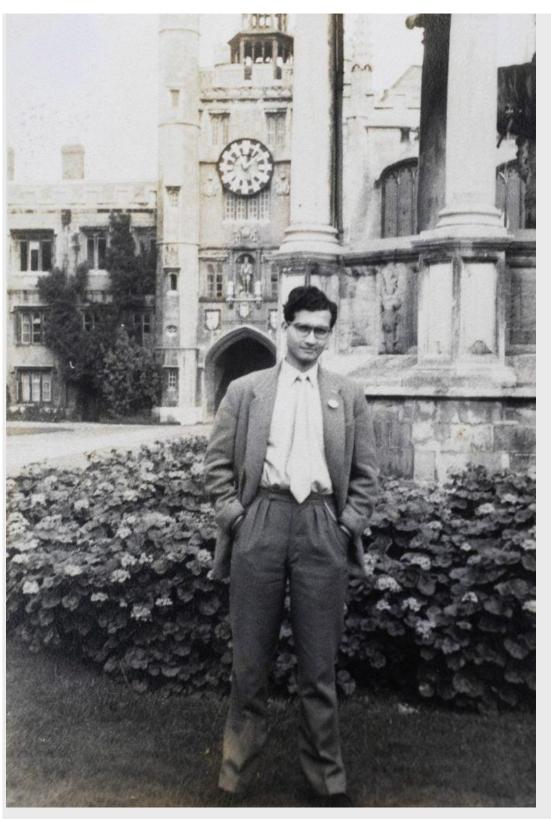
GAZETTE: Your interest in politics started while you were a college student in Calcutta?

SEN: No, I think earlier. In Shantiniketan it started. The family was quite political because nearly everyone was interested in getting rid of the British Empire. My father's cousins, my mother's brother and cousins, they were all getting arrested under what the British called "preventive detention." That doesn't mean they're charged with any crime, and the government didn't have to establish that they have committed any crime. But it's a preventive detention that unless you detain them, they could cause crime. That was the idea. So I think among my parents' cousins, I had about seven or eight people who were periodically in and out of "preventive detention."

GAZETTE: What were they worried about your relatives doing?

SEN: Basically, because they were writing essays saying why the British ought to go. I remember from the time when I was between seven and eight [that] I went with my grandfather and grandmother, who were trying to plead with this Indian, but British, civil service officer, asking, "Why have you kept my son in prison?" To which this officer said, "Because he writes anti-imperial essays and op-eds in newspapers and magazines, and we have to make him stop doing it." So my grandmother said, "But he has never committed any violence." And this officer said, "No, and indeed, that is

not the reason why he is in prison. But as soon as he stops writing anti-British raj essays, we would be happy for him to come out." I was very impressed by this conversation [laughs], but I didn't fully understand what else was going on.



Amartya Sen at Trinity College, Cambridge, in 1958.

GAZETTE: After you graduated from Presidency College in two years, you went to Trinity College at the University of Cambridge in 1953. Tell me about that decision.

SEN: My Calcutta degree was a BA degree, and the Cambridge people treated it as the "part one" of the BA degree. And I think they were right. It's not a very high-level degree, but I had that, and I'd done well. So when I went to Cambridge, they said, "OK, you can do our three-year degree in two years." So I did another BA in two years in Cambridge. And by that time, I was also doing relatively advanced economics of various kinds. There was a kind of gulf, because in Calcutta, I was quite used to doing rather technical economics, and suddenly, I found myself attending classes in Cambridge with people who had done very little technical economics.

GAZETTE: You set out on an 18-day voyage by boat from India to England. Was attending Cambridge something you had always dreamed of doing?

SEN: It was originally my dad's idea. When I was a student in Calcutta, I had what they call squamous cell carcinoma in my mouth. I had radiation treatment, and it destroyed a lot of the bones in the mouth. So it was a hard time. The doctors gave me a 15 percent chance of living for five more years; that's all. But when I recovered from it, I think my father thought that it may be a good thing for me to go abroad. He was a teacher, but he had just about enough to support me for three years in England. Initially, I didn't get in. But when I eventually got in, he was able to pay for it, including the boat trip.

GAZETTE: Did Cambridge's reputation in economics at the time draw you there?

SEN: That's right. There was a combination. I was going to do economics. At that time, Cambridge had the reputation of having the best department of economics in the world. That was one reason. It may not have been true, though, but people believed that. But I also was interested in mathematics, and particularly in the college I chose to go to, in Trinity College, there had been people whose influence was still there, like Bertrand Russell, [Alfred North] Whitehead, [Ludwig] Wittgenstein, and others who were interested in the philosophy of mathematics. I was interested in that. And I also had a lasting interest in politics, and there were a number of good thinkers on the left in Cambridge.

GAZETTE: Who were some of the people advising you back then?

SEN: One mentor was an Italian economist, Piero Sraffa. He was my director of studies, as they call him, so he was in charge of my education in Cambridge. And I got on very well with him. There was Maurice Dobb, who was a Marxist economist, and probably the leading Marxist economist in Britain at that time. And then there was Dennis Robertson, who was a

conservative economist, but very amiable and friendly. They were great mentors of mine. I spent quite a bit of time chatting with them, and they were indulgent of me. Sraffa and I used to go out for walks after lunch on a regular basis, almost every other day. He liked chatting with me, and I did like chatting with him.

GAZETTE: What were the big economic debates happening at that time?

SEN: Among the conventional ones, there was a good debate still about whether unemployment could be kept away by Keynesian policies — by government expenditure and planned action. The Keynesian remedy for unemployment was one of the major debates on that subject. This was about a decade after FDR here, and, in economic theory, John Maynard Keynes in England had made a big difference to the thinking about unemployment — that you could eliminate it.

But I was also interested in the poor people's economics, [people] who had nothing to sell except their labor because they don't have any assets. How could they survive? And what can you say about their economic studies? And what can you say about the issues being discussed very much now here, like minimum wages? That also made me interested in such subjects as the labor theory of value, because labor theory is very important for those who have only labor to offer to the market and hardly any assets. So I was generally interested in poor people's economics. There was quite a lot of debate going on, and I liked joining in, which I did.

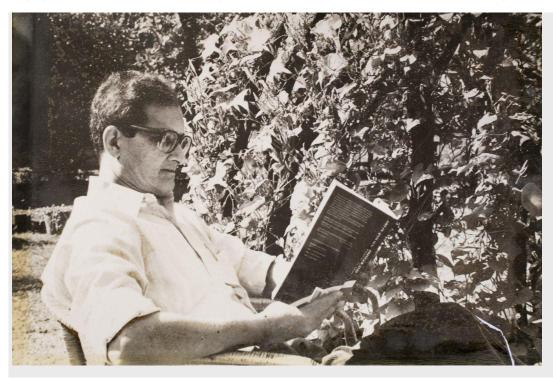
GAZETTE: How would you describe your politics then?

SEN: Definitely much left of center, but very keen on liberty and pluralism. That is, I thought the left had much better things to offer — this was true also in Calcutta, much earlier, before I came to Cambridge — had much more things to say. But what I disliked is that often they would regard liberty and giving people the freedom of choice — First Amendment, for example — to be a kind of bourgeois luxury, which I didn't think it was at all. So I opted for the left, but with a lot of interest in liberty and freedom.

GAZETTE: So much of your work has been pioneering. Before you had become established, did people suggest that your career would advance faster, perhaps further if you focused on more conventional areas of economics?

SEN: I didn't spend too much time thinking about it, because first of all, as far as my small life is concerned, I was not having a difficult time. The college [had] elected me to a Prize Fellowship. For four years, I had no obligations. I could do what I liked, and I got an assistant professor's salary, or what in Cambridge would be a lecturer's salary. So I was doing quite well. My only problem was that I didn't often have people working in a similar area who I could chat with about my own work. For that, I had to do some traveling. And I decided quite early in my life, when I had just finished

my degree in Cambridge, that I will, every fourth year, go to America for a year and be a visiting professor. I was at MIT for a year, and I went to Stanford. I went to Harvard and then Berkeley. I was traveling and really enjoyed the interactions very much indeed. So it worked out all right.



Amartya Sen reading in the garden at Pratichi.

GAZETTE: You left a prestigious teaching job in India to return to Cambridge to pursue a Ph.D. in philosophy. Why philosophy?

SEN: I was always interested in philosophy. I had studied on my own a certain amount of philosophy, including Indian philosophy. When I became reasonably skilled in Sanskrit, I could read the old philosophical documents in Sanskrit. I was never really interested in religion very much, so these were non-religious subjects, especially epistemology and ethics. And I really enjoyed doing them, including philosophy of mathematics. I fully enjoyed doing them. But when the college suddenly said, "Now, for four years, you can do what you like. We'll give you a salary," I said, "This is a really good chance to do some philosophy systematically," which I did.

GAZETTE: Who were some of the thinkers that influenced you in those days?

SEN: When I was in school, I was particularly involved in the philosophy of an Indian philosopher called Aryabhata. He was around 500 AD. He was a mathematician and an astronomer and a philosopher. He was an expert on such things as the diurnal motion of the Earth, rather than the sun going around the earth. He was interested in the theory of eclipses. He was interested in the fact that since Earth is a round object, being up when you were on one side of the Earth was the opposite of being up on the other side

of the globe. He was concerned with the relativity of your position compared with other positions on Earth you could occupy. Aryabhata and his follower Brahmagupta were also interested in gravity, in explaining why small objects are not thrown away as the earth rotates.

I spent quite a bit of time in my school days studying these Sanskrit puzzles, as to why this happened. These were mostly anti-religious, but rationalistic thinking. So they remained a part of my interest. When I came to Cambridge, they got gradually transferred into modern mathematical philosophy, like that of Russell and Whitehead and Wittgenstein and so on. But I also, by then, was getting interested in ethics and epistemology. In ethics, John Rawls was a big influence on my thinking. I read quite a bit of "Mathematical Logic," particularly [Willard Van Orman] Quine, who was also here, and Hilary Putnam. These are people I read with great admiration and profit. I was reading more and more of their writings as I advanced. And eventually, I did some work that was influenced by their works.

GAZETTE: You focused on economic inequities between women and men when it was a relatively uncommon thing to do. What prompted you to examine those issues?

SEN: I was particularly struck by the fact that even in my school, which was a very progressive school, that the achievements of girls and achievements of women in general seemed to receive far less appreciation and acclaim than men's work did. I also thought that some of [my women] classmates almost seemed to understate their own claim to fame because they didn't want to generate a sense of nervousness among the men as to whether they are keeping up. And as a result, they end up understating their reasons for recognition. So I spent a bit of time thinking how we could make it more natural that women should be less modest. That was one of the reasons. The other is, I encountered all these big problems like missing women (that there are fewer women than there would be had they received equal care). Women do have a pretty bad deal in life, and that seemed to me to be an immediate reason for working on the issues of gender inequality.

I'm planning to do a book on gender. There should be one in about a year or two. There are so many different problems people get confused that I thought I might put together the problems that make up gender disadvantage. It will draw on prior research, but there will be a number of new things in it.

GAZETTE: Your work seems to address, either directly or indirectly, issues of social justice. Where does that come from?

"People have given up hope that I might retire. But I like working, I must say. I've been very lucky. I've never done, when I think about it, work that I was not interested in. That is a very good reason to go on."

SEN: I've always been interested in issues of social justice, even in my school days. And it continued when I was in Cambridge. Earlier I talked about Piero Sraffa mainly as an economist, but he was interested in philosophy, too, and he was very concerned with issues of justice. And then, because of John Rawls, social justice became very easily a subject for me to talk about and decide where I disagreed with Rawls, which I did. But I would not have been able to do any of this work without Rawls. With Rawls, I could say, "Well, yes, Rawls is important for me, but I disagree here. There, I disagree."

The other influence was Hilary Putnam. But underlying all that was my interest in social choice, the mathematical reasoning involved. Kenneth Arrow, who essentially invented the subject, was, of course, a big factor in my choice of work. I taught a class with Ken Arrow and John Rawls in '68-'69. I was visiting here at Harvard. Arrow was then on the faculty of Harvard for some years, and Rawls was very established at Harvard. So the three of us together, we did a class on justice and social choice, which was quite fun. I remember, while flying to a meeting in Washington, my neighbor on the plane asked me what did I do? I said, "I teach in Delhi, but at the moment I'm visiting Harvard." I told him that I'm concerned with justice and social choice involving aggregation of individuals' disparate views. And he said, "Oh, let me tell you: There is a very interesting class taught by Kenneth Arrow, John Rawls, and some unknown guy on this very subject. You should check it out!"

I really enjoyed it very much because they had such excitingly original minds. They invented questions that others had not thought of and dealt with them, both Rawls and Arrow did. I had been under their influence even before I came to Harvard, but of course, it was wonderful to be able to teach a class together.

GAZETTE: Arrow's groundbreaking "Social Choice and Individual Values" (1951) was published when you were a first-year undergraduate. How influential was it to your thinking then?

SEN: It was a transformation for me. I knew different people had different values and preferences, and so the question could easily arise: What should the society do given the variety of views that we happen to have? But the fact that one could get a systematic discipline out of it had not occurred to me. I was only 17, I guess, then. But once it occurred to me and I could see what Arrow had done, I couldn't resist taking a serious interest in the subject. The literature then was quite limited. Now, of course, the literature's exceedingly vast.

GAZETTE: You've seen the conventional wisdom, as it were, evolve in economics on a number of fronts. Have you reconsidered any of your own thinking over the years?

SEN: Well, indeed yes. It happened even in social choice theory, too. That is, initially I was convinced, as Arrow had been, that the problem is arising from the fact that we are asking society to have an organized, systematic preference. Whereas society cannot have such a preference because it's not an individual. Persons do have such preferences.

So instead of asking, how do we go from individual preferences to a systematic social choice based on a social preference, we could ask the question: How can we go from individual preferences to any social choice so that in every group of alternatives from which to choose, there will be an alternative which gets to be a majority choice by the people over every other alternative in that group. The prevailing intuition was that there should be no impossibility there. I was increasingly convinced that this itself would lead to an impossibility. So, in this respect, I changed my mind on how the impossibility in "the impossibility result" of Arrow comes about.



Amartya Sen leaving his office at the Harvard Center for Population and Development, 1999.

GAZETTE: Looking back, when did you feel like you had made your mark in the field? Was it the publication of "Collective Choice and Social Welfare," which is widely-considered a foundational text?

SEN: I have not reached that point yet. I'm working hard to get there! [laughter] "Collective Choice and Social Welfare" is the book that made me think I understood the subject, namely social-choice theory. I hadn't earlier on had the sense of being in command of the subject. By the time I wrote "Collective Choice and Social Welfare," I did have the sense that I could do all those things and that I could lecture on them. And indeed I did — everywhere. I did it in Delhi. I did it in LSE, London School of Economics.

I did it here in Harvard, when I was visiting here for one year, 1968. In addition I was extending the results already known. I enjoyed those classes. I still enjoy doing problems in social choice theory. I teach now here with Eric Maskin and Barry Mazur, [Gerhard Gade University Professor], and we do cover social choice theory from time to time. That interest is unlikely to go away for me.

GAZETTE: Is there more out there you'd still like to explore?

SEN: There are a number of problems which I would love to do. Some of them are things that would make a difference in the world a bit more. For example, we can move from poverty to security and see what help we get from social choice theory. Further there are quite a few other analytical problems involving mathematical logic that still interest me. Who knows? I may think of new problems.

GAZETTE: In 1998, you were awarded the economics Nobel for your many theoretical, empirical, and ethical contributions to the field. Yet it doesn't seem to have been the career capstone for you that it often is for other laureates. You remain as busy as ever writing, working, traveling, teaching. Why?

SEN: People have given up hope that I might retire. But I like working, I must say. I've been very lucky. I've never done, when I think about it, work that I was not interested in. That is a very good reason to go on.

I'm 87. Something I enjoy most is teaching. It may not be a natural age for teaching, I guess, but I absolutely love it. And since my students also seem not unhappy with my teaching, I think it's a very good idea to continue doing it.