Why are so many students being put off studying science at school?

I myself had my doubts.

I could not deny the awe inspired in me by the Les Miserables, the English Patient or El Quijote. The tremendous insight into humanity given by Victor Hugo, the clever satire of Cervantes ridiculing the heroic aspirations of people, or the absolute mastery of narration of Ondaatje; all compelled me.

However, students who have chosen humanities expect you to be insensitive to all this.

For you, it is the greatest of insults. They are telling you: you are heartless.

That you are not interested in economics or politics; that you don’t care about society or law; that you don’t worry about “human” issues.

How is this possible?

You start worrying that this might be the case. I see both disciplines now, you say. But as I continue along my chosen path, will I become less worried about the other? Will they become- humanities-art- a small silhouette left behind on a crossroad? Will they? The question pends in the air.

How could you know? How could you be sure?

Of course, this is all nonsense. Science is a profession. One is a scientist like somebody else is a builder or a farmer. Art and politics belong to all of us; not to a few.

Nonetheless, you see how traits are attributed to your personality without having given any signs of possessing them. Scientists – those squared-minded people. Scientists – those who value numbers more than words and music. Scientists - .... I will leave it there. The point is made.

Also, there is the issue of feeling equal to everybody else. This is very important when you are 15 or 17. It could possibly be the most important thing: feeling you are one more in a group.

Studying science does not help. The distinction is quickly made when somebody points out the obvious: she does physics. This is O.K.; to some point. It is worse however if: she understands physics.

Suddenly you have the impression of being a stranger. When starting to talk about something science-related, the response you get is the equivalent of: “Sorry, I don’t smoke”.

The only time you hear people talking about science is when referring to science fiction movies, which don’t really like. No need to say, of course, that these are not particularly scientific either.

Nonetheless, let’s suppose you overcome all this.

Science in school is actually, indeed, boring.

Had you refuted every single one of your friends’ arguments successfully; the whole defence will quickly dismantle when you arrive to the science courses. You cannot but say: They ARE right...

Science is not – by any means - presented as a creative subject. In fact, the absolute opposite: science is 1+1=2. Science is a subject that leaves no place for argument... for reason even...

Thus, people are simply not attracted to the discipline.

Consider maths: we are taught how to be calculators.

All courses are reduced to a matter of arithmetic: do what you do, you will only but: add, subtract, multiply and divide.

Where is the beauty of it? Nowhere, really.

Maths is never presented as a language. As the means to describe nature - to transcribe logic thought.

Mathematics does not only portray evidence: it is alive and has its own hidden laws. You start with three obvious statements and, juggling about with them, arrive to an unexpected conclusion which gives you a profound insight into to something you were not even considering. Rich and concise, that’s what they are.

You can only but bow in respect and say: you are indeed surprising. I did not quite understand how you arrived there but I can envisage how powerful you are. How clever.

Do teachers communicate this to students? Do they risk venturing outside textbooks?

Most just prefer to stick to simple and tedious algebra.

The problem stated in the title of this essay will not be solved tomorrow. It is much deeper and profound. Just like climate change, it requires a change in thinking. And just like climate change, it is of vital importance.

Students need role models. Academics in love with life and culture; who -like the first Greek philosophers- are familiar with all disciplines and experts in many.
What is this poisonous myth which says: if you are good at something, you must, for sure, be terrible at every other aspect of your life? Why? Why do we establish such anguishing limitations?

We - more than the air we breathe - need people who break the walls which we ourselves have made, walls which separate culture and suffocate the new minds and souls of this new world.