Greek philosophy emerges out from a background of animism that seems to have been the early orientation all over the world, and in this background there is the sense that everything is alive; so the approach to it is like that of living entities dealing with each other. But the philosophic approach that emerged, first with Thales, is the beginning of the emergence of the idea, which in its history has become refined and sharpened so that it is finally the concept completely determined, usually, by a finite number of specifications, at which point the idea has become mathematical and has lost the living quality. The development of the idea, and its sharpening, was the great early contribution of the Greeks. Mathematics is carried with them to an advanced stage in Archimedes. Here we're having, and have produced, and the West has inherited, a highly developed tool.

This factor is fundamental to the possibility of any science, but it is not all that science requires. The Greek had a mathematics which would have made possible a substantial technology, but another factor was neglected, and that is the aesthetic component of direct observation. In the history of science, this factor was most largely contributed by Galileo. From the combination of the two factors of observation and theory, there has grown the scientific worldview in which that world is no longer alive, but is determined by definition. This, then, produces something that stands in the most radical contrast with the early animism out of which it grew, and it throws light upon a statement made by Carl G. Jung, somewhere, after he had visited India, namely, that Indian culture and philosophy was the primitive way of thinking, which, nonetheless, had become highly sophisticated, and thus stood in contrast with our own. We have a disjunction from the universal sense of everything being alive in our scientific development. That sense remains and becomes highly developed in the Indian thought. This is a point of very great importance for our understanding of the differences between the two points of view.

To be sure, we do have the division of science known as the life sciences, but we do not take life as a basis; we take physics as a basis. We start from the inorganic and then tackle the problem of how life emerged from the inorganic. This is very different from an initial position in which life is sensed as present everywhere, and it presents a barrier of cross-understanding with respect to that line of thought in which philosophy accepts the livingness of all things.

Now, here I have covered in a few words a distinction which calls for volumes of study and much meditation to bring it out. I’ve sketched it very briefly, but here lies the difficulty of conceiving how a substance may be brought into a world by conscious entities and that that substance should be capable of changing the forms of our consciousness and our attitudes. I cannot go into a full elucidation of the complexities involved here. I only give this briefly stated suggestion and ask that the mind of the hearer shall be open to
considering possibilities that come from another worldview. Our worldview has led us to the edge of disaster and therefore implies that we seek a correction.

Perception of this needed correction emerges when we consider the fundamental principles implied in our scientific procedure. There are two principles involved here not usually considered in a discussion of scientific methodology. They are, first, the principle of abstraction in two senses: one of which is harmless, essentially; the other may be very potent in its producing a condition that is destructive. The second principle is usually implicit, but is the assumption that there are two, and only two, organs, faculties, or functions of cognition, namely, sense perception and conceptual cognition.

We shall consider first the effect of the principle of abstraction. Here we have two applications: one is the abstraction of a specific knowledge field from the context of all possible knowledge. This is essential to the scientific development. Without this principle, mathematics never could have emerged; and I do not find fault here. But the second abstraction involves the isolation of cognition in separation from the total context of human consciousness. The human consciousness involves much more than cognition.

Now, in this total context of human consciousness, in the field that involves more than cognition, I wish to direct your attention to three modes. These are the moral sense, the sense of beauty, and religious feeling. Cognition taken in isolation from the background of these three modes becomes something isolated and, in a way, essentially sterile. What difference does it make if a man approaching a problem of research, in one case, isolates the cognitive functioning entirely and moves simply in a secular sense divorced from all relationship to morality and considerations of beauty, in one case; and in another case, moving in the context of the religious feeling, the sense of moral responsibility, and an orientation to beauty? Are the cognitions in the two cases the same? It may well be that in the one case where there is isolation from religious feeling, the sense of morality, and the sense of beauty, that the cognition has become a distorted cognition and fails to reveal the truth as it really is; whereas, if that cognition is imbedded in the sense of sacredness that comes from the religious feeling, and in the sense of a moral responsibility, and a feeling for beauty, it becomes a healing and illumining power.

Here, then, is a flaw in our scientific method and an illustration of that flaw is afforded by the scientific research employing vivisection. Here the will to knowledge has become so arrogant and single-pointed that it abandons all moral sense and seeks knowledge by cruelty. This factor is present very strongly in this case, but it underlies our whole scientific methodology. And I put to you the question, how far does this distort the knowledge which we acquire? How far is this responsible for the destructive condition that our science has produced? How far is this responsible for the imminent possibility of disaster that we have brought upon our sense? Would a researcher grounded specifically in a persistent religious feeling so that there was no contrast between the secular and the sacred, so that indeed the sacred feeling overshadowed all his seeking, would that not mean that he would make the turn that would render his achieved knowledge a blessing instead of a curse.

Second, consider the principle which is implicit in our science and philosophy, and this even in, at least, the logic of the Buddhists, namely, that all cognition consists of either sense impression or conceptual cognition, when, in point of fact, it may be proved true that there are other modes of cognition. What is the result of such an assumption?
Obviously this, that the knowledge would be incomplete, partial, and, mayhap, essentially a *maya* or illusion.

At this point the following question may well arise. How is it possible that a scientific determination, as contrasted to tentative hypothesis, should produce an illusion when it is verified pragmatically by its actually working in the sensible order? Thus, by reason of certain calculations producing a certain trajectory, it was predicted scientifically that a capsule containing men could be projected to the vicinity of the moon, and that actually happened. This brings us into the question of what is the nature of the world about us in its relation to conceptuality, and for this I shall direct your attention to certain theses advanced by the logical Buddhists.

Logical Buddhism arises in the third phase of Buddhism around the eighth or ninth century A.D. The men mainly responsible for this development are Dignaga and Dharmakirti.\(^1\) This work is impressive, having much similarity to the formal logic developed by Aristotle some 1000 years earlier. But more impressive still is the fact that it has a keen appreciation of the epistemological problem nearly 1000 years before Immanuel Kant. In this development there is predicated two organs of cognition, namely, sense impression and conceptual cognition. I shall not develop this point of view in considerable detail, but only very briefly. It is posited here that absolute reality is given only by point-instant sensations, which are essentially indeterminate but are efficient. They are the moments when one first receives a sense impression without any recognition. The point-instant is, therefore, essentially unutterable and ineffable. There is predicated also a conceptual power which is essentially creative. The world about, in the determinate sense of specific objects, is the resultant of the point-instant sensation and the creativeness of conceptual cognition. Therefore, the world as we see it, producing determinate objects like mountains, trees, houses, oceans, continents, rivers, planets, stars, galaxies, is a resultant of two factors: one viewed as essentially real, the other created. The determinate sensuous order is, therefore, in part unreal, but in part real. We may call it real-unreal.

Now consider, assuming this point of view, what happens when a powerful conceptual thinker, such as Sir Isaac Newton, presents a cosmic view which predetermines the way in which others following him experience the world? Sir Isaac Newton may be viewed as a creative *Manu*\(^2\) that legislated, rather than discovered, the possible forms of our experience, to a degree; and, therefore, we saw the world, or in general experienced it, within the forms which so predetermined it. Thus it was that we seemed to send astronauts to the moon by following a certain trajectory built on the


\(^2\) H. P. Blavatsky, *The Secret Doctrine*, vol. 1 (Wheaton, Ill.: The Theosophical Press, 1893), 93:

Let us now analyse the word or name Manu. Orientalists and their dictionaries tell us that the term “Manu” is from the root *man*, “to think”; hence “the thinking man.” But, esoterically, every Manu, as an anthropomorphized patron of his special cycle (or Round), is but the personified idea of the “Thought Divine” (as the Hermetic Pymander); each of the Manus, therefore, being the special god, the creator and fashioner of all that appears during his own respective cycle of being or Manvantara. Fohat runs the Manus’ (or Dhyan Chohans’) errands, and causes the ideal prototypes to expand from within without—that is, to cross gradually, on a descending scale, all the planes from the noumenal to the lowest phenomenal, to bloom finally on the last into full objectivity—the acme of Illusion, or the grossest matter.
principles laid down by Sir Isaac Newton. This would imply that the conceptualist, and most especially the pure conceptualist or mathematician, instead of making discoveries actually, in a degree, legislates the forms of future experience.

This, then, would give us an immediate answer to the famous question of Einstein which runs as follows: “How can it be that mathematics, being after all a product of human thought independent of experience, is so admirably adapted to the objects of reality.” The answer would be, here, that the mathematician, to a degree, predetermines the form of possible experience. He has legislated that form. He is the Manu, in a degree, of future experience.

From this standpoint we would have to abandon the common conception that there are things, which exist entirely outside consciousness in every possible sense, that all we have and can know in the sensible order is only an image lying within consciousness. The world of experience, thus, is a world of image relationships all existent within fundamental consciousness; and the conceptual order legislates, to a degree, the experience which we may have. This is introduced not in the dogmatic sense as being the necessary truth, but as showing a point of view which exists and by which men have actually achieved a working adjustment between the identical and the other. Then, from this standpoint, we may say that the idea and the supposed thing are of the same “suchness”—the suchness being that which is completely real, but is wholly ineffable. This, then, leads us to certain consequences. The idea and the thing conceived as of the same suchness implies that through the apparent thing or object one may manipulate the state or content of consciousness; by the thing one may manipulate the idea, and vice versa, that through the idea it is possible to manipulate the thing.

This, then, shows us how it is possible for an impingement of energy-substance from without our world-field upon that world-field can produce a change in the attitudes and procedures of the consciousness of this humanity, thereby effecting a change which will render possible the resolution of the problems with which we are now confronted.

There remains one final question, how will the impingement of this substance-energy be experienced by the individual? I shall suggest one form which it may take, not implying that this is the only possible form. It may appear as an impingement of energy so great that it produces a psychical strain or exhaustion without any element of ideation in it; yet, with the passage of a limited time, such as twenty-four hours or more, rich ideation may unfold from it, which may even have the effect of changing one’s point of view from that which he held before, and it may effect a certain change in the constitution of one’s own nature such that it will leave one feeling that somehow he, himself, is something of a stranger to himself. I’m not suggesting that this is the only possible way, but it is a form which I personally have actually experienced, and this tape is the result of that impingement.

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At this point an enigma presents itself which in all ages has agitated inquiring minds. How can it be that mathematics, being after all a product of human thought which is independent of experience, is so admirably appropriate to the objects of reality? Is human reason, then, without experience, merely by taking thought, able to fathom the properties of real things?
A thought has just come to me which may throw a light on the process of ideation exemplified in this tape. Think of the initial impingement of the energetic factor as being of the nature of a proto-conception, or, rather, a proto-cognition. Then, out of this, by a process analogous to that of crystallization, it attains a greater or less perfection of ideological formulation. The process may be illustrated by certain phenomena in the field of geology. In the case of a great granitic batholith, such as the Sierra Nevada, there is originally an intrusive deep in the earth in a more or less fluid or plastic form. This would correspond to the first impingement of the proto-cognition. Cooling gradually, the batholith begins to crystallize, and since the process in this case is very slow, the crystallization becomes complete and forms some type of granitoid rock. Now, this would be a case of complete formulation.

On the other hand, suppose that the plastic or liquid form of material comes up through a volcano and is immersed in sea water in which case it cools very quickly, in fact, so quickly that no crystallization is possible, and we have what is known as volcanic glass—a mass of material that is totally uncrystallized. This would correspond to the state in which one had a mystical unfoldment but was totally unable to say anything intelligible about it beyond, say, a grunt or two.

Between these two extreme forms of rock, we have an intermediate class known as the porphyries, in which the cooling is at a rate intermediate between that of the glass and the full granitoid rocks. In this case certain materials may form crystals while other materials cannot, and this varies in degree so that we have porphyries reaching from the amorphous form of the glass to the completely crystallized form of the granitoids. This would correspond to those who had a mystical breakthrough and could say something about it, but were unable to give a complete formulation. Apparently, the majority of those who have had such experiences of a mystical sort fall into the classification of the porphyritic rocks.

Perhaps this may suggest the process involved here in connection with this tape, where in the beginning there was an impingement of an energetic component without any ideation, while ideation developed later to such degree as was exemplified in this tape. End of the epilogue.