



## Part Three

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### NEW THINKING

The future is the promise of the dawn  
inviting us  
to create and to construct  
rather than  
to submit to the opacity of the unknown.



## A new vision of the world

*Reviewing the story of your life reveals a human being with a rather uncommon destiny marked by the love of life. This deep emotion runs like a red thread through all the stages of your life. Indeed it was the lifeline which allowed you to overcome all the perils and problems you were exposed to. This lifeline was nourished by an irresistible optimism and confidence in the future. In the face of a world where, since your birth until the inception of the twenty-first century, violence and conflicts are daily occurrences, could you tell me how you keep this optimism?*

The way I see and feel it, optimism is more than an attitude in our existence. First it appears to me as a fundamental feature of our character, of our behavior programmed in our genes. Then as our existence unfolds, it is also a choice we make for the road on which we embark: Is it the one of pessimism and skepticism leading nowhere, except to failure? Or is it the one of confidence in the future, of viewing evolution as a dynamic process offering to man an infinity of opportunities? I definitely have chosen this latter road to meet the dangers and challenges life had in store for me. I also felt comforted in this approach by a philosophical

conviction derived from the observation of the evolution of the universe.

Let me mention the example of life on planet earth. Since its start some four billion years ago, life—perhaps in accordance with some sort of a cosmic blueprint, which science has not yet unveiled—has evolved in a process of constantly increasing complexity and adaptation, leading to a phenomenon which might be defined as self-awareness and spirituality. Starting from the microorganisms, this evolution through countless phases, marked by trials and errors, has finally led to man, a species capable of reflecting on itself, on its destiny as well as on the universe of which it is part. If we don't destroy the biological phenomenon on planet earth, there is no detectable reason why this evolution should not go on, an evolution towards growing complexity and spirituality.

Ilya Prigogine speaks of the unidirectional arrow of time, only directed toward the future: there is no return to the past.

That's why fundamentally I am confident about the destiny of the human species, unless we destroy ourselves, which would be in the terminology of Prigogine a bifurcation leading to self-destruction. Naturally, there will be quite a number of dead-end-streets or dead-end-roads. But viewed globally, I am hopeful that humanity is embarked on the road leading to the ultimate point called by the Jesuit priest and philosopher, Teilhard de Chardin, the "point Omega," when man will merge with his creator, the ultimate and absolute reality. Expressed differently, it's through man, choosing the right road, that the fundamental reality is engaged in a process of permanent creation. If, on the contrary, we engage ourselves on the road of self-destruction, we shall fail. However civilizations similar to ours and existing on other planets of the universe might succeed in reaching the point Omega.

*Do you think therefore that a new planetary thinking will be the main and important milestone on this road leading to ultimate accomplishment?*

We do not live in a deterministic world such as some physicists, like, for instance, Laplace, have postulated in the past. Destiny is not a fatality but a potential offered to man. He uses it or he doesn't; either he is conscious that reality is a dynamic process or he remains static, past-oriented and that leads to destruction. Man has the freedom to choose. He is the master of his destiny. But he must be guided in his steps. He must take an orientation consistent with some kind of a blueprint unveiled progressively through the discoveries of science and the philosophical implications. This planetary thinking could be described as philosophical software programmed for a new attitude of man in his behavior and his relations with others, be it on an individual scale or on the scale of peoples and cultures.

Aware of the difficulties which always arise when fundamental changes occur in the society, I would like to propose the following approach.

First a new vision of our world, or should I call it a new world view as science presents it to us at the present state of knowledge. This new view should necessarily lead to a new mentality, a new frame of mind, which again will lead to a new behavior in the relations between men. These three elements are entangled together. They are the building blocks for a better society in the twenty-first century.

The scientific work and philosophical considerations by Ilya Prigogine have inspired me in those reflections.

*It would perhaps be interesting to speak briefly about Ilya Prigogine, a scientist and philosopher of science whom you like to quote.*

It is a fact that I have a lot of admiration for Ilya Prigogine, who has been a real source of inspiration for me. Both scientist and philosopher of science, he has achieved a combination of these two approaches which cannot be separated anymore in the twenty-first century. In the last fifty years, particularly in physics

and astrophysics, more progress has been made than in the last two thousand years. By speculating on the essence of what we, at present, perceive as reality, I believe that theoretical science cannot be ignored. Philosophizing in a speculative manner without referring to what science reveals to us today, is just an exercise in some sort of vague mumbling and confused verbosity. Authentic scientists, explaining their findings to those who are interested but who do not have the possibility to follow them in the mathematical formulation, are very clear in their communication. It was definitely the case as far as Ilya Prigogine is concerned. Based on his scientific research on the second law of thermodynamics, he introduced the notion of a deterministic chaos. He earned the Nobel Prize through his work on the biological phenomenon which arose on our planet in what he called “dissipative structures” of self-organized systems. It is the phenomenon of “negentropy” versus entropy. He also postulated that time is an irreversible dynamic process. The arrow of time is only pointing in one direction: forward! But the bifurcations where these self-organized systems arise cannot be predicted. They can only be anticipated on the basis of probabilities. Indeed it is what Prigogine called “the end of certainties.”

Thus, Prigogine postulates that reality is a permanent construction. It evolves, it is unpredictable, and at the same time is irreversible. The arrow of time therefore is in one direction only.

*In substance, your conclusions are based on these three fundamental principles: continuous creation, an unpredictable evolution, and time which is irreversible. How do you relate your planetary thinking to these principles?*

They lead to a new vision of the world, which implies three consequences:

1. Nothing is permanent, but change. Our world is not static but dynamic. Creation is not a unique original act but a continuous process. Man at the present state of intellectual and spiritual evolution is called upon to be an active participant in this process.
2. The potential is richer than the real. The future is wide open. It is an infinite dimension of potentialities. It is up to the human species to seize them or not.
3. The arrow of time points in one direction, the future. The past is irreversibly over. It is useless and even detrimental to regret it or to attempt to reestablish it.

At first sight, this vision of the world appears elementary. In reality it is not. We only have to think of the countless fatalists and pessimists surrounding us, not to speak of the fundamentalists and integrists of all sides and directions. They are rooted and rigidly fixed in ancestral traditions and thinking belonging to the past. They deny all forms of progress and change, and their actions lead inexorably to conflicts and violence, such as terrorism on our planet.

Thus a new vision of the world calls for a new sense of responsibility of men. We must reach a new level of maturity in our thinking and in our actions. We must be the builders of the future where man will live globally in a society of justice, in a society of peace, where prosperity will no longer be exclusively reserved to a minority. This of course calls for new standards in ethics, to which I shall revert in one of the following chapters. The point I want to make now is: This is not utopian, but a compelling necessity of survival for mankind.

*Based on science, if I understood you correctly, your reflections do not appear to have a religious connotation.*

I do not see here any contradiction or incompatibility. On the contrary. In the first chapter of Genesis, there is a beautiful description of man feeding himself at the tree of knowledge. Acquiring knowledge is one of the most fundamental commandments. Acquiring knowledge is not a static exercise but a dynamic process. In our time we speak of lifelong learning. Learning what has been written and expressed in the past has to lead man to create and communicate new knowledge by engaging himself on the infinite road of new discoveries and ultimately to wisdom. Let me illustrate this by a dialogue I imagined between a religious man and a philosophical physicist.

### **Dialogue between a religious man and a philosophical physicist**

*RELIGIOUS MAN: Descartes said: "I think, therefore I am!" I say: "I believe, therefore I am!"*

*PHILOSOPHICAL PHYSICIST: As a scientist, I do not see any contradiction *a priori*. To believe and to think are the inherent qualities of man conscious of his existence.*

*But there is a whole universe between believing and thinking. Thinking is a rational exercise to analyze established facts. To believe is an act of faith. When I say I believe in God, in a Supreme Being who created the universe and who acts in it, I draw my conviction from the Holy Scriptures, which have been transmitted to us and which I consider as the eternal truth. When I pray, I sense the proximity of God and without seeing Him nor understanding Him, I feel His presence both transcendental and immanent.*

On this last point, I am not so distant from you. The awe which I feel when I make a discovery must be very similar to the mystical elevation which you experience in your intense prayer. Don't

forget that reality is a whole, encompassing both the visible and invisible; matter and spirit are entangled. For some of us physics lead to metaphysics.

*This is possible, but as a physicist, you draw your certainties from science. Well, science will always reach limits. You miss the essential: what is beyond this limit, the Absolute.*

You are right: science cannot prove or disprove the existence of God. Science reaches irreversibly a point, let us call it a wall. Everything that is situated beyond this wall is a matter of pure conjecture. Heisenberg, one of the founding fathers of quantum mechanics, speaks in this context about “steps beyond frontiers.” Thus I shall never know the absolute truth, but at the same time I shall relentlessly search for this truth. The search for the absolute gives to man a sense of fulfillment and joy.

All this does not mean that there is no convergence between us. The laws of nature and the universal constants, such as the law of gravitation, leave a wide-open field of interpretations in which the believer and the scientist can meet and conduct a constructive dialogue. Are the laws of nature the product of coincidence or is there an underlying principle which we have not yet discovered? In the framework of the theory of chaos, scientists, particularly Prigogine, have identified a chaos which is not entirely contingent and which marks a tendency of self-organization. The believers see there the hand of God, while the researchers, as strict scientists, ask themselves feverishly what is behind this mystery of a self-organizing principle.

Albert Einstein did not practice his religion but he was penetrated by the idea that the universe itself had a meaning, based on the laws and principles, determining fundamental reality. Others, like Paul Davies, speak of a “cosmic blueprint and the mind of God.” Wolfgang Pauli, a Nobel Prize winner in physics, mentions the soul of the world: “anima mundi.” Some scientists

are deeply religious, like the Pakistani Muslim physicist Abdus Salam, who received the Nobel Prize with Steven Weinberg and Sheldon Glashow. He prays three times a day; at the same time he is a passionate researcher. He feels no contradiction in this. The Koran recommends to the faithful to study and to understand the laws of nature.

*Thus, are you identifying the basic principles and laws with God?*

As a physicist, I do not attach any specific name to a reality or non-reality, which is beyond the field of my scientific explorations. But let me mention here the ancient Hebrews, who had an astounding insight, one of the commandments of the Decalogue stating not to make an image of God. The Jews not only refrain from a given picture of God, but they also don't name Him. There is one exception: On the day of Yom Kippur, the most sacred day in the Jewish calendar, the High Priest entering the Holy Arch, pronounces loudly and clearly the name of God. But on Yom Kippur the Jews for twenty-four hours live in a spiritual dimension, detached from space and time. In the Holy Scriptures, a multiplicity of names defines what man perceives as an emanation of the divine manifestation.

*If I interpret you correctly, in your vision as a scientist, there is no opposition between faith and science, between spirituality and scientific research. Thus, science and faith are complementary. When science reaches its limits, it leaves the field of the absolute to the believer.*

Not exactly. I rather see the two roads followed by the believer and the scientist as parallel. The believer in his exercise of meditation and contemplation tries to deepen and to give continuously a new sense to his faith, while the scientist in the exercise of research and exploration attempts to widen constantly

the field of the knowledgeable. By walking down these two roads, the two, the believer and the scientist, follow a common mysterious and irresistible urge anchored in the human species: the search for absolute truth. They attempt to reach the same ultimate goal by different, parallel approaches. At the end of time, they will meet in the discovery of absolute truth.

*Would that be the point Omega of Teilhard de Chardin?*

If you wish, but as a scientist I prefer to speak of all the parallels which ultimately will meet and merge. In the meantime nothing prevents the physicist to believe and nothing prevents the believer to engage himself on the road of the philosophical scientist, contemplating and studying the laws of nature. The Jewish rabbi and philosopher, Alexandre Safran, in his work *The Wisdom of the Kabbale*, expresses a beautiful and deep thought: "To the extent that science progresses in its constant evolutionary process, man gets nearer to the divine light."

In my own philosophical interpretation, science is universal and fulfills a unifying role, a role of reconciliation and pacification between the oppositions which divide humanity. It thus fulfills an important function, aiming at eliminating ancestral and contemporary oppositions.

## **Two roads, same destination**

*Mr. Israel, there's a question I've wanted to ask you for quite some time: You obviously have a certain preference for physics and the physicists. There is, however, in the scientific heritage, in particular of the nineteenth and the twentieth century, a vast array of important scientists of other disciplines inviting us to philosophical reflection, in particular Darwin, as well as Watson and Crick, who discovered the intimate structure of the human genome with all its therapeutic and sociological and philosophical implications.*

I cannot deny that I have a certain predilection for fundamental physics and physicists, because their field of research touches on the infinite both in its macro and micro expressions. They knock at the door of the Absolute. The biologist or biochemist, for instance, deals with life on our planet, a rather recent phenomenon compared to the birth of the universe. They rationally analyze the functions and mechanisms of the biological systems in their evolutionary process. Many of them claim that these self-organizing systems can be explained without having recourse to an all-overarching divine principle. Richard Dawkins speaks of the “Blind Watchmaker.”

Personally I am fascinated by physics and cosmology, which from a philosophical point of view strike a chord in my own deep quest. I read years ago that some serious scientists were asking themselves whether there still remained something to discover in physics. I found this very strange and in complete contradiction to my own thinking. I am convinced that in physics and in cosmology, there is an infinity of concepts and manifestations to be discovered. The search will go on and on and on until the end of time. And that’s why I think that this field of human exploration and search will lead us continuously to new insights, new discoveries, to an intense feeling of fulfillment and awe, a link to the Absolute.

*The philosophical scientist concludes the dialogue with the believer insisting on the universal and unifying role of sciences in our time. How do you view this role of integration?*

On the scientific level, the discoveries constantly bring new insights, new knowledge which will exert an influence on our way of thinking, on our way of understanding the other and also on our beliefs. In the past, since antiquity, scientists have made important discoveries. These were reserved to an inner circle, and

their communications to the outside usually never extended beyond the local or regional sphere. The vast majority of human beings was not informed and did not feel concerned, and therefore in their own thinking remained static. New insights and new knowledge were calling for change, but most of the people had no access to the progress of knowledge, thus remaining entrenched in their past thinking.

Today, in line with the extraordinary progress made in the acquisition of knowledge, science has gained credibility and authority. Research is growing exponentially. That is the positive result of globalization. In our increasingly interconnected world, new knowledge is communicated and accessible to everyone wherever he lives. Therefore I think that man should necessarily be influenced in his belief and in his ideology by this new world image which is unveiled to us by science. Believers, atheists, scientists, and philosophers contribute to building a universal platform of knowledge, which in a compelling manner will sooner or later lead to new thinking, planetary thinking. Such thinking is essential in a number of areas where the very existence of humanity and life on our planet are threatened. And here I single out the demographic explosion, the heating of the planet, the destruction of ecosystems, just to mention these few deadly risks.

I am hopeful and confident but not sure that a new planetary consciousness will gradually emerge and translate itself into more responsible behavior and a greater solidarity of humanity. Obviously, this cannot be realized in a single day. I am convinced that man in the twenty-first century, alongside his attachment to his country of origin and to his regional culture, will feel himself more and more concerned with the destiny of the human beings and he will also demonstrate an increasing attachment to the blue planet that is his home. In the last instance, as I said before, it is a matter of the survival of the human species on our planet.

*In what manner could this unifying role of science influence the believer in your dialogue? More fundamentally, what will be the impact of this universal platform of self-imposing scientific evidences on the beliefs, convictions, and religions of people in our time?*

It is up to each one to rebuild his personal philosophy on the basis of this common scientific platform. Still largely divergent at present, religious beliefs and convictions can no longer be in fundamental opposition to knowledge. In our time, immediate communications should lead to a common vision of the universe and this is a positive point.

I do not think that this evolution will result in a universal religion. The quest toward the Absolute, toward the fundamental reality, will manifest itself in multiple ways illuminated by the dazzle and awe of the scientists and the fervent prayers of the believers.

But there is a second point, a very important one: global ethics. I have already evoked this essential point in a preceding chapter dealing with the dialogue among all confessions and cultures. A new planetary consciousness rooted in universally recognized scientific discoveries with philosophical implications will shape not only new thinking but a new, more responsible behavior in the interest of humanity as a whole. Deviating from this path of planetary responsibility would lead inexorably to the disappearance of the human phenomenon from our planet, as illustrated by the dangers of the warming of the planet, a continuous demographic explosion, wars, and terrorism, with their corollary of hunger, misery, and desperation experienced by billions of people.

Before approaching the last chapter showing some possible ways to reach all these goals, let me illustrate by a few short stories some of the imperfections, injustices and flaws of our society in our time.

## A perfectible society in short stories

### For the sake of philosophy

The meeting was over earlier than anticipated, and the banker went to the bar of his hotel, situated on the last floor. The place was rather deserted at this time of the afternoon. Wanting to find some moments of solitude and relaxation, he ordered a double scotch with ice and soda while his thoughts were migrating in all directions.

A young woman in tight jeans underlining the shape of her body entered the bar. She cast a quick glance around her and finished by looking at the banker. She approached the table and asked if she could take a seat. The banker was taken aback because the bar was practically empty. He quickly said yes and asked whether she would like to drink something. She ordered a cola light.

Smiling, she engaged in conversation right away:

“May I ask where you are coming from and what you are doing? I suppose you are on business?”

“Yes. I come from Europe and I am a banker. And you, what are you doing?”

“I am a ‘walking girl.’ ”

“A walking girl? And you walk like this the whole day?”

“No, only in the afternoon and in the evening.”

“Where? In the street?”

“No, I walk from one bar to another.”

“But for what reason?”

The young girl appeared surprised. She sipped her cola and said:

“In order to finance my studies.”

“Your studies?”

“Yes, I am a student in philosophy and once I have completed my studies, I want to become a professor. But in the

meantime I have to cope with my finances, which are limited. You know universities are very expensive in this country, especially those who rank among the best. Since it is not easy to find a job, in particular a well paid job, I decided to become a 'walking girl.' ”

“Well! To use a word from the philosophical vocabulary of the ancient Greeks, you are a peripatetic, a street walker or should I say bar walker?”

The girl, a bit astonished said:

“Oh, you seem to be quite familiar with philosophy! That is not so common for bankers. I believe that we are made to understand each other. By the way, you are right: the name given to the women who exercise my profession derives from the Greek 'peripatetic,' the disciples of Aristotle who philosophized while strolling on the boulevards of Athens. But did you know that these ancient philosophers in Greece did not walk for their pleasure, but by necessity?”

“Frankly no. I ignored this . . .”

“They were walking because of a lack of means to cover the rent for a special place where they could dispense their teaching to others. So I feel close to them because of my own financial problems, but I have one single goal: to obtain a Ph.D. in philosophy, and I shall succeed in spite of my difficulties of the moment. And I shall be a university professor, I shall start a family with a man who will love and respect me, and we shall have children.”

“You are an optimist. You believe that in spite of your past as a peripatetic, you will be engaged by a university. You must be very naïve.”

“I am convinced of that. Our society is full of hypocrisy and is calling for a change. If you take a look at the cover pages of a number of magazines, if you look at so many movies, if you look at the so-called respectable women of the upper classes, they are wearing clothes which uncover more than they cover. They want

to look enticing and sexy, whether they are young or old, whether they are pretty or ugly. We, the street walkers, the prostitutes, how can we distinguish ourselves from them? Surely not through our clothes anymore. I think that we should describe our job in a different manner.”

“What do you mean by that?”

“I just mean that we are therapists. We bring healing and consolation to those who are lonely, to those men who are ugly, to those men who cannot find a companion, as well as to those who are frustrated by the attitude and the remarks of their partners. So they come to us. We are paid, rather underpaid, to bring consolation and solace to all these sick and unfortunate people. And you see that for all these reasons, my dear banker, I believe that I shall succeed.”

“Listening to you, I am sure of this, because you are intelligent and know what you want. In any case, I wish you good luck with all my heart. May I offer you another coke or something else?”

She looked at her watch.

“No thanks. I haven’t time anymore. But if you wish we can pursue our conversation in your room. I charge one hundred dollars per hour, but as I like you, I grant you a reduction: fifty dollars, for the sake of philosophy.”

The banker thought for a moment. It was not the cost which made him hesitate, but the moral inhibitors firmly encroached in him, his principles, and his reputation.

She perceived his hesitation and anticipating his refusal, she got up.

“Sorry, I have to continue my long march. I have not yet earned a single dollar today and my dues have to be paid by the end of the month. Thanks for the coke. Until some other time, perhaps . . .”

She gets up from the table and leaves the bar rather precipitously.

The banker did not expect such a quick departure. He was asking himself whether he should not have accepted her invitation, or at least given her fifty dollars, just like that? Without any strings attached, for the sake of philosophy?

Abruptly he got up from his chair and nearly fell over a stupefied barman: "Excuse me. I'll be back in a moment." He ran to the elevator, his portfolio in his hand:

"Miss, wait a second!"

Too late. The elevator had already started its long descent to the ground floor.

### For the sake of science

It was a hot, sweltering summer day. Crossing the park, the student, though young and fit, was suffering from the heat and constantly wiping the perspiration from his face. He saw a bench and dropped down on it. Then he saw a small old man approaching the bench. The man had red cheeks, was amply perspiring, and out of breath. He quickly glanced to the right and left, and before taking a seat, he asked politely:

"May I?"

He was so exhausted that he could not wait for the answer. Breathing heavily, he practically fell down on the bench. His attire was rather conventional, and in spite of the heat he wore a black suit with a yellow tie and a shirt which once upon a time was white, but on that day was wet and wrinkled. He wore a straw hat which probably dated back to the Roaring Twenties. He was carrying a leather brief case bursting in all corners. The old man was trying to regain his breath.

The student:

"Are you alright, sir?"

"Yes, yes . . ."

The man was one of these old people who even if they look very ill do not want compassion. They still have the illusion that

they are alright and much younger than they look or are. The man went on:

“You know it’s the heat, just the heat!”

Carefully he put the briefcase on the bench besides him as if it would contain all the valuables of the world.

The man repeated again:

“What heat! It’s not common here in Luxembourg.”

The student did not really want to engage in conversation. He nodded and plunged into the text of the chemistry course he had taken in the morning. He noticed that the old man surreptitiously looked over his shoulders. He did not mind. After all, the old man would not understand anything about it.

The man:

“Sorry, to interrupt you again in your review of your course. According to what I saw, you are a student in organic chemistry. May I ask a short question, if this doesn’t trouble you very much?”

The student, surprised by the knowledge of the stranger, nodded affirmatively.

The man:

“In fact, I only wanted to know whether your studies give you satisfaction.”

The student was somehow surprised and, ignoring the identity of his neighbor, preferred not to open up too much to him. He said:

“I chose this discipline because I thought it is fascinating, in particular in biochemistry and genetics. But the way the courses are presented to us could be more interesting.”

“Don’t worry, I ask you this question for my own reasons. I was a professor in physics, but a long time ago I retired. I understand what you mean. You feel disappointed!”

“Yes, I am disappointed. It’s deadly boring. Our courses stop when really they should become interesting. Instead of concentrating on contemporary science or the latest discoveries which mark our time, our courses deal essentially with the history of

science. Thus there is little time left for the passionate field we would like to explore with our professors: how the present-day research leads to undoubtedly fascinating discoveries in the future. Only few think how interesting a modern up-to-date course in chemistry could be. It's unbelievable . . .”

“I share your view. You know, after my retirement, I registered as a free student in various courses, particularly astrophysics and cosmology. The reason is not only to remain active but also to discover in the present state of knowledge a new holistic image of reality. But very soon I gave up. It was really deadly boring. What we learned in these courses was indeed light years away from present day scientific research. So I quit and decided to write a book. Even if nobody reads it, for me it was a relief, to express my innermost feelings, a vision inspired by contemporary scientific research. You know, Mr. Student, paper is the most patient material on earth. Think about the myriads of worthless reflections, of worthless musical notes and worthless paintings put on paper, but paper submits to it willingly as it does to my phantasms and mental vagrancies.”

“It is really reassuring to hear you say all this. It confirms what I dimly perceived all the time. I am sorry that you have retired. I would have been delighted to attend your courses.”

The old man took a certain time before he replied:

“You know, my young friend, during my active life, I thought in the same way as your teachers do. I was conscientious; I prepared my courses with great care, and gave quite a number of explanations whenever asked. When I returned to the university as a student after my retirement I realized the failings and flaws of a methodology as it is consigned in the text book. During my active life, without being conscious of it, I was teaching the past, I was a historian of science.”

“I am sorry. I did not want to embarrass you . . .”

“Don't apologize. I have overcome this shock. To realize that many of my colleagues made the same observation, gives me a lot

of comfort. Let me mention here what the Nobel Prize winner, Pierre-Gilles de Gennes, had written in one of his books. He recalls the boring manner in which chemistry was taught to him in the *lycée* (*high school*). This induced him, once he became known worldwide and therefore credible, to voluntarily teach a few lessons in contemporary chemistry in the high schools of France in order to convey a new image of science in our time and to provoke enthusiasm among the students.

And that's how the idea to write a book on today's science arose in my mind. I had also some contacts with the Institute of Santa Fe in New Mexico, where well-known scientists in different disciplines—physicists, astrophysicists, biologists, chemists, mathematicians, sociologists, psychologists, and so on—work together in exploring the basic principles applying to all sciences and based on a new holistic paradigm: complexity and adaptation in the evolutionary process. This book took me ten years to write, but far from hard work, it proved to be a most stimulating and exhilarating exercise. Scientific research is progressing at such a fast pace that each time I thought I had come to a valid conclusion, I had to revise and correct what I had written. I am now on my second revision already. In substance, what I want to communicate to the teachers is that in their courses they must never be static in their thinking. In their teaching they must give priority to new theories leading to new discoveries. Then they will succeed at instilling in the mind of the students a feeling of enthusiasm and fascination. But in order to achieve that, the teachers have to be themselves enthusiastic.”

“Is your book on sale in bookstores already?”

“Not yet. I just got a first print from my editor, and I have it here with me.”

The old man pulled a large volume from his briefcase and nimbly turned some pages as if he would be caressing and stroking a beautiful woman. Then with a generous gesture, he handed over this book to the student and said:

“I take pleasure in giving it to you. You will be my first reader.”

Feeling some hesitation in the eyes of the student, he added:

“Don’t worry. You don’t owe me anything. It’s a gift for the sake of science.”

### **Condemned to die: The judge and the inmate of Death Row**

The old solitary judge, who never wanted to admit either to himself or to others his age, was condemned to death, not by justice but by the medical field: “In view of the advanced state of the tumor I owe you the truth. Nothing can be done anymore, even surgery would be useless.” That’s what he has been told by his doctor. On the judge’s question of how much time was left to him, the doctor after a brief hesitation answered: “Based on my experience, six months, perhaps a bit more, perhaps a bit less. I am sorry for you.”

During his professional career, the judge had pronounced quite a number of death sentences. In the judiciary, he was called “Old Sparky.” His sentencing was based on the principle that those who willfully and deliberately commit murder, take the life of others, do not deserve to live themselves, and therefore are to be sentenced to death. He was heavy-handed but had a quiet conscience.

But when he saw himself put in the “Death Row” by the medical profession, the judge did not understand this. He always had done his duty. He rarely missed a religious service on Sunday. He had been an irreproachable spouse. What happened to him now must be a terrible mistake, a judicial mistake, and since the medical world did not know the procedure of the appeal, the sentence by the medical doctors handed out to him was without appeal. There is no Supreme Court of Medical Justice. How can he go on living, even a single day, with such a mental stress?

In his desperation, he suddenly recalled the case of Peter M. condemned to death by one of his colleagues for rape and murder. Peter M. always claimed to be innocent. He might be able to give him some comfort under the tragic conditions he undergoes now himself.

After many contacts he made with highly-placed persons in the judiciary and penitentiary, he finally succeeded in obtaining the authorization to meet and to speak to Peter M.

Peter M. is an African-American, born in a poor family, living a miserable existence under dire conditions. As a child, he proved to be quite intelligent, but he was brought up without any love and affection. He never had a chance in his life. After having left school, he was continuously jobless and started to commit minor misdemeanors. And then, one day, he was arrested for rape and murder. He admitted the rape but always denied vehemently the charge of murder. He pretended that he only raped the woman and left her alive in a backyard and that someone else must have killed her. He was badly defended by a court-appointed lawyer. This is very often the case for those who are living on the fringes of society. He was condemned to death and from procedure to procedure, he awaits his execution for more than ten years, locked up in the place called "Death Row."

This is the background of the two personalities who meet one day and start a conversation in a prison.

Peter M., a stocky man, his face marked by the life in prison, approaches slowly and heavily the iron screen separating him from his visitor. In a tired and aggressive voice, he addresses himself to the judge:

"My lawyer told me that if I agreed to speak to you, you could possibly help me for the review of my trial."

"Who tells me that you are really innocent?"

"But I am, it's just like that. I swear it on the head of my mother, on the Bible, on everything you wish. I never killed anyone. My condemnation is a scandal. Nobody has any proof

against me. But if you don't believe me, we have nothing to say each other. There is a certain time for me to live. I can't lose time in idle and useless conversations. Get out of my sight! I don't want to see you any more!"

Peter M. gave a signal to his guards to take him back to his cell.

The Judge:

"But wait! Let's suppose that you are innocent. Personally I am willing to believe you. After all, it was not I who condemned you, but even if I wished, I'll have neither the possibility nor the time left to me to do something for you."

"But you have influence. And you are retired. You have all the time to help me if you wanted to do that."

"You are mistaken. Like you I am also condemned to die. I have an incurable cancer."

"Well, that's sad for you, but it doesn't concern me."

"According to what the doctors say, my days are numbered. I wanted just to ask how you endure this feeling, being condemned to die very soon. After all, we both share the same destiny. You, condemned by the human judiciary, and I, by the human medical profession. Both of us, innocent and condemned to death, we must have something to say to each other."

Peter M., numb, bewildered and speechless doesn't react for several moments. Then he explodes:

"You are shit! You talk crap! Aren't you ashamed of yourself?"

Peter M. is shouting furiously, menacing the judge by shaking the iron screen.

The guards rush in the direction of the condemned man and put shackles on him to bring him back to the cell.

But the judge stopped them:

"Please, leave him alone. I have to speak to him. It's indispensable and I have the authorization."

Peter M. hesitates. As he hates the guards even more than he does the judge, he finally agrees to sit down again, and proceeds more calmly:

“Listen, Old Sparky! How do you dare to compare yourself to me? I have never killed anyone. And you? You have tens and tens of human lives on your conscience!”

“I only did my duty. I applied the law.”

“That’s it. You apply the law and you even have a good conscience. For me, it’s just murder what you did.”

“Listen . . . Peter, I don’t allow you to . . .”

“Excuse me! But of the two of us, the innocent, that’s me! And if one of us deserves the death sentence, it’s you. You have killed or you induced others to kill, not I. Are you religious, Mr. Judge?”

“Of course.”

“OK, but I am not. God has deceived me. I have no confidence in him anymore. I know the fifth commandment: “Don’t kill!” (*Thou shall not kill*). This commandment doesn’t allow any exception.”

“Frankly, I am not a theologian; I apply the law, which I swore to apply when I took office.”

“Listen to me, Mr. Judge. This discussion will lead us nowhere. I know now that you cannot save my life. All I wish is that my sufferings will finish as soon as possible. Look at my hair. It is white and I am not even thirty years old. Try to imagine just for a moment my anxiety in the evening each time when I go to sleep, and I don’t know whether I shall still be alive in the morning. To leap up in my slumber and to jump out of my bed when I hear steps on the floor in the corridor. Frankly I can’t go on anymore. I don’t want to live anymore. Lets get it over as soon as possible.”

Several months later, at dawn, Peter M. jumps out of his bed when the guards wake him up. He knows that the moment has come.

He is trembling, he is shivering, he fights, he shouts. He asks for a pardon. In this last fight he doesn’t want to give up a life which was so miserable for him. The guards put shackles on him

and bring him by force to the place of execution. They place him on a stretcher, his hands and feet firmly bound with ropes which bite into his flesh. Peter M. takes a deep breath, shuts his eyes and when the lethal injection is given to him, he sees at the end of a dark corridor a white light, a light brighter than a million suns, a flooding light which takes him away, very far away.

The same night, the old judge dies in his sleep in the hospital. In his slumber, he has torn off all the tubes, his last lifeline.

### Julius asks questions

Julius is a bright, young boy, very curious, and asks his parents questions all the time. They feel drowned in a sea of questions; they try to answer to the best of their knowledge.

Here are some samples of questions, which of course change with Julius's age.

*Julius: Could you tell me why on the publicity for cars or for frying pans, there are very often nude women?*

*Father:* To draw more the attention to the publicity and the items on sale.

*Oh yes? But why not nude men*

I have to think about this.

\* \* \* \* \*

*On television or on photos in the press it's funny to see the heads of states or the heads of governments, when they meet each other: they slap themselves on their shoulders or in the back. What does that mean?*

I think that in politics, which is all a matter of nuances, these slaps on the shoulders should show that one has particularly warm and friendly relations with the colleague of the other country. If politicians only shake hands, that definitely signifies that the relations have become slightly colder.

\* \* \* \* \*

*Pop, you make me take courses at the academy of music. I was able to appreciate the works of your favorite composers, like Bach and Beethoven. But could you tell me what do rock and hard rock mean to you?*

For me, they are expressions, rhythms which the human being feels in the depth of his soul. Don't forget that music is the most elementary among all forms of communication. It is also universal. Perhaps cosmic reality is the manifestation of vibrations, of rhythms, of harmonies and disharmonies. Later when you have read and studied sciences, and particularly the new theory in physics, the "String theory," we can speak about this again.

\* \* \* \* \*

*Why do people engage in wars? Why do they kill each other?*

In our time, we work very hard to prevent wars. We do not always succeed. I hope that when you are my age, armed conflicts will irreversibly belong to the past.

*But how can we stop the killings?*

One has to start very early. If, for instance, one of your school-mates attacks you, even violently, you have the right to defend

yourself, but at the same time you should try to reason with him. Try to understand him, and also to make yourself understood by him.

\* \* \* \* \*

*I am afraid of terrorism. Practically every day one sees pictures on television of suicide attacks. Are these people desperate?*

To a certain extent, yes, they are desperate and frustrated. But it is also the fight of those who want to impose their way of being, their way of thinking which is static. And then there are all those who, in their irrational thinking, believe that terrorism is the only mean to restore injustices. Finally, terrorism is also due to unscrupulous men who use suicidal attacks to their own advantage, driving primitive and desperate young people to these ultimate criminal acts. These terrorist leaders are a minority who themselves live in comfort and luxury by sending others to death and causing the death of innocents.

*But there is so much injustice; there are so many social and economic imbalances abounding in our time. What would you propose?*

This calls for an in-depth study. I cannot give you a conclusive brief answer, but I am confident that new thinking, new mentalities in particular in the new younger generation, will succeed in correcting and eliminating these imbalances. More and more encounters among young people from different strata of society with an open mind should progressively bring a solution.

\* \* \* \* \*

*The other day I saw Aunt Lisa. She was crying and she felt desperate. She wanted to speak to the medical doctor who did not have*

*time. Why do doctors not speak to their patients longer? Are they so busy?*

Don't forget that the medical doctors take care of their patients to the best of their abilities, but they are very often overwhelmed with work, worn out. Yet they carry on because the vast majority of them have a great sense of responsibility for life and death, which rest on their shoulders. But there are men and women who voluntarily spend part of their time to accompany the sick and listen to them. They do a wonderful job, and they are complementary to the hard and important work of the medical doctors.

\* \* \* \* \*

*I often ask myself about my future. Shall I find work? This becomes more and more difficult for the younger people. And then what kind of studies should I pursue, and in what professional activities should I engage? Where shall I have the greatest chance of success? Do I need to succeed, by the way?*

I have no answer regarding the problem of unemployment. I think we are living in a period of transition, in a period where technology opens new possibilities for the younger generation. Society is practically condemned to find a solution, which appears to be particularly urgent in countries and regions engaged in the process of adaptation to a global world.

This being said, I have no magic solution for professional success. But in my view, what counts is the pleasure which you feel when you wake up in the morning, and you are looking forward to a day at school or a day at work. If a feeling of joy, even bliss, penetrates you when you wake up, then I think you are engaged on a good road. Whether you choose a profession in technology, in agriculture, in banking, in law, in business, in

teaching, or even as a simple factory worker, you will feel happiness if your work is in line with your abilities and tastes. Then I think you will have made a good choice. And above all, never forget, my son, that in order to be really happy, you have to share.

### The virus “Rumin”

The virus existed for a long, long time. In fact, it has been around since the dawn of humanity. It affects human beings, but strangely enough, not animals. It causes a lot of suffering to those who are the victims, but it brings delight to those who act as transmittal agents from mouth to ear, as well as through communication by mail or by media. The virus does not attack physical organs of human beings but their reputation. It starts to create doubt in the minds, and then it succeeds in causing trouble and finishes by destroying the private, the professional, and the social life of the victim. In extreme cases, the virus might even eliminate lives, driving people to suicide.

This virus is known under the term of “Rumin” which is a contraction of Rumor and Insinuation.

\* \* \* \* \*

Five P.M. Reception in one of the high class hotels in town. Mr. V. (like Victim) is among the invitees.

“Hello Mr. V. How are you? You look fine. And what a super, super suntan! This is really not astonishing with the blessed weather we have. One doesn’t need to go on vacation abroad. There are so many picturesque unvisited places even in our small country.”

“Indeed, that’s why we decided, my wife and I, not to go to another country for our vacation. We just stayed at home.”

“But that’s great! What a good idea to stay home. We, I must say, spent a magnificent fifteen days on the Seychelles Islands.

After all one lives only once, doesn't one? I tell you, paradise on earth, the Seychelles. The children were delighted, absolutely ravished. You should go there for your next holiday trip . . . But I am sorry, I have to apologize. I just saw a friend to whom I absolutely have to speak. In spite of many calls from my mobile phone I did not succeed in reaching him. He must have been abroad. Hope to see you later."

Mr. V., a habitu  of these receptions, is rather astonished that tonight many of his old acquaintances with whom he was accustomed to have a conversation either appear to have not seen him, or if they cannot avoid saying hello, they all find an excuse to run off.

Soon, V. leaves the reception.

But what happened to V.? It is just as simple as that: he is under attack by the virus Rumin.

The company he manages is under an official inquiry. This is certainly not exceptional. Quite frequently in the past there have been similar verifications and inquiries. Yet in our time, they are multiplied, I don't know by which factor. V. is not conscious of having violated any regulations or laws, but he has to prove this. Some media indulge with delight in reporting the slightest information or news they think having got from a reliable source.

The inquiries can last months, even years. Fortunately, in our democracies there is a presumption of innocence for those who are accused, at least, in law. But as quite a lot transpires to the outside world through the media or through rumors and whispers, what remains then of the presumption of innocence?

Of course there are friends, the real ones, which one can count on the fingers of one hand. They manifest a certain solidarity with V. They invite him and his wife to dinner, privately and not too often. After all, one has to protect oneself in order not to be drawn into some kind of affair which risks compromising one's own reputation.

For V., this agony lasts two long years. After the inquiry has been concluded, his innocence is established. This is reported by the media in a brief communiqué without any comment.

V. and his family are of course relieved. But contrary to other viral infections, Rumin leaves a sequel of mental scars. V. is not the same anymore. It is true that at the receptions which he no longer has great inclination to attend, he is surrounded again by the party-goers who do not avoid him anymore, and who do not fail to say to each other: "I always said that it was a misunderstanding, and that V. would be cleared of any of the faults he was accused of."

V., with his moral wound still quite open, feels heartened however by such marks of sympathy and as an optimist he hopes that time will heal the moral wound.

One day, upon entering a restaurant, he hears a voice from the end of the room: "There is no smoke without fire!" V. turns his heels and walks out of the restaurant.

He never will know that in fact what he heard was the statement of a patron who believed that he had detected the start of a fire in the kitchen of the restaurant.

\* \* \* \* \*

In the afternoon in a cozy coffee shop of a well-known pastry store, two friends meet and have a conversation. The two women are just gossiping a trifle. They exchange some confidences.

"By the way, do you still meet the XY's?"

"Of course, they are friends. Paul and I we are very fond of them. Why do you ask?"

"You know, it's rather delicate. If I speak to you about this, it's because I am your closest friend. I think you should be careful, be on your guard, particularly with regard to her. At a dinner offered by Minister K., when coffee was served, Mrs. XY told me that she has heard from somebody, who is a very serious person,

that you have a lover. Don't worry. I told her right away that as I know you, this is impossible. And yet, if it was the case, it is not extraordinary in our time, is it?"

"This is ridiculous. From whom does she pretend to have this information?"

"Ah, that she did not tell me. I've asked quite a number of times, but she did not want to give me an answer. I must say that she appears to have heard this from many sources."

"Many sources, you say? That means that the rumor has already been spread all over town?"

"All over town I don't know. Anyhow, quite a number of people seem to be aware of this."

"But this is just despicable, horrible!"

"Yes, despicable. But that isn't all. On one side, they think that you have a lover, because you lack something at home. Maybe Paul is not capable anymore of satisfying you. Others pretend to have seen Paul in the company of a beautiful young woman at a rather unusual place. As Paul is a very attractive man and in his youth had the reputation to be a lady killer, some pretend that you are having a liaison just to take revenge.

"This is absurd. First of all I have no lover. Then I can assure you, Paul has no virility problems. As for the rest, I am sure of Paul. Let's forget all that. We are losing our time discussing such silly, inane gossip."

"This is also my point of view. But please do understand me. You are my best friend, I just want to warn you regarding the XY's, about the heinous rumor they are spreading, and of which I do not believe the slightest word, of course. This might hurt you, but I think it is best that you are informed. All the more so, since there is also a saying: 'There is no smoke without fire.' "

In the evening, back home, Paul finds his wife a bit distant and he is quite surprised when she asked him point blank: "Do you want tell me something, by any chance?"

## A new mentality and a new behavior

*Mr. Israel, your short stories deal with major flaws in our society, such as social injustice, boring instead of stimulating education, capital punishment, insinuations, slanders, hypocrisy, and so on. You underline quite rightly that the enumeration of these flaws in our society is far from being complete. Therefore in a more general manner: How do you think that planetary thinking which you advocate could contribute to eliminate injustices, inconsistencies, imbalances, and thus lead us to a better, a more peaceful world?*

Changing mentalities and also behavior is not an easy undertaking. It is a process over an extended period of time. I hope that the rather dismal evolution experienced on our planet allows sufficient time to bring about the essential corrections. In his remarkable book, *High Noon: Twenty Global Problems—Twenty Years to Solve Them*, Jean-François Rischard thinks that humanity has only about twenty years at its disposal to deal with the most crucial global problems.

I fully agree with this. One has to act rapidly and with energy, with both traditional as well as innovative measures. We have no time to lose any more. I am convinced that any effective sustainable solution will pass necessarily through new thinking leading to a new mentality.

I mentioned a new vision of the world already in the context of a new perception of reality as it unfolds to us in the present state of knowledge. But this is not sufficient to reach a level of planetary thinking and to bring about a change of mentalities.

Probably since the appearance of life and in particular of *Homo sapiens sapiens* on our planet, our generation has experienced a most fundamental event: putting two men, Armstrong and Aldrin, on the moon. This event of planetary scope with implications for humanity, difficult to imagine in the past, imperatively calls for new holistic thinking. For the first time,

human beings detach themselves from earth on which humanity is firmly rooted. Neil Armstrong, while leaving the Lem and putting his feet on the rocky soil of the moon, exclaimed: "That's one small step for man, one giant leap for mankind." I watched this event in 1969 on television. I couldn't believe my eyes when I saw the hesitant, clumsy steps of Armstrong and Aldrin on the moon, their strange choreography due to the lighter gravitational pull of the moon. Breathless, I was drunk with an emotion I cannot describe. I realized that from then on, something had profoundly and fundamentally changed. Our thinking and the way we view reality will be different from now on.

Simultaneously with me, millions and millions of other people watching this event on television must have reacted in the same manner. In our time, those born after us, the younger generation, take this for granted to a certain extent. And so it must be stressed again and again that a new turn has been taken in the evolutionary process of humanity, and more generally of life on our planet. We also have to communicate this feeling of bliss and awe which we experienced suddenly by viewing and by admiring the beauty of our blue planet, which we saw in its splendor for the first time as photographed from outer space and transmitted to us thanks to advanced technology. We suddenly realized that humanity, as diverse as it is, through the variety of cultures, is one single family, the family of man as defined by the Luxembourg American photographer, Edward Steichen. In this new world, there should not and cannot be a place any more for war, killing, and terrorism. A new feeling of solidarity between all human beings has to arise and to strengthen and measures have to be taken to correct social injustices and human sufferings.

The possibilities offered from that moment on are wide open. In fact they are infinite. In prehistoric times, some species left the sea to live on land. This process as described by Darwin has been a long evolution extending over millions and millions of years. Voyages by rockets to outer space and finally putting

human beings on the moon have taken place within an incomparable short span of time. This is due to the progress of knowledge, in a constantly accelerating evolution extending not over millions, but only over hundreds and tens of years. The human brain, active with its neurological network, is shortening dramatically the course of evolution to which it gives impetus and a direction. Thus chance and contingency appear to be reduced while a purpose, in the wake of the progress of knowledge, emerges and the unique direction of the arrow of time acquires a profound significance. We have entered the post-Darwinian era, which calls for New Thinking. In our time and in the future, it is those who blend the progress of knowledge with spirituality who will prevail and not those who are the physically and militarily strongest.

On planet earth, Nature is taking a U-turn engaging itself in a bifurcation leading ultimately, in the vision of the priest and philosopher Teilhard de Chardin, to the point Omega, the final destination when humanity will rejoin its Creator.

*And all this, in your opinion will solve humanity's problems?*

Certainly not by itself. New thinking will be the bedrock on which we can construct a better world.

*If such a new vision of the world leading to new mentalities becomes a reality, what do you propose in order to implement the necessary steps and measures for changing our behavior, our way of dealing with our problems, our way of life and thinking in the years, decades and centuries ahead?*

The corollary of new planetary thinking is new planetary ethics. The Catholic theologian and philosopher Hans Küng speaks of the "Weltethos," worldwide ethics. In the past, the ethical code regulated the relations between human beings on the scale of a

tribe, a community, a city-state as in ancient Greece, and then a nation. Nowadays, mainly through communications, the way we believe and the way we behave has global planetary implications and consequences. Therefore the code of conduct of ethics has to be global, planetary. How to establish and how to implement such a global code of ethics is a major challenge, probably one of the greatest challenges confronting mankind in our time.

Many initiatives have already been taken in this direction. Let me just recall the Council for a Parliament of the world religions which was held in Chicago in 1993, and which proposed a code for planetary ethics.

More recently a group of elder statesmen meeting within the framework of an interactive council submitted to the Secretary General of the United Nations a text called a "Universal declaration of the obligations and responsibilities of individuals." This document stressed not only the human rights but also the human obligations. All these initiatives are important.

As far as I am concerned, I want to confine myself to one major objective: education. The changes I propose for a new vision of the world, a new mentality, and a new behavior, can only be effective if an appropriate education is given first and foremost to our children and to the adolescents, those who build the future, and I would like to add to the elder people. After all, this is a vital topic for lifelong learning. Education must implant in human beings the seed on which a new mentality will arise and unfold.

Thus in a more general manner, education must place more emphasis on the level of knowledge which we have reached at present, and upon which we shall construct the future, rather than relating the history of the acquisition of knowledge. Then it should be communicated with insistence and an appropriate documentation that humanity is a whole composed of many cultures and many civilizations bound together, more than ever before, by a planetary solidarity. The ways and means have to be

identified to eliminate wars and to put a halt to the demographic explosions as well the pollution of our environment.

The sanctuaries of the future will no longer be monuments in stones but the landmarks in the progress of knowledge and peaceful coexistence encompassing the whole of humanity. The American sociologist and visionary, Alvin Toffler, in his remarkable book *Powershift*, shows and explains that the future belongs not to the physically or militarily strongest but to those who will have acquired a maximum of knowledge utilizing it in the interest of the whole community.

It must be underlined that wars are not inevitable. There are no holy wars; only life is holy. The Roman saying “*Si vis pacem, para bellum*” (*If you want peace, prepare war*) must be universally replaced by the commandment “*Si vis pacem, para pacem*” (*If you want peace, prepare peace*). For the educator, transmitting knowledge, explaining science and research, must be an activity he performs with joy, with pleasure and even with enthusiasm. These feelings must be transmitted to the students, to those with whom he is engaged in the process of a constructive dialogue and exchange of views.

In this educational process, it must be constantly stressed that, for instance, the findings in science and scientific research have reached a certain level of our understanding and can never be considered as the absolute truth. According to the philosopher of science, Karl Popper, real science can be defined as such if it can be proven wrong. Let me just illustrate the pitfalls to which a misconception of science, considering it an absolute truth, can lead, causing important social disruption. For instance, quite recently some neuroscientists postulated that decisions we think to have taken by our own free will, and for which we have to assume our personal responsibility, are in fact manifestations of our neurosystem, preceding by split seconds our act. Thus, there would be no personal accountability. Such findings, if legitimized by our legal and judiciary systems, could lead to

conditions which would completely disrupt the fabric of our society. Therefore the following caveat imposes itself. In science there is no absolute truth and what is considered to be demonstrated today can be disproved and will be disproved tomorrow. In this context, the definition of science by Popper should always be present in our mind.

Yes, humanity is irreversibly embarked on the road of progressive knowledge. We are mountain climbers, moving on slippery soil. We have to avoid the dangers which confront us and yet at each stop, new challenges wait for us and we go on climbing and climbing, trying to reach a summit, the ultimate truth, which seems to recede the more we think that we are in its proximity.

That is the destiny of mankind. It is particularly fascinating, because climbing on this road, we continuously reap the benefits of our efforts through a better life, through better health conditions, through the lengthening of the average life span.

In conclusion, such an attitude, born out of a new mentality and a new sense of global responsibility, leaves wide open the field of a fruitful exchange of views and ideas between those who belong to organized religions, those who are philosophers, and also those who are scientists and who say that for them the cosmos is a vast, not understandable chaos without any guiding principles, without any significance.

In Western civilization knowledge has progressed and evolved through science rooted in the Hellenistic philosophy to approach reality.

Other cultures have developed their own vision of reality in the wake of their traditions and beliefs, leading to a variety of creeds and philosophies. Though the effectiveness of the scientific approach appears to be amply proven, it would be wrong and counterproductive to impose it on other cultures as the only way to grasp reality.

I am convinced that the essence of New Thinking is the irreversibility of time pointing in one direction, forward: forward in

the wake of the universal dynamic process of evolution. “Nothing is permanent but change” and values, though eternal, have to be redefined and reinterpreted in a constantly, and in our time of transition, fast-changing environment.

The relations between individuals and nations have to be based on the principle that reality is not static and what was considered as absolute truth yesterday is not necessarily true today. This appears to me the only way to fight efficiently and without bloodshed terrorism generated by fundamentalist static thinking. The concept of the unidirectional arrow of time should be part of the educational programs.

A study could be conducted on the practical application on a day-to-day basis of these principles as well as on ethics, the permanent guide for the behavior of man with his neighbor. Thus the message of the prophets and of Jesus—“Love thy neighbor as you love yourself”—will find its accomplishment.

Descartes says: “I think, therefore I am.” The believer says: “I believe, therefore I am.” I am tempted to say: “I love, therefore I am.”

And it is to love, to my love for life that I dedicate the following last short story.

At a colloquium which took place in Luxembourg in the year 2000 on “Higher education in a knowledge-based society,” a professor of a well known university in Hong Kong said in a jesting manner: “We, the scientists, are sometimes a little wacky. Thus we could even imagine and postulate that in a distant future, thinking will exist and evolve without any organic support.”

This statement has inspired me to write the following story.

### **In Love with Life**

On a Saturday afternoon there was scorching heat in Luxembourg. Schmitt decided to take a drink on a terrace of the Place d’Armes. There were many people there, and a rock band

played passionate rhythms. At Schmitt's table there was a free seat. A man approached, clad in an elegant suit completely out of place in the torrid heat. He sat down without uttering a single word. Schmitt observed him silently. He was tall, slim with ample dark brown hair, his face very harmonious, recalling the works of art of the ancient Hellenistic sculptors. The waiter asked him what he would like to drink. The man looked quizzically around him and then with his elegant index finger he pointed to the bottle of mineral water of Schmitt. Once served, he did not touch it in spite of the heat. He turned his head incessantly in all directions and appeared to carefully register everything which happens around him. All of this with a detached look. His eyes were like an icy lake reflecting a blue sky on a sunny day.

Suddenly he addressed himself politely to Schmitt:

"May I ask you: What is this country and what is this town?"

Surprised by this unexpected question, Schmitt asked him, slightly ruffled:

"But sir, you came here. You must know that you are in Luxembourg, and here is the capital of Luxembourg, which is also called Luxembourg."

"Thank you very much. I just wanted verification. Thanks for the information."

The stranger continued with his roving eyes to observe the crowd strolling leisurely. Schmitt noticed that contrary to everyone, the stranger did not perspire. Moved by an increasing curiosity, he decided to ask a question which was literally burning his lips:

"Excuse me, sir. May I ask you from where you come?"

"Oh, that would be too long and complicated to explain."

"I understand. I don't want to be indiscreet. In Luxembourg, we are very discreet; you know the banking secret and so on."

"What does that mean, banking secret?"

"Banking secret is a specific form of confidentiality regarding financial matters."

“I see. Thank you very much for the information. Very interesting.”

“You must like this expression.”

“Every new word pleases me. It is information, and every piece of new information is important for me.”

“Oh yes. What do you do with all this information, may I ask you?”

“I record it. I analyze it. I compare it, and if it is good information I try to draw out of it new information by extrapolation, deduction, induction . . .”

“I understand. But why do you do that? Is that your profession?”

The other was silent for a few seconds, and then he cast his translucent look at Schmitt.

“As you appear to be really interested, I shall tell you, but you probably won’t believe me. That is why, a few moments ago, I did not want to reply to your question regarding my origin. But before reacting, listen to me carefully. Of course I count on your discretion. I come from a distant galaxy. In the course of my peregrinations through space and time, I find myself here to collect information on your planet and its inhabitants.”

Schmitt is flabbergasted. He thinks that he is in front of a mentally deranged man. Yet curiosity drives him on to pursue the conversation.

“Well, you come from a distant galaxy. However, in our universe, distances between galaxies can be measured in millions of light years. According to Einstein, it is impossible to exceed the speed of light, which is about 300,000 kilometers per second. I would be interested to hear how you came to Luxembourg and by all appearances in good shape?”

“The law of gravitation does not apply to us. We are dematerialized beings. At the state of evolution we have reached, there only remains the immaterial part, the thought. We have no body. This allows us to move practically instantaneously in space and

time whatever the distances. In principle, you have the same capacity as we. But your thought is still imprisoned in your body, as was the case on our planet, a long, long time ago.”

“But you, in front of me, you have a body. You wear clothes.”

“That’s an illusion which is projected around us for the comfort of our intergalactic interlocutors. As a matter of fact, we are pure thoughts, thus eternal. We shed our organic shell. If you touch me, if we shake hands, you will notice that.”

Schmitt, shaking hands with the stranger, did not feel anything. Yet he presented himself:

“My name is Schmitt, and what’s yours?”

“I have no name. If you wish you can call me Alpha, or rather Omega.”

Schmitt was very upset. He did not know what to say and excused himself while he went to the toilet. Only after a relatively long time he returned and spoke to Omega in a whispering voice:

“Well, it’s true then? You are an authentic extraterrestrial being. Right from the start, I noticed something special about you. And for you there are no distances. It’s unbelievable. And you are immortal if I understand you correctly?”

“Of course.”

“Fantastic. And what do you do in this timeless, eternal existence?”

“We collect, analyze, and process information. This is natural for conscientious thoughts.”

“But this must be very boring to collect and treat information from here to eternity?”

“Our task is to collect information and to process it, that’s all.”

“You do that for which purposes?”

“To enrich our intellectual heritage, our vast database of information.”

“And what in the last resort do you do with your database of stocked up knowledge?”

“We enrich it continuously, as I explained to you. And that’s the reason of my presence here.”

“And that’s all?”

“Why do you want more? Listen Schmitt, be a bit rational. We are pure thoughts. What do you wish us to do with our intellectual heritage? We have no body . . .”

“Precisely! I try to be rational. I am asking myself if it would not be an advantage for you to have a body and to be mortal rather than accumulating and processing information. Then you could contribute to the construction of a real world, unfinished and permanently in the making.”

“By roaming over your planet, and having noticed so many explosions, so many war machines, so many killings, I must say that I feel rather relieved not to have your faculty to construct what you call the real world.”

“It is true that wars and other ills still proliferate on our planet, but they are also a challenge. Humanity slowly and in many zigzag movements works constantly to construct a better world. This is our destiny, a difficult one but also an inspiring one. We are builders in time: you do not build, and you miss a most exhilarating feeling, the fascinating task to build for which we need our bodies.”

“OK. But in contrast, you are mortal.”

“That is a rather unilateral view of things. You do not consider Love in all your reasoning.”

“We are rational beings, Schmitt. For us, Love is out of question; or rather it does not exist. This does not prevent us from recording and analyzing all information, including Love.”

“I do not want to know what your analysis means to you. You have no bodies, no sensations, no emotions, you cannot know what Love is; it is beyond your understanding. Thanks to the fusion of individuals who love themselves and procreate in Love, life renews itself continuously. Death is powerless. It puts an end to individual lives, but it is unable to block the

permanent linking in the process of life. Love is stronger than death.”

“This is an interesting reasoning. To my knowledge, our analysis never reached that point. I shall deal with this personally in order to update our database.”

“While analyzing and updating perhaps you could ponder on the following features: death puts an end to our individual life but at the same time it renders life more intense. Happiness is a fleeting moment. We feel it when the sun at dawn is rising on the horizon, when a child is being born, in the kiss of a beloved one, in the creation of works of art. We are untiring searchers of happiness. Bad luck, sadness, and grief do not change us fundamentally, because searching for happiness is already a source of happiness. You really don’t know what you miss in your existence of thoughts.”

“Such a question does not pose itself to us. We are rational beings. We shall of course integrate all this information in our heritage. Is there anything else I should know for instance on Love which appears to me a particularly interesting information?”

“But you never understand anything of Love, as you have no body, no sensations, and no feelings. You cannot feel pleasure. You do not laugh. And Love under its various, I would even say infinite, forms is so vast . . . Look, there are a couple of lovers sitting two tables away from us. They look at each other with tenderness. They fondle each other, they kiss each other. It’s moving, isn’t it?”

“It’s very interesting, but yet, their Love is evanescent because they will die.”

“When aging, they will of course painfully feel death approaching. But they will love each other even more intensely, aware that the beautiful adventure comes to an end. In the meantime they don’t think of death. They want to be happy. Do you know what it means to be happy, Omega?”

Omega, obviously forgetting to pay for his mineral water, gets up and leaves in silence. Slowly he passes the table of the two lovers and for the first time there appears in his eyes a kind of nostalgic feeling.

Schmitt pays for the two mineral waters. Returning home, he is thoughtful. Yes, he is also a being who thinks like Omega, but he is also a being who has a body, who loves, who is happy, yet knowing that he will die one day.

And more intensely than ever, Schmitt loves life, is passionately **In Love with Life.**