When the young Theaetetus was introduced to Socrates as a lad of brilliant promise, Socrates said to him that he felt sure he had thought a great deal. The boy answered, "Oh, no" — not that, but at least he had wondered a great deal. "Ah, that shows the lover of wisdom," Socrates said, "for wisdom begins in wonder."

And life also begins in wonder. For the very small child, everything is a wonder, a tiny pebble, a ladybird that passes, the tinkling of a bell, the smile of his mother. He is a kind of explorer discovering a wonderful world and it is what makes him grow and progress and learn. But, as Sri Aurobindo says,

\[
\text{When the eyes grow solemn,} \\
\text{Laughter fades away.}
\]
Gradually this feeling of perpetual discovery is veiled and slowly disappears. The world is not something to discover anymore, it looks like the one of adults, that is to say, it is an environment to which we are habituated, which contains but few surprises for us. Of course, there is still a certain curiosity, more or less intense, which looks for intellectual answers and is satisfied with them. Of course, at the bottom, there remains a thirst for the unknown, a taste for miracles, but the child, and then the adolescent, forgets more and more about this part of his being or gives it a marginal value.

To preserve the sense of wonder is then a very important question of education.

How can we define the sense of wonder, and in what way can we act as teachers so that it can remain as a lever of progress for the child?

It seems to us that the sense of wonder is what you experience when you suddenly feel that you see something for the first time: it was there before, but it was as though a part of the lifeless background, it was grey; it was empty of meaning; now, perhaps because your look has been more intense, it starts to have a life of its own, one would say, it starts to speak to you. It is the feeling that seizes on you when something makes you sense the invisible behind our physical world. It is what you experience when something in you awakens to the fact that the universe is alive, that there is not one single thing that does not carry in itself a secret meaning. The small child knows it but often he loses this sense too soon.

Why? Because, most of the time, the universe is “explained” to him and these explanations given to him, or rather, imposed upon him, are superficial, mechanical, and instead of helping him sense the presence of the Divine behind a phenomenon, they rather tend to close the door to that perception and empty the world of its real meaning. The physical world becomes flat instead of being a world containing worlds containing worlds.

And there, the way a teacher answers the children’s questions or explains a given phenomenon is determining. He can, with reasoning and logic, explain a phenomenon and close the door to any further inquiry, or, without shunning logical demonstrations, he can make his explanation a proposal, a starting-point for further research.

To the senses it is always true that the sun moves around the earth; this is false to the reason. To the reason it always true that the earth moves round the sun; this is false to the supreme vision. Neither earth moves nor sun; there is only a change in the relation of sun-consciousness and earth-consciousness.
The miracle is everywhere in this world, from the cell to the planets, from the atom to the galaxies, from the stone to the brain. And how best to communicate this to the child is an aspiration shared by many teachers. There is no doubt here that to have access to good materials is extremely important, keeping in mind that ultimately it is the teacher who has to create his own materials and accumulate a series of luminous examples, striking stories, extraordinary descriptions which will all tend to present to the child a universe packed with mysterious meaning.

I still remember my impression when I was quite small and was told that everything is "atoms" (that was the term they used in those days). They said to me, "You see this table? You think it's a table, that it's solid and it's wood — well, it's only atoms moving about." I remember, the first time I was told that, it caused a kind of revolution in my head, bringing a sense of the complete unreality of all appearances. All at once I said, "But if it's like that, then nothing is true!" I couldn't have been more than fourteen or fifteen.

His question [the question asked by a student about the role of sciences] called this to mind. I said to myself, "It opens a door onto another reality."

So each study could be an occasion to break the crust of appearances, the utilisable and manageable appearances, and to plunge into an unknown world. And it does not mean to live in a world of fantasy or imagination; on the contrary, it means to pierce deeper into the world thanks to a rigorous observation.

In fact, for education, people should always encourage both tendencies side by side: the thirst for the Marvellous, the seemingly unrealizable, for something that fills you with a sense of divinity while at the same time encouraging, in the perception of the world as it is, an exact, correct and sincere observation, the abolition of all imaginings, and a most practical and meticulous feeling for exactness in details. Both tendencies should go side by side.

Examples abound of physical phenomena which, when studied with a great exactness, yield a harvest of miracles. We would like here to present briefly some of them, just to make ourselves clear. It is obvious, though, that it is not only the choice of the subject that counts, but the way the teacher, in his presentation, can communicate this feeling of being confronted with, as Sri Aurobindo says, "the magic of the Magician".
All observations and experiences tending to show the unity behind the fragmented appearances of the universe will be extremely useful. And we could well start by making the children aware of the fact that the so-called difference between the animate and inanimate is not as radical as we think.

The teacher can make the child share the astonishment felt by the great Indian scientist Bose, when he discovered that metal is not fundamentally different from the living organisms and that the curves showing its molecular reactions strongly resembled those of muscles. Metal, then, does not look as "inert" as we thought before.

If we turn to the animal world, it should be easy to awaken the sense of wonder in the child, showing him the perfection of the laws which rule their behaviour. The child can understand the stupefaction of the Austrian zoologist H J Frith when he studied a certain turkey living in Australia. This bird builds an earth hill to serve as incubator for his eggs. Inside, the temperature should constantly be maintained at 33°C. For six months, depending on the weather, depending on it being night or day, the bird digs ventilation shafts; closes them; adds a layer of sand above the incubator; increases it; diminishes it... Frith placed three electric ovens inside this incubator-hill and switched them on and off. The bird took all necessary measures to maintain the chamber at 33°C. The scientist was unable with his oven to change the temperature more rapidly than the bird corrected it.

In the same way there are colours we can’t see and there are some animals that cannot see all the colours that we see, there are also sounds that we can’t perceive. For instance, if we do snorkling we will not be able to hear sound because our ear is made in such a way that it can hear only those sounds that go through air. But a hydrophone can record the numerous and strange sounds of the deep seas: whistling, snoring, roaring, sputtering, moaning etc. Thus we could accumulate examples to make the children realise how limited is our perception of the universe.

All stories that put into light the astonishing infallibility of the so-called "instinct" of the animal are likely to make the children dream of a world where the uncertainties of the mental and the confusion of the vital desires would be absent and everything would be instantly known. Among them is the true and well-known story of the salmons’ voyage.

The salmons, seven years after their birth in a mountain stream, and having spent their life thereafter in the open sea, reappear at the mouth of the same river that saw their birth. Experiences have shown that no salmons ever go back to the wrong river. This fact has been ‘explained’ by the faculty of the salmons to recognize the odor of their native river. But this should not diminish our sense of wonder: is it not amazing that the
salmons are able to smell the distinct odor of "their" river miles away in the deep sea?

All these examples have a common point: they demonstrate, so to say, the irreality of appearances, they make one feel the presence of an invisible hand behind; they make one realize, as Bose said, "that we are blind in a world of light".

These examples are not limited to physical phenomena. They can be taken from many domains of life. Suppose, for instance, that we take as a theme of research: what is money?

What is money? What is this thing which is so omnipresent in the daily lives of almost everybody? What is this element of life which appears so concrete for most people on earth?

This old, soiled and crumpled note of 10 Rs — from where does it come, in whose hands did it go, what good or bad did it do? This scrap of paper with a number on it — what does it really represent?

If we go back to the ancient societies which knew trade long before using money, we discover that money, as the British philosopher David Hume said, "is not, properly speaking, one of the subjects of commerce; but only the instrument which men have agreed upon to facilitate the exchange of one commodity for another". An astonishing range of objects has been used for the purpose at different times and places — feathers, pieces of cloth, shells, cocoa beans, iron bars, silk — among them coins are of particular interest only because their use has continued to the present day.

The subject of money is full of mystery and paradox, and this is the first one: how is it that a medium of exchange, which is only a convention agreed upon by man, has assumed such a concrete and heavy meaning in our life?

If we study the history of money, we realize its progressive dematerialization, from metal bars to gold or silver bullion, coins, gold certificates, bank notes, cheques and credit cards, and the future "electronic money". It has become nothing more than a transfer mechanism with no link to any material object as a guarantee of its value.

Today we are told that more than a thousand billion dollars are going back and forth in the money markets of the world in one single day. What is this money really? It hardly exists out of computers; it goes mostly from computers to computers... immaterial really. One remarkable fact is that the whole gigantic system is actually moved by psychology. It depends on confidence or mistrust in this or that currency, on hopes of making big
gains or fears of losses. So in a way, it would not be entirely wrong to describe it as a giant psychological bubble.

Neither a form of merchandise with its own intrinsic value, nor an attribute of state power, paradoxical in nature since it appears to be the consequence of the economic activity of which in fact it is a pre-requisite, money can be the subject of an exploration full of surprises; which ultimately would lead the child to a perception different from the one he had before.

How many times, after telling a wonderful story or recounting a remarkable event to the children, do we hear them say, "But is this a true story? Did it really happen like that?" They don't want to be fooled, they will admire but not before ascertaining the facts. And this is a good and sound basis on which we can build. This is part of the "abolition of all imaginings" that Mother speaks about. Each child is an enquirer, an investigator, as Sri Aurobindo said. These qualities should be used and developed, the critical mind should not be rebuffed, but at the same time, the sense that the notion of the "impossible" is a relative notion, should be encouraged. Let us recall how Sri Aurobindo himself gave with humor some telling examples to a skeptical disciple who had commented that the Supermind was an impossible invention, because it had never been seen before:

What a wonderful argument! Since it has not been done, it can't be done! At that rate, the whole history of the earth must have stopped long before the protoplasm. When it was a mass of gases, no life had been borne, ergo, life could not be born — when only life was there, mind was not born, so mind could not be born. Since mind is there but nothing beyond, as there is no Supermind manifested in anybody, so Supermind can never be born. Sobhanallah! Glory, Glory, Glory to the human reason!

We usually notice that the student, when becoming an adolescent, has a tendency to grow sceptical, or even sometimes cynical. We can comfortably attribute this to the "age", and wait till it passes. Or we can, searching in ourselves, find the root of this apparent rejection of the "marvellous" : does it not come from a disguised but deep pain, and is not this pain caused by the feeling of being expelled from the marvellous, the living world of the childhood, exiled from the paradise? If this is so, then this attitude of "what-is-so-great-about-it?" does not mean a rejection of the "seemingly irrealizable", it means on the contrary a starving in the
adolescent for something which will lift him above the routine circles of ordinariness, a starving mixed with apprehension: will he be able to find it in his life?

This call should be heard, otherwise there is a risk that the student loses altogether the faculty of wondering and turns away more and more from this great source of joy, instead of keeping it alive all his life. Yet, we should all be able to say what Newton will remark in the evening of his existence, “I do not know what I may appear to the world but to myself I seem to have been only like a boy playing on the seashore, diverting myself in now and then finding a smoother pebble or a prettier shell than ordinary, while the great ocean of truth lay all undiscovered before me”.

2 Sri Aurobindo, Thoughts and Aphorisms, ibid., Vol. XVII, p. 90.
3 Mother’s Agenda, 17/12/1966.
4 Mother’s Agenda, 6/3/1963.
5 Sri Aurobindo, Correspondence, Vol. I, p. 56.