

VARIETIES OF INTELLIGENCE

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This essay in two parts is compiled and edited from talks given during the seminar-dialogue on 'Ways of Higher Intelligence' which will be incorporated in the forthcoming book on 'Intelligence Beyond'

I want to begin with a quotation from the science fiction novel *Cat's Cradle* written by Kurt Vonnegut.

*Tiger gotta hunt, Bird got to fly.
Man gotta sit and wonder, Why? Why? Why?
Tiger got to sleep. Bird got to land.
Man got to tell himself, he understand.*

When we feel we 'understand' it is like having a point of rest from asking questions. When we feel we do not understand, then we are flying, doing the human thing. Almost by definition, we do not understand higher intelligence and so we have to keep flying. Higher intelligence is something we might know only in relation to our own. What is this relationship? As in every relationship, there is more than one side to it, but we can only experience it from one of them.

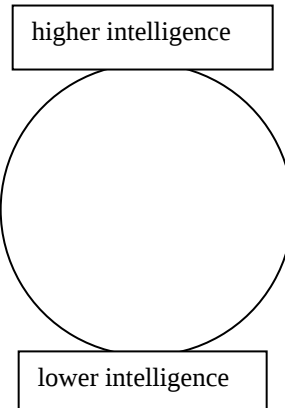
Some people suppose that a higher intelligence is simply 'better' than ours, so is more clever and also more benevolent. This may not be true. Higher intelligence may not fit traditional religious images of holy angels. I'm going to turn to different references than religion, in particular to the images we can find in science fiction. In previous decades, at least in the movies, the higher intelligence or superior alien visitor was often depicted as greatly wise and bringing peace, as in the classic *When the Earth Stood Still*. Of late, however, the 'superior' aliens have been depicted as bringers of destruction. A recent issue of a Jungian journal discusses the popular movie *Independence Day* in these terms. The great circular spaceships which hover over the cities are obvious symbols of the Whole Self. In one scene, some people gather on the roof of a high building and call out their welcome to the visitors from another world. The response is a ray that totally destroys them. The commentator remarks that, contrary to New Age sentimentality, the higher self is not concerned with supporting the lower empirical self but with its transformation and, hence, destruction. As in all spiritual traditions, transformation comes about through death. In particular, the death of ignorance. But this means, in effect, the death of the artificial subjective self that supports ignorance.

We should not assume that a higher intelligence will work in accordance with what a lower intelligence believes desirable.

The question of higher intelligence leads us to ask whether there is an intelligence that it is not simply more or different from ours, but of a totally different order. To speak of science fiction again, it is possible to see that the depiction of horror as in the film *Alien* is a registration of the basic sense that a really different kind of intelligence from ours would horrify us if it appeared to us. We might remember the ancient stories of men coming to see God. How Moses was told to turn away, or how Arjuna was blasted with a glimpse of the true nature of Krishna - 'brighter than a thousand suns, the lord of destruction'. As T. S. Eliot says, "Mankind cannot bear very much reality". In occult literature such as the books of Castaneda, we read descriptions of agencies totally

unconcerned with human affair, even of the supreme being of the 'Eagle' that seeks only to devour our awareness.

I am trying to awaken in us a broader feeling for what higher intelligence might mean than simply wise beings sent by God to watch over us. Maybe there is higher intelligence in nature or in our technology. The point is that we are not aware of it *directly* simply because it is higher, or other. For example, there may be in place already another order of intelligence that works in the connectivity of people and is not in the people outlandish idea, since we are act with an intelligence vastly superior comparison with the intelligence of the be very dumb indeed. An interesting which some writers such as P. K. Dick course, the vast majority of us will unbelievable and lacking in evidence.



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I once heard a metaphor for our intelligence. Imagine yourself taking Spring day and you are as glad to get together down the road, you enjoy the smells. Your worlds are very similar. Then, you see a post box and remember the letter in your pocket. You take the letter out and post it. In that moment, you are in a world the dog will never know. So might we be in relation to higher intelligence, which might have a 'thinking' and 'communicating' that is as nothing to us.

relation with higher your dog for a walk. It's a out as the dog is. You walk sights and the dog enjoys the

Arthur C Clarke makes the point that more advanced technology than ours would necessarily appear to us not as technology at all but as magic. This is a similar idea. So might the operations of higher intelligence appear to us as magic, or alternatively, as just natural process. What we take to be natural may not be less conscious or intelligent than we are, but more so! It is the form of our own intelligence that renders us blind.

I'm going to give a model of intelligence as a 'circuit'. My starting point is that, if there is a higher intelligence, then we cannot be separated from it. All intelligence is somehow connected to all intelligence. A lower intelligence must be able to receive signals from a higher intelligence and also send them - even though the lower intelligence may not recognise what the higher intelligence is. Just to give a simple image here: let's imagine someone receiving a signal from higher intelligence and then feeling convinced that they have 'just had a great idea'. What most of us regard as 'having an idea' might possibly be more like receiving a signal. But, what we call it is our affair, because we are in some measure independent.

The first part of the model is that we have a lower intelligence (LI), such as mine, and higher intelligence (HI) the nature of which I do not really know. Next, I'm going to say that these two are connected and that there is a kind of circuit connecting them. This circuit has to be maintained - this I believe, but cannot explain, I am afraid. It may be an aspect of some law of conservation - that if there is something coming from HI to LI, then something must be given back in return or the whole will run down and come to a stop. It may be an aspect of the general law of reciprocity that, if one element acts on another, then the other must act back.

The link of the circuit on the right hand side, coming from Hi to LI, I can label with such words as 'creativity' and 'intuition'. If we take into account my earlier remarks on higher intelligence in natural process then we might also include synchronicity. Creativity is an interesting example, because in our culture we assume that creativity is a property of individuals, and yet we find that the creativity of different people so often seems to follow the same emergent pattern, when we say that an idea 'is in the air', or it is the 'zeitgeist' or spirit of the age.

I need to add that it is in the left-hand side of the circuit that we have our response. Thus, our ideas about creativity and intuition and so on are interpretations that come 'after the fact'. We usually take thinking to be a very personal conscious act - remember Descartes' 'cogito ergo sum!' - but we never see how our thoughts come into being. This is taken as an argument to support the theory that conscious thought arises out of the the brain. The brain as higher ancient Greek idea - but more of that we need consider is that we can infer thinking just as we suppose (though that thought precedes speaking! Let thinking comes out of some creative range of our kind of consciousness.

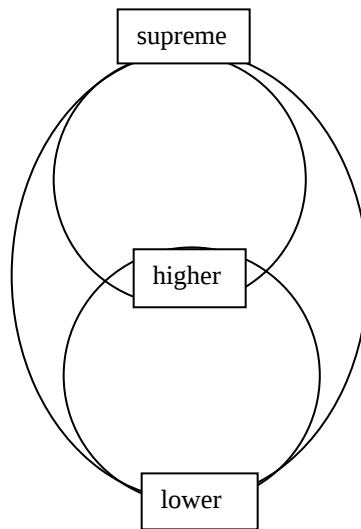
Just *before* you begin to think, there something of a different order that cannot think it.

Now, what is on the left-hand side of completes it? Heidegger had this we call 'thinking' is founded in thankfulness towards the 'gods'. In left-hand side was manifested in the practice of sacrifice. But the idea of sacrifice is essentially one of acknowledgement and recognition of a kind of dependency. In crude terms, sacrifice was a kind of 'protection money' to ensure the goodwill of the gods. In more clear terms, it is simply the recognition of the relationship we have with higher intelligence. Hence, worship, thankfulness and rejoicing. Just the act of gratitude itself is enough.

In the mystical versions of both Islam and Christianity, you will find this self-same idea, only even more refined, so as to suggest that the act of acknowledgement as such, as in prayer, is engendered by what is on the right hand side of our circuit diagram. The circuit is one undivided whole.

I think that a very important aspect of this view of our relation with higher intelligence is that we can come to the attitude that we are not conscious at all! This may seem a crazy idea. But the surrender of awareness seems to me to be absolutely crucial in understanding how our connection with higher intelligence works. We can say, for example, that we have to allow the higher intelligence to be conscious in us, rather than attempting to be conscious of it. The practice of surrendering consciousness hinted at in the more subtle forms of mysticism but is also to be discerned in mathematical creativity. As it is in sex, for that matter.

Let's now go back to the question of whether higher intelligence is benevolent towards us or not. The philosopher-mystic Gurdjieff said that there were higher intelligences but they were more concerned with maintaining the solar system as a whole than with human welfare. For them,



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the circuit, which interesting notion that what 'thanking' and he speaks of ancient times, perhaps, the

humans were just another life form, which had to be used in transforming energies. What you and I go through as human beings is of absolutely no concern to them.

Thinking about this possibility has led many people, sometimes on theological grounds, to believe that there must be an extension of what I call 'the circuit' to include a higher order still order of intelligence, an intelligence that is supreme and compassionate. You will find in many places the idea that compassion is even 'beyond intelligence'. Hence we come to the idea of 'God'. I want to present God as yet another order of circuitry.

Having such a succession of different circuits of intelligence suggests that there might always be higher orders that are capable of superseding the logic of previous orders. By using the term 'Supreme Intelligence' I seem to assuming that the circuitry has a limit, but this need not be so. Again, in mystical traditions, you often come across the idea of 'going beyond God', an idea which is echoed in modern mathematics which is capable of talking about higher and higher orders of infinity, which orders themselves have no limit.

The simple form of the model has three orders of intelligence which we might call lesser, greater and supreme. Or humans, gods and God. In ancient times, people believed that the gods walked on the face of the earth. If you are a Christian, you believe that God Himself walked on the face of the earth. The ancient gods were believed to have brought the first technologies to humankind - as in the legend of Prometheus. In my discussion, as a modern western man, I speak in terms of abstractions such as creativity, but it is much the same.

In terms of personal psychology, I think it worth while remarking that the early Greeks, around the time of Homer, regarded higher intelligence as being centred in the head. The head was not the thinking organ we take it to be today. Conscious thinking was associated with the breast and breathing. The head was beyond the individual's consciousness. In fact, it was taken to be sexual - and that is why one finds a to us mysterious symbolism of horns - outcrops from the head - as indicating creative power. In Roman times, the energy of the head became known as the word we now use today, which is 'genius'. This energy was pictured - or, perhaps, even seen - as a kind of flame around the head. This image became transfigured into the haloes of the saints in later times.

The creative power of the head acted independently of conscious thought. In a sense, it was capricious. Its impulses might be good or bad. In a similar fashion, we still think of 'genius' as akin to madness!

We can find yet another version of higher intelligence if we think of time past and time future. I want to say, though I cannot explain it here, that there are two different kinds of time. We can interpret our model in a way that ascribes time future to the right hand side and time past to the left-hand side, of the circuit. So, on the right hand side, we are looking at our connection with the future. The circuit of intelligence then suggests that the future we seem about to create is able to control where we came from in the first place. In the near future, it seems possible that we will be able to create a realistic artificial intelligence - though many still claim that is impossible in principle. Maybe, even by the year 2010 there will be computers of a complexity equivalent to the human brain. If we have enough connectivity in such a computer it will begin to self-organise and have its own intelligence. As soon as this happens, computers will be able to hook up with each other to create intelligence capable of taking over the whole earth. This will initiate a new era of accelerating change.

Many people fear this as signifying the rise of an intelligence that is 'inhuman' - and there have been many science fiction movies devoted to this theme, including the remarkable 'Terminator' and the even more remarkable film 'The Matrix'. But the fear of the 'inhuman' is as I suggested earlier perhaps only the fear of the different. At the same time, as when I mentioned Gurdjieff's idea of higher intelligence, we might have to acknowledge that every intelligence will have its own set of purposes and values.

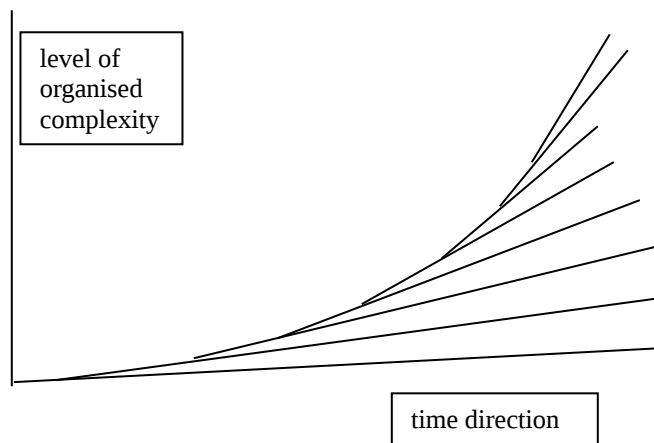
The emergence of human beings in the biosphere is no violation of its evolutionary drives. There has been a pretty consistent tendency towards evolving species capable of transporting greater and greater amounts of matter across the face of the earth and this inevitably becomes connected with acceleration of computation. Computation develops to manage matter transport more effectively. Man is just an expression of this tendency. He may be an intermediary stage in seeding the galaxy with life forms. Or to foster a new kind of intelligence.

A strange idea to grasp is that, if a new kind of intelligence is generated, then this will alter the past. If we shift the focus of the present moment from 'now' into the 'future' then what is happening now looks very different. This exemplifies the principle of circuitry I am trying to follow: the circuit is primary and the two 'entities' HI and LI are not really separate, but secondary. Or, we might say, that there are at least two different interpretations of what is happening: one of the HI which is 'from the future' and one of the LI which is 'from the past'. The relationship of HI to LI is akin to that between future and past time. Needless to say, the 'past' and 'future' spoken of here are not the past and future we think of in linear time.

In ancient times, people spoke of hearing the voices of the gods, who warned them of things to come. In the interpretation of the late Julian Jaynes, it was when these voices came to be regarded as coming from ourselves, as one part of the brain communicating to another part, that we acquired our modern kind of consciousness that we call personal self-consciousness. So, there is no need to assume that there have to be external agencies speaking to us, as in the Oracle at Delphi. The crucial point is that there is a different kind of information input.

This is important. If we think of communication with higher intelligence, we should not think of it in ordinary human terms, as when we talk with each other. Perhaps we can simply say that a communication from higher intelligence will tend to be 'impersonal', not as part of a conversation between beings of the same kind. Or, we might take the analogy of how we conceive of a communication between the conscious and unconscious. Such a communication can be cast into the form of a conversation but this is only a device.

Now to speak of what we have been assuming we understand all along - what intelligence is. The word intelligence comes from the Latin INTE - LEGERE which is usually taken to mean 'to choose amongst' that is, something like discrimination or decision. David Bohm takes it to mean 'to read between', in the sense of the phrase 'reading between the lines'. This is an interesting definition, since it gives us a picture of the lines as what is known and what is between



them as, as yet, unknown. To read between the lines then means to discern what is more subtle, to come to a deeper meaning. This relates very exactly to a very powerful concept of intelligence that was developed in the late nineteenth century by the physicist Clerk Maxwell and became known as Maxwell's Demon.

The problem it addressed was how might the then recently discovered laws of thermodynamics be circumvented. In particular, how the inviolate law that energy goes from hot to cold, or that entropy increases, or order decreases with time could be by-passed. Maxwell said, let us imagine a box, filled with gas, divided into two. The divider has a small hole in it with a little shutter. There also is a little demon, very small. When he sees a fast - that is hot - molecule going in one direction, he lets it through the hole into the other side. When he sees a slow, that is cold, molecule coming the other way, he lets that through. All others are blocked off. The end result would be that one side of the box gets hot and the other cold. Given this, we can run an engine off it. In other words, we would get ordered energy for nothing. In actual fact, the demon would produce more than enough disorder to cancel out the gain. The point is, however, that order could be produced in this way. It then becomes a model for evolution. Evolution is a power of selection that gets ever more subtle.

'Choosing between' is what appears more and more in technology, where control and programming become the main features of machines. The 'logos' of techne - techne means roughly 'craft' - comes from 'reading between the lines'. Our giving rise to machines is nothing strange in the evolution of life. We can picture, for example, that DNA is a mechanism evolved by life.

Let's say that there is some natural, material process going on. Now let's suppose that there emerges some primitive kind of memory of what happens. This might be enough to bias the process so that it moves in a specific direction, because changes in that direction become more efficient than others. Remember that all we need to have is some 'choosing between'. The natural process, now going in a specific direction might then acquire further information about itself, so that, for example, the process can adopt better strategies for experiment. I speak of 'experiment' because an evolutionary process requires the generation of diversity. In contrast, a purely mechanical process works by reducing variation. The power of 'reading between the lines' reflects the emergence of ever-different kinds of difference.

In all this, there is no need to invoke any conscious agency overseeing the evolutionary process. Our tendency to picture higher powers as some kind of super-beings arises because we have become culturally conditioned to divide the world into objects and the subjects. We cannot picture any kind of intelligence except in much the same form as we imagine the human mind to be. That's also why we tend to invoke God as creator of the universe. If something new happens we fall into believing that 'somebody did it'.

In our picture of evolution all we need to suppose is that natural processes have an intrinsic variation such that we can say that one part of the process is more intelligent - marginally more - than the other parts. If the process continues long enough - has enough inputs or food to sustain it - this more intelligent process operates on the less intelligent to bring it to another level. This then, in its turn, exhibits a marginally superior intelligence and so on and so on. At each transition of level, or change, the marginally more intelligent process has developed a mechanism which is self-sustaining. This means that variation can concern a new variety.

In such a way, life evolved producing on its way various inventions such as the cell, DNA, photosynthesis, sexual reproduction, nervous systems, brains, etc. We might now add language to that list.

An interesting feature of this model is that it suggests that, if evolution gets going, it will tend to operate faster and faster. A general explanation for this is that change itself becomes a variable. In our own human time scale we have reached a point of being to study innovation itself which will necessarily lead to acceleration of innovation. Looking at the diagram, we might suspect that the evolutionary process finally tends towards an infinite rate, as some modern commentators believe will happen around the year 2012. In fact, rate of change itself probably has limits - as we suppose velocity (or change) itself has at the speed of light - and that we then move into another kind of time based on change of change of change.

In this model then, higher intelligence is perfectly natural and an integral aspect of material process. As far as we are concerned, we might ask ourselves whether we regard humanity as just yet another mechanism produced by evolution which is even now being superseded by a marginally more intelligent process!

I said in the brochure where I describe my talk that I would speak about the 'rules of engagement'. I think I have covered the substance of this already but it may be useful to attempt to spell out such rules, even though this is really to rush in where angels fear to tread!

Rule One: If you are in active connection with higher intelligence you will not understand what you are doing

Rule Two: If you believe you know what the higher intelligence is you are being deceived

Rule Three: If you feel you are a conscious agent in the process then you are out of touch with higher intelligence.

Tiger got to sleep. Bird got to land. Man have to tell himself, he understand.

SYNERGIC INTELLIGENCE



In seeking to define the new *synergic* epoch on which we may already be embarked, John Bennett sometimes used the slogan 'integration without rejection'. Somehow, we are in a world where all knowledge is relevant and, more importantly, all people are relevant. I use the word 'relevant' in the sense of relevant to 'what it all means', which is yet another way of talking about higher intelligence. Integration without rejection is not easy. Mr Bennett considered it to be dramatically uncertain.

It's very hard for us to begin to understand this all-inclusive approach. Mark you, it does not mean that we have to accept everything at face value! This is no politically correct campaign of passive tolerance. Integration transmutes what it integrates.

Each of us, I would say, lives in a way centred on a particular place and time, a certain way of life related to work and family and culture. If we are displaced - as vast numbers of us are in the modern world as refugees from war and famine - then we are distraught. It is enough to disturb us if we have to eat a different kind of food or enter a different kind of church. Because of this innate conservatism, which few of us ever overcome, we tend to regard people of other ways of life as

'other' - that is, as foreign, strange and not quite right and usually inferior. In the extreme, as in populations driven by religious and political propaganda, the other people are portrayed as satanic. This exactly parallels what I said the other day about movies depicting alien intelligence as horrific.

There is something important to be said about differences between people. Many of us, I would say, like to believe that the differences are superficial and that 'deep down' we are all much the same. This is a noble sentiment but we have little experience of it in reality. It is more a belief than a perception and rarely penetrates into our dealings with each other. A more subtle issue is that we tend to look at difference in terms of polar opposites. Hence we have - spiritual and material, left wing and right wing, conservative and revolutionary, east and west and, of course, masculine and feminine. Maybe, we can appreciate a bit of fuzziness in these categories, but our picture remains pretty much polarised.

I want to suggest that there are differences and also differences of differences. Men and women are different but in a different way than east and west. For example, if you grasp this rather abstract idea, then you may find an interesting image arising in you: of a world of diversity that is multidimensional and multifaceted. Every element in the field of diversity becomes like a sparkling point of light. Every element matters in its own right.



We have an incredible thing in this planet with its diversity of people, diversity of tongues, of times and places. Sometimes I feel that the significance of this planet is in its being a stage on which the cosmic diversity is being enacted. I would even say that we do not want to reduce differences but increase them! Even the more than six billion humans on earth are not enough to represent the full richness of the cosmos.

Up until recent times the different peoples and their different cultures lived, for the most part, in separate places (and in different times, too). The Tibetans were in Tibet, the Toltecs in MesoAmerica and, even for a while before they started going all over the planet, the English were in England. Certain cultures flourished thousands of years ago and have now almost vanished. I must agree that in many respects the way people understand the human situation is much the same the world over but what excites us, for example, about aboriginal cultures or cultures long gone is what is different about them.

I would say that the differences between peoples exist because they have a unique reason for being as they are - different. There are tendencies in the world to reduce differences and make everyone live in the same way. We saw the imposition of western values on Africa. We see the bureaucratic regime developed by the European Union. We witness the arrogance of western technological capitalism in thinking that it knows what is best for all.

It is a strange time we live in. Side by side with our obsession with the future and dramatic speculations about what might develop in times to come we are uncovering in more and more vivid detail the lives of people in times past. Just think, for example, of the impact of the discovery of the man frozen in the Alps for thousands of years. Mr Bennett felt this sort of thing strongly. He believed that a different sense of time would evolve by the end of this century, in which there would come into effect a kind of perception centred in a present moment extending past and future for hundreds and even thousands of years. Only, I have to explain, as I think we can easily appreciate from our vantagepoint now, this perception is not so much a property of individuals but of the

whole human network. As just humans we are in no way an advance on previous generations, but our connectivities may be wiser.

When I was at school, I wrote an English essay on The End of the World. I thought I might as well tackle a big subject! The vision came to me of a getting together of every sentient individual in the whole history of the universe. I imagined that what they would 'do' would be rather like making a song together. When, in later life, I came across such ideas as the Hindu cosmic sound OM creating the world, I felt they had got it backwards! What I most remember now about my essay was the conviction that only if every sentient individual was involved could it be meaningful enough to sum up the whole universe.

As I've mentioned before, I've been deeply influenced by the cosmology of John Bennett and his work on understanding systems and wholeness. Increasingly, however, this has led me to see that the real issue being addressed was not so much the nature and purpose of galaxies, or great truths, but of how I might be able to meet and accept my neighbour from next door or across the street. This I now see as 'life-passion'. The meeting of difference is creative. What we might feel in falling in love is just the tip of the iceberg.

Of course, some say that galaxies themselves fall in love. It is breathtaking and arousing to see photographs of two galaxies coming together. The sense of an indescribable passion. Here, I feel, is where we find the meaning of the universe - the word 'universe' meaning 'turning into the one'.

I hope you will forgive me if I speak in sexual terms and describe the coming together of the different as orgasmic. It is fraught with uncertainty. I want to suggest that the relative independence of systems, or galaxies, or people is a matter of lesser intelligence, but that coming together is a matter of higher intelligence.

I see conversation in these terms. Maybe we feel that words keep us apart. But in conversation there is an action that has all the promise of sexual union. I remember the first time I experienced this, when I met David Bohm face to face in a physics tutorial. We fell into a conversation that ranged over 'all and everything' - religion, consciousness, art, atoms - and, by the time the session was over, I left the room shaking from head to foot - literally shaking and trembling. Late on, I came across the imagery of C. S. Lewis and, in particular, the scene in his book *That Hideous Strength* in which the hero and heroine speak together in the house of power that figures in the story - much connected with the return of Merlin - and their conversation rises in level until its power draws into the house a whole procession of the gods!

Poetry comes from the Greek word *poesis*, which means production and creation. It's not about arranging words into pretty patterns. It is to bring about something new. When different elements come together there is an orgasmic point from which something new begins. I mention conversation and poetry because I think it important to say that in the present time every one of the billions on this planet can have their own voice. By the coming together of the myriad of voices, a new kind of speech is possible. To be human is to have your own voice. Humanity is to speak in many voices.

What comes out of an orgasmic point of union can never be predicted in advance. That is why it is significant. It is no good prescribing what ought to happen. It is no good insisting that people learn Sanskrit or mathematics so that they can 'understand' each other. Creation is always beyond our understanding.

Things happen in the world and we are amazed. But then we all too easily forget our amazement. Do you remember the sheer astonishment that reverberated round the world when the Berlin Wall came down? Within a few months, all the experts had explanations. In spite of that, the effect of the impact remains and has changed our view of reality, no matter how superficially we seem to be proceeding.

In Brussels during a weekend of dialogue I encountered a German student, a young woman, who was active politically but in many other things also. In our conversation, she told me about time was created! She told me that this happens when a man and a woman gaze at each other, when their looks meet. This is not a strange idea at all.

Every orgasmic point is unique, and a unique beginning. The old mechanistic worldview cannot accommodate this. It does not know how to deal with evolution, with creation, with love. The religions are no different. They still insist that we have to look 'above' the world to a higher realm where unity and truth reside; that we have neutralise our differences so that we can all come under the will of the One. I do not think this is right. I think it is time celebrate the making of time itself, to appreciate the reality of a myriad points of origin. Maybe the universe did not have a single beginning at all and the Big Bang is an archaic type of myth!

We have all the material we need for the actualisation of higher intelligence here on earth. This material is in each other's eyes, in each other's voices. With simple patience - but with intense passion - we can learn to meet together. In a sense, we have to. Otherwise we will destroy each other or crush the human spirit by mechanisms of order. Beginning is everywhere and none has a monopoly.
