

Civilizations Past and Future

Lecture 1: Civilizations Past and Future

Friends, the issue I want to raise before you touches upon fundamentals. First, I would like to ask what exactly a human being is. Man is defined in many ways but in my view, he should be defined by what he has built over centuries and millennia. We have three thousand years of recorded history - a little more or a little less - what is this history? This history is of continuous generations building something. What have they built?

They have built civilizations. What is a civilization? Cultures are many. We do not know of any human beings who do not live in a society, who do not have a language, who do not have some sort of a living together, customs and rituals from birth to death. Death is not an ordinary biological process, nor is birth. From birth to death, the cycle of a human being is governed not by a biological *karma* which he shares with animals, but each biological step is transformed by him into something non-biological. Man is continuously trying to transform the biological into something trans-biological. Moreover, when he looks around at the world, he cannot accept the world as a natural thing. He transforms the world into not merely a living habitation, where he feels at home, but into the image of his own aspirations, feelings, hopes and fears. He has to build the world, the cosmos, in order to make sense of his life, of his journey from birth to death, of his relationship with the preceding and the succeeding generations. The human being is in a constant correspondence with the world of the elders - those who have given him birth and helped him to grow,

those who taught him, those from whom he has learnt; as well as with the larger world around him which provides him with food, shelter, air, water, which provides him with everything, which spreads its beauty before him. The sky and the earth are there for him. This is his world, the world which created him and which is continuously created by him. The history of civilizations is the history of man. It is a history of creating a world of meanings, a world of significance, a world in which the cosmos - the natural and the biological - are transformed into something different which is not biological, which is not natural. The human being is born as a helpless child who needs to be taken care of; who needs not merely to be cared for, but also to be taught. The first thing he has to learn is language. Even before that, he has to learn the relationship with the mother who cares for him, who loves him, and by whom he is trained. You all know of the problems which a child undergoes in the process of this 'training'. The toilet training, the weaning; those who have studied it were surprised at the variety of the processes in which the child is gradually separated from the mother. I will not go into the details. It has been studied cross-culturally. Psychologists have studied it. It is a story of frustration and fulfillment. When the child seeks the breast, she feels fulfilled. When she is weaned, she is frustrated. You all must have felt the immense anger and rage in a child when she rebels against the mother - she bites her; she does everything; she goes into a tantrum. So the source of an ambivalent relationship with the world arises with the relationship with the mother. She cares and she treads; she frustrates and she cuddles and cares. This is our relationship with the world. We feel that the world -whatever it is - should care for us as the mother did, but we also know

that it continuously betrays us. The world, like the mother, disciplines us. It tells us: 'Look! You cannot do whatever you like; you shall not be given everything you want; it is not what you really need; you are under an illusion that what you want is beneficial to you'. The world tells the human individual that there is something beyond her, something for the learning of which one has to go out of her family, out of one's home. To learn, one has to go to school, college, *gurukul**; one has to go through apprenticeship; one has to learn a craft or a skill. This is acculturation of a formal kind, on top of the informal kind which takes place within the family system. You learn to speak properly, pronounce properly, write properly, do everything properly; you learn how to dress, how to get up, how to sit, how to walk. Imagine! Everything is taught; one is thoroughly disciplined and there is a punishment in terms of praise and blame; punishment which may be physical, non physical, cultural. If you are thinking about the human being, all these factors have to be taken into account.

What I am trying to suggest is that a human civilization, is necessarily made of structures of meaning, structures of significance, structures of making the world not merely habitable, not merely comfortable, but meaningful. How to cope with the effect of birth and death? How to cope with the effect of coming into being and passing away? How to cope with the effect of aging and illness? How to cope with the effect of responsibility? How to cope with all this? How to cope with learning? How to maintain what has been achieved? It is not easy. That which has been achieved has to be maintained since it cannot be transmitted to the next generations without

Gurukul - The guru's house; the traditional teaching institute*

maintenance. Friends, try to see how difficult it is to maintain and learn what has been achieved, and to transmit it. Every society is conservative. Conservatism is considered as a negative word today, but frankly, without conservation, no society can even maintain itself. Language has to be conserved. Numerous things have to be conserved, and in this process of conservation the cycle of generations comes into being, and it modifies inevitably. Not everything can be conserved. Things have to be selected, things are lost, things are modified. Things are modified and lost in every generation. Every generation chooses to emphasize differently, to see differently, to pass onwards different things. The point is that even in a process of conservation and transmission, modifications are an intrinsic, an inbuilt ingredient. We are conserving and modifying-innovating simultaneously. Therefore the attitude of the younger generation to the older generation, from which he has learnt, is always ambivalent. The younger generation respects the older one, but it also rebels against the elders just as the child against her parents. The new generation wants to grow, to become independent. I am thinking of one's attitude toward one's teachers, toward the elders. One is respectful; they have given her so much; but they are against innovation. They may sometimes encourage a little change, but they do not want radical questioning. Fortunately or unfortunately, each generation questions the preceding generation, and the older generation does not like it. The relation between the youth and the old is a perennial problem. Imagine! Young people are the future, and yet some think that they do not know anything. I have yet to find a teacher who thinks that he can learn from his students, or who admits that his

students have gone beyond him or that he respects them as equals. These are commonplaces. Why do I repeat them? Just to make you aware of a human structure as it evolves, as it comes into being.

Let me move on and suggest that there is a difference between civilizations and cultures. Cultures are everywhere: man cannot be conceived of without culture, without what he has built. But civilizations are few. Civilizations are based on writing. They reflect the transition from orality to writing, to literacy. I do not know if you have ever felt the difficulties which writing creates. I had the experience of teaching persons who did not know how to write, and then I saw the immense difficulty which must have ensued. We ourselves must have passed through it in our childhood. You have to correlate what you write with what you speak. Speech varies from individual to individual. To have a standard way of speaking a language is very difficult. In Sanskrit class, we were taught how to speak; I can make a distinction between small Ka and big Ka. Most people cannot; if you ask them to write, they will write big Ka; they cannot make the distinction. This correlation between arbitrary signs on paper and what is spoken is not an easy task. Another task would be to read what is written, and to read it properly. Imagine how much we are in love with the script. We call it language! A Bengali, or a Gujarati, or a Tamil, or anybody - they do not want to write in a common script. We are in love with the script, just as we are in love with a particular body of an individual. I am saying all this to present before you something which I have been troubled about for a long time. I want to share with you a concern. Whether this concern is justified or not is a different issue.

But let us share, informally. Let us think together. As I have already said, the number of civilizations is small. Some of you must have read Arnold J. Toynbee's work entitled *A Study of History*. He was probably the first person to classify civilizations. After the archeological investigations, we can practically speak of a history of civilizations, and as he said, it is time to reflect on them. There are civilizations which had passed away, which are dead. They have left remnants but they are not alive, like the Egyptian civilization, or the Babylonian or the Mesopotamian or the Aegean and so many others. The latest civilization to be analyzed and to be deciphered was the Maya civilization of South America. The dating of the earliest Maya civilization is 2600 B.C. I could not believe it. The Vedas are most conservatively dated around 2500 BC; Ancient Egypt is dated to about 3000 BC. But a civilization in South America around 2600 BC is absolutely unbelievable, yet a fact. The deciphering of the Maya script is an adventure in itself. The deciphering of all these scripts, the Egyptian, the Mesopotamian and others, which people have accomplished, is amazing. You cannot understand how much work has been invested, how difficult it must have been. Until you have deciphered a script, you do not know a civilization. Mere archeology gives you a lot, but unless there is language and deciphering you do not understand a civilization. But what does the deciphering really mean? What does writing mean? It is fixity of something which cannot be fixed. I speak, and the language vanishes. Sounds are vanishing all the time. I want to put them **there**, to make them permanent. It is what may be called the flowing stream of time frozen into static bits which can be held, which can be seen, which can be understood, which can be read. The story of deciphering scripts and the translation of

orality into literacy should be told and discussed. But this is not the story which I want to tell you today. Instead, I want to tell you something else.

Each civilization has been built around what we may call the dominance of a language. There has been Sanskrit, there has been Chinese, there has been Greek, and Latin and Arabic. There are not too many languages of civilizations. Today the pan-global emerging language is not Sanskrit, Chinese, Latin or Arabic. It is not French, nor German, but rather - as you all know - English.

Recently the Ninth East-West Philosophers' Conference was held in Hawaii and dedicated to the theme of 'Educations and their Purposes'. The very title of one of the papers presented in the conference, 'The overdominance of English in global education: Is an alternative scenario thinkable?' by Tze-Wan Kwan, demonstrates the problem. 'Is an alternative scenario thinkable?' asks the author. Can any other language except English be the basis of international communication? If a universal civilization or a larger civilization is emerging, then it must have a language of its own. And this language is gradually becoming English. Even Europeans who are proud of their languages, translate their works into English. A work in German or French, just like a work in Italian, has no international audience unless it is translated into English. This is a fact. Just as earlier, Sanskrit was the pan-Indian language. Imagine! Even the Buddhists and the Jains had to write in Sanskrit in order to be considered not merely knowledgeable, but to pave their way to the central arena of discussion in this country. When did the Buddhists start writing in Sanskrit? When did the Jains do so? The transition from Pali and what we call Prakrit into Sanskrit is an interesting story. Sanskrit was, and let me add that Sanskrit still is a

living all-Indian language of classical discourse, of intellectual discourse. We are not aware of it. I discovered it, and I try to tell my friends - look! English is one of the all-Indian languages of intellectual discourse; Sanskrit is the other. From north and south, from east to west, people can get together anywhere and talk in Sanskrit.

Whether we speak of the Indian, Chinese, Greek, Roman or even Arab Civilizations - despite great differences, there is also communality. Historians believe that around the sixth century BC something happened; something happened to man's consciousness. Concepts started dominating over the images. It was not merely Plato and Aristotle; it was not merely the Buddha and Mahāvīra; it was not merely the Upaniṣadic seers; it was not just Pāṇini; it was everywhere. Something was emerging. Poetry was being replaced by something else. Images were being replaced; symbols were being replaced; rituals were being replaced. Self-consciousness took over, and formulated itself, first and foremost in questioning. People started to question, in different fields, questioning based on concepts rather than on the old images and symbols. Argumentation and questioning have emerged, as well as logic or *Pramāṇśāstra* and reflection on language. Imagine! We live in language. We never think of the fact that language is a hidden structure. Friends, everybody knows the name of Pāṇini. Everybody knows about the early reflection on language in this country. This country has perhaps the privilege of having been the first civilization to reflect on that which makes the human being a human being, i.e. language. Take for example Yaska's *Nirukta*, his reflection on the Vedic language. I did not plan to discuss it with you, but I cannot resist

the temptation. We must know our civilization. We do not know our own tradition. I am saying this absolutely seriously. There are outstanding scholars and outstanding works unknown to us. Imagine! A tradition which starts with writing on grammar!

Who is Pāṇini? Why did Pāṇini write? Why has Yaska raised the question about language being noun-centric (*saṃjñā-pradhāna*) or verb-centric (*kriyā-pradhāna*)? Why has he raised this question? What is the problem he was pointing at? What is the problem with language? Why does he raise the question 'Is language translatable?' Can the meaning of language be conveyed in different ways? Imagine! A country whose first text, leaving aside *Nighaṇṭu* and the *Vedas*, first reflection on language, claims that language will be meaningless if what you think cannot be said in another way. And there is a name associated with it. The name is Kutsa. He is the one who has propounded this view. Indian thinking is not anonymous; it is varied to particular persons, and we must know their names, we must know their opinions, we must know their diversities. This country will never be known to itself unless it hears the diverse voices which are there; conflicting voices, but respectful voices. People respected others who were totally opposed.

A reflection on language is the strangest thing, because what is language? Language is not a natural object. If you do not know a language, it does not mean anything to you. You may hear people talking, but not knowing the language renders it gibberish for you. A language undeciphered is not a language. What is this deciphering? In India we found the hidden structure in language. I will not go into details about the notion of a hidden structure behind the manifest. The latent structure was

found in every civilization. The Indians found it in language. The Greeks found it not in language but in nature and mathematics. The reflection on mathematics focused on counting. Imagine! We all count and measure. It is the simplest thing: 1, 2, 3. Reflection on counting and measuring gave rise to something very strange: a world of infinity. I would not like to go too deep into the development of mathematics and the reflection on mathematics. Nevertheless, let me say the following: The extension of the realm of numbers is one of the strangest stories of man. How do we conceive of negative numbers? How was the world of numbers created? How do we conceive of fractions? How do we conceive of irrationals? How do we conceive of the imaginaries? The story of the extension of the realm of numbers is as interesting, perhaps more interesting than the discoveries of Columbus or the discoveries in Astronomy. They depend on observation. Astronomy-wise, you have to watch the heavens; Columbus had to go around the earth and the oceans; but in mathematics, the extension and discovery of a realm is a purely intellectual exercise, a compulsion of a thought to move forward. When it comes to addition, one can go on adding infinitely. There isn't a number which you cannot add. You can always add. Speaking of subtraction, if one wants the subtraction operation to go on infinitely, one needs negative numbers. If you want to divide indefinitely you need fractions. If you want to have roots, you need irrationals; and if you want to have the roots of the negative numbers, you need imaginaries. Imagine for a minute: the square root of a negative number cannot be either plus nor minus. What sort of number is it then?

The reflection on language led to a vast notion of hidden structures; and the question of the relations between languages, just like the reflection on the activity of counting and measuring, led to what we may call a movement forward. This went on for at least three thousand years, in numerous fields. This reflection was motivated by the conviction that there is something to be found; structures to be revealed; a whole world to be known, and a sense of distinction between truth and falsity, ignorance and knowledge, *avidyā* and *vidyā*, *ajñāna* and *jñāna*. Serious inquiry took place in the realms of knowing, feeling and willing. Let us focus briefly on action and feeling as realms of reflection. The reflection on action gave rise to the notions of 'right' and 'wrong'; the reflection on feelings gave rise to the notions of 'desirable' and 'undesirable'. The latter two are slightly different from 'good' and 'bad' or 'right' and 'wrong'. Supposing that I am envious or ambitious; in a sense there is nothing wrong in being ambitious; in a sense there is nothing wrong with love or *moha*[†] or *krodha*[‡] or *kāma*[§]; but I feel that there is something wrong. Imagine the two directions: reflection on action and reflection on feelings or emotions. The reflection on feelings resulted in the demand for a change in one's own consciousness, while the reflection on action resulted in the demand for a change in one's behavior or action. The reflection on consciousness, i.e. self-consciousness, resulted in what may be called motivation. The ideals of *Dharma* and *Mokṣa* arose from the fact that people, in India and elsewhere, realized that they are not what they ought to be; that their consciousness is not what it should be; that it is filled

Moha - confusion[†]
Krodha - anger[‡]
Kāma - desire[§]

with greed, desire, ambition, jealousy and all sorts of things. They felt that it should not be like this. There has been a long attempt to change one's consciousness in the direction of the desirable and one's action in the direction of the good. In this respect, take for example the Buddhist *Śīla*** . What do the Buddhists say? They speak of *maitri*, *karuṇā*, *muditā* and *upekṣa*†† . And what are the *yamas*‡‡? They are *ahimsā*, *satya*, *asteya*, *brahmacarya* and *aparigraha*§§ . What is man doing? He is suddenly discovering that he does not act as he ought to act. His relation to other human beings is not as it ought to be. His relation to the living world is not as it should be. The long discussion in India on the issue whether animal sacrifice, i.e. the Vedic sacrifice, is justified or not attests to the fact that even the killing of an animal became a problem. I will not go into further details on this issue. The feelings lead to discussion of the notion of the beautiful in the *Alaṅkāra-śāstra****, but this is another story which I will not go into today. Instead, I would like to return - because otherwise I will be lost in the jungle which I myself created - to our initial discussion of civilizations, and argue that not merely our civilization, but all the civilizations are facing today a radical crisis. This includes the western civilization. All civilizations are facing a similar problem. We have an illusion that the west does not have a problem with its past. Frankly I am sure that many of you must have seen the anguish and the concern which western thinkers have been having with their own

Śīla- moral principles**

maitri, *karuṇā*, *muditā* and *upekṣa* - 'friendliness', 'compassion', †† 'joyfulness' and 'equanimity'

Yamas- moral principles‡‡

ahimsā, *satya*, *asteya*, *brahmacarya* and *aparigraha* - non-§§ harmfulness, truthfulness, non-stealing, celibacy and non-greediness

Alaṅkāraśāstra - Sanskrit poetics***

civilization. We are hardly aware of the profound dissatisfaction; of the profound feeling that something is happening, which is destroying humanity. Not so much in us, but in the west. Take for example Heidegger, one of the greatest thinkers, or take anybody else - they do not know what to do with this, with that which is happening around them. Or take the latest example: Derrida's name is well known to everybody. Derrida died recently. Just before he died, he edited a collection of his articles and papers, titled in its English translation *Eyes of the University*. It is a strange title. But the subtitle is even stranger: *The Right to Philosophy*. Imagine a thinker in France, in Europe, saying 'The right to philosophy', as if this right itself is being endangered. And why 'Eyes of the University'? Because Derrida sees philosophy as 'the eyes' of self consciousness. Philosophy is reflection, self-reflection, reflection on everything, critical reflection. It is the heart of the intellectual enterprise. Universities have so many disciplines, but philosophy is the discipline which thinks about the other disciplines. It is a second order, or even a third order reflection. It is reflection on reason itself. It is reflection on the enterprise of knowledge; it is reflection on the enterprises of goodness, beauty, everything. Derrida writes 'The Right to Philosophy', thus suggesting that this very right is under danger. What is this danger? If a person in France, or a person in Europe, feels so, a person who is at the center of things, we should take it very seriously. We are far off. Our own concerns are marginal. Perhaps we are not even self-conscious about them, but he had to live in it daily, hourly.

I would like to take a brief detour to show you why Derrida, or why western intellectuals, or why sensitive intellectuals everywhere are really worried. The stories of the intellectual history of the last one hundred years, i.e. of the twentieth century, are amazing. They start somewhere at the end of the nineteenth century. Derrida himself has literally 'dug out the roots'. I mean, he and his writings are supposed to be and really are 'postmodern'. Postmodernism has destroyed everything. These people have destroyed everything. They have destroyed their own house, their own foundations. And now they are looking around, complaining at the debris which is around them. It is the strangest situation, where man has self-consciously, gradually committed suicide, and then he asks 'What is happening to me?'

The story started with the discovery of non-Euclidean geometrics. It was the biggest shock to the intellectual life and to man's reason. Euclidean geometry was the only geometry. Space was Euclidean and its axioms were self-evident. The story started, as most of you know, with the parallel postulate. There was a well known Italian mathematician. He asked: if we give up the parallel postulate - will the results be self-contradictory? He found that they were not self-contradictory, but they were bizarre, unbelievable and acceptable neither by intuition nor by experience. However, they were not inconsistent. The story is carried forward. Now it is a commonplace of knowledge that non-Euclidean geometries were formally shown to be viable and deductively coherent. Euclidean geometry was only one of the geometries possible. What happened to the house of reason? The house of reason suddenly found that there was

not one foundation, but many foundations at the pure deductive mathematical level. The axioms ceased to be axioms. They became postulates. This is one of the biggest transitions in self-consciousness of thought about reason. Reason is not self-evident. There is no self-evident truth. Reason is only 'if-then': if you accept x , then y follows. The story of non-Euclidean geometry is known, but its large impact on man's self-consciousness about reason is not documented. The story goes further: Can mathematics be safeguarded? This is the fascinating story of man's attempt to find indubitable foundations of mathematics. Let us turn to logic: the foundations of mathematics should be found in logic, because logic is self-evident. We have the laws of identity; Aristotle has formalized them. If we can reduce mathematics to logic, foundation will be given to mathematics and self-certainty to the laws of reason themselves. The attempt was made - it was a huge attempt - Russell's name is associated with it, and the history of the *Principia Mathematica*. A number of other people have also contributed, but the attempt has failed. The story of the failure is one of the greatest stories: man has discovered that there were no foundations to reason. This is what we may call 'the removal of foundationalism'. Man has discovered that reason has no self-evident, self-certifying, foundations. Reason was built on air, which could be questioned. There were no foundations of reason. Today nobody accepts foundationalism. It has been totally destroyed. Imagine! The attempt to find consistency and completeness through proofs, failed! The work of what we may call non-Euclidean geometry destroyed the very idea that you may find consistency and complete proofs in a mathematical system.

Now let me shift to language. The story of language started in the west pretty late. What is language? Even though Plato has written about it a little, I will not go into to the details. Firstly, the breaking of language occurs in literature. The work of Joyce is well known. *Ulysses* is a classic example of what is being done with language. But beyond *Ulysses*, he wrote *Finnegan's Wake*. If you have not read it, I suggest that you take some time off to look at the book and try to make sense of it. What is language? What is the semantic reference of language? Language is that which we can play with. Can we break the rules of grammar? There is of course the notion of deep grammar, but the artists or the poets or the novelists - they are struggling not to say something, but rather to say nothing through language. Take for example a poet like Mallarmé. You have to see what was happening in Europe. It was in Europe that the breaking of language, the breaking of everything has gradually taken place. You all know about Existentialism - what was happening reminds me of the theater of the absurd. What did the theater of the absurd do? It enacted the absurdity on the stage. The notion that life has no meaning has been voiced by hundreds of persons. What did Sartre say? 'Hell is other people'. Read his *No exit*. It is a beautiful play, masterly played, a true insight into the human situation. The last line says that 'Hell is other people'. Or read the novels of Dostoyevsky. All these people were shaking their own foundations. What was happening in philosophy was even worse. Literature is great, art is great but let's speak of philosophy. Philosophy is the self-consciousness of reason itself, because it reflects on every other discipline. There is philosophy of mathematics, philosophy of art, philosophy of history, philosophy of

everything. Now friends, imagine! The whole business of reason was centered in *lakṣana-vicāra*, in finding the essence, the 'right definition'. Aristotle's whole enterprise is about finding the 'right definition'. Ultimately knowledge is asking 'What is this?', and one answers 'This is this'; and when one says so it means that if this property ceases, it ceases to be 'this'. Thinker after thinker questioned this. There are no essences. Existentialists already said that existence comes before essence. Wittgenstein, one of the greatest thinkers, even questioned the notion of definition and suggested instead the notion of 'family resemblance' - that the same term can be applied to different objects which may have no common property at all. The idea of a common property or an essential property being shared by all the members of a certain class was not tenable. He went even further and said that the notion of an ostensive definition does not make sense. Ostensive definition means that you ask 'What is this?' and you say 'This is this'. You ask what is green and you point at the green, what is 'table' and you point at a table. What more can be a clear definition? And Wittgenstein said that it is not true. Both the existentialists and the non-existentialists broke the notion of essence as the heart of knowledge or reason. There was no essentialism and there were no foundations. And the last 'blow' was given in the self-conscious formulation of Derrida, when he said this is all 'logo centric'. He rediscovered the famous Logos which was discovered in Greece and elsewhere, and said that all past knowledge - two thousand years of knowledge - is mistaken. The entire enterprise of civilization is mistaken. Because civilizations are logo-centric, they are reason-centric; there is no such thing as 'reality', and there is no such

thing as language. Imagine the shattering of language, the shattering of the notion of self-evidence, the shattering of the notion of proof, the shattering of the notion of foundation, the shattering of the notion of essence. It all led to a situation where no statement could be said or maintained. The most representative figure of such a view is Richard Rorty. He claims that discussion is not possible. On the other hand, there are Habermas and others who claim that we should have communication and discussion. Rorty says that we cannot discuss because there can never be a common ground. This story is well known, that we are now left nowhere, that we have nothing to hold onto. Reason itself has been destroyed, there are no foundations, there are no essences, there is neither Logos nor Nomos. The Greek thought centered on values, on something objective to hold onto. Nomos means norms. We are left without norms. There is neither Logos nor Nomos, only Eros - unbridled and unchecked desire; total arbitrariness; do what you like! Act without any reason whatsoever! If you kill a person, it does not matter; if you rape, it does not matter. Imagine! This had been shown on the stage: murder and rape are justified, even self-justified, because there is no reason. Outstanding writers and thinkers have supported all this. And now we complain: what has happened? Why should we complain? Friends, we have come to a situation where everything goes. Even in India. You see, the whole attitude to reason has changed. We just do not have any foundation, essence, surety or common ground for discussion. We can only persuade. Only the rhetorical is left. But for that you must have language. Language itself is shattered, and it has been shattered by artists, by writers and by thinkers.

At a deeper level, as I have hinted above, knowledge was supposed to find truth. *Tattva* - what is *tattva*^{†††}? Even earlier knowledge was related to notions such as *kriyā*, *pravṛtti* and *sāmarthya*^{†††}; knowledge was supposed to enable me to do something, to undertake successful action. What is the relation of knowledge to action? What is the relation between truth and goodness? Where have we moved to? Knowledge itself is not seen anymore as the search for truth but as the search for gaining our desired aims. But isn't knowledge supposed to be something else? Should it not be neutral? Should it not be knowledge for the sake of itself? Previously, large parts of knowledge were not used at all; and if 'used', then knowledge was 'used' or related to liberation, to psychic freedom.

One of the fundamental problems about knowledge in India has always been formulated as: 'How can I change my consciousness in such a way that there is no greed in it, no desire in it, no malice in it, no jealousy in it?' But you all know what happens today. People preach for malice and are not ashamed for it. They consider malice to be alright. Everything is considered to be alright. What has happened to us? The latest turn is - well, all of you know what your children are learning, what your grandchildren are learning, what everybody is learning - commerce, business administration, business management, computer sciences. This is the rage of the day. This is the consciousness that is being formed now. This is what people desire, what they consider to be knowledge. You see, the notion of knowledge has totally changed. We live in an era where knowledge is management. Knowledge itself has to be managed. Management has become a resource, like

^{†††} *Tattva* - truth, essence, reality, axiom
^{†††} *kriyā*, *pravṛtti* and *sāmarthya* - action, activity and capacity or power

iron, steel, oil. Do you know what the function of this institute (IIAS) is? (Audience laughs) Perhaps you are not self-conscious enough. Perhaps those who have established the institute were not self-conscious either, because it is a western notion. There is a very interesting notion called venture capital. What is venture capital? It has started in America. Everything starts in America (Audience laughs) Americans are great experimenters, there is no doubt about it. If you want to understand the modern situation, go to America; but European thinkers are not far behind. Anyway, generally you invest in a profitable enterprise, or at least a possibly profitable enterprise. Venture capital is not like that; it is an adventurous capital. That is, I'm investing capital in more than one place, I split my investments over. I watch what we may call developing trends and technology directions, and try to figure out what might prove profitable in, say, ten years from now. I am splitting my basket. I have, supposing, several million dollars, so I split one million here, two millions there etc. I may lose; it's a gamble; but I hope that one of my various investments will be profitable. That is called venture capital. Now friends, we are like venture capital (Audience laughs). We are brought here so that one of you or one of us may say something significant. That is at least the hope (Audience laughs). Seriously, to understand contemporary approaches to knowledge, you have to go to the management sciences. Most of us ignore the management sciences, or at least do not think much of them. But I was recently woken up from my dogmatic slumber. A paper which I read has woken me up: knowledge is treated now as an object; it is divided and classified. How does knowledge begin? You have data. What is data? How does this data organize information?

Information is not data. Data is organized information. But information is not knowledge. How does information become knowledge? Even knowledge is no longer merely knowledge. Knowledge is now being translated into technology. How is technology to be dealt with? Technology must result in production. Production must result in marketing. Marketing must result in selling. This cycle starting from what we may call 'knowledge' is a whole process. Knowledge, as suggested above, has to be managed. You should not be surprised; when Kennedy said after the first sputnik: 'We shall place man on the moon in ten years', he meant what he said and kept his word. All the scientists, all the mathematicians, everybody was involved in this business; the business of placing a man on the moon. How was it done? Knowledge was generated. Have you read a book titled *Genius*? It is on the life and science of Richard Feynman, one of the greatest physicists of modern times. It is the story of physics after World War II, and the story is woven around the personality of this great physicist. One of the most interesting chapters tells of Einstein who wrote to President Roosevelt, letting him know that knowledge in physics has moved to such a point that an atomic bomb can be made. We are further told of Roosevelt's decision and the appointment of a committee under Oppenheimer. Their task was to build an atomic bomb. You must understand the ambiguity and the dilemma: these were physicists who were not interested in making the bomb. They were old-style physicists. They believed in knowledge, they believed in pursuing truth. They wanted to know what the nature of the universe is, what the nature of matter is. They suddenly found that their knowledge had reached a certain point where it could be used for what is known as weapons of mass destruction. It is an interesting story. These

people left their scientific pursuits, and joined together. Feynman was made in-charge of the project. He was a young man; the older people did not like it. And they did make it happen! It is the story of an older attitude vs. newer attitude. These people had worked for five years on the building of the bomb, and had succeeded. But then it was time, and this is indeed what they were waiting for, to go back to their scientific work. They felt that they were wasting their time with the bomb, literally wasting their time because they were not doing science. It is a moving story. What did Oppenheimer do when the war ended? He called about ten or fifteen leading physicists, young people, from all over, and asked them: Where do we go from here? Let's go back to our 'business'. Our 'business' is knowledge; our 'business' is not making bombs. But such attitude is now a rarity. Imagine this attitude, which is reflected in his meeting with these scientists; it would be something of an experience to read the minutes of that meeting.

So friends! The attitude to knowledge is nowadays determined by governments, large companies, industrialists. They determine what will be done with it, and how it is to be produced. Knowledge is no longer independent of the purposes which we want to derive from it. And the purposes are only two: economic profit and military. All knowledge, or to be precise, three-fourths of the knowledge people are engaged in today is funded and controlled. It is controlled by big corporations, big business centers, or funded for military purpose. What has happened to the seeking of truth? There is no such thing as truth. Power or profit! This is, to my mind, a very dangerous game.

Let us proceed to a second thing which has transpired. I have heard [in other lectures given at the IIAS in September 2005] references to Mahatma Gandhi. I am surprised. Gandhi is outmoded. He was indeed a great man. He did something great. But Gandhian society and economy cannot be established. It is a futile dream; you cannot have self-sufficient villages. A village today is integrated with the whole world through the internet. Let us be quite clear: the world has changed radically. Self-sufficient villages or persons, living on minimum - this is all over, passé! We cannot live on minimum. We are not *brahmacarins*^{sss}. We do not live on minimum. We want luxury! We want everything! Everybody wants everything. All past ideals of civilizations are absolutely passé. Unless we understand that the past attitude to knowledge, the past attitude to values and ideals of life and the past attitude to what constitutes beauty - all belong to the past, we will have no future! If we want to think about the future of civilization, we have to get rid of it, at a deep fundamental level. As much as we love the past, being in fact the children of the past, we have to get released from it. Take a brief example: What is the distinction between man and machine? What is the distinction between life and matter? These two crucial issues today are not merely being questioned, but the questioning of them results in technology which is so fast-developing, that most people are not even aware of what is happening. Take artificial intelligence - I don't want to go into details, but I would like you to see at least the work that is being done. I have recently seen two papers on the matter. We say that man is free and a machine cannot be free. 'Mechanical' means that it is 'not free'. But why cannot a machine be free? Let us make

a machine which is free. What is freedom? You have to 'operationalize' the notion of freedom. We have not merely 'operationalized' the notion of freedom, but built machines which exemplify some sort of freedom. There are different kinds of freedom. For example, freedom between different persons; there is a hierarchical system; you decide or somebody decides what is to be done, and then you follow it; I mean, given the margins of experimentation, you can do what you like. A machine is being built in such a way that the subsystems of the machine are given freedom within certain limits; a general end is being given by the programmer, but you are given freedom.

What I'm trying to suggest is that we must seriously consider the 'operationalization' of the notion of freedom, and to openly think of different kinds of freedom and the relation between individuals and freedom, as well of hierarchical structures of freedom and the way they are being translated into machine-building.

We feel emotions. Can the machine feel emotions? Prima facie it is an absurd and a self-contradictory thing. But I was both amused and surprised to see that people have decided to find out whether a machine can feel emotions or not. Now, how to go about it? The scientist is a strange animal, because he wants to do something. He says 'Look! We do give instructions to the machine; I can speak, and the machine records, the machine can act on it, which means that whatever you say is recorded'. But how do I express my emotions? I express my emotions by varying my pitch, my tone, the way I speak. What I say carries my emotions, and emotionless speech is impossible. It will become monotonous, i.e. mono-tone. That which does not vary in tone is monotonous, is dull. So scientists have built a machine or shall we say,

introduced artificial intelligence which records speech and acts according to the instructions. Now, supposing I speak in a certain way - the machine should be able to discriminate my emotional tones. If I am angry, it should be able to know that I am angry. After all, the animals do. Animals know your mood - if you are unhappy or angry - your cat knows, your dog knows.

Friends! My point is that artificial intelligence breaks down the distinction between man and matter, between life and matter. I do not know if you have seen the work on the mapping of the genetic information. I was surprised. You must see it. It is fun. Imagine! You are born and will get some disease at the age of forty. It can be predicted. After prediction you will perhaps want to do something with it (Audience laughs). When your youth ends, you can be made young again. All this is happening in the field of genetic information. Now here is a language of a different kind; a language which is determining what may be referred to as a process over a period of time.

So this is already happening. Therefore I am suggesting that all past civilizations are passé! Their foundations are no more. They lie shattered. A new civilization is arising, whose attitude to knowledge, whose attitude to truth, whose attitude to values, whose attitude to norms, whose attitude to feelings, is changing so radically and fundamentally, that we cannot even imagine what is going to happen. Let me just say one thing more: the foundation for everything was family, family's strength. Now, there will be no family. The family system will be replaced by cloning and all sorts of new reproduction-methods. Family is no longer needed. Family in the old sense of the word becomes impossible! Or take the learning process: in a learning process, the teacher was always central. But

things are starting to change. Let us remove the teacher because he is unreliable - teachers may have moods; teachers may come to the class or not; why to have teachers? We are moving into a very strange world, whose possibilities we cannot even understand. Nevertheless, one thing is clear: the new civilization will be very different, and hankering and nostalgia about past civilizations should cease. We will have new dreams, new aspirations, a new type of human being.

In closure I would like to touch upon one more thing: There is a book titled *The Spectrum of Consciousness* by Ken Wilber. It is an intriguing book. The author suggests that man has become aware of the fact that consciousness has changed and evolved in the past. This story about the change and evolution of man is not merely a story of the evolution or change in his body, but in his brain and in his consciousness. Hence, the question which the author rightly raises is, what is the future of consciousness? In this context, experiments which were undertaken, experiments in transformation of self-consciousness through consciousness, experiments which are called *Yoga*, have captured the central-stage of the international attention today. How to combine these experiments with objectivity is the problem, and perhaps will be the problem of the next civilization. Let me conclude with the following observation: We think that the so-called *sākṣātkāra* or *anubhava* or the realization of the saints, the self-realized souls, is the ultimate thing about consciousness. I would like to suggest that this is a part of our conditioning. We were born in this civilization, so this is our belief. However, it is not true! The self-realizations of the past, in different civilizations - after all, mysticism is not confined to

India alone - have become not completely irrelevant, but totally lost their monopoly. The past should not hold us. We should learn from the past, get inspiration from the past; the past should be used, valued, respected; not like the west, which has rejected its past (a theme to be developed in my next lecture); but let us not be identified with the past. Let us not say that everything that has to be achieved in the field of consciousness has been already achieved. The future is open! Let us not be bound by the past, whether in the *Alaṅkāraśāstra* or in *Yoga*, or in anything else. And let me just add that it does not matter if one's belief is true or false. If she really believes in it, she will act on it, and by acting, she - every one of us - brings reality to being. History is made out of innumerable decisions based on different interpretations or knowledge, which might have been true or false. Even in cases when it was false, it has brought something true into being. The history of religions is a classic example of the fact that things have come into being, institutions have been built, everything has been done, and yet, the present consciousness tells us that the beliefs on which they were based are not necessarily true. Yet that falsity has brought something into being. I believe that the notion of what we call 'illusion' or 'falsity' has to be seriously examined. These notions are closely related to imagination. Is imagination unreal? Imagination is an integral part of action, and as such it cannot be unreal. Friends! I invite you to take a closer look at the relations between truth, imagination, action and reality.

Thank you!