

The following was adapted from an informal talk given by professor Bohm in Santa Monica, California in 1981. Also included are several brief passages from two additional sources: Thought As A System - 1990, and Changing Consciousness 1991.

We are faced with a breakdown of general social order and human values that threatens stability throughout the world. Existing knowledge cannot meet this challenge. Something much deeper is needed, a completely new approach. I am suggesting that the very means by which we try to solve our problems is the problem. The source of our problems is within the structure of thought itself. This may seem strange because our culture prides itself on thought being its highest achievement.(T)

Almost everything we see in the world was created by thought, all the cities, the buildings, science, technology, and even most of what we call nature. Farmland was created by thought, so were factories, airplanes, nations and governments. Thought is very powerful, and has created many good things, but if we don't notice how it works, it can become very destructive, as with the present danger of nuclear war, pollution and mass destruction of natural resources.(C) Therefore, it is necessary to look at the structure of thought and knowledge, to see what the problems are and to explore the question of insight, which is required to bring knowledge to order.

We are all familiar with abstract knowledge stored in memory; in books, in records and computers, but knowledge goes further than this to include all sorts of skills. And there's tacit knowledge, that is, without words. Another part of knowledge is belief. Beliefs motivate us and are based on presuppositions. Our whole approach to life is full of presuppositions. They affect everything, our actions, our thoughts, our feelings, our urges, desires, and motivations. Presuppositions have an unconscious yet pervasive effect on our whole being. We may have presuppositions of the inferiority of certain kinds of people, whatever they may be. We are very likely then to perceive and experience them as inferior and treat them accordingly.

This, of course, is prejudice or pre-judgment. It is a presupposition. Therefore, thought and knowledge are active. They are participatory and affect everything, the way we behave, the way we respond, perception, every part of our life.

Information Takes Over

I suggest that we don't decide what to do with information. Information takes over. It runs us. Thought then creates the impression that it is our servant, just doing what we want it to do. That's the difficulty.

Knowledge, as it actually exists, is an undivided whole. It's in flowing movement, an ongoing process. But there is a tendency to say that only correct knowledge is active and incorrect knowledge is no knowledge at all.

But at any moment knowledge is a mixture of what is correct and what is incorrect. Often you cannot tell the difference and treat them both the same.

We are saying that thought is not merely the intellectual activity. Every reaction to thought is simultaneously emotional, neurophysiological, chemical and everything else. And it passes between people - as one whole process all over the world.(T) The point is, that memory is something you never see and in many ways has been interchanged with perception. The movement of the mind is far too subtle, complex and rapidly moving to be grasped by thought. So we are caught, responding from memory without knowing that this is actually happening. Our perceptions are shaped and colored by memory in ways that are not conscious. This evidently leads to irrelevant actions and ultimately to conflict.(C)

This can be changed by direct perception and experience but in most cases this change is limited to what fits the overall context provided by past knowledge, be it correct or incorrect.

From time to time challenges arise however, which cannot be met by the existing framework. What is needed then is insight. Insight means "to look within." It implies looking into the essence of what is to be known and simultaneously looking into the mind that is engaged in the act of knowing. This new perception then permits new forms of response that may meet the challenge.

Knowledge Is Limited

I have suggested that today's challenges cannot be met by existing knowledge. Attempting to solve the environmental, social, cultural and ultimately political problems with the crude and fragmented structure of thought which is now common will never work. The point is, knowledge is limited. And proper application of knowledge requires that knowledge know its limitations.

For example, suppose you have a computer with a "virus" that is doing all sorts of crazy things. A number of computers could soon become so completely occupied that they no longer respond to the programmer, and necessary programs may even be destroyed. This is a good analogy of what has happened to the mind. This "virus" has communicated itself throughout society, and the brain is thoroughly occupied, as well as being disrupted in its function.(C)

As a result, intelligence which can be compared to the programmer, is no longer able to properly affect the brain. We are overwhelmed by all sorts of meaningless misinformation, and the more television and newspapers we have, the more rapidly the virus spreads. I am saying that we need a perception or insight, which is not dependent on memory and therefore able to see the limitations of thought and knowledge.(C)

One of the best ways of understanding what insight means is to look at certain theories, especially those which deal with universal order. The word "theory" comes from the same root as the word theater. It means to look, to make a spectacle. You could say a theory was originally a way of looking at the world. The idea that theories could be proposed and discussed freely began with the ancient Greeks. Before that time, theories of universal order were incorporated into religious systems which were not freely discussed or questioned. The Greeks proposed and discussed, with great passion, a wide range of fundamental theories. In these discussions a certain notion of universal order developed which was carried forward into medieval Europe.

It was believed that heavenly matter, being most perfect, would move in perfect orbits, and the most perfect orbit was considered to be a circle. Actual observations showed, even to the ancient Greeks, that the planets were not moving in circular orbits, but this did not prevent them from holding onto the idea of perfection. Rather, they accommodated the idea by saying they are circles superimposed on circles called epicycles. By adding enough epicycles you could still account for the heavenly motions and retain the notion of circularity. In a deeper sense however, it was an evasion of a fundamental challenge.

One reason why observation didn't lead the Greeks to question increasing perfection was their belief that reason was of highest value, while the senses were regarded as unreliable and deceptive, which they often are. The very idea of universal order also generates strong feelings and any challenge may be sensed as a threat to the whole of existence. Therefore, there is a great reluctance to question notions of universal order.

Toward the end of the Middle Ages Roger Bacon suggested that observation and experience could criticize ideas that appeared to be reasonable. This was revolutionary and the beginning of the scientific approach. It made it possible to correct the Greek bias toward reason and to limit the extreme power of knowledge, which at that time was so great that nothing could really challenge it.

As this approach began to take hold, observation and experience accumulated showing there was nothing particularly perfect about heavenly matter. In general, people were not aware of how this knowledge was a fundamental challenge to prevailing ideas about the nature of matter. Newton sensed this challenge and was the first to face it fully.

According to the story, he saw an apple falling, and by implication must have asked himself, "Why isn't the moon falling?" And his answer was very simple, "The moon is falling," and, indeed, because all matter is basically the same, every such free body is falling toward every other, which implies a universal force of gravitation. This discovery was a flash of perception, an insight.

Without Passion

The Mind Cannot Go Beyond Its Habits

Newton's ability to have perceptions of this kind indicated a quality of genius that is not at all common. This quality involved an intense interest in questioning, with true passion, what was commonly accepted.

When this passion is absent, the mind is in a state of low energy and cannot go beyond certain habitual patterns in which it feels comfortable, safe, secure and respectable. It cannot, therefore, face the challenge of questioning basic ideas.

In Newton's time it was commonly known by scientists that celestial matter was basically similar to earthly matter. But this was placed in one mental compartment and not allowed to disturb other compartments. The question is, how could people maintain these compartments which allow two contradictory ideas to comfortably exist side by side?

Newton's ideas worked so well that his whole structure was accepted as absolute truth and dominated physics until the early 20th Century. Very few scientists had the energy of mind to question ideas with such great prestige. Einstein however, when he was only 15 years old, asked himself the question: "What would happen if an observer were to move at the speed of light and look at a mirror in front of him? The light would never leave his body and would never reach the mirror so he would see nothing." This paradox shows deep insight into fundamental questions of physics. The energy of insight is revealed in Einstein's ability to question presuppositions of common scientific knowledge. Those who knew Einstein will agree that his work was permeated with great passion, and it was this passion that made possible the dissolving mental barriers.

Knowledge Is Full Of Barriers

The point is that knowledge is full of barriers which are very active. In the case of special relativity, one of the main barriers was Newton's belief that any velocity could be reached and overtaken. Einstein did not mean to disparage Newton with his questioning. Rather, he said that if he saw further than Newton, it was because he stood on Newton's shoulders. Newton himself showed a similar humility when he said he felt like a person walking on the shores of a vast ocean of truth and picking up a few interesting pebbles.

Those who followed him however, treated these pebbles as absolute truth for several centuries. After a long period of successful application of scientific knowledge, or indeed any kind of knowledge, acquires a certain pride or hubris, which is the result of an unconscious presupposition of absolute truth. It takes immense energy and insight to dissolve this sort of hubris or arrogance, which is one of our greatest mental barriers.

As I said, knowledge is not just an accumulation of information waiting passively. It is an active and often dominant process that controls the general operation of the mind, without our being conscious of it. And it takes a high level of mental energy to be aware of this activity. Otherwise, it takes over, which is what it has done.

I propose that the essence of insight is this mental energy which perceives these subtle and powerful forces of knowledge, the emotional, social, intellectual, and still others that are beyond description, which make us very reluctant to give up fixed beliefs. When this energy is present we could say that the mind is free of certain blocks that are inherent in knowledge. I want to emphasize that the general action of insight is in dissolving blocks and barriers, which allows the ordinary faculties of the mind, such as reason, to give rise to new ideas and approaches.

Knowledge Must Yield To Fresh Perceptions

It's clear that any form of knowledge has to be able to yield to fresh perception or, rational behavior is impossible. Knowledge with absolute necessity cannot yield so it distorts, rationalizes, and pushes aside undesired facts so that nothing disturbs the general framework. This means that we are caught in self-deception.

Consider national sovereignty for example, which implies that each nation puts its own interests as the highest priority, and everything else takes a lower place, including morality and ethics, the life of the individual and, if necessary, the whole existence of mankind, including that nation itself. This leads to unending chaos and conflict, especially in the modern world in which everybody clearly depends on everybody. To maintain the idea of absolute sovereignty against the fact of mutual interdependence requires great distortion and self-deception.

We do the same thing as individuals. Each one tends to put his self interest as the highest priority. We all know the slogan, "Number one comes first." Or else he puts his group first, his family, his tribe, his race, his religion and defends this with the same sort of dishonesty and deception that is used to defend national sovereignty.

This way of determining priorities is full of contradictions which have been building up for thousands of years. So now there's a vast structure of meaningless nonsense that ultimately dominates most of knowledge, and knowledge serves this nonsense. No one in particular can be blamed for this. If you look into yourself, you will almost certainly find that all of us are caught in the same sort of absurdities.

We could say that knowledge is largely in the dark about itself, that knowledge doesn't know it's doing this. This darkness is self-created and in this darkness the mind falls again and again into self-deception trying to relieve the pain that comes from this contradiction. We could say that knowledge has become self-centered by building up these contradictory commitments of absolute necessity, especially of the self. Knowledge of the self then assumes supreme necessity which dominates, distorts and leads knowledge into self-deception and destruction. This trap is very subtle because the unconscious presupposition of absolute necessity operates before one can think reflectively. By the time you begin to think in this way it's often too late. The mind has already begun to defend itself through various forms of self-deception.

This activity generates a kind of darkness. I suggest that what is needed to penetrate this darkness is insight. Not just particular insights such as those of Newton and Einstein. These are valuable, but there's something much greater, as Krishnamurti brought out in all his work. This is, an insight into the whole activity of knowledge, where the mind can actually see what it's doing.

To put it differently, we can say that people have been seeking enlightenment through knowledge without realizing that this has the possibility of creating endarkenment as well. Some knowledge maybe enlightening, but other forms are endarkening and we need insight to see the whole thing. Then various questions regarding our values, our priorities, what to do with science, the environment and education will become clear.

Knowledge Without Insight Will Lead To Self-Deception

I have to emphasis strongly that knowledge without insight will ultimately lead to self-deception because of the pressures implicit in that knowledge. There is little realization of the ultimate inability of science to avoid the self-deception implicit in the active functioning of knowledge which is not penetrated by insight.

Insight is universal, and its origin or essence is not restricted to great scientific discoveries or to artistic creations, but rather is of crucial significance to everything we do. The negative operation of insight removes blocks and barriers, while the positive is the new perception that this removal makes possible.

Without interfering with the necessary and useful function of memory, insight dissolves the mind's attachment to all kinds of absurdities that hold us prisoner to the past. This affects all functions of the mind, physical, emotional, and intellectual as one undivided act which does not involve time in any basic way. It not only takes place in a flash with no sensible duration, but its essence cannot be captured in thought. There's no meaning in choosing to have an insight and then trying to find some means of producing this result. Rather, the action of insight is immediate, total and not analyzable.

The key point is that everyone must be able to question with great energy and passion whatever is not clear. Its necessary to sustain this questioning in spite of whatever difficulties may arise. This questioning is not an end in itself and its purpose is not mainly to give rise to answers. Rather, it's essential in the whole movement of life which can only be harmonious when this ceaseless questioning frees the mind of the tendency to hold indefinitely to contradictory and confused knowledge. If you question in this way there may be the energy of insight which is crucial for opening up the mind to new directions. To do this is a tremendous challenge, not only because of our habit of wanting important ideas to be secure, but because of very deep and subtle questions involving how the mind operates.

At present insight is not generally given great value in society nor in education. Rather, there's a very strong bias in favor of accumulating knowledge, and doing this far beyond the point where it actually makes sense, while the spirit of questioning, necessary for insight, is ignored and, in fact, is discouraged if this questioning disturbs strong beliefs.

There's also a great deal of discussion for the need to foster creativity. When you look closely however, what it is actually being done is often developing the imagination, which is not enough for creativity. Imagination may be part of creativity, but without insight, neither imagination nor reason nor anything else is going to be creative. We have to see is that insight itself has very high value. Then we'll have a different attitude to knowledge, values and education. The whole of life will be a field in which there is no end to the possibility of fresh and original perceptions.

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