The Two Cultures - CP Snow

5 May  CP Snow - The Two Cultures - Sam Alexander

It is 50 years since CP Snow wrote his seminal work "The Two Cultures" and Sam looks at how it is still relevant today.

Welcome to tonight's talk on "The Two Cultures", a book from a lecture C P Snow gave in 1959. I'll be discussing this book from a number of angles including the Rede Lecture he gave just two days shy of 50 years ago, which became this book, the man as both novelist and physicist, the book, and finally a little bit about myself will creep in.

But, as a prelude to this talk, I want to say what a most wonderful writer C P Snow is. I had studied theology for 12 years, putting up with incomprehensible translations of German and continental theologians and philosophers, often pulling out what little hair I had to make sense of their writing. C P Snow on the other hand writes like smooth honey. Similarly as a technician and computer engineer, the technical manuals were as dry as old army biscuits. Snow was a welcome author to my book shelf.

It was through Snow's writing, both fiction and scientific, that I now come to give this talk. I read him as much for his style as for his substance.

Charles Percy Snow was born in Leicester in 1905. He trained as a scientist at Cambridge where he subsequently became a Fellow of Christ's College. He started writing fiction in the early 1930's as a form of relaxation. During the war, he became a Civil Servant responsible for the recruitment of scientists for the war effort. He was knighted in 1957 and became a life peer in 1964. He died in 1980.

Just quickly on his fiction, he is best renowned for his series of 13 books, now published as a trilogy, known as "Strangers & Brothers". It became a BBC Drama series in 1984. He brought his same eloquence to his book on "The Physicists", his history on the golden age of physics before WWII. He writes of John Cockcroft, who after developing the proton accelerator thus;

In about the only magniloquent gesture of a singularly modest and self-effacing life, Cockcroft walked with soft-footed games player's tread through the streets of Cambridge and announced to strangers, 'We've split the atom. We've split the atom.'
Now, before I begin on the Rede Lecture that became the “Two Cultures”, it is mentioned in the introduction to the book, The Physicists, which incidentally is a first draft, that the book was written mainly from memory. It is the same with the “Two Cultures”; yes there is preparation, but the research comes from his memory of the actual events of the first half of the 20th Century.

To the book in hand, 70 odd pages of introduction, a testimony to the relevance of such a book, 50 pages where the lecture became the book, and finally another 50 pages where Snow revisits his talk 4 years later.

Robert P Crease writes in his essay, the “Two Cultures turns 50”:

Soon after the book appeared, critics attacked Snow’s abilities as a writer, his achievements as a scientist, the rigour of his concepts, the legitimacy of his characterizations and the validity of his claims. Yet the book remains in print, and its famous phrase continues to describe the gulf still perceived to exist between the arts and sciences.

On May 7, 1959, Sir Charles presented “The two Cultures and the Scientific Revolution”. In order not to confuse you, the audience, from the beginning, the two cultures are almost always restricted to the literary intellectuals and the physical scientists. In a single page, Snow drops the names of the scientists, Hardy, Rutherford and Dirac, and the writers T S Eliot and Graham Greene; people of whose circles he moved in. What I am saying to you, is that we have to be a little careful not to individualise his comments too much, as they are directed to a problem of a mutual incomprehension... between the two.

Again, fifty years earlier, the intellectuals were considered conservative or to the right, while the scientists were considered humanists or to the left. We see these same broad divides between East and West, Continental and Analytical philosophy, lower and higher churches, blue and white collar workers etc. It therefore becomes a lifestyle and political disparity as well as an intellectual divide.

Snow goes on to talk regularly of the human condition and that in most cases it is tragic. He says that, “Most of our fellow human beings, for instance, are underfed and die before their time. In the crudest terms, that is the social condition.” He believed the intellectuals were complacent in one’s unique tragedy, and let the others go without a meal, whilst the scientists are inclined to be impatient to see if something can be done.

Up until now, it has been a discourse on the differences between the two cultures, but Snow then goes on to recount a conversation with another scientist where Snow was asked whether the social opinions of most of the famous twentieth century writers, not only politically silly, but also wicked, did bring Auschwitz that much nearer?

This is the clanger! Up until now, the lecture has been a discourse in fields of endeavour, education, even social status, but now, the intellectuals are not only wicked, but complicit, perhaps by their silence, in the atrocities of the Second World War.
At this point, for the sake of some balance to my admiration of Snow, I include from the introduction to the book:

“In reading Snow’s text, therefore, we need to remember its origins, and to accept that he was not a systematic thinker, nor, in some ways a particularly exact writer. His preferred ground was that of the Big Idea: he seized it, turned it in a somewhat unconventional direction, illustrated it with a few facts and anecdotes taken from widely differing domains, and reiterated it in accessible, forceful prose.”

Snow believed that the scientists held the future in their bones, while he parodied that the intellectuals respond by wishing that the future did not exist. Throughout the lecture he reiterates that the scientists are the solution to feeding the world’s hungry and there is an underlying lament in his talk for the fact that the intellectuals are not in step with the scientists. This divide is further exasperated as the feelings of one side become the anti-feelings of the other side.

The next part of the lecture, though interesting, is of little concern to us 50 years later. He pulls apart the structure of education within Britain of the then, past 150 years. He deplored the classical education that resulted in many generations of luddites, ill equipped to handle the complexities of the Industrial Revolution, through to the then current Scientific Revolution. America on the other hand, though not of the same rigour, had a much more generalist education that better prepared students for the future. He himself was from a family within the upper working class, and though he went to a small private school, and entered Cambridge through Scholarships, many believed it was this poorer background that flavoured his attitude to the upper class intellectual.

He recounts Rutherford, the great physicist’s repartee, “Lucky fellow, Rutherford, always on the crest of a wave.” “Well, I made the wave, didn’t I?” Snow clearly anchors the intellectuals within a time warp, while he states, “I believe the industrial society of electronics, atomic energy, automation, is in cardinal respects different from any kind that has gone before, and will change the world much more.”

Again, a parting shot at the past, “If our ancestors had invested talent in the industrial revolution instead of the Indian Empire, we might be more soundly based now. But they didn’t.” “We are left with a population twice as large as we can grow food for...”

He goes on to say that, “The main issue [of the Scientific Revolution] is that the people in the industrialised countries are getting richer, and those in the non-industrialised countries are at best standing still: so the gap between the industrialised countries and the rest is widening every day. On the world scale this is the gap between the rich and the poor.”

A point to remember about 1959 is that we were in the start of the cold war. Snow measured the success of the technological skills of nations by the speed in which they built the H bomb: the USA in 1945, USSR in 1949, UK in 1952 and subsequently France and China in 1960 and 1964.

At the time, John F Kennedy went on to say about the west and the east, “Let both sides seek to invoke the wonders of science instead of its terrors. Together let us explore the stars, conquer the deserts, eradicate disease, tap the ocean depths, and encourage the arts and commerce.”
As has proven to be true, Snow went on to say that, “It is technically possible to carry out the scientific revolution in India, Africa, South-east Asia, Latin America, the Middle East, within fifty years. There is no excuse for western man not to know this, And not to know that this is the one way out through the three menaces which stand in our way — H-bomb war, over-population, the gap between rich and the poor.”

Snow’s solution to the three menaces? “An immense capital outlay, an immense investment in men, both scientists and linguists, most of whom the West does not yet possess.”

In his “Second Look”, four years later, he writes, “Man doesn’t live by bread alone….But though our perception may be dim, it isn’t dim enough to obscure one truth: that one mustn’t despise the elemental needs, when one has been granted them and others have not. To do so is not to display one’s superior spirituality. It is simply to be inhuman, or more exactly anti-human.”

C P Snow concludes his lecture and book as follows:

Isn’t time we began? The danger is, we have been brought up to think as though we had all the time in the world. We have very little time. So little that I dare not guess at it.

Again I quote from Robert P Crease:

Few critics, too, appreciate that Snow used language differently from literary critics. He was neither advancing claims nor outlining a theory; he used the anecdotes to call something to our attention for us to see ourselves. Philosophers call such use of language “formal indication”. It is indicative, for it aims only to point at something rather than paint it in detail, knowing that we would experience it differently. It is formal, for it provides enough clues so that we can identify it nevertheless.

That is all I wish to say about the lecture and the book at this point. It engendered much controversy and criticism at the time, but it has gone down within “The History of Ideas” as a seminal contribution, highlighting the state of science as it moved from the industrial into the scientific.

However, fifty years later, to the week, where are the great scientists and the great intellectuals? They have been swallowed up by the corporations. It is not a scientist who develops the next penicillin, but a pharmaceutical company. And yes, we still have literary figures, but they exist within the confines of the book publishers, screen writers guild, and the movie production companies.

It would be a little too glib to say that the scientists are now to the right and the intellectuals are to the left, but I think like Snow articulated, the literary intellectuals have always been slow to move, so it would appear that they are where they
were fifty years ago, and the scientific corporation have moved extremely to the right, overtaking the intellectuals.

As to the menace of the gap between the rich and the poor, I believe the small gains made by the world's poor have been miniscule compared to the rapid acceleration of the world's rich, and unfortunately, it seems we have a new poorer underclass within the poor nations of Africa like Darfur in Sudan.

And again we see a switcheroo in that it has been the entertainers and not the scientists who have taken up the cause for the poor in Africa by investing, talent, time and money to help raise cash to buy food for the starving.

I believe the "Scientific Revolution" has lost its way. It has not reached humanitarian potential that Snow espoused. Unfortunately, it found a new direction in capitalism and consumerism. Of course, the literary intellectuals are no better; it seems that there is an overwhelming gene within the western psyche that puts human greed before human need.

Snow's other two menaces, Atomic War and overpopulation? Wars aplenty, but fortunately not Atomic. However, why so many wars over the past fifty years? Could it have anything to do with the population increasing from 3 billion to close to 7 billion people? War, overpopulation

Fifty years ago they were worried about a nuclear winter; we have trumped that with global warming.