Amartya Sen, UBC, 21 April 2011

DISCIPLINE AND BEYOND

1

It is a wonderful for me to become affiliated to this distinguished university in this marvellous way. I have had the privilege of working together, over many decades now, with many members of the UBC faculty (particularly in social choice theory), and I have greatly benefited from these associations as well as from the high quality of research, sometime pioneering work, carried out by academics in different fields at this remarkable university. I deeply appreciate the further - and in many ways closer - connection with the UBC that the conferment of an honorary degree gives to me. I am extremely grateful.

The immediate occasion for our get together today is the celebration of the 40th anniversary of the Interdisciplinary Studies Graduate Program at the UBC. While looking back at the marvellous history of this innovative program, we have reason to reflect on the intellectual arguments behind this imaginative initiative that took us beyond the narrow confines of each separate discipline. That subject - and those arguments - are the main subject of this brief talk.

There is, however, another occasion of which I have been asked to take note, namely the 150th anniversary of the birth of the great poet and writer Rabindranath Tagore. These are, at one level, two quite unrelated subjects. Rabindranath Tagore would have been 110 years old when the Interdisciplinary Studies Graduate Program was initiated at the UBC. Since he had died many decades earlier, there was no direct interaction between Tagore and UBC's interdisciplinary departure. Further, he did not write extensively on interdisciplinary education per se. But there is, in fact, a strong indirect connection between Tagore's intellectual priorities and the motivation underlying interdisciplinary initiatives in general. This is because Tagore's passion for breaking down the barriers that sequester our thinking into separated compartments has a clear relevance to the arguments behind pursuing knowledge and intellectual relations that cut across

disciplinary boundaries. Indeed, the recognition of this connection gives us a handle to appreciate what interdisciplinary education can, seen in the broad perspective of non-segregationist understanding of the world in which we live, do for us and how it can motivate our work.

2

Before I go into the rationale for interdisciplinary education, let me first say a few words on the importance of what might be thought to be the exact opposite, namely the virtue of strictly discipline-based education. I do not think that the two, that is, discipline-centred education and interdisciplinary pursuits, really pull us in oppositive directions, yielding some kind of a battle of two allegedly contradictory understandings of the pursuit of knowledge. Indeed, I do not believe that we can champion interdisciplinary education by trying to dig the grave of specialized education. We can go confidently beyond, in an informed way, the respective boundaries of good disciplines only if the disciplines themselves - and our education in them - are good and robust.

It is very important to acknowledge first how much the world of knowledge and understanding has benefited from the high quality of work that has been accomplished respectively within different disciplines. We might, for example, like our medical researchers and practitioners to know something about human psychology and the broader social impact of what they do, but we would undoubtedly be somewhat disappointed, to say the least, if our doctors did not know medical science well, in the first place.

In fact, when I was thinking, last week, about today's celebration of interdisciplinary research, I could not help recollecting the day, after having just arrived at Harvard across the Atlantic, when I was waiting to see my new doctor in his room. I went around the diplomas and other acknowledgments of honours of my new doctor that were hanging on the walls of the

room. This was more than twenty years ago, but I recollect the jolt I received when the first degree certificate I saw on the wall of my doctor, whom I had not yet met, was an acknowledgement that he got a Harvard summa from the Department of Sanskrit. I was, of course, totally terrified. I was impressed that he had expertise in Sanskrit (a language and literature to which I have been loyal throughout my life, since the age of five), but I did want my doctor to know some medicine as well. Of course, I remembered immediately the good writings of ancient Indian medical scientists, like Charaka and Sushruta, more than two thousand years ago, but I did think a bit of modern medicine could come in rather handy.

As it turned out, my doctor had many other qualifications as well, from medical institutions of great reputation, as a voyage around his walls soon revealed. He also proved to be, over the years, to be a very good practising doctor. Armed with these further knowledge, I was very happy indeed at my doctor's expertise in Sanskrit. And it really was interesting to talk with him - in addition to medicine - also about his take on what he had got out of oriental studies. My understanding of his good disciplinary expertise in medicine had by then transformed my reaction to his interdisciplinary commitment from one of real terror to one of absolute thrill. If there is a moral of this story, it is that interdisciplinary work demands disciplinary foundations.

Indeed, when specialized education and research first emerged in the form of sound pursuits of different disciplines, something of real importance was achieved that the earlier history of undifferentiated quest for knowledge could not provide. We have historical signs of the remnants of the earlier non-specialized intellectual history in the academic language that survives to our own day. Post-graduate education in an extraordinary wide variety of subjects is still acknowledged by the degree of doctor of philosophy, in the form of a Ph.D. or D.Phil, no matter how unphilosophical the candidate's work - or his or her disciplinary subject - might be. This reminds us of the time when philosophy stood for much of academic enquiry in general, encompassing a whole gamut of particular subjects or disciplines. Discipline-based specialized

pursuit of knowledge gradually took us beyond the limitations of the lack of specialization. And that route has achieved a lot for human knowledge and understanding in a huge variety of subjects, in the history of ideas in the world. The case for interdisciplinary work has to be seen only after that debt to disciplinary education and research is adequately acknowledged.

3

Now, the question that arises is this: if disciplinary education is, so good, so important, then why do we need to go beyond it at all? There are many plausible answers to that questions, but I will concentrate on only two of them here (I would be happy to talk about some others when the "Q&A" time comes). The first problem with purely discipline-based education is that many fields of enquiry, and many topics we have reason to pursue, do not fit well - or at all - within the rigid boundaries of any particular subject. I can illustrate the problem with a field that I have already touched on, to wit, medicine and health care. Even as we see the strong argument for pursuing the medical sciences, from medicine to surgery, with specialized dedication, the use of medical expertise cannot but benefit from knowledge of, and interest in, many other concerns, from psychology to sociology - and (dare I say) even economics.

Indeed, some subjects - and this does include economics - cannot be fully appreciated without invoking and making use of types of reasoning that other disciplines, different from the narrowly defined sequestered subjects, have made us understand better. Let me clarify what I am saying with a concrete example. The origin of modern economics can, most economists seem to accept, be traced to the pioneering work of Adam Smith in the eighteenth century. Smith was, in fact, Professor of Moral Philosophy at the University of Glasgow. When he went into economics - and there were others earlier than him to do this like Aristotle or Kautilya or Petty or Quesnay - he was not of course still within the confines of moral philosophy. He was opening up

a new way of understanding economic relations that would have a profound impact on economic thinking. The new discipline of modern economics was being founded.

However, while this was a new subject - and new it certainly was - Smith was not in any sense denying the relevance of moral philosophy to economic reasoning. Many of the major misunderstandings of the lessons to draw from Smith's pioneering work have arisen from trying to segregate economics from moral philosophy altogether.

Misinterpretation of Smith's analysis of reasons for action has been a rampant feature of twentieth-century economics. For example, in two well-known and forcefully argued papers, the famous Chicago economist George Stigler has presented his "self-interest theory" (including the belief that "self-interest dominates the majority of men") as being "on Smithian lines". Stigler was not really alone or idiosyncratic in that diagnosis - this is indeed the standard view of Smith that has been powerfully promoted by many writers who constantly invoke Smith to support their belief in the unique rationality of the profit motive. If you do something for anyone else, this can be rational, in this theory, only if you get something from it yourself. Following that odd presumption in modern economics, the alleged views of Smith, even though entirely implanted, have invaded neighbouring disciplines as well, and a whole generation of rational choice political analysts and of experts in so-called "law and economics" have been cheerfully practising the same narrow art. There is no room in this "as if Smith" for generosity, or social commitment, or public spirit - values the reasonableness of which Smith discussed in considerable detail in The Theory of Moral Sentiments. I have taking the liberty of suggesting, on another occasion, that while some men are born small and some achieve smallness, it is clear that Adam Smith has had much smallness thrust upon him.

The puzzling thing about this is that it is contradicted by what Smith said again and again in his work. It is also the very first sentence of his first book, published in 1759, The Theory of Moral Sentiments. This book - Smith's first but also his last since the last edition of the book with some corrections in other respects (but not of the point we are discussing) came out in 1790, at the end of Smith's life, begins with the following observation:

> How selfish soever man may be supposed, there are evidently some principles in his nature, which interests him in the fortunes of others, and render their happiness necessary to him, though he derives nothing from it except the pleasure of seeing it.

One reason for the interpretational confounding is the tendency to confuse the question of the adequacy of self-interest as a motivation with a much narrower question: what motivation is needed to explain why people seek exchange in a market economy. Smith famously discussed that to explain why people seek trade we do not have to invoke any objective other than the pursuit of self-interest. This is a fine point about motivation for trade, but it is not a claim about the adequacy of self-seeking for economic success in general.

Indeed, Smith discussed how the functioning of the economic systems in general and of the markets in particular can be enormously helped by motives that go well beyond self-love. As it happens, this issue, well discussed by Smith in the mid-eighteenth century, is of great interest in analyzing many economic crises of market-based economies that the world has experienced over the centuries, including the recent one, beginning in the fall of 2008, that has somewhat overwhelmed us.

In the Wealth of Nations Smith considers a variety of economic problems, for some of them the guidance of what he called - rather disparagingly - "self love" is entirely adequate (for example, as discussed earlier, in explaining why people seek trade). But for other economic engagements, self-love is not the solution but the problem, for example in inducing some people to cut corners and to take excessive risks with the hope of quickly making a lot of profit. Smith

diagnosed a tendency towards over-speculation that tends to grip many human beings in their breathless search for immediate gains. Smith called these promoters of excessive risk in search of profits "prodigals and projectors" - which, by the way, is quite a good description of the recent entrepreneurs of credit swap insurances and sub-prime mortgages in our time.

The important boundaries that these entrepreneurs transgressed involved a departure from the standard rule-oriented behaviour - not guided only by narrow self-interest - that Smith thought was the norm in most economic relations. Smith points to motivational variations between people and the need to take them into account in devising state policies and economic programmes. Unwavering faith in the wisdom of the stand-alone market economy, which is largely responsible for the removal of the established regulations in the United States paving the way to the economic crisis of 2008-9, has tended to assume away the activities of prodigals and projectors in a way that would have shocked the pioneering exponent of the rationale of the market economy. As Smith warned, relying entirely on an unregulated market economy can result in the dire predicament in which "a great part of the capital of the country" is "kept out of the hands which were most likely to make a profitable and advantageous use of it, and thrown into those which were most likely to waste and destroy it."

In understanding the nature of the financial stability of a country, it is also extremely important to pay attention to Smith's argument that:

> When the people of a particular country has such confidence in the fortune, probity, and prudence of a particular banker, as to believe he is always ready to pay upon demand such of his promissory notes as are likely to be at any time presented to him; those notes come to have the same currency as gold and silver money, from the confidence that such money can at any time be had for them.

Smith discussed why trust in each other and establishing rule of behaviour that generate such confidence is neither redundant, nor automatically guaranteed. He discussed why such

confidence need not always pre-exist - or survive - so that a climate of mutual trust has to be cultivated and fostered. Even though the champions of extraordinarily narrow readings of Smith, enshrined in may economic books, may be at a complete loss about how to understand the present economic crisis (since people still have excellent reason to seek more trade even in the middle of the crisis - only far less opportunity), the devastating consequences of mistrust and the collapse of mutual confidence would not have puzzled Smith, who discussed the respective roles of different types of human motivations and the need for state regulation to curb the excesses of the search for profits. Good economic reasoning cannot be guaranteed without taking adequate note of the insights from other disciplines, from moral philosophy to social psychology.

I have illustrated my point about the relevance of other disciplines within the subject matter of a particular discipline by considering only economics, but similar points can be made about other disciplines as well, including social choice theory, to which I referred earlier, which has been studied extensively at the UBC is an obvious illustration. This is a quintessentially interdisciplinary subject.

5

If the relevance of many disciplines in the inner logic of particular disciplines is one reason for the importance of interdisciplinary studies, another reason is less about the subject matter of disciplines, and more about the broadening of the nature of reasoning used in one discipline that can be obtained by considering methods of reasoning that other disciplines have found useful and productive. Since I quoted Smith earlier, let me refer to a general methodological argument that he presented about looking beyond the parochial traditions surrounding one's thinking to understand the range and productivity of different kinds of methods and reasoning used in other disciplines that can be usefully invoked. That general concern would also give me the opportunity to make a few remarks, before I end this lecture, on Rabindranath Tagore's rejection

of parochial separatism. Smith used his anti-parochial argument in many contexts, including in expressing scepticism of regional or cultural localism.

> In developing the need to look beyond limited boundaries of our habits of thought:
>
> We can never survey our own sentiments and motives, we can never form any judgment concerning them; unless we remove ourselves, as it were, from our own natural station, and endeavour to view them as at a certain distance from us. But we can do this in no other way than by endeavouring to view them with the eyes of other people, or as other people are likely to view them.

This is a very general argument about avoiding the limits of boundaries in human thought and action, and if it applies to cultural parochialism, it also has relevance to disciplinary confinement, precluding interdisciplinary initiatives.

6

In this argument against bounded and parochial thought, Smith would have found a strong ally in Rabindranath Tagore. Tagore's basic idea of education was grounded on reaching out across the barriers of culture, nationality and discipline of thought. Of course, his main concern was not the methodology of education, but that of political, social and cultural understanding. He worked hard to break out of religious and communal thinking that was beginning to get some championing in India during his life time - it would peak in the years following his death in 1941 when the Hindu-Muslim riots suddenly erupted in the subcontinent, making the partitioning of the country hard to avoid. And yet the cultivated tension of that period of communal disharmony did ultimately pass, and even the part of Bengal that had been defined on religious lines as Muslim-majority area to form what became East Pakistan, would take a new kind of identity in the early 1970s in the emergence of a secular and democratic Bangladesh.

With its independence, Bangladesh choose one of Tagore's songs ("Amar Sonar Bangla") as its national anthem, making Tagore possibly the only person in human history who had authored the national anthems of two independent countries. India had adopted another song of Tagore - "Jana Gana Mana Adhinayaka" - in 1947 as its national anthem. All this must be very confusing to those who see the contemporary world as a "clash of civilizations" - with "the Muslim civilization," "the Hindu civilization," and "the Western civilization," defined largely on religious grounds, with forcefully confronting the others. They would also be confused by Rabindranath Tagore's own description of the cultural background of his family: "a confluence of three cultures, Hindu, Mohammedan and British." Rabindranath's grandfather, Dwarkanath, was well-known for his command over Arabic and Persian, and Rabindranath grew up in a family atmosphere in which a deep knowledge of Sanskrit and ancient Hindu texts was combined with the learning of Islamic traditions as well as Persian literature. It is not so much that Rabindranath tried to produce - or had an interest in producing - a "synthesis" of the different religions (as the great Moghul emperor Akbar had tried hard to achieve), but his outlook rebelled against separatism and parochialism.

> Whatever we understand and enjoy in human products instantly becomes ours, wherever they might have their origin. I am proud of my humanity when I can acknowledge the poets and artists of other countries as my own. Let me feel with unalloyed gladness that the all the great glories of man are mine.

Indeed, in Tagore's vision of the future of his country, and in fact, of the world, he emphasized the need for capaciousness as much as he focused on the importance of freedom and reasoning. In a moving poem, Tagore outlined his vision eloquently in describing what he longed for:

Where the mind without fear and the head is held high

Where knowledge is free

Where the world has not been broken up into fragments

By narrow domestic walls.

This rejection of parochial separatism is a central feature of Rabindranath Tagore's approach to intellectual separation, and this applies as much to disciplinary sequestering as it does to religious segregation, or civilizational partitioning.

If this reasoning is correct, then one of the more general arguments for interdisciplinary studies is precisely the removal of boundaries that generate artificial divisions that are ultimately counterproductive, no matter how useful they might initially be for the specialized pursuit of disciplinary knowledge. Rabindranath Tagore was not alive when the Interdisciplinary Studies Program was established at the UBC, but he would have needed little convincing in seeing the importance of an inclusive approach to education, like the one here at UBC the anniversary of which we are celebrating today. Tagore's argument against being confined by "narrow domestic walls" is a perfectly general methodological point. I am very grateful for having the opportunity to be present here on this memorable occasion.