AN APPROACH TO CONTEMPORARY QUESTIONS
IN THE LIGHT OF ANTHROPOSOPHY

The Golden Blade

SUPERSENSIBLE EXPERIENCES A Lecture (hitherto untranslated) given at Dornach on January 18, 1920	*Rudolf Steiner*
EARTH-EVOLUTION IN THE FUTURE A Lecture given at Dornach on May 13, 1921	*Rudolf Steiner*
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Edited by Arnold Freeman and Charles Waterman

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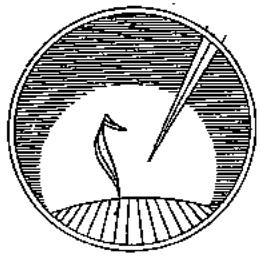


Anthroposophy, a way of thought rather than a body of dogma, springs from the work and teaching of Rudolf Steiner (1861–1925). He spoke of it as "a path of knowledge, to guide the spiritual in the human being to the spiritual in the universe".

The aim of this Annual is to publish writings which bring the outlook of Anthroposophy to bear on questions and activities relevant to the present time.

The title derives from a reference by Rudolf Steiner to an old Persian legend. "Djemjdid was a king who led his people from the north towards Iran, and who received from the God, whom he called Ahura Mazdao, a golden dagger, by means of which he was to fulfil his mission on earth . . . . It represents a force given to man whereby he can act upon and transform external nature".

Some Conditions for Understanding Supersensible Experiences

Rudolf Steiner

*A Lecture (hitherto untranslated) given by Rudolf Steiner at Dornach on January 18, 1920 **

FROM the present time onwards it will be impossible for man to acquire any real self-knowledge or feeling of his own being without approaching the science of Initiation, for the forces out of which human nature actually takes shape are nowhere contained in what man is able to know and experience in the material world. To form an idea of what I want to convey by saying this, you must think about many things that are familiar to you from anthroposophical studies.

You must remind yourselves that as well as living through his life here between birth and death, man passes again and again through the life between death and a new birth. Just as here on earth we have experiences through the instrumentality of our body, we also have experiences between death and a new birth, and these experiences are by no means without significance for what we do during our earthly existence in the physical body. But neither are they without significance for what happens on earth as a whole. For only part—and indeed the rather lesser part—of what happens on the earth originates from those who are living in the physical body. The dead are perpetually working into our physical world. The forces of which man is unwilling to speak to-day in the age of materialism are nevertheless at work in the physical world. Our physical environment is fashioned and permeated not only by the forces emanating from the spiritual world, from the Beings of the higher Hierarchies, but forces proceeding from the dead also penetrate into what surrounds and overtakes us here. So that a full and complete survey of man's life is possible only if we look beyond what can be told us by knowledge obtained through the senses and through history, here on earth.

The existence of such forces is in the end the one and only thing that can explain man in his whole being and the whole course of human evolution on the earth. A time will come in the physical evolution of the earth—it will be after the year 5,700—when, if he fulfils his rightful evolution, man will no longer tread the earth by

* From a shorthand report, unrevised by the lecturer. Published by permission of the Rudolf Steiner-Nachlassverwaltung, Dornach, Switzerland.

incarnating in bodies derived from physical parents. In that epoch, women will be barren; children will no longer be born in the manner of to-day, if evolution on the earth takes its normal course.

There must be no misunderstanding about such a fact as this. Something else, for example, might come about. The Ahrimanic Powers, which under the influence of the impulses working in men to-day are becoming extremely strong, might succeeed in preventing earth-evolution in a certain respect. It would then become possible for men—by no means for their good—to be held in the same form of physical life beyond this time in the sixth or seventh millennium. They would become much more like animals, while continuing to be held in the grip of physical incarnation. One of the endeavours of the Ahrimanic Powers is to keep humanity fettered too long to the earth in order to divert it from its normal evolution.

However, if men really take hold of the best possibilities for their evolution, then in the sixth millennium they will enter for a further 2,500 years into a connection with the earthly world of such a kind that they will, it is true, still have a relationship with the earth, but a relationship no longer coming to expression in the birth of physical children. In order to make the picture graphic, I will put it like this: In clouds, in rain, in lightning and thunder, man will be astir as a being of spirit-and-soul in the affairs of the earth. He will pulsate, as it were, through the manifestations of nature; and in a still later epoch his relationship to the earthly will become even more spiritual.

To speak of any such matters to-day is possible only when men have some conception of what happens between death and a new birth. Although there is not complete conformity between the way in which, between death and a new birth to-day, man is related to earthly conditions and the way in which he will be related to them when he no longer incarnates physically, there is nevertheless a similarity. If we understand how to imbue earth-evolution with its true meaning and purpose, we shall enter permanently into the same kind of relationship with earthly affairs that we now have only between death and a new birth. Only our life between death and a new birth in the present age is, shall I say, rather more essentially spiritual than it will be when this relationship is permanent.

*

Without the science of Initiation, understanding of these things lies leagues away. Most people to-day still persist in believing that the essential way to acquire knowledge of the science of Initiation is to amass all kinds of spiritual experiences, but not by the path that is proper for us in the physical body. Even the experiences gained by spiritualistic methods are apt to be valued more highly to-day than those which can be understood by the healthy human reason. Everything that is discovered by an Initiate, and can be communicated, is intelligible by the normal, rightly applied, human

reason if only the necessary efforts are made. It is a primary task for the Initiate, also, to translate what he is able to proclaim out of the spiritual world into a language intelligible to human reason. Much more depends upon such translation being correct than upon the fact of having experiences in the spiritual world.

Naturally, if one has no such experiences, there is nothing to communicate. But crude experiences which arise without healthy reason being applied to their interpretation are really worthless, and have not the right significance for human life. Even if people were able to have many supersensible experiences, but disdained to apply healthy reason to them, these experiences would be of no use whatever to humanity in the future. On the contrary, they would do serious harm, for a supersensible experience is of use only when it is translated into the language that human reason can understand. The real evil of our time is not that men have no supersensible experiences; they could have plenty if they so wished. Such experiences are accessible, but healthy reason is not applied in order to reach them. What is lacking to-day is the *application* of this healthy human reason.

It is of course unpleasant to have to say this to a generation that prides itself particularly on the exercise of this very reason. But at the present time it is not supersensible experience that is in the worst plight; it is healthy logic, really sound thinking, and above all, too, the force of truthfulness that are worst off. The moment untruthfulness asserts itself, the supersensible experiences fade away without being understood. People are never willing to believe this, but it is a fact.

The first requirement for understanding the supersensible world is the most scrupulous veracity in regard to the experiences of the senses. Those who are not strictly accurate about these experiences can have no true understanding of the supersensible world. However much may be heard about the supersensible world, it remains so much empty verbiage if the strictest conscientiousness is not present in formulating what happens here in the physical world.

Anyone who observes how humanity is handling palpable truth to-day will have a sorrowful picture! For most people are not in the least concerned to formulate something they have experienced in such a way that the experience is presented faithfully; their concern is to formulate things as they want them to be, in the way that suits themselves. They know nothing about the impulses that are at work to beguile them in one direction or another away from a faithful presentation of the physical experience.

Leaving aside trifling matters, we need only observe the impulses which arise from ordinary human connections in life and prompt men to 'varnish' the truth in one respect or another. Further, we need only realise that the majority of people to-day are not speaking the truth at all about certain things, because of national interests or the like. Anyone who has national interests of some kind at heart

can neither think nor say anything that is true in the sense in which truth must be conceived to-day. Hence the truth is virtually never uttered about the events of the last four or five years, because people everywhere speak out of one or other national interest.

What must be realised is that when a man desires to approach the supersensible world, infinitely much depends upon such things. In times when procedures such as I characterised at the end of the lecture yesterday are possible—can you believe that many avenues to the truth lie open?* They certainly do not. For those who wallow in such swamps of untruthfulness as were disclosed yesterday, spread fog which completely shuts off what should be grasped as supersensible truth by the healthy human reason. There is equal unwillingness to perceive that straightforward, candid relations between man and man must prevail if supersensible truths are to penetrate in the right way into the social life. One cannot 'varnish' truth on the one hand and, on the other, wish to understand matters of a supersensible nature.

*

When they are put into words, these things seem almost matters of course, but actually they are so little matters of course that everybody to-day ought constantly to repeat them to himself. Only so can there gradually be achieved what is necessary in this domain. As I said here recently, the essential principle of social community is that it must be founded upon *confidence*, in the sense indicated. This must be taken in all earnestness. In very many respects this confidence will also be necessary in the future with regard to paths of knowledge. The attitude adopted towards those who are in a position to say something about the science of Initiation should be to examine their utterances with the healthy reason only, not with sympathy, antipathy or the like, nor in the mirror of personal feeling. It must at all times be realised that the Anthroposophical Society should become in the real sense a bearer of supersensible truths into the world. Thereby it could achieve something extraordinarily necessary and significant for the evolution of mankind.

But it must be remembered that to have experiences in supersensible spheres is obviously a matter to be taken in earnest. I told you some time ago how a friend of our Movement, shortly before he died from the effects of war-wounds, wrote lines in which, in the very face of death, he speaks of the air becoming hard, granite-like.

* Dr. Steiner was quoting scurrilous statements, based on deliberate falsifications, that were published in newspapers in Germany about the alleged political aims, methods and activities of the Threefold Commonwealth Movement at the time it was founded. He also referred to articles in a Roman Catholic periodical, and to a book by a Professor of Psychology containing false information about Anthroposophy.

I said at the time that this is an absolutely true experience.* Think only of the most elementary experiences connected with crossing the Threshold of the spiritual world and you will be able to gauge the importances of these things. In our life by day—or also by night, for then there is electric light—the sun, the light of the sun, illumines the objects around us; the sunlight makes them visible. In a similar way the other senses become aware of surrounding objects. If I limit myself at the moment to the example of the sunlight, directly the Threshold is crossed man must become one with the light in his inmost being. The light cannot enable him to see objects because he has to pass into the very light itself. Objects can be seen with the help of the light only as long as the light is outside. When man is himself moving together with the light, the objects illumined by it can no longer be seen. But when, in his being of soul, he is moving in the light itself, then for the first time he becomes aware that thinking is, in reality, one with the light weaving in the world.

Thinking that is bound up with the body is proper to physical life only. Directly we leave this body, our thinking loses definition; it weaves into the light, lives in the light, is one with the light. But the moment our thinking is received into the light, it is no longer possible to have an ego as easily as man has one between birth and death, without doing anything towards it. His body is organised in such a way that his being reflects itself through the body, and he calls this mirror-image his ego. It is a faithful mirror-image of the real ego, but it is a mirror-image, a picture only, a picture-thought, a thought-picture. And the moment the Threshold is crossed, it streams out into the light.

If another anchorage were not now available, man would have no ego at all. For this ego, this 'I', that he has between birth and death, is furnished for him by his body. He loses it the moment he leaves the body, and then he can be conscious of an ego only by becoming one with what may be called the forces of the planet—especially the variations of the planet's force of gravity. He must become so entirely one with the planet, with the earth, that he feels himself to be a part of the earth, as the finger feels itself to be a member of the human organism. Then, in union with the earth, it is possible for him again to have an ego. And he perceives that just as here in earthly life he makes use of thinking in the physical body, after earthly life he can make use of the light.

From the standpoint of Initiation, therefore, one would have to

* See lecture given at Dornach, 15th November, 1919: "An impression of this nature must be understood. . . . For in wrestling to acquire the wisdom needed for the future, one of the most frequent experiences is this: the surrounding world presses in upon one, as if the air had suddenly hardened to granite. The reason for these things can be known, for it need only be remembered that it is the striving of the Ahrimanic Powers to cause the earth to become completely rigidified."

say: Man is united with the earth's force of gravity and through radiating light concerns himself with the things of the world. Applied to the experience beyond the Threshold, this would express the same fact as when one says here on earth: Man lives in his body and thinks about the things of the world. Of the life between birth and death we say: Man lives in the body and concerns himself with things through thinking. As soon as he leaves the body, we must say: He is united with the earth's force of gravity or with its variations, with electricity or magnetism, and through radiating light, inasmuch as he is now living in the light, concerns himself with the things of the world.

*

When things that have been *illumined* in this way—instead of being merely thought about, as is generally the case—are put into words, they are entirely comprehensible to the healthy human reason. And even the Initiate, if he has not developed his reason in the right way, gains nothing whatever from his supersensible experiences. When someone to-day—please take what I am now saying as a really serious matter—has learnt to think in a way perfectly adapted to meeting the demands of school examinations, when he acquires habits of thought that enable him to pass academic tests with flying colours—then his reasoning faculty will be so vitiated that even if millions of experiences of the supersensible world were handed to him on a platter, he would see them as little as you could physically see the objects in a dark room; for that which makes men fit to cope with the demands of this materialistic age darkens the space in which the supersensible worlds come towards them.

Men have become accustomed to think in the one and only way that is possible when thinking is based on the bodily functions. This kind of thinking is ingrained in them from their youth onwards. But healthy human reason does not unfold on bodily foundations; it unfolds in free spiritual activity. And even in our Elementary Schools to-day children are educated away from free spiritual activity. The very methods of teaching hinder the development of free spiritual activity. Dare one incur the responsibility of concealing from the world these vital truths of the age? People may not realise why it was thought necessary to set into active operation an institution such as the Waldorf School in Stuttgart. But through this Waldorf School some at least of the children of men will be given a real chance to discard the bigotry of the times and to learn how to move in the element of thinking that is truly free. As long as such things are not regarded in this serious light, we shall make no progress.

Now I would like to call your attention to another tendency which is still far too common. Because people are tired of the old in its ordinary form, they like to get hold of something new; but for all that they want the new to be somehow veiled, whenever possible,

in all the old, habitual conceptions. I have known many people—and it is well to be under no delusion about these things—who have realised that anthroposophical Spiritual Science is endeavouring to promulgate something true and right about Christianity, about the Mystery of Golgotha. But among them were some for whom this was right only because it exposed them to less disapproval in Church circles; hence they found Anthroposophy more opportune than some other form of spiritual science holding a different view of Christianity. In anthroposophical Spiritual Science the one and only question is that of truth; but with some people it has not always been a question only of truth, but often only of opportunism. Naturally it is unpleasant nowadays to have to witness the attitude to truth adopted by the representatives of the religious confessions and ultimately by their congregations who are also influenced by it. This is a trend of the times that must be kept clearly in view.

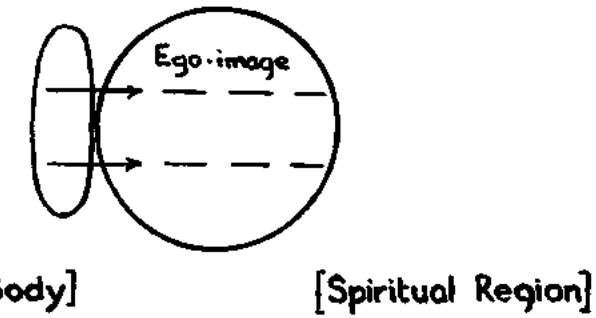
*

If it is desired to approach the supersensible world in the right way, we must have interest in all things—but never mere curiosity. People are so ready to confound curiosity with interest. They must learn not only to think differently but to feel differently about all things. If anthroposophical Spiritual Science were ever to be given a mantle suitable for the atmosphere of coffee-parties or what corresponds to them nowadays, this would by no means conduce to the fulfilment of its task—for this task is of grave moment.

The reason for the hostility that is asserting itself at the present time in such ugly forms is simply this: People realise that here it is not a matter of a sect, or of a happier "family circle" such as many desire, but that something is truly striving to activate the impulses needed by the times. But what interest have the majority of people to-day in these impulses? If only they can bask in happiness or have something in the nature of a new religion! This egoism of soul, which impels very many people to anthroposophical Spiritual Science, must be overcome. Interest in the great affairs of humanity is necessary for any true understanding of Anthroposophy.

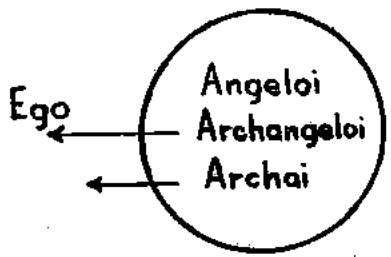
These great concerns of the life of humanity are clearly to be discerned in the most seemingly trivial facts of life. But in *one* respect our whole life of perception and feeling must change if we want so to orientate healthy human reason that it functions in the right stream of Spiritual Science. Let me repeat: The whole of our life of soul must change in one particular respect if our healthy human reason is to function within the stream of spiritual life that is to be brought to mankind through Anthroposophy. What is the orientation given us here on earth by the culture that is smothered in materialism? Our orientation is such that we feel ourselves as *bodily* men—with bones, muscles, nerves. And our body acts as a

mirror, reflecting the image of our ego to us—schematically, like this:



Your true being is somewhere in spiritual regions. Here, in the physical world, is your body. It becomes a mirror, reflecting back to you the image of the ego. The ego itself is here (= = =), but the image of the age is reflected back to you by the body. You know of this ego-image when you look at the body with *that* centre of your being of which most people at present know nothing, but in which they nevertheless live. So the ego, together with the thoughts, feelings and impulses of will, is mirrored by the body. Behind this ego-image is the body, and man calls these mirrored images his soul; behind the soul he perceives the body and uses it as his support.

But this picture: There, down below, is the body; there the ego emerges . . . this picture must be entirely changed. It is a picture perceived in complete passivity, and is indeed perceived only because the body is behind it. We must learn to perceive quite differently. We must learn to perceive: You are there in your spiritual world, a world in which there are no plants, minerals and animals, but Angeloi, Archangeloi, Archai, and the other Beings of the Hierarchies; in *them* you live. And because these Beings permeate us through and through, we ray forth the ego:



We ray forth this ego from the spiritual world. We must learn to feel this ego, to feel that we have within us the ego behind which

stand the Hierarchies, just as the body, composed of elements of the three kingdoms of nature, is behind the ego that is an image only. We must pass out of the passive experience into activity in the fullest sense. We must learn to feel that our real ego is brought into being out of the spiritual world. And then we also learn to feel that the mirror-image of our ego is brought into being for us out of the body that belongs to physical existence.

This is a reversal of the usual feeling, and to this reversal we must habituate ourselves. That is the important thing—not the amassing of facts and data. They will be there in abundance once this reversal of feeling has been experienced. Then, when thinking is active in the real sense, those thoughts are born which can fertilise social thinking. When the ego is allowed to remain a mirror-image, thinking can take account only of those social matters which are (as I said yesterday) merely the outcome of changes in phraseology. Only when man is *active* in his ego can his thoughts be truly free.

In past centuries, not so very long ago, this freedom in thinking was still present in men, although springing, it is true, from atavistic qualities of soul. Instinctively, they regarded it as an ideal to achieve this freedom in their thinking, whereas *we* have to achieve it in the future by conscious effort. There is an outer illustration of this. Just look at the diplomas conferring the Doctor's degree at universities in Middle Europe. As a rule, people are made not only Doctors, but Doctors and Masters of the Seven Liberal Arts—Arithmetic, Dialectic, Rhetoric, and so on. This no longer means anything, for the Seven Liberal Arts are nowhere included in the curriculum of modern universities. It is a relic, a heritage from an earlier period when through university life men strove to liberate their thinking, to develop a life of soul able to rise to truly free thinking.

At the universities to-day the degrees of Master of the Liberal Arts and Doctor of Philosophy are still conferred. But this is no more than a relic, for nobody understands what the Liberal Arts really are. They are justly named 'Arts' because they were pursued in a sphere lying above that of sensory experience, just as the artist's imagination unfolds freely and independently of material existence. The degrees inscribed in university diplomas once represented a reality, just as many other things still surviving in the formulæ current at universities were once realities. The title, *Magister Artium Liberalium*, is a very characteristic example.

*

This living grasp of the self (*Sicherfassen*) must again be achieved. But it goes against the grain, because people to-day prefer to move about on crutches instead of using their legs. Their ideal is to have what they are to think conveyed to them by the outer, material facts. It is unpleasant for them to realise that

thinking in the true sense must be experienced in free spiritual activity, because it means tearing themselves away from the convenient things of life, from all props, all crutches in the life of soul. Whenever things are said from the standpoint of a kind of thinking that has nothing whatever to do with the sense-world, but in complete freedom creates out of intuitions, people do not understand it. My *Philosophy of Spiritual Activity* was not understood because it can be grasped only by one who is intent upon unfolding really free thoughts, one who is truly and in a new sense a 'Master of the Liberal Arts'.

These are the things that must be understood to-day—with the right feeling and with the earnestness that is their due. Especially to the English friends who are here for a short time only, I want to say this: The Building we have erected on this hill must be regarded as an outer beacon for the signs of the times. This Building stands here in order that through it the world may be told: If you go on thinking in the old way, as for four centuries you have become accustomed to think in your sciences, you will condemn humanity to destruction. With the help of crutches you may seek in the easy way to establish principles of social life, but in so doing you will only be preserving what already has death within it.

For the life of soul to-day it is essential to unfold thinking that is as free as are those forms out of which, in architecture, sculpture or painting, the attempt has been made to create this Building. Its purpose is that at *one* spot on the earth these things shall be said not through words alone, but also through forms. Men should feel that here, through these forms, something different from what can be heard elsewhere in the world to-day is intended to be said, and also that what is said is urgently necessary for the further progress of mankind in respect of knowledge and social principles, in respect of all the sciences and of all branches of social life.

Translated by Dorothy Osmond.

A Picture of Earth-Evolution in the Future

Rudolf Steiner

*A Lecture given at Dornach on May 13, 1921**

This is a time when a great deal of attention, ranging from serious science to science-fiction, is being devoted to "outer space". There is speculation on various levels about visitants from other worlds. Behind it all there may be an instinctive feeling—true in itself though often distorted in expression—that the apparent isolation of man on earth is not final; that man is not alone in the universe. We are therefore reprinting here a lecture (first published in English in the quarterly, 'Anthroposophy', for Easter, 1933, and long out of print) in which Rudolf Steiner spoke, briefly and enigmatically, of the need to recognise and welcome certain beings, "not of the human order", who since the seventies of the last century have been descending from cosmic spheres into the realm of earth-existence, bringing with them "the substance and content of Spiritual Science."—*The Editors.*

THE lectures I have given recently on the nature of colours† may have helped to show you that we can begin to understand man in his real being only when we relate him to the whole universe. If we ask: What is man in his true nature?—then we must learn to look upwards from the Earth to what is *beyond* the Earth. This is a capacity of which our own time particularly stands in need. The human intellect has become more and more shadowy, and as a result of the developments which took place in the nineteenth century, it is no longer rooted in reality.

This unmistakably indicates that it is high time for man to discover how he can receive new impulses into his life of soul, and we will turn our attention to-day to certain great cosmic events with which we are already familiar from other points of view.

Most of you will have read the book *An Outline of Occult Science*, and will have realised that one of the great events in earthly evolution was the separation of the moon from the earth. The moon as we see it to-day, shining towards us from cosmic space, was once united with the earth. It then separated from the earth and now circles around it as its satellite. We know what incisive changes in the whole sweep of evolution are connected with this separation of the moon from the earth. We must go far back

* From a shorthand report, unrevised by the lecturer. Published by permission of the Rudolf Steiner-Nachlassverwaltung, Dornach, Switzerland.

† Three lectures on *Das Wesen der Farben*, given at Dornach on May 6–8, 1921. Published in English as a book entitled "Colour" (new edition in preparation).

in time, before the Atlantean deluge, to find the epoch when the moon departed from the body of the earth.

To-day we will confine our attention to what came to pass on earth in connection with the being of man, and with the kingdoms of Nature around him, as a consequence of the separation of the moon from the earth. From the lectures on colours we have learnt that minerals—that is to say, the coloured mineral substances—actually derive their different hues from this relationship of the moon to the earth. Recognition of this fact enables us to make these cosmic events part of an artistic conception of existence. But other matters of the greatest significance come into consideration here. Man's being is the product of preceding metamorphoses of earth-existence—namely, the Saturn, Sun and Moon periods of evolution, during which no mineral kingdom existed. The mineral kingdom as we know it to-day came into being for the first time during the Earth period. Mineral substance, therefore, became part of man's being only during this Earth period. During the stages of Saturn, old Sun and old Moon, man had nothing mineral within him at all. Nor was his constitution adapted for existence upon the earth. By his very nature he was a being of the cosmos. Before the separation of the moon, and before the mineral substances with their many colours came into being, man was not adapted for earthly existence.

Let me put it in this way. It was a very real question for the Spiritual Beings who guide earthly evolution as to what must happen to man. Should he be sent down to the earth or be left to pass his existence in a realm beyond the earth? It can be said with truth that the separation of the moon, with the consequent changes in the earth and in the being of man, was the outcome of a decision on the part of the Spiritual Beings who guide and direct the evolution of humanity. It was because this coarse moon-substance was sent out of the earth that man's organism developed in such a way as to make it possible for him to become an earthly being. Through this event—through the separation of the moon and the incorporation of the mineral kingdom into the earth—man has become an earthly being, existing in the sphere of earthly gravity. Without earthly gravity, he could never have become a being capable of freedom. Before the separation of the moon he was not, in the real sense, a personality. He was able to become a personality because of the concentration of the forces that were to build his body. And this concentration of forces was the result of the separation of the moon and the incorporation of the mineral kingdom into earthly existence. Man became a personality, and freedom was henceforward placed within his reach.

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The evolution of man upon the earth since the separation of the moon has proceeded through many different stages. And we may say that if nothing else had happened except this departure of the

moon from the earth, it would still have been possible for man to draw out of his organism, out of his body and soul, pictures such as arose in ancient, clairvoyant vision. Nor was man deprived of this faculty by the separation of the moon. He still envisaged the world in pictures, and if nothing else had happened, he would be living in a world of pictures to this day. But evolution went on. Man did not remain fettered to the earth. He received an impulse for evolution in the other direction—an impulse which actually reached its climax in the nineteenth century.

Even when long ages ago the human being, as 'metabolic man', became subject to the force of earthly gravity, he was adapted as 'head man' for a cosmic existence. In effect, the intellect began to evolve. The old clairvoyant pictures densified into the forms of intellectual consciousness, as it was until the epoch of the fourth century after Christ. It was then for the first time that the human intellect began to grow shadowy. This process has been increasingly rapid since the fifteenth century, and to-day, although the intellect is an altogether spiritual faculty in man, its existence is not rooted in reality. It has only a picture-existence. When the man of to-day thinks merely with his intellect and faculty of reason, his thoughts are not rooted in reality at all. More and more they move about in a shadowy existence which reached its climax during the nineteenth century. And to-day man is altogether devoid of the sense for reality. He lives within a spiritual element, but is at the same time a materialist. His thoughts—which are spiritual but yet merely shadow-thoughts—are directed entirely to material existence.

Thus the second great process or event was that man became more spiritual. But the spiritual substance once derived from matter no longer ensouls him. His nature has become more spiritual, but with his spiritual faculties he thinks only about material existence.

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You know that the moon will one day reunite with the earth. By the astronomers and geologists, who live in a world of abstractions, this reunion of the moon with the earth is placed thousands and thousands of years ahead. But this is mere illusion. In reality it is by no means so very far distant. *Humanity as such* is becoming younger and younger. Human beings are coming to a point when their development of body and soul will proceed only up to a certain age in life. At the time of the death of Christ, of the Event of Golgotha, human beings in general were capable of development in body and in soul until the 33rd year of life. To-day this development is possible until the 27th year. In the fourth millennium a time will come when men will be capable of development only until the 21st year. In the seventh millennium the bodily nature will be capable of development only until the 14th year of life. Women will then become barren. An entirely different form of earthly life

will ensue. This is the epoch when the moon will again approach the earth and become part of it.

It is high time for man to turn his attention to such mighty events of the realm of existence beyond the earth. He must not go on dreaming, vaguely and in the abstract, of some form of Divinity, but he must begin to be alive to the great happenings that are connected with his evolution. He must know what it means to say that the moon once left the earth and will enter the earth again.

Just as the separation of the moon was a decisive event, so too will be its re-entry. It is true that as human beings we shall still be inhabiting the earth, although birth will no longer take place in the ordinary way. We shall be connected with the earth by other means than through birth. We shall, however, have evolved in a certain respect by that time. And we must learn to connect what is happening to-day—I mean the fact that the intellect is becoming more and more shadowy—with what will one day be a great event in earthly evolution—the re-entry of the moon into the substance of the earth.

If the intellect continues to become even more spectral than it is already, if men never resolve to receive into their being what can now flow to them from spiritual worlds, then they will inevitably be absorbed into the shadowy greyness of their intellectual life.

What is this shadowy intellect? It cannot understand the real nature and being of man. The mineral world is the only realm which the shadowy human intellect is to a certain degree capable of understanding. Even the life of the plant remains enigmatical; still more so the life of the animal; while human life is altogether beyond the grasp of the mind. And so man goes on his way, evolving pictures of existence which in reality are nothing but a great world-question. His intellect cannot begin to grasp the real nature of plant or animal, and least of all that of the human being. This state of things will continue if man fails to listen to what is being given to him in the form of new Imaginations, in which cosmic existence is pictured to him. The living wisdom that Spiritual Science is able to impart must be received into his shadowy, intellectual concepts and thoughts, for only so can the shadow-pictures of the intellect be quickened to life.

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This quickening to life of the shadow-pictures of the intellect is not only a human but a cosmic event. You will remember the passage in the book *Occult Science* dealing with the time when the human souls ascended to the planets and afterwards descended once more to earth-existence. I spoke of how the Mars-men, the Jupiter-men and the others descended again to earth. Now an event of great significance came to pass at the end of the seventies of last century. It is an event that can be described only in the light of facts which are revealed to us in the spiritual world. Whereas in

the days of old Atlantis human beings came down to the earth from Saturn, Jupiter, Mars, and so on—that is to say, beings of soul were drawn into the realm of earth-existence—since the end of the seventies of last century, other Beings—not of the human order—have been descending to the earth for the purposes of their further development. From cosmic realms beyond the earth they come down to the earth and enter into a definite relationship with human beings. Since the eighties of the nineteenth century, super-earthly Beings have been seeking to enter the sphere of earth-existence. Just as the Vulcan-men were the last to come down to the earth, so now Vulcan Beings are actually coming into the realm of earthly existence. Super-earthly Beings are already here, and the fact that we are able to have a connected body of Spiritual Science at all to-day is due to the circumstance that Beings from beyond the earth are bringing the messages from the spiritual world down into earth-existence.

But, speaking generally, what is the attitude adopted by the human race? The human race is behaving, if I may put it so, very shabbily to these Beings who are appearing from the cosmos and coming down—slowly and by degrees, it is true—to the earth. The human race does not concern itself with them; it ignores their existence. And it is this which will plunge the earth into tragic conditions, for in the course of the next centuries more and more Spiritual Beings will be among us—Beings whose language we ought to understand. And this is possible only if we try to grasp what comes from them: namely, the substance and content of Spiritual Science. They want to give it to us and they want us to act in the sense of Spiritual Science. Their desire is that Spiritual Science shall be translated into social behaviour and action on the earth.

I repeat, then, that since the last third of the nineteenth century, Spiritual Beings from the cosmos have been coming into our own sphere of existence. Their home is the sphere lying between the moon and Mercury, but they are already pressing forward into the realm of earth-existence and seeking to gain a foothold there. And they will be able to find it if human beings are imbued with the thought of their existence. This can also be expressed as I expressed it just now, by saying that our shadowy intellect must be quickened to life by the pictures of Spiritual Science. We are speaking of concrete fact when we say: Spiritual Beings are seeking to come down into earth-existence and ought to be willingly received. Catastrophe after catastrophe must ensue, and earthly life will fall at length into social chaos, if opposition is maintained in human existence to the advent of these Beings. They desire nothing else than to be the advance-guards of what will happen to earth-existence when the moon is once again united with the earth.

To-day people may consider it comparatively harmless to elaborate only those automatic, lifeless thoughts which arise in connection with the mineral world and the mineral nature of plant,

animal and man. Materialists revel in such thoughts which are—well—thoughts and nothing more. But try to imagine what will happen if men go on unfolding no other kinds of thoughts until the time is reached in the eighth millennium for the moon-existence to unite again with the earth. These Beings of whom I have spoken will gradually come down to the earth. Vulcan Beings, 'Supermen' of Vulcan, 'Supermen' of Venus, of Mercury, of the Sun, will unite with this earth-existence. But if human beings persist in nothing but opposition to them, earth-existence will pass over into chaos in the course of the next few thousand years.

It will be quite possible for the men of earth, if they so wish, to develop a more and more automatic form of intellect—but that can also happen amid conditions of barbarism. Full and complete manhood, however, cannot come to expression in such a form of intellect, and men will have no relationship to the Beings who would fain come towards them in earth-existence. And all those Beings of whom men have such an erroneous conception because the shadowy intellect can only grasp the mineral nature, the crudely material nature in the minerals, plants and animals, nay even in the human kingdom itself—all these thoughts which have no reality will in a trice become substantial realities when the moon unites again with the earth. And from the earth there will spring forth a terrible brood of beings, a brood of automata of an order of existence lying between the mineral and the plant kingdoms, and possessed of an overwhelming power of intellect.

This swarm will seize upon the earth, will spread over the earth like a network of ghastly, spiderlike creatures, of an order lower than that of plant-existence, but possessed of overpowering wisdom. These spidery creatures will be all interlocked with one another, and in their outward movements they will imitate the thoughts that men have spun out of the shadowy intellect that has not allowed itself to be quickened by the new form of Imaginative Knowledge, by Spiritual Science. All the thoughts that lack substance and reality will then be endowed with *being*.

The earth will be surrounded—as it is now with air and as it sometimes is with swarms of locusts—with a brood of terrible, spiderlike creatures, half-mineral, half-plant, interweaving with masterly intelligence, it is true, but with intensely evil intent. And in so far as man has not allowed his shadowy intellectual concepts to be quickened to life, his existence will be united not with the Beings who have been trying to descend since the last third of the nineteenth century, but with this ghastly brood of half-mineral, half-plantlike creatures. He will have to live together with these spiderlike creatures and to continue his cosmic existence within the order of evolution into which this brood will then enter.

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This is a destiny that is very emphatically part of human evolution upon the earth, and it is quite well known to-day by many

of those who try to hold humanity back from the knowledge of Spiritual Science. For there are men who are actually conscious allies of this process of the entanglement of earth-existence. We must no longer allow ourselves to be shocked by descriptions of this kind. Such facts are the background of what is often said to-day by people who out of old traditions still have some consciousness of these things and who then see fit to surround them with a veil of mystery. But it is not right any longer for the process of the earthly evolution of humanity to be veiled in mystery. However great the resistance, these things must be said, for, as I constantly repeat, the acceptance or rejection of spiritual-scientific knowledge is a grave matter for all mankind.

I have been speaking to-day of a matter upon which we cannot form a lukewarm judgment, for it is part and parcel of the very texture of cosmic existence. The issue at stake is whether human beings will resolve in the present epoch to make themselves worthy to receive what the good Spirits who want to unite with men are bringing down from the cosmos, or whether men intend to seek their future cosmic existence within the tangled, spider-brood of their own shadowy thoughts. It is not enough to-day to speak in abstract terms of the need for Spiritual Science. The only thing to do is actually to show *how* thoughts become realities. Dreadfully abstract theories are hurled at men to-day, such, for example, as "Thoughts become things," or similar phrases. Abstract statements of this kind altogether fail to convey the full and concrete reality. And the concrete reality is that the intellectual thoughts evolved inwardly by men to-day will in time to come creep over the earth like a spider's web wherein human beings will be enmeshed, if they will not reach out to a world lying beyond and above their shadowy thoughts and concepts.

We must learn to take in deepest earnestness such matters as were indicated at the conclusion of my lectures on the nature of colours, when I said that the science of colour must be lifted out of the realm of abstract physics into a region where the creative fantasy and feeling of the artist who understands the real nature of colour go hand-in-hand with a perception of the world illumined by Spiritual Science. We have seen how the nature of colour can be understood, how that which modern physics, with its unimaginative charts, casts down into the Ahrimanic world, can be lifted into the sphere of *art*, so that there can be established a theory of colours—remote, it is true, from the tenets of modern science, but able to provide a true foundation for artistic creation, if man will only receive it into his being.

And there is another thought, too, that must be taken very seriously. What do we find to-day all over the civilised world? Young students go into the hospitals or to universities to study science, and the constitution of the human being is explained to them. By studying the corpse they learn about the bones and the

rest of the organism. By a series of abstract thoughts they are supposed to be able to acquaint themselves with the nature of man's being. But in this way it is only possible to learn something about the mineral part of the human organism. With this kind of science we can only learn about the part of man's being which has a significance from the time of the separation of the moon until its return, when the shadowy thoughts of modern times will become spidery creatures having a concrete existence.

A form of knowledge must develop which produces quite a different conception of the being of man, and it can be developed only by raising science to the level of artistic perception. We shall realise then that science as it is to-day is capable of grasping only the mineral nature, whether in the mineral kingdom itself or in the kingdoms of plant, animal and man. Even when applied to the plant kingdom, science must become a form of art, and still more so in the case of the animal kingdom. To think that the form and structure of an animal can be understood by the means employed by anatomists and physiologists is nonsense. And so long as we fail to realise that it is nonsense, the shadowy intellect cannot be transformed into a living, spiritual comprehension of the world. What is taught to young students to-day in so abstract a form in the universities must be transformed and must lead to a really artistic conception of the world. For the world of Nature itself creates as an artist. And until we realise that Nature is a world of creative art which can be understood only through artistic feeling, no healing will come into our picture of the world.

In the torture-chambers of mediæval castles, people were shut into what was called the 'iron virgin', where they were slowly spiked with iron teeth. This was a physical and more tangible procedure than that to which students in our day have to submit when they are taught anatomy and physiology and are told that in this way they are acquiring knowledge of the nature of man—but fundamentally it is the same kind of procedure. All that can be understood of the nature of man by such methods derives from an attitude of mind which is not unlike the attitude of those who were not averse from applying tortures in the Middle Ages. Students learn about the human being as he is when he has been dismembered; they are taught only about the mineral structure in man, about that part of his being which will one day be woven into the network of spiderlike creatures extending over the earth.

It is a hard destiny that power should lie in the hands of men who regard the truest thoughts as absurdities and who scorn the impulses that are most inwardly and intimately bound up with the well-being of human evolution, with the whole mission of humanity in the world. It is a tragic state of things and we dare not shut our eyes to it. For it is only by realising the depth of such a tragedy that men will be brought to the point of resolving, each in his own place, to help the shadowy intellect to admit the spiritual world

that is coming down from above in order that this intellect may be made fit for the conditions of future times. It is not right for the shadowy intellect to be driven down into an order of existence lower than that of the plants, into the brood of spidery creatures that will spread over the earth. Man's being needs to have reached a higher level of existence when, in the eighth millennium, women will become barren and the moon will unite once again with the earth. The earthly must then remain behind, with man directing and controlling it from outside like an object which he need not carry over with him into cosmic existence. Man must so prepare himself that he need not be involved in what must inevitably develop upon the surface of the earth in this way.

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From pre-earthly existence man has descended to this earthly life. His birth from woman began with the departure of the moon, but this physical form of birth is only a passing episode in the great sweep of cosmic evolution and will be replaced by another. It is the phase which was destined to bring to man the feeling and consciousness of freedom, the self-completeness of individuality and personality. It is a phase by no means to be undervalued. It was necessary in the whole cosmic process, but it must not remain forever unchanged. Man must not give way to the easy course of assuming the existence of an abstract God, but bring himself to look concretely at things that are connected with his evolution. For his being of soul-and-spirit can only be inwardly stimulated when he really understands the nature of the concrete realities connected with the great epoch towards which his successive earthly lives are leading him.

That is what a true Spiritual Science tells us to-day. The human will is threatened with being deprived of spiritual impulses and with becoming involved in the spidery web that will creep over the earth. There are men in existence who imagine that they will gain their ends by promoting their own spiritual development and leaving the rest of their fellow-beings in a state of ignorance. But the vast majority live in complete unawareness of the terrible destiny that awaits them if they lend themselves to what an ancient form of spiritual knowledge called the "sixteen paths to corruption." For just as there are many ways in which the shadowy intellect may be directed to the impulses and knowledge coming from the spiritual world, so naturally there are many ways in which varieties of the shadowy intellect will be able to unite with the spider-beings who will spin their web over the earth in times to come. Intellect will then be objectivised in the very limbs and tentacles of these spidery creatures, who in all their wonderful interweavings and caduceus-like convolutions will present an amazing network of intricate forms.

It is only by developing an inner understanding for what is truly

artistic that man will be able to understand the realm that is higher than mineral existence—that realm of which we see an expression in the actual shaping and form of the surfaces of things in the world.

Goethe's theory of metamorphosis was a most significant discovery. The pedants of his day regarded it as dilettantism, and the same opinion prevails to-day. But in Goethe, clarity of insight and intelligence was combined with a faculty of vision which perceived Nature herself as an active expression of artistic creation. In connection with the animal world, Goethe only reached the point of applying this principle of metamorphosis to the forms of the vertebræ and cranial bones. But the process whereby the forms of a previous existence are transformed, whereby the body of the earlier life is transformed into the head of the subsequent life—it is only by an inner understanding of this wonderfully artistic transformation of the radial bones into the spherical that we can truly perceive the difference between the head and the rest of the human structure. Without this insight we cannot perceive the inner, organic connection between the head and the rest of the human body.

But this is a form of art which is at the same time science. Whenever science fails to become art, it degenerates into sophistry, a form of knowledge that hurls mankind into calamity so far as his cosmic existence is concerned. We see, therefore, how a true Spiritual Science points to the necessity for artistic insight and perception. This faculty was already alive in Goethe's soul and comes to expression in his hymn in prose, entitled *Nature*, written about the year 1780, and beginning: "Nature! We are surrounded and embraced by her. . . ." The ideas are woven together so wonderfully that the hymn is like the expression of a yearning to receive the Spirit from the cosmic All.

It can be said with truth that the development of the thoughts contained in Goethe's hymn to Nature would provide a dwelling-place for the Beings who would fain come down from the cosmos to the earth. But the barren conceptions of physiology and biology, the systematising of plant-life and the theories that were evolved during the nineteenth century—all the thoughts which, as I showed in the lectures on colour, have really nothing to do with the true nature of the plants—can awaken no real knowledge, nor can they get anywhere near the being of man. Hence the body of knowledge that is regarded to-day as science is essentially a product of Ahriman, leading man on towards earthly destruction and preventing him from entering the sphere which the Beings from beyond the earth have been trying to place within his reach since the last third of the nineteenth century.

To cultivate Spiritual Science is no abstract pursuit. To cultivate Spiritual Science means to open the doors to those influences from beyond the earth which have been seeking to come down to the earth since the last third of the nineteenth century. The cultivation

of Spiritual Science is in very truth a cosmic event of which we ought to be fully conscious.

And so we survey the whole span of time from the separation until the return of the moon. The moon which, as we say, reflects the sunlight back to us, is in truth deeply connected with our existence. It separated itself from the earth in order that man might become a free being. But this period of time must be utilised by man in such a way that he does not prepare the material which, with the re-entry of the moon into the earth-sphere, would combine with the moon-substance to produce that new kingdom of which I have tried to give you a graphic picture.

Now and then there arises in human beings of our time a kind of foreboding of what will come about in the future. I do not know what meaning has been read into the chapter in *Thus Spake Zarathustra*, where Nietzsche writes of the 'ugliest man' in the 'valley of death.' It is a tragic and moving passage. Nietzsche, of course, had no concrete perception of the valley of death into which existence will be transformed when the spidery brood of which I have spoken spreads over the earth. Nevertheless, in the picture of this valley of death in Nietzsche's imagination there was a subconscious vision of the future, and within this valley of death he placed the figure of the 'ugliest man.' It was a kind of foreboding of what will happen if men continue to cultivate shadowy thoughts. For their destiny then will be that in hideous shape they will be caught up by the forces of the moon-existence as it comes down into the sphere of the earth and will become one with the brood of spidery creatures of which I have been speaking.

What purpose would be served by keeping these things secret to-day, as many people desire? To keep them secret would be to throw sand into the eyes of men. Much of what is spread over the world to-day under the name of spiritual teaching is nothing but a process of throwing sand into men's eyes so that no single event in history can be understood for what it really is. How many people realise to-day that events of fundamental and incisive importance are taking place? I have already spoken of these things. But how few are prepared really to enter into them! People prefer to shut their eyes to what is happening and to think that, after all, the events are not really of such great significance. Nevertheless, the signs of the times are unmistakable and must be understood.

This was what I wished to say in regard to the way in which the being of man upon the earth is connected with the cosmos.

The Trinity in Man and Nature*

A. P. Shepherd

IN this article I am attempting to expound a concept of the nature of Being and Reality that has been in my mind for the past eighteen years. I shall be covering ground that many have explored and written about, but for the most part I shall make little reference to other points of view. To present a subject such as this in one article must involve omissions and tentative statements, but I hope I shall succeed in making plain the general theme of my argument.

As every student of Anthroposophy knows, Dr. Steiner revealed the presence of Man and Nature of many trinities or threefold relationships. Man is spirit, soul and body; in his earthly life he functions through three sheaths, the astral, the etheric and the physical; he expresses himself in thinking, feeling and willing. In his physical manifestation he is head-man, heart-man, and limbs and metabolic-man; in his path to Higher Knowledge he experiences three higher levels of consciousness and being, Imagination, Inspiration and Intuition. In Nature again there are three levels of consciousness and being—in the mineral kingdom, the plant kingdom and the animal kingdom.

In this article I do not intend to dwell on the workings of these trinities in Man and Nature, but rather upon the concept of Trinity itself, in its relation to Man and Nature; the concept of Trinity in Unity, and Unity in Trinity, which in this form of expression is familiar to us in the Christian definition of the Godhead, as set out in the Athanasian Creed. There the two sides of the seeming paradox are stated in the most precise terms, with no attempt to explain or reconcile them, but simply as a fundamental dogma of faith. What I seek to maintain is that this apparent paradox of Trinity in Unity and Unity in Trinity is not a mere theological deduction from divine revelation, but is—as we might have expected it to be, if we really believe it to be the nature of the Godhead—a revelation of the true nature of all being and reality.

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In setting out this thesis, I propose to start from the level of universal sense-experience and of scientific thinking, from the age-long perplexity of modern thought as to the nature of Man's perception through his senses of the world around him. In the naïve view of the ordinary man, his visual sense-perception gives him a direct, objective awareness of objects outside himself, and he regards what is given in his sense-perception—colour, form, etc.—as the properties of the object perceived, correcting and balancing the evidence of his eyes by that of his other senses.

The scientific thinker, tracing the physical process of visual perception—as far as he can trace it—holds that we perceive only an inner picture, created by the brain, which bears no direct revelation of the nature of the object "perceived", although it is adequate as a practical means of relating ourselves to it.

I do not intend in this article to investigate the process of sense-perception, intensely important though it is. Rudolf Steiner spoke a great deal about it, and I believe that the point of view I am trying to establish would throw great light upon it. But all that I am concerned with now is the fact of sense-experience.

This image that we perceive, whatever be the process by which we perceive it, is rooted in both the perceiver and the perceived. It is a relation to each other in which they stand. The picture which I have of a rose depends upon the presence of a rose within the visual range of my eyes. If the rose is taken away, or if I turn my back upon it, the image disappears. Neither I nor the rose can claim the image for itself, for it does not exist except as a relationship between us.

This would seem to challenge the assertion that the image is "created" by the brain. At best, the image is an interpretation of received impressions. The brain cannot create any other sort of picture from those sense-impressions than the one it arrives at, and it continually tests and corrects this picture by reference to the received impressions, and those of other senses. Visual sense-experience, therefore, is a relationship between the perceiver and the perceived.

Here I want to make a most important point. This relationship is vital to both perceiver and perceived, not only as a useful process of knowledge, a means of communication, but vital also to their *being*, their *existence*. The image of the rose—the fact that I see the rose as red—is part of what I *am*. The fact that the rose, in that relation to me, appears as red is part of what the rose *is*.

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Let us develop this a little further, beginning with my claim that my perceived image of the rose is part of what I am, of my very being. Man's self does not consist merely of his immediate momentary physical existence, but of his continuous inner experience. When I say "I" in the deepest sense, I do not refer to the former but to the latter, my inner experience, which is preserved and is, in a measure, recoverable in memory, and is more deeply and completely preserved in my etheric body, or, in terms of psychology, my "Unconscious". If the whole of my sense-experience of the outer world of Nature and Man is taken away from this inner self of continuous experience, what is left? Quite obviously this relationship between myself and the outer world,

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which expresses itself through sense-experience, is a vital element in my being. Of course there are other relationships between myself and the world about me, some of them physical and obvious, others of which I am unconscious. But the fact remains that the visual images which I have in perception, and all the impressions I receive through my senses, are, in a very real sense, part of my being.

It is perhaps less obvious and not so easy to demonstrate that this relationship is also part of the being of the perceived object. For it has been the aim of the philosophy and science of the last four centuries to seek in the object perceived for the "thing-in-itself", behind and independent of its appearance to the observer. The qualities which arise in sense-perception as a relationship between the observer and the thing observed were defined as secondary qualities, and were disregarded as relevant only to the observer and no part of the reality of the object observed. Investigation was concentrated on the so-called primary qualities, which were held to be independently inherent in the object itself, such as weight, size, etc. But these qualities are no less a relationship than the discarded "secondary qualities". If any object were the only object in the world, no conclusion could be arrived at about its weight or size, for these can be conceived and expressed only in comparison with other objects. It is a relationship to these objects.

The discoveries of nuclear science show that atomic structure—the foundation of matter—does not reveal a material "thing-in-itself", but only a rigidly controlled relationship of electron, proton and neutron, themselves only focal points in fields of force. In a recent article in the *Sunday Times* on "The Elementary Particles within the Atom", Professor Salam says: "Each one of these particles exists in interaction with certain others". Indeed, it has been one of the discoveries of nuclear science that at a certain stage the observer himself cannot be detached from the object under consideration; the very fact that he is "observing" has a direct effect upon the object under observation. The basis of matter itself is relationship.

Furthermore, to disregard the "secondary qualities" manifest in sense-perception is to disregard the fundamental relationships in which the object stands to the observer, relationships far more essential to its particular manifested being than are the nuclear relationships which underlie it. For example, if a rose is reduced to its material elements or to its atomic structure—in which there is neither colour, scent, nor form, as manifested in sense-experience—then the rose, as a rose, is no longer there; just as the dissection of an Old Master into classified particles of canvas and paint is no longer a picture, and its whole *raison d'être* has been destroyed. As George Macdonald wrote: "The show, the appearance of things, is that for which God cares most. . . . It is through their show,

not through their analysis, that we enter into the deepest relationship to them."

In point of fact, do we not build up the reality of any object by discovering more and more of the relationships in which it stands, to ourselves, to other objects, or within its own manifested being? All these we build up by thought working upon our sense-impressions, for none of these relationships is directly manifest in bare sense-impressions. First, we discover, by thought, the relationships of colour and form in which the visual sense-impressions present themselves, and verify or elaborate them by other sense-impressions, of sound or touch, etc. Then we go on, by thought, to further relationships not directly given in the sense-impressions. These relationships we build into the reality of the object so completely that, having become familiar with it, we come to think of this whole complex of relationships almost as directly given in the sense-impressions. But the fact remains that the reality of the object consists entirely of relationships discovered by thought.

Indeed, it is interesting to see how, even to the thinker, the wider reality, which includes discovered relationships not apparent in the sense-impressions themselves, appears to manifest itself directly to sense-perception. This can be seen in such a programme on television as "Animal, Vegetable or Mineral", if one watches the face of, let us say, Sir Mortimer Wheeler as he takes into his hands some article or even fragment of pottery. He receives from it the same sense-impressions as would be given to anyone else, but as one watches in his eyes the intense thought with which he scrutinises the object, it would almost appear as though the manifold relationships of place and date and probable form and use, derived from thought and stored-up in his memory, have become directly manifest to his sense-experience, as composing the reality of that at which he is looking.

It should be noted that the claim that the relationship given in sense-perception is part of the reality of both observer and observed is not invalidated by the fact that to a colour-blind person the object appears in what we should call "the wrong colour". For this fact, that the rose appears in this colour to the colour-blind person, is still part of the rose's reality, as it is also part of the reality of the colour-blind observer.

Thus we see, not only that the reality of any object consists in its relationships discovered by observation and thought, but that there is no part of the being of the object that is not a relationship, either to entities outside itself, or to entities discoverable within itself. This also seems to be supported by the latest discoveries of nuclear science. In the article by Professor Salam already referred to, he says of the "neutron" that it can exist only in relationship to another particle. "When left free, a neutron decays in about ten minutes into a proton, an electron and a neutrino." He concludes with a startling statement. "The elusive neutrino, a massless,

electrically neutralised particle, is perhaps the most perfect instance of a disembodied spirit"! He might have said, "of a pure relationship".

Hence we must say that entities consist of relationships, are built up out of relationships. Relationships are the substance of existence and being. This applies equally to conscious entities, such as animals, and self-conscious entities, such as men or spirit-beings. Between self-conscious beings, of course, consciousness itself enters into the relationships, and lifts them to a new level, producing also a new level of being. Yet the fact remains that the relationships constitute the reality of the beings.

We have already considered how this truth applies to unconscious objects, but there is more to be said in regard to this. So intricate and yet ordered is the pattern of relationships in the object, so integrated with our own conscious thinking, that one is driven to the conclusion that the objects are the expression of conscious beings behind the phenomenon, with whom the relationship and its consequent reality may well be an even more vivid experience that it is to us. One is reminded of the satirical question and answer of the late Monsignor Ronald Knox:

The Question. "There once was a man who said: 'God
Must think it exceedingly odd
That the sycamore tree
Continues to be
When there's no-one about in the quad.'"

The Answer. "Dear Sir, Your astonishment's odd:
I am always about in the quad,
And that's why the tree
Continues to be,
Since observed by Yours faithfully, God."

As St. Paul put it, "God is not far from any one of us; for in Him we live and move and have our being."

But the fact that the relationship is a constituent in the being of both entities which it relates has a profound effect on the nature of the relationship itself, and of the trinity of which it forms a part. The relationship itself can never be regarded as "abstract", because it is the constituent of the entities which it relates, and therefore itself partakes of the nature of their "being". Moreover, inasmuch as this quality of "being" expressed in the relationship is shared by each of its participants, the subject, the object and the actualised relationship, and also cannot be possessed by any of them alone—for its existence presupposes all three—we have here a trinity, in which each is itself an entity, and yet all three are united in a unity of being. This I call Trinitarian Reality and Being.

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But we have not yet exhausted the nature and significance of these relationhips which our thinking discovers. Not only do they

constitute the very being of the objects which they link together, and in that measure themselves partake of "being", but the relationships themselves can become entities independent of that relationship, a new point of being from which fresh relationships establish themselves in ever-widening creativity.

The rose-colour, which manifests itself as a relationship between the rose and myself, becomes itself an entity of colour, establishing a new range of related entities of colour, independent of that particular relationship. Relationships are therefore seen, not only as constituents of being, but as the creative source of new entities.

This is manifest in perhaps the greatest achievement of human thinking, the science of mathematics. This is a science entirely of relationships. Objects are necessary as focal points of relationship, but they are undefined, and presented symbolically as x or y. This science of relationships, carried to more and more complicated and abstruse heights, beyond the range of the ordinary mind, has manifested the creative quality of relationships, in that mathematics has been the key to many of the deepest secrets of science and the instrument of its greatest discoveries and of its ventures into new fields of knowledge and achievement.

Thus, what appears at first sight in our sense-experience as a duality of subject and object, or object and object, each of whose being is explained by abstract relationships with the other, becomes a trinity of subject, object and relationship, in which relationship, contributing to and partaking of the reality of both subject and object, has itself become an entity, and, in so doing, ever creatively extends this Trinitarian Reality.

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All this points to the doctrine of the Trinity with which we started, but we have not yet exhausted the analogy. For this doctrine is not only of a Trinity of Persons, whose being and consciousness share in the identity of their mutual relationships. This Trinity of Being is also a Unity of Being which includes the whole, and is thus shared in and experienced as a whole by each and all of the Persons of the Trinity.

Now is there any human experience which bears analogy to this all-inclusive experience of Unity and Trinity? It must be an experience which includes consciousness of the self as a focal point of relationships, yet feels itself expanded into a consciousness of wider being, which includes itself and all the beings to which it is related, and also the relationships between them.

There is, in the first place, the mystical experience to which many mystics have borne witness: a sense of expansion of being, until it appears to be all-inclusive—and yet, with all these, an experience of being far more intense than personal, individual self-consciousness. There is a similar pattern of experience quite frequently in Christian conversion, a sense of expansion in a new-

found love of the whole world. It is expressed in the words of Saul Kane, the suddenly converted drunken boxer in Masefield's *Everlasting Mercy*:

> "I knew that Christ had given me birth
> To brother all the souls on earth,
> And every bird and every beast
> Should share the crumbs broke at the feast."

So, too, in Intuition, the last stage of Higher Knowledge, as Rudolf Steiner describes it, there is the experience of mutual interpenetration of being, each experiencing himself in the other and the other in himself, passing on to the experience of sharing in all-inclusive reality, with intensified consciousness of self.

To conceive of this profound Trinitarian Reality in concepts is almost impossible. Perhaps, we may try to form an Imagination of it, conscious that such a picture must fall far short of the reality.

Let us picture a vast transparent sphere filled with an endless network of criss-crossing threads of relationship. Wherever they meet is an object. Where many threads meet, is a focal point of being. At the centre and pervading the whole is the Godhead, the perfect mutual relationship of Father, Son and Holy Spirit, out of whose personified creativity all these myriad relationships have come, and keep coming into being.

From our perception of the working of Trinitarian reality at the level of our physical consciousness, we are able to realise more clearly the significance of the Triune Godhead. Relationship being the essence of true being, we see the eternal necessity of at least a dual personal consciousness within the Godhead itself—The Father, the Ground and Source of all Being, and the Son "begotten before the worlds", weaving and creating out of the Divine Substance; the "eternal Word, through whom all things were made".

In this relationship they are not two separate Persons, each experiencing the other, but the relationhip and experience are always "two-way"—"I in the Father and the Father in Me". What the Son is to the Father is part of the being of the Father; it is also part of the being of the Son. What the Father is to the Son is part of the being of the Son; it is also part of the being of the Father. "I and the Father are one." And this pulse of being between the Father and the Son, which is Divine Live, constituting as it does the essence of their being, is Itself personal, the Eternal Spirit "proceeding from the Father and the Son", providing the threads of true relationship by which the Son creates.

In this tri-Personal Unity of Being the Godhead consists, and, out of the joy and blessedness of its own being, seeks to bring self-consciousness and conscious relation to itself to those focal points of relationship which have in them the potentiality of self-conscious being. To achieve this end, these immature beings must first be withdrawn from their consciousness of existing wholly in

this totality of Trinitarian Being. They must be brought into a condition of "separated" consciousness. In this lowered experience they gradually become aware of themselves as focal points of being, which more and more appear to be completely self-contained and separate from other focal points of being, any relationhips discovered between themselves and other entities appearing impersonal and abstract, except in so far as they affect their physical being. Moreover, the relationships perceived extend to a very limited range, of which they themselves seem to be the centre. This is the sphere of physical consciousness.

But when, as by death, these physical beings are released from the controlled time-experience of their "separated" consciousness, they discover that their relationships no longer appear abstract, but as the very constituent elements in their being. Moreover, they perceive that these relationships extend ever more widely and deeply through the universal network of being and relationship, and in this experience their own being, now conscious of existing in its relationships, seems to expand so as to include the whole sphere of being. Finally, they experience the relationships which unite them to the Godhead itself and so reach consciously the level of Trinitarian being, at which level they and other beings experience themselves and one another in interpenetration of universal being.

Thus we see that in this Trinitarian relationship, which is implicit even in our physical sense-experience, there are involved, not only higher levels of Consciousness, but higher levels of Being.

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What I have tried to show so far is that the doctrine of the divine Trinity in Unity and Unity in Trinity is not a mere theological concept—as some believe—but that it is a revelation of the real nature of all being; indeed, of all reality. Also that indications of this are given in the universal experience of sense-perception and knowledge, and, to a still greater degree, in mystic and supersensory experience. What I would now attempt to show is how this conception permeates and is implicit in Dr. Steiner's teaching.

Let us begin with that which was the earliest element in his teaching, the nature of man's knowledge of the world through sense-perception as it is set out in *The Philosophy of Spiritual Activity*. We have already considered man's sense-experience as containing fundamental elements of Trinitarian Reality, but this is all the more evident as we consider the light which Dr. Steiner threw on this subject.

He revealed, in a quite new way, the fundamental place of thought in sense-perception, and pointed out how rarely the thinking man—and still less the ordinary man—"thinks about thinking". He pointed out that man's awareness of the reality about him had been "split asunder": part was given to man in sense-impressions, but man has himself to bring to bear upon these his own activity of thinking, and only in this way establishes

conscious relationships with reality. Thus thinking is a spiritual activity, an activity of man as spirit.

When we apply to this the concept of Trinitarian Reality, we see that what man seeks in thinking is to discover relationships between his diverse sense-impressions, and between the so-perceived separate objects of sense-experience. Some time ago I heard Sir Julian Huxley say, in a television broadcast, that what he would most like to know of things not yet known was, "What is thinking?" I would venture to suggest the answer: "Thinking is the search for and application of relationships implicit in and between objects of sense-experience."

Moreover, man thinks, not only because relationships complete knowledge, and provide means of contact, but because *they complete his being*. In order that he may acquire self-awareness, man finds himself, not only with a divided knowledge, but with a divided *being*. Sense-impressions give him an awareness of entities outside his separated, self-contained physical self. They can be made real only by establishing relationships between them and one another and himself. Moreover, he can only complete his own reality as a spirit being by establishing these relationships with the world impinging on him. *Thinking then is the pathway to spirit-being*. Man thinks because he needs relationships in order to live, and in a "separated" existence he must look for them. His spirit would starve if it could not establish relationships between itself and other entities.

But the relationships found in this way are not "compelling", as they are in the spiritual world. They appear, to the ordinary man, as abstract thoughts, revealing the nature of separated objects outside himself. They leave him free to accept or reject, to use or misuse them. But if man would rise to his full heritage, he must discover in full consciousness the Trinitarian reality of subject and object in living relationship, as constituting the true reality and being, both of himself, and of each and all of the "separated" objects.

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We find indications of the concept of Trinitarian reality also in Dr. Steiner's exposition of how the three stages of Higher Knowledge, Imagination, Inspiration and Intuition are reached. The first stage, "Imagination", is reached by directing concentrated meditation upon a spiritual reality of whose existence we are aware, but which is not manifest to our sense-experience, as, for example, the growth-forces of a plant. If the meditation is successful, the spiritual reality makes an impression on us, through our developed soul-organs of perception, in form and colour. This is an "Imagination". It is, as it were, a spiritual sense-impression giving an awareness of a spirit-object impressing this pattern of form and colour upon us. But as yet we do not know the nature of that object itself, but only its effect upon ourselves. For us to know it,

it must itself establish a direct relationship with us, which will reveal its own being.

We have, therefore, to dismiss from our attention the "Imagination"—that is, the effect which the object made upon ourselves from without—and wait until we receive from the spirit-reality a communication of the relationship which links it to ourselves. We wait in pure thought-meditation, directing our relationship-discovering faculty of thought towards the object, until, as Spinoza put it, "spirit comes to meet us". This is the stage of "Inspiration", the stage of the discovery of spirit-reality itself in revealed relationships, and the discovery that in those relationships not only the spirit-reality, but we ourselves, consist.

Then, when relationship is fully taken up into being, we reach the final stage of "Intuition", where living in relationship passes into a mutual interpenetration of being, an experience of oneself in the other, and the other in oneself. Subject, Object and Relationship have been taken up into Trinitarian Being.

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These three stages of Higher Knowledge are, of course, only an anticipation, by the path of spiritual self-development, of the actual ascent of the human spirit after death, first through the etheric realm of picture-consciousness or spirit-awareness, then to the astral realm of living in the moral discovery of the ontological significance of relationships; and finally to the pure spirit-realm of Trinitarian being. This repeated ascent and descent of the stairway of being between spiritual and earthly consciousness, leading from earth-life to earth-life, is not only the pathway of individual spirit-evolution, but through the reincarnation of great spirits it provides the impulse for the gradual spiritual evolution on earth of mankind—from unconscious Trinitarian being, through separated being, to full separated self-consciousness, and finally, by rediscovery of the reality of spirit, to fully-conscious Trinitarian being.

In a very illuminating way Dr. Steiner shows how this spiritual evolution of mankind has worked out in human history. For he shows that the key to the understanding of human history is not to be found primarily in man's gradual discovery and mastery of the physical world, but in the evolution of human consciousness in that process. In this we find the clearest indication of the presence and working of Trinitarian reality.

Descending from an unself-conscious Trinitarian existence in universal being, in his earliest contact with the physical world man still felt deeply the unity between his own being and the other beings and entities, spiritual and physical, about him. He lived in vivid consciousness of vital relationships between himself and them, in the light of which he interpreted their being. He was as yet hardly aware of his or their separate existence.

Gradually this original experience began to fade into a more

"separated" consciousness, in which man looked for guidance to the leaders of the Mystery-centres, who still retained spiritual vision and understanding. It was an age of ever-expanding experience and development of physical existence, but one in which man still felt himself linked with the spirit-world, his fellow-men, and the world about him. It was the age of the *Sentient Soul*.

With the rise of Greek civilisation man entered into a new stage of "separated" existence. He became more and more conscious of his own being at one end of his experience—that is, of himself as *Subject*, able not only to experience, but to initiate and control relationships with external entities, and as having moral responsibility in doing so. It was the age of *the Intellectual Soul, the Subject-conscious Soul*; and the "I", as subject, became increasingly interested in itself and its possibilities. Nevertheless, for centuries man still retained a consciousness of being linked with the world about him.

Four centuries ago, with the dawn of the scientfic age, man became supremely interested in that which was at the other end of his experience, *the Object*, disregarding his own personal relationship to it, and considering it wholly in its relationship to other objects. Relationships still remain, but they no longer deeply affect him, nor, for the most part, hold any moral content for him. They are simply abstract laws, a method of gaining knowledge and control of objects. It is the age of *the Consciousness-Soul, the Object-conscious Soul*; Nature is utterly devoid of spirit and is regarded merely as an object of exploitation, for which man has no sense of responsibility. In this concentration upon Object-consciousness man has included himself as an object equally with other material objects, a phenomenon of the physical world, governed by abstract laws. The trustworthiness of man in his subject-activity is questioned, even his right as an ordinary individual to exercise such a function at all.

Finally, in this twentieth century the emphasis has gradually shifted from Object-consciousness to *Relationship-consciousness*. We have already referred to higher mathematics as the science of abstract relationships and to the discoveries in nuclear science of relationships as the basis of matter. The significance of Subject and Object, of man and the world he lives in, seems lost in the incomprehensible abstract mathematical relationships by which the high-priests of the Science-Mysteries explain them. Moreover, these supposedly abstract relationships have been able to release and to create forces which threaten, not only the harmony of existence, but existence itself. Nor is it only in pure science that the worship of relationships in themselves has been set up. Political and social ideologies, economic world-schemes and industrial setups, wholesale educational systems, have become dominant relationships, in which the individual subject or object are mere pawns and their significance almost irrelevant.

It is the opposite process to that of Higher Knowledge. The wheel has gone full circle from the all-embracing Trinitarian Unity of the Spirit-world. Subject and object and one object and another object are seen as separate entities, and the former living relationships between them have become either properties of the objects, or merely abstract laws, or impersonal fields of force that threaten the existence of both subject and object. Man is left wondering if there is any vital relation at all between subject and object, between himself and the world.

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There are, however, indications of a reaction against mere despair. Science, as we have seen, is beginning to realise that relationships cannot be treated as abstractions, but are a concrete factor in reality, even relationships between observer and observed. So, too, there is a growing conviction that political ideologists must not be allowed to function in disregard of the well-being of individuals and their way of life; that uninhibited economic competition cuts its own throat; that the disregard of the natural aspirations and needs of undeveloped peoples must breed wars; and, finally, that only in co-operation with the laws of Nature's own being can man depend on her sustenance.

But these experience-bought readjustments of human living cannot of themselves solve the problem. Man must return from his "separated" consciousness to an awareness of Trinitarian reality. In order that he might do so in full consciousness, it was necessary for him first to acquire his separated awareness of the three elements in that inclusive reality, Subject, Object and Relationship, even as in the Godhead itself the triple personal consciousness is necessary for the experience of the Triune Unity.

Although he is unconscious of it, man is a microcosm of the macrocosm of the Godhead. But he can only be a real, self-conscious centre of spirit-being, a spirit-self, by a mutual subject-object and object-subject relationship between himself and God, and between himself and the created world, which is the expression, through the hierarchies, of the Divine Word. To obtain Trinitarian being, this relationship must be reciprocal, as it is between the Persons in the Godhead. Man's great mistake has been to regard his relationships as only one-way—from himself, both in regard to the created world and even towards his fellow men; to disregard the other man's point of view, and, in any case, not to recognise it as of any ontological significance to his own being. He must learn to allow his spirit to be "object" to the speaking of others and also to the speaking of the created world. Man cannot reach this all-inclusive unity of being out of a separated, materialistic outlook, devoid of spirit. He must press on, with the aid of Spiritual Science, to the actual discovery of spirit, if he is to attain the true nature of Trinitarian being.

But it is in the work of Christ for mankind, on which Dr. Steiner

gave some of his most illumining revelations, that the real working in heaven and earth of the Trinitarian Mystery is most apparent. In a quite unique series of books and lectures, Dr. Steiner revealed the deed of Christ in Incarnation, in its divinely-planned relationship to the whole spiritual evolution of mankind.

The descent of Christ into the physical life of humanity took place at the moment when man was about to enter the final stage of the "separation" of his consciousness. The Intellectual or Subject-conscious soul was beginning to lose its instinctive sense of connection with the world about it, and in a few centuries, after a period of bewilderment, it would change into the complete "separatedness" of the Consciousness-Soul, the Object-conscious Soul.

Christ could not arrest this evolution of consciousness, because, until man had discovered himself in "separatedness", he could not consciously enter into the true experience of his being in Trinitarian relationship. But what Christ was not yet able to do for man's Thinking, He was able to do for man's Feeling. Dr. Steiner often speaks of Christ's earthly work as the redemption of man's Feeling, and of the present age as the opportunity to receive through Christ the redemption of man's Thinking.

Christ Himself declared that the one new commandment He had brought to men was that they should love one another, as He had loved them, in giving His life for them. It was not the first time that men had been told to love each other. Love in the ancient world was not a mere emotion. It expressed the perfection of relationship between man and God, and between man and man. When on Mount Sinai, Moses gave the Law, he transposed the true spiritual relationships, as he could see them in the spirit world, into a code of earthly relationships. He summed it up—as Christ Himself did—as perfect love towards God and towards man. Moreover, Moses revealed the fact that this love, this relationship, was not only a code of conduct, but the very substance of man's being, when he said, "Behold, I have set before you this day good and evil, life and death."

But in the crisis in human history at the coming of Christ, man needed more than a commandment; he needed a Divine example. The love that the Death and Resurrection of Christ awakened in men's hearts passed from feeling into devotion and became, not only a redemption of feeling, but the beginning of the redemption of will. In the experience of it man reached a new level of consciousness and a new level of being.

We find this expressed again and again in St. Paul's Epistles, and especially in the first Epistle of St. John. St. John offers men the eternal life which was with God and had been manifested to men, the new life of relationship to the Father and the Son, through the Spirit of Love which filled them. "That ye may have fellowship with us, and our fellowship is with the Father and with his

Son, Jesus Christ." It was a new life, a new experience of being. "We know that we have passed from death unto life, because we love the brethren." It was a new level of consciousness. "He that abideth in love abideth in God, and God abideth in him."

But perhaps the mystery of Trinitarian being and relationship was most completely expresesd by Christ Himself in his last great prayer. "I pray that they may all be one: even as thou, Father, art in me and I in thee, that they also may be in us . . . that they may be one, even as we are one; I in them, and thou in me, that they may be brought to perfection into one; that the love wherewith thou lovest me may be in them, and I in them."

The method by which this should be achieved is described by Christ as the releasing of man's soul out of the prison of his "separated" experience, by restoring to it again Trinitarian consciousness. "How shall this happen to us," His disciple asked, "and not happen to the world?" "If a man love me," Christ replied, "he will keep my word; and my Father will love him, and we will come unto him and make our abode with him."

Looking down the course of Christian history, it might appear that Christians have completely failed to achieve this Trinitarian Unity. But is it not rather that the conditions for its full realisation have not yet been attained? Christian feeling and devotion are limited by the fact that man's thinking cannot yet free itself from the Ahrimanic delusion of the ultimate nature of "separated" physical existence. It is from this delusion that Christ would redeem man's thinking at the present time, by enabling his Christ-filled soul to acquire, through the self-development of Higher Knowledge, a direct experience of spirit-reality. When man's thinking can grasp the reality of spirit in man and nature, then it will reach that understanding of Trinitarian reality and being which will enable Christ's vision for man to be fulfilled.

But it will not be only man's relationship to God and Man that will be redeemed; with it there will be the long-awaited redemption of Nature of which St. Paul spoke. For man's soul being delivered by this Christ-given Trinitarian consciousness from the prison of his own astral experience, his Thinking will also be delivered, by the discovery of the reality of spirit, from the Ahrimanic delusion of the permanence of separated physical reality. Then he will know Nature, not only as mirrored in his own sense-perception, or as the "other", to be mastered and exploited; but in her own soul-filled, God-related, man-related being. Then the triple polarities of Man and Nature, God and Nature, Man and God will be resolved into the true Trinitarian reality of Nature, Man and God. Then once again Man will walk with God among the trees of the garden of Nature, because in his Christ-won Trinitarian consciousness he will no longer feel naked and ashamed.

The East-West Deadlock and a Threefold Social Order

Ralph Courtney

AS crisis has followed crisis in the twists and turns of politics during the past few decades, the peoples of the world may well have asked themselves why no end to the current series of hot and cold wars ever appears to be in sight. The victories and defeats of these years have brought no final settlement. When one enemy was vanquished, another appeared on the scene to take his place. As people look back to-day, they may wonder why these wars should ever have been started. By the same token, there is no regular way in which they can ever be brought to a close. Unless an idea can be found that will break the present deadlock between East and West, millions are likely to perish and the end of civilization may be in sight.

Former wars were waged for definite objectives. Men fought for territory, or in pursuit of other forms of plunder. No such unworthy objectives are acknowledged at the present time. The latest development in these wars is that certain areas in Eastern Europe have been occupied or subjected by the Russians. Thus the "war aims" of the Western Powers are to "liberate" the "enslaved" peoples of these lands. On their side, the Eastern Powers propose to "liberate" the whole human race from the horrors of capitalism. What one side proposes in the name of liberty, the other rejects as slavery, and *vice versa*.

The best way to avoid a shooting war, in the view of the West, is to prepare for it. The East, while preparing for war, has great faith in the strength of its ideology. Its conviction is that as the idea of socialism spreads, the West will be forced to capitulate. Neither side wants a nuclear war, but the faith of the East in the ultimate victory of socialism prevents it from negotiating a settlement.

As for the peoples in the countries involved in these wars, their deepest feelings are no longer touched. Their friends of one period have turned out to be their enemies in the next. As their liberties disappear in the Cold War, and as they watch their wealth being confiscated by high taxes, they realise there is nothing they can do. Secretly, many of them have come to sympathise with their official enemies.

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There was a time when nations were relatively free to exchange their goods and services with one another. Nowadays, trading is subject in large measure to political control. Politics has also extended the area of its operations to include the cultural, as well

as the economic, side of social life. The news is very often tinged with propaganda. What the people are not supposed to know is concealed from them. It is as if the Cold War had lifted itself into an area that is above human control and beyond the reach of the peoples. Each nation lives under pressures from outside its borders. Even governments are doubtful about the policies they should pursue.

As time goes on, ever larger segments of the world's populations become less self-dependent. The Western Powers look after their "under-privileged" citizens, and are continually extending the welfare features of their respective States. Under partnership between government and business, great new industries are springing up. Old industries live in the hope of getting government contracts. More and more men and women work directly or indirectly for their governments. Many of these people have acquired a kind of vested interest in the *status quo*, and any relaxation of international tensions might alter the conditions on which their livelihood depends. When they, along with their relatives and friends, add up to a majority of the voters, the point of no return on the way to Stateism will have been reached.

Meanwhile, the costs of government soar. They have so far been met by more and higher taxes and by increasing the public debt. Yet if the Cold War should continue much longer, Western nations may face bankruptcy, and the time will not be far distant when totalitarian compulsion will have to replace the softer methods of economic inducement.

Governments no longer try to look beyond the Cold War. If a negotiated peace were suddenly to come, the Western nations would be caught off balance, and the ensuing domestic turmoil might be harder to handle than a continuation of the Cold War. Nor would peace be exactly welcome to many present-day leaders in politics, diplomacy, finance, and the Armed Forces.

As time goes on, the two sides in this titanic struggle become more and more alike in their political centralisation. In fact, so topsy-turvy have things become in the West that the one-time champions of private enterprise and cultural liberty are now selling political world-centralism to their peoples as the dream-world of the future. Political centralism has not demonstrated its ability to establish peace and contentment for its peoples, and yet the force of a political super-authority in the shape of the United Nations is expected to bring peace to the whole world.

Thus, any idea pointing to a possible solution of the East-West deadlock, no matter how far-fetched, deserves to be fully explored. And no matter how expensive this idea might prove to be to certain interests, it would be cheaper than an endless cold war or a war of annihilation.

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In the early centuries of European development, religion was

tribal or national. The armed forces of the State stood behind the local religion. It was natural for the rulers of that time to want to extend the worship of the true God (or the right way of worshipping Him) by conquering their neighbours. But, as time went on, the forms of religion lost some of their former importance. The Church and the State tended to go their separate ways. With the separation of Church and State, religious wars came to an end.

A new combination then arose. Instead of uniting with religion, the State now combined with business. Nations used their diplomacy, the money of their treasuries and even their armed might, to promote the trading of their nationals. Thus began a period of so-called politico-economic imperialism which has lasted up to the present time. Its slogan was that trade follows the flag.

Theoretically, it could be argued that the world would be more peaceful if private business operated independently of the State, just as religion has done. Then wars would come only when one people grossly insulted another, or if a conqueror set out to annex his neighbour's territory. In such a world, where business was on its own, good and stable governments would be at a premium, for buyers and sellers would want to do business only with nations on whose laws and promises they could depend.

This theoretical answer to the problem of war, by separating politics and economics (as well as separating politics from the cultural aspects of society), would meet with many difficulties in practice. Yet it offers a line of approach along which certain initial steps could be taken in a new direction. For the fact must be given consideration that the two sides to the present controversy approach the Cold War from different points of view. The East expects the Cold War to end when all nations are converted to socialism, while the West hopes to negotiate a settlement of East-West problems on the basis of its present strength. In between these two points of view, there is room for trading on both sides in keeping with their different convictions.

Both parties to this conflict are preoccupied with foreign commerce. The Russians contend that when the State owns the means of production, it saves the profits ordinarily paid out for the use of capital. Therefore, it can produce more economically. Russia has, in fact, challenged the West to prove that this is not so. The non-socialist West can reply that the payments for the use of capital do not tell the whole story of public versus private ownership. For whenever governments undertake economic production, there is always inefficiency and waste. Leaks and corruption of various kinds, which must be added to costs, also creep in. These extra costs, if not met by profits, are then passed on to the people in the form of taxes.

Thus, for example, some 700 enterprises are now being run by government in the United States. It has been calculated that these 700 enterprises, in spite of being tax-free, have spent an average of

ten billion dollars yearly for the last 15 years, without counting the salaries of an estimated million federal employees who work for these enterprises but are paid out of a separate fund. According to this same calculation, the total savings that could be realised by turning these enterprises back to private industry would be large enough to permit the United States to abolish its income tax. This question, whether public or private ownership of the means of production is best, cannot be decided in theory. It must be tested in the field of actualities.

The West is therefore obliged to face an ideological issue. A decision must be reached in principle as to whether it intends to go on, directly or indirectly, subsidising foreign trade, or whether it is ready, little by little, to reject government participation in business so that the economy may stand on its own feet. If it should elect to slug out the Cold War with the Russians as one cultural-politico-economic totalitarian Power against another, an eventual shooting war would be almost inevitable.

Alternatively, if the West were to announce that henceforward the United States, and perhaps other Western countries, had decided to go progressively back to a private economy, this news would have a profound effect on the trading atmosphere. It would mean that private firms and banking institutions in the West would have to take the financial risks involved in trading with the East. If the Russians were not prepared to pay cash, they would have to establish relationships of confidence between themselves and Western bankers. Thus, to some small extent, trust would begin to replace present-day suspicion.

It is true that government-operated economies have the advantage of being able to trade with foreign lands as a single authority in both buying and selling. They can make barter deals that would be difficult for private economies to imitate at the present time. This does not mean that foreign trading should be taken over by governments, but rather that the private economy should organise itself to operate in this same field.

The dream of the Free Trader has always been to establish a general world-economy in which each nation would supply what it could best produce. Any imbalances in this trading would be taken care of by variations in exchange rates or by the shipment of gold. But the world has moved away from the ideas of the Free Traders. Its economy is now made up of separate nationalistic trading units, each of which strives to be as nearly self-sufficient as possible. Home markets are "protected" by tariffs against cheap foreign articles.

In many instances to-day, manufacturers could advantageously import and use foreign materials and parts if it were not for the existence of tariffs. If these imports were exchanged for an equal value in goods sold for export, neither the national economy nor the ultimate consumer would suffer. The labour lost on imports

would be compensated for by the additional labour employed on exports.

Thus, if manufacturers were willing to adapt their production so as to use limited supplies of imports in exchange for exports, a healthy division of labour would be introduced in foreign commerce. Instead of the unlimited imports of the Free Trade economy, purchases abroad would be balanced against exports to the same country.

In order to make this division of labour possible and to overcome the tariff obstacle, manufacturers in each line of production would have to do the importing themselves. They would have to agree upon the internal arrangements necessary for the handling of these imports and take the needed steps to obtain the remission of tariffs on balanced two-way accounts. Manufacturers who are now opposed to tariff reductions would doubtless find them entirely acceptable under these conditions.

No compulsion would be needed to bring about these quasi-barter transactions. If the opportunity to arrange them were open, the drive and ingenuity of the business community could be relied upon to do the rest. Unless such a division of labour can be introduced in the field of foreign commerce, the chances are that the trend towards economic isolationism will continue, along with ever-increasing international tension.

Although the chance of any such internal arrangements being reached may appear to be remote, yet in time they will be found necessary in dealing with government-operated economies in the field of barter. These arrangements would also punch a hole in tariff walls which, though small at first, could eventually lead to the end of politico-economic trading. For two-way quasi-barter deals, once consummated, would probably be repeated and extended to other lines until a world-economy was established on a free-trade basis in which each nation would supply what it could best produce. Nevertheless, each nation's economy would be protected by the fact that, although the sky would be the limit in the quantity of trading, the individual nation would only have to absorb foreign goods of its own choosing equal to the amount of its exports.

Until a shooting war actually breaks out, the West is, in any case, obliged to co-exist with the East. The great question is whether the West will, itself, become more and more totalitarian, or will decide to turn in the direction of a non-political economy. The latter alternative would call for a test of economic strength which the Russians themselves have invited. Yet it is not impossible that, in time, when trading became general and lucrative, the Russians would eventually prefer, amid the ensuing relaxation of tension, to forget some of their ideological fixations.

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In his lectures and writings, Rudolf Steiner refers to an important event in the year 1899. Behind the scenes of external happenings a change occurred in the human soul's constitution. This change now needs to be reflected in a Threefold Ordering of society.

In the early stages of human development, man was little more than a reflection of the cosmos. His thinking, feeling and willing formed a single complex. The impulses arising in one of these provinces of the soul's life were automatically subject to the influences of the other two. The same wisdom that is in the ordering of nature, guided human evolution. Part of this wisdom was behind the automatic inter-action between the forces of man's soul.

Since the beginning of this century, the inter-play of thinking, feeling and willing has changed. The human will may have the urge to do things that thinking and feeling cannot restrain. A man may be overwhelmed by intense emotion or he may be taken possession of by thinking devoid of feeling. Thus, his soul is dragged down to subhuman extremes.

In outer social life, the three soul-forces of thinking, feeling and willing correspond respectively to the economic, political and cultural aspects of society. Their unity had its reflection in the guidance of "government". No matter whether this guidance came through religion, politics or economics, the different sides of social life worked together.

A new stage in the development of human freedom has now been reached. The time has come when man's spirit, or ego, as opposed to the soul, must undertake to provide the stability that the soul is now unable to maintain within itself. Man is free to determine his individual and social future. If he does not use this freedom rightly he will be invaded by forces opposed to his further evolution.

Under the Old Wisdom, the world-processes tended towards centralisation and guidance. This tendency is no longer in keeping with human freedom. It may continue within the cultural life (but with no compulsion on the individual in matters of belief or allegiance), or in the economic realm, where by necessity men associate with one another for production and consumption. But in between these two spheres, a new political life will arise in which the individual is severed from his special interests. The power of the State will be limited to the maintenance of common rights in all spheres. Politics will no longer "manage" cultural affairs or business, and when its power may no longer be used to further the special interests of individuals or groups, governments will be lifted above corruption.

A prophecy of this future society is to be seen in the demands for a social order of Liberty, Equality and Fraternity. But these mutually contradictory ideals cannot be realised under a onefold, centralised system. In a decentralised threefold society, men can be culturally free, equal in their rights, and fraternal in their economic associations under common rights. In such a society the

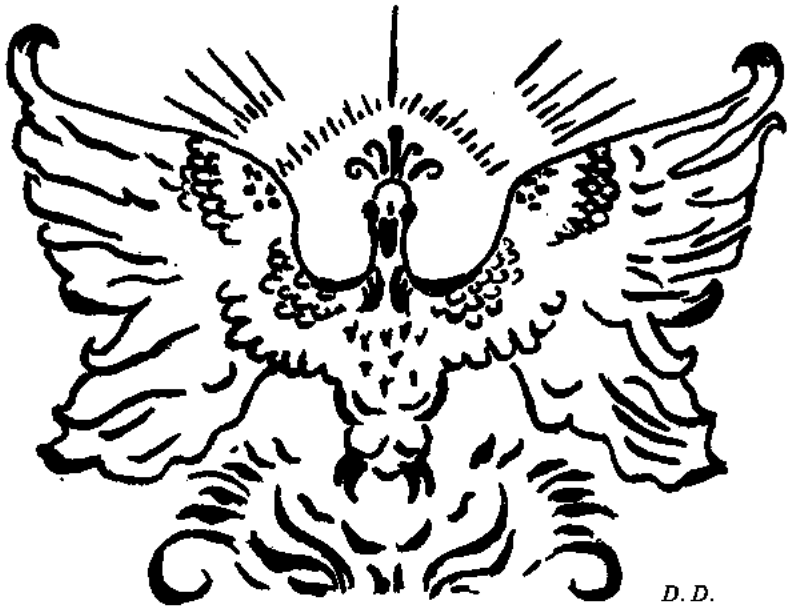
ideals that are shared by each of its members would come to expression.

Steiner's Threefold Social Order is reminiscent of the kind of society that the Founding Fathers had in mind when they wrote the United States Constitution. The Declaration of Independence postulated certain rights to Life, Liberty and the Pursuit of Happiness. Citizens were to compete fairly and freely on the basis of these common rights; but in the 18th century the hierarchical pattern was still strong and men were not ready to live without special privileges. In a very short time, "rights" under the American Constitution became special privileges in disguise.

It is perhaps a mistake to ask what remedy the Threefold Order would apply to this or that current problem. The truth is that most of these problems are themselves the result of centralism. The Threefold functional division of social life is itself the general answer to every social problem, including that of war. Once the basic soundness of this idea is recognised, the way in which different problems should be handled would become self-evident, and the Threefold Social Order would evolve naturally.

The choice before the world to-day is not between healthy social conditions and a possibly dangerous experiment in Threefoldism. On the contrary, the choice to-day is between conditions that are acknowledged on all sides to be extremely dangerous, both socially and militarily, and a reasonable point of view that offers the possibility of peace and trade at the sole expense of prejudices and special interests.

It was Steiner's stated opinion, at the time when his book on the Threefold Order was first published (1919), that no other solution of the social problem was possible. Anything else that might be tried, he said, would only bring calamity after calamity. In the light of all that has happened in the last few decades, this statement has proved to be prophetic.



D. D.

Phoenix

Maurice Wood

IT was reading the book by Maurice Burton, *Phoenix Re-born*,* that drew my thoughts to the legend of the phoenix. The author, a renowned naturalist, draws on his own observations, backed by those of many other people, to show how much in the stories of the legendary phoenix has parallels in bird life to-day. The inner meaning of the phoenix legend, the superb picture of sacrifice, death, resurrection and immortality, are admittedly barely touched upon; and indeed little seems to be known either of the origin of the legend or of any significance it has for the life of present-day man.

To the student of Spiritual Science this whole subject has special interest, for the writings of Rudolf Steiner are rich in references to birds. Speaking on "Cosmic Formative Forces in the Animal Kingdom" (July 16, 1923) he said: "He who understands the different wonderful shadings of the bird world understands much also of the nature of the human soul in its relation to the world".

The phoenix legend has existed for thousands of years and comes down to us from many parts of the ancient world. On its

* Hutchinson, 1959.

long and devious route various details and ideas have been added, many of which may at first sight seem irrelevant and even contradictory, but when read in conjunction with references from Dr. Steiner's words they are found to be true to bird life, their meanings are made clear, and one cannot doubt that both are drawn from the same profound origin.

What kind of a bird was the phoenix? There are wonderful descriptions of the brilliant colours of its feathers, "which can be compared only to the lustre of precious stones"—a peacock, perhaps? Then there is the long tail, "scintillating with reflections of the purest gold"—suggesting the golden pheasant? Yet again, the hooked beak of the eagle, the grace of the heron, and the wondrous voice, "which neither the notes of the nightingale nor the flute of the Muses can equal"?

No wonder ornithologists cannot agree in their attempts to identify the bird with any single species now in existence. The fact is, I think, that if ever the phoenix was seen by mortals in ancient times, it was seen not with physical eyes, but as the archetypal bird—a being embodying all bird qualities and possibilities, out of which the whole bird kingdom was born.

The connection of the phoenix with the sun, fire and the elements of warmth and light is one of the main features of the legend. This, the Bird of the Sun, lives out its long life in the seclusion of the sacred forest of the sun as the attendant of Phoebus, an overseer of the groves, a priest or priestess of the wood. (The phoenix is described as being of either sex, or sexless.) Each morning he flies on wings of flames to perch at the top of the highest tree in the forest, and there, turning nine times towards the rising sun, he awaits the first rays. As soon as these touch the threshold of his brilliant palace, a zephyr springs from the bosom of the new day. The phoenix, breathing forth his divine flame, shakes himself, throbs and trembles, and suddenly, in a transport of enthusiasm, he sings. At the sound of his harmonious voice, more mellow than the nightingale's, the new light floods the earth. The lion roars in response; soon all Nature joins in the concert; and heaven and earth are united in love.

At long intervals of time the phoenix has the urge to leave this abode of delights and go to the country where reigns the empire of death. The immortal bird is now concerned with nothing but dying. He builds himself a nest, using for it aromatic herbs and the most precious perfumes. Then he yields up his life. His nest becomes his tomb.

After death, his body ferments, and this fermentation, away from the ethereal light, produces the fire which is associated with his sepulchral nest. But death carries in one hand the funeral torch and in the other the torch of life. The nest is at once a sarcophagus and a cradle. The fire which consumed the ancient body will rejuvenate it.

There are different accounts of the details of the death and rebirth of the phoenix and of the short time he spends on earth. In one account, as soon as he has acquired the strength of adolescence, his dearest wish is to carry out his duties to the remains of his "father". He constructs and hollows out an egg-shaped mass into which he gathers the paternal ashes, and then he bears it away in his talons to an ancient temple of the sun. He deposits it on the altar, where, amid pomp and majesty, it is sacrificed by the venerable priest. The rejuvenated phoenix returns to live in the same country, to carry out the same duties, and follow the same laws as his "father" before him.[1]

In his lectures, *Man as Symphony of the Creative Word*,[2] Rudolf Steiner gives us further insight into this intimate association of birds with the elements of warmth and light. In Chapter V. we read: "Birds live fundamentally and entirely in the element of warmth. Birds fly in the air and breathe it, but their element is warmth and the differentiations of warmth within the air. The bird has its own inner warmth, and outside is the outer warmth—it really lives in the difference of the levels of temperature between the warmth of the air and the warmth it imparts to its own internal air; in these variations of temperature the bird has its life."

To understand more fully this interchange of warmth between the bird and its surroundings, we must look at the physiology of a bird. One of its most striking features is the elaborate breathing system. The lungs, themselves comparatively insignificant, are supplemented by ten air-sacs of varying sizes, inserted between the internal organs and extending even into the hollow bones, which in other animals are filled with marrow. These air-sacs are worked rather after the fashion of bellows.

The violent exertion that birds put forth in flight and in all their energetic activities engenders great heat. Birds are intensive livers. They have a higher temperature than any other class of animal. The air-sacs, by constantly exposing their very extensive surfaces to fresh indraughts of air, cause a large withdrawal of heat from the bird's body. They thus create a sort of internal perspiration (birds have no sweat glands) and a *rhythmic* inter-relation is established between the inner life of the bird and its environment.

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This leads us to another distinctive characteristic of birds—their mantle of plumage. In a lecture entitled "A Living Knowledge of Nature" (Dornach, 20.1.23), Dr. Steiner describes how the feathers of the bird receive all their manifold complications through the inworking in a particular manner of the air—of air in which

[1] This summary of the phoenix legend is extracted from translations of the poem attributed to Lactantius, recorded in Dr. Burton's book.

[2] All quotations from Dr. Steiner are taken (unless otherwise stated) from these lectures, given at Dornach, October-November, 1923.

sunlight and warmth are active. It is to the air that is inwardly aglow with the warmth and light of the sun — the sun-filled atmosphere which it absorbs — that the eagle [taken as the typical bird in this instance] owes the main part of its existence and the formation of its plumage.

In another lecture Dr. Steiner says of the plumage: "It is all formed from without; a bird's feather can come into being only because the forces working down from cosmic space upon the earth, and co-operating in the construction of the feathers, are stronger than the forces proceeding from the earth. The basis of the feather —the quill—is certainly subject to the forces proceeding from out of the earth, but then it is forces working from outer space which give ordered sequence to that which is affiliated with the *shaft* of the feather and constitutes the external plumage of birds."[1]

Alfred Newton, in his *Dictionary of Birds* (1896), describes the growth of a feather in this way (abridged):

"The first indication of feathers appears about the fifth day of incubation as slight pimples on the still semi-transparent skin of the embryo. Each pimple is produced by a cluster of cells . . . . which multiply rapidly and take on the shape of a cone, the apex of which is directed backward. The base of the cone then sinks more deeply into the skin and arranges itself into an outer sheath, which contains the whole of the young feather . . . . and into an inner mantle of a delicate meshwork containing a pulp of blood or plasma, and this pulp becomes the nutritive organ of the feather. . . . Around this pulp the quill or spine of the feather grows, and above this the cells arrange themselves in longitudinal rows. These rows are transformed into the barbs of the feathers . . . . *and their formation proceeds from the apex downwards.* . . . Ultimately, all these hairs meet at a base and join up with the cylindrical tube forming the quill of the feather." (My italics.)

Thus, while we see that the quill is formed through the pulp by forces proceeding from the body of the bird, the forces which form the barbs seem to come from outside—they are formed from the apex downwards. The barbs "shoot in like arrows", as Dr. Steiner puts it.

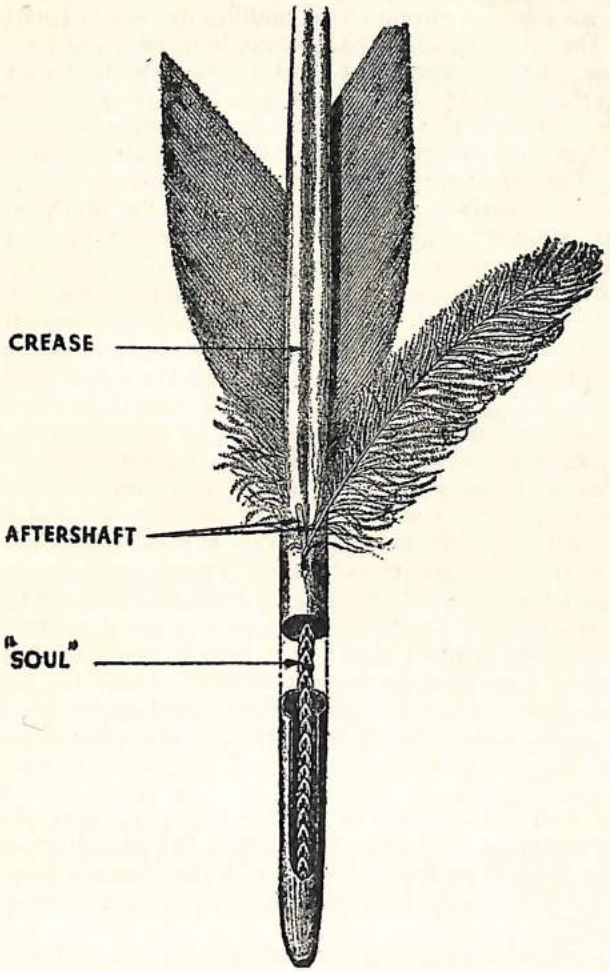
"When the pulp has finished its function as a nutritional organ," continues Newton, "it withdraws towards the base, leaving only its horny sheath in the form of a series of 'cups', known in German as the 'soul' of the feather."

Finally, when the feather reaches full size, the aperture at the base closes; all blood supply is cut off and there is no further vital connection between the feather and the bird. In this sealing off of the feather we see a fundamental difference between a feather and a hair. In the hair forces flow from the animal organism outward, while everything produced in the feather by the sun-filled air-forces

[1] *Wonders of the World* (Munich, August, 1911; lecture 9).

remains external to the bird. It remains in the form of its feathers, and the outcome of this is to be observed only when the bird dies.

"The flight of the eagle," says Dr. Steiner, "is in a sense a symbol of its existence. It flies as physical eagle, but how much further its flight extends after death! The spiritualised physical substance of the eagle-nature flies through the cosmos, there to unite with the spiritual substance of the spiritual world." And again: "The pur-



From Newton's *Dictionary of Birds.*

pose of the bird creation in the whole economy of earth-existence is to carry back spiritualised earthly substance into the spirit-realm. Spiritualised earthly substance, the light-filled air-forces in the feathers of the birds, passes over when they die into the spirit-realm and is changed back again into spirit-substance."

Let us now look (if possible) at an actual feather and examine its wonderful structure. The flight feather from a goose's wing makes a good example; it is large enough for considerable details to be seen with the naked eye.

First, we notice a strong spine running the whole length of the feather. This main spine, or back-bone, is made up of two parts—the hollow, almost transparent quill, containing the "soul", and, above it, the tapering shaft, filled with an opaque, white, pithy substance. At each side of the shaft is a row of what we think of as true "feather", composed of the manifold barbs tightly woven together. The outer surface of the shaft is smooth and polished, while the inner surface, which comes next to the bird's body, has a rougher, more open-textured surface, and down the centre is a groove or crease. This crease runs down to the point where the shaft joins the quill, and here a little second feather, or tuft of barbs, is seen growing out of—or, let us rather say, into—the main feather. This is known as the aftershaft. The base of the aftershaft appears to penetrate down into the shaft of the larger feather and so to form a connection between it and the "soul" in the quill.

These are the observable facts. Now let us look at them with a little imagination. The body of the bird has been filled with sun-illuminated and sun-warmed air which has met the bird's own inner warmth, and by way of the air-sacs has entered into the bird's bloodstream. So the bird's body is now radiating warmth, which is spiritualised earthly substance. This warmth is surrounded and contained by the bird's plumage. Now, put yourself under the bird's wing or under the feathers. Can you see the crease in the shaft guiding the warmth down to where it meets the aftershaft, down into the "soul" of the feather, there to be received and stored in the little cups? Here the spiritualised earthly substance lives on until the bird's death, when it is returned to the spiritual world.

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It was with pictures such as these in mind—pictures of sacrifice and resurrection in bird life—that I read Maurice Burton's book connecting his observations of birds with the phoenix legend. The greater part of his book deals with the curious phenomenon known as "anting".

To describe a very simple form of anting by birds, I should like to recall an experience of my own. When we lived at the farm, the window at which we had our meals looked out on to a small lawn, and under the path between this and the house was a colony of ants. For the ants which did not find their way into the house, the lawn

was a favourite foraging ground. One morning at breakfast, we noticed that the starlings seemed to be atoning for blocking up our spouts and chimneys with their nests by feverishly collecting ants with which to feed their young. But the curious thing was that each time a bird picked up an ant, it seemed to wipe it by passing it under its wing.

We thought at the time that the birds were doing this in order to clean the food for the nestlings, but we have since realised that actually they were "anting". So quick were the birds' actions that it was difficult to see exactly what was happening, but it seems to me now that they must have been bringing the ants into contact with the quills of their flight feathers. This was a rather perfunctory exhibition of anting, but that is the way with a starling—life is so hectic, always in a hurry.

The anting posture has been observed to manifest in various ways according to the bird's nature and environment, and a wide variety of substances is known to induce it. They include formic acid, exuded by most ants, and citric acid and butyric acid exuded by a few ants, and such things as lemon juice, vinegar, mustard, nettles, moth balls, aromatic leaves, certain berries (e.g. juniper), beer, lighted cigarettes, hot wood-ash, smoke, and naked flame. I should like to add the silica in sand and dust, for I suppose such every-day sights as hens dust-bathing in the poultry run and sparrows in the road are a form of anting under restricted conditions, or under such conditions as happen to be available.

If we look for some property common to all these substances, there is only one answer: heat, or the impression of heat. It was the reaction of birds to fire that first suggested to the author of *Phoenix Re-born* that there might be a connection between anting and the phoenix legend. This one can well understand after looking at the illustrations, and reading the amazing examples, given in his book. There are stories of rooks snatching lighted cigarettes, eating the ash, and inhaling tobacco smoke. They strike matches and go through a form of anting with the charred head while these are still hot, and one rook even learnt to switch on the electric stove. But the most convincing indication of the connection between anting and the phoenix is the account of the intense fascination that burning straw had for two rooks, Corbie and Niger, inhabitants of Dr. Burton's aviary.

Some straw was set alight on a platform fixed upon a high post in the aviary. "As soon as the flames appeared, Niger flew over to the platform, and standing on its edge reached forward with outstretched neck to peck at the wisps of smoke rising from the straw. As he did so, he spread his wings sideways, fanned his tail and brought his head down under one wing. As the head was placed under the wing, the beak was directed towards the primaries, and the tail either remained fanned and pressed against the edge of the platform or was twisted to the same side as the beak.

"Here then was the anting pattern characteristic of the rook. . . There was the moment when Niger stood up amid the smoke and flames, with his tail fanned towards the ground, his spread wings held out sideways and his head turned to one side. As he held this position for a brief second or so, he seemed to epitomise all the conventional pictures one sees of the legendary phoenix."

Niger's postures are further described as grovelling, spread-eagling, wallowing and gyrating over the flames, the convulsive movements of the wings giving the impression of a dying bird making one last attempt to rise. "We have to visualise these actions passing from one to the other in rapid succession, giving the impression of a bird writhing in agony, or holding one position for a while, and in such an unnatural posture that it appeared to be incapacitated."

Again: "When a rook is anting, there is not so much an appearance of ecstasy, as described for other birds, as of physical distress. At the same time, the effect is one of grandeur. . . . The total effect is of a magnificent display of spread feathers, bearing little resemblance to a rook as we normally see it, either at rest or in flight, but having the appearance of a feathered being struggling with some unseen difficulty."

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Scientists have not yet given a definite ruling on the meaning of anting, but the commonest suggestion is that the birds like the feel of the formic acid of the ants on their feathers or skin.

I remember that as schoolboys, if we came across ants when out rambling on a hot summer's day, we used to take them and press them on our tongues, professing that we were refreshed by the taste of the "vinegar"—the formic acid in the ant's body. What is the connection between schoolboy pressing ants on his tongue and the starling pressing them on the quills of its feathers?

I think Dr. Steiner directs us to the answer when he says: "The feather contains something tremendous for all able to see it. It contains the secret of the formation of thoughts. . . . When what is produced by the sun-filled atmosphere comes to a being, not from without, as in the case of the eagle, but from within, as in the case with the human nervous system, then thoughts are formed, but momentary thoughts, thoughts of the immediate present. . . . These forces cause the formation of feathers in the eagle. There is nothing more inspiring, for one who has a true feeling for nature, than to realise the inner relationships between human thought, when it is quite concrete and inwardly alive, and the feather of a bird. A man who has inner practice in such things, knows quite well when he thinks like a peacock and when he thinks like an eagle, or when he thinks like a sparrow. It is an absolute fact, with the exception

that one is astral and the other physical, that these two—thoughts and the feathers of birds—correspond in a wonderful way."

Dr. Steiner points out that in the human being the growth-forces, that build up the body of the child, later become the forces of the intellect. In the feather we see, when the pulp is withdrawn, the growth-forces transformed into thought-activity.

That the birds get some sensual gratification out of anting, at least in its early stages, may be assumed, or why should they do it? As the proceedings develop, however, it looks as though there is at work in the feathers some influence not directed by the bird; as though some force stronger than the bird takes control. To me it suggests that the bird is wrestling with its feathers as we wrestle with our thoughts; sometimes painful thoughts that bite and burn.

Now please think like a starling, and like a schoolboy squashing ants. I believe formic acid is used in human medicaments to give muscle tone and to counteract fatigue. In small quantities, it is a stimulant.[1] We boys were, through the taste of vinegar via our nervous system, inwardly stimulating our thoughts, which were of feeling hot and tired. The anting starlings that I used to watch were applying the formic acid of the ants outwardly, to the underside of their feathers, the feeling of warmth stimulating the thought-activity. They were perhaps getting some "kick" out of it for themselves—"a quick one"—too busy to let it interfere with their foraging for the family. The old corbie with his fire-eating, on the other hand, is indulging to excess. He is consuming too much warmth, and it is the warmth of earthly fire and smoke and ash, not sun-warmed and sun-illuminated air. Isn't it rather like someone getting drunk while celebrating a solemn rite?

There is also what I think might justifiably be classed as a form of anting, though it is performed without ants—I mean sun-bathing. A mother blackbird, having raised her family largely on food from our bird-table, finds herself with a little time and energy to devote to her own life, and has obligingly chosen for her bathing place a patch of dry soil at the foot of our compost heap. The first time I saw her there, she was lying flat on her breast, her wings outstretched, in the full glare of the sunshine. For a time she lay quite still with her head on one side, her beak open and gasping, giving every appearance of undergoing some strong emotional experience and enjoying it.

She had raised her crest—the feathers on the top of her head—and the sun glittering in them gave her a golden halo—in fact, to a rather lesser extent, the whole bird seemed to be surrounded by a scintillating aura of sunlight. Then she raised a wing, letting the sunlight pour through it—first one wing, then the other.

This spell of rapture lasted for four or five minutes, then ended quite suddenly. She jumped up and hopped a few feet away into

[1] See *Nine Lectures on Bees*, Lecture IX.

the shade of a clump of iris, and there began vigorously preening the underside of her wing feathers and the root of her tail feathers —but not, as far I could see, making use of the oil-gland on her rump. She scratched her head, gave a little more attention to her wing feathers, and this time to the feathers in the middle of her breast. Then, deliberately, she hopped back again to her sun-bath and the whole process began again. She went through this performance three or four times. At the end, looking quite normal, she returned to her search for food, and I to my—by now cold—meal.

On sunny days, our friendly blackbird comes habitually to the same spot at about the same time of day, one to two o'clock, when there is not much doing for birds amongst the insects. I understand anting has been observed most frequently between the months of June and September—rather an off-season for other bird activities.

Anting is almost entirely restricted to the *passeres*, which order includes the insectivorous birds, small birds, birds that perch, and song-birds. It does not seem to have the same attraction for the birds that hover, and those whose lives are spent more in the heights and on the wing. It is as though their desires were fulfilled in the actions of their everyday lives, whilst the little *passeres* and the birds living nearer the earth have a certain craving left unsatisfied—their mission for the great universe, the gathering of spiritualised earthly substance in their feathers, incomplete.

There is one order of birds that has not so far been observed to exhibit any form of anting, and that is the raptores—the robbers, the birds of prey. These birds seem to have little use for the earth. As a robber, the eagle steals substance from the earth for its own needs; but it is in its flight in the upper regions, where the earthly substance is spiritualised, in the pure sun-filled air, that the eagle has its real joy in life.

What a picture of balance and poise there is in the hovering bird! No stimulation from earthly sources is needed here for the regulation of the inner and the outer warmth. The beat of the powerful wings is all-sufficient. Little wonder that the phoenix was given the figure of the eagle as representative of the bird kingdom.

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In *Man as Symphony of the Creative Word*, Rudolf Steiner has given us much insight into the part played by the nature spirits—the elementals—in this communion between cosmos and earthly conditions. It is the sylphs living in the warmth and light, in the moving currents of air, that have such a great affinity with the birds. It is they who inspire the birds to sing. The sylphs are the bearers of cosmic love to the plants. In the phoenix legend it was the chorus of the birds and the roar of the lion that "united heaven and earth in love." Wherever the hovering of the eagle, the flight of the swallow or the gulls, or the notes of the song-birds, create

tone-filled currents of air, there the sylphs are conscious of themselves; they find their ego in the stimulation aroused in them by birds.

Something lives in the sylphs that resembles the human wish-nature; they receive it from without, not from within. They receive it from the realm of birds. They partake of the forces that pass from the bird's body to the feathers, the spiritualised earthly substance that has gathered astrality from the bird organism; and one can imagine that the sylphs become especially active when these forces are being enhanced by the direct light of the sun, or by spiritualised substance such as the formic acid of the ants.

But in picturing the phoenix we must imagine that this bird of fire is associated not only with the sylphs, but even more closely with another order of elemental beings—the fire-spirits or salamanders. The salamanders must play a part also in anting, for the ants are insects, and just as the sylphs are drawn to the birds, so do the fire-spirits follow the trail of the insects. The sylphs convey to the plants the forces of light; the fire-spirits guide concentrated warmth for the use of the plants. The fire-spirits are active, too, in the outpouring of physical substance into the cosmos. As the warmth, when a flame is kindled, causes light, so do the fire-spirits inspire the insects to send forth spiritualised physical substance to shine forth in space.

In *Spiritual Science and Medicine* (page 193), Dr. Steiner cites the case of the blackbird when it eats too many garden spiders and feels discomfort. The bird knows by instinct the appropriate remedy and makes for henbane, a plant of the same order as deadly nightshade, which is poison for animals and man but is used as food and medicine by the birds. If there is no henbane available, the blackbird falls down in convulsions and dies. This sounds very much like the sufferings of Corbie, the rook, when playing with fire. In both cases these birds had taken too much earthly substance inwardly—the blackbird eating spiders, Corbie inhaling smoke. The starlings with their anting on the lawn, and the blackbird with its sunbathing, were applying a natural remedy externally to their feathers.

By what we call instinct, the birds balance their diet of insects with something from the plant world, and for this purpose (alas for the farmer and gardener!) they often choose the tender shoots and buds of his seedlings, his peas, the heart of carnation buds, polyanthus and yellow crocus. In the *Agriculture Course* Dr. Steiner gives us something in the way of a remedy for this sort of thing. "The bird-world," we are told, "becomes harmful if it has not the 'needle-woods' or coniferous forests beside it to transform what it brings about into good use and benefit". Again, in the last of the *Nine Lectures on Bees*, Dr. Steiner says that the berries of the juniper tree, "so greatly loved by the birds, contain something of

that poison which must pervade all that is earthly, so that this earthly may rise again in the spirit". This sort of advice is typical of what is given in the *Agriculture Course*—the bringing of balance and harmony to the farm and garden.

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But Dr. Steiner gave the instance of the blackbird and the spiders to show the difference between the thinking of blackbird and man. The bird's understanding that leads her to the henbane operates through its pulmonary system. The bird breathes the external intelligence which hovers everywhere and is led to the henbane. It was perhaps out of an understanding of this sort in man that the phoenix legend originated. Man now actually participates in the external intelligence through the organ of the brain. He has reft the power of thought away from the heart and lungs and internal organs. "And," says Dr. Steiner, "finding the way back to a right and sound understanding of the world will be the criterion of whether we, in our pursuit of science, become sound again."

In present-day methods of agriculture, so greatly advertised and advocated, much of the plant-world is being wantonly destroyed as mere weeds, the insects as pests. Life is made very difficult for the bees and the birds, and only by an increasing use of drugs and stimulants are our animals kept going. These materialistic methods have in them the seed of their own destruction. Out of the ashes the new phoenix must arise through a renaissance of human thinking with the help of Spiritual Science.

There is one most beautiful and dignified performance of anting recorded by Dr. Burton. He was watching through binoculars a cormorant out at sea "apparently sitting on the water, with its wings outspread, maintaining this position for long spells at a time. . . . Lit by the rising sun, the bird had to all intents and purposes suddenly appeared. Three or four times it had raised its wings, as if saluting the sun, and then it had held that position somewhat as if defying the laws of gravity. . . . It displayed itself in an almost perfect picture of the reincarnation of the phoenix".

To close with some words of Rudolf Steiner: "How wonderful are the secrets discovered in the universe when one is able to perceive these things! Then one really learns why all these varied animal and other forms exist on earth at all. They all have immense significance for the universe".

What Is History About?

A. C. Harwood

HISTORY is in a great muddle to-day. No one knows exactly what it is about, whether it is a science or an art, whether it is a study of people or of processes, or what is its relation to other fields of enquiry.

The trouble began — like so many other troubles — in the nineteenth century. Until then historians had told a story covering a smaller or greater series of events from some accepted point of view, after preliminary enquiry into the facts. (We should bear in mind that history originally meant an *enquiry*, but evolves into the word *story*.) The great Greek historians, Herodotus and Thucydides, were interested in illuminating from their own periods the favourite Greek contention that success begets *Hubris* (roughly Pride) and that *Hubris* begets Nemesis (roughly a Fall). The Roman Livy told the tale of the glorious mission of Rome. Christian historians such as the Venerable Bede were concerned with God's purpose in the Fall and the Redemption, and the not too far distant separation of the righteous from the wicked at the last judgment.

Even after the Renaissance, the historian's task was simple and his materials were not too hard to assemble. Samuel Johnson took a dim view of the historian's trade. "Great abilities (said he) are not requisite for an historian, for in historical composition all the greatest powers of the human mind are quiescent. He has his facts ready to his hand; so there is no exercise of invention. Imagination is not required in any high degree; only about as much as is used in the lower kinds of poetry. Some penetration, accuracy and colouring will fit a man for the task, if he can give the application which is necessary." *

This placid view, which was based on the picture of more or less static man living in a static nature, was shaken even before the end of Johnson's century. Rousseau made his contemporaries take the society of primitive man seriously for the first time. A contrast arose in which the idea of social evolution was inherent. German philosophers sought for a unifying principle in history. Kant said that we cannot prove, but we must assume, that there is a plan in history, just as we assume, though we cannot prove, that there are laws in nature; and the plan in history is the education of the human race through rationality to freedom.

Kant held that it was the evil element in man—greed, selfishness, etc.—which led him to abandon the harmony and happiness of his original state of nature, and set him on the long path to

* Boswell. Year 1763.

freedom. Hegel, who believed that all history was thought, advanced his dialectical process of thesis, antithesis and synthesis as the moving power in history. For he held that history was concerned with *acts* not *events*—and acts are intelligible only as the outward expression of thoughts. (Later his disciple Marx was to invert Hegel's dialectical process by applying it to history considered as *events*, and above all economic events.)

Meanwhile in England the new geology arose, with its view of the evolution of earth and nature, which Hegel denied. The success of the scientific method in other fields produced a new type of scientific history, just at the time when science itself was becoming historical. Evolutionary man was now set against evolutionary nature. At the same time the field of history was enormously enlarged by new discoveries and excavations. Carlyle extended Johnson's preference for biography over history into the theory that history is the story of Great Men. In reaction to this view, Buckle held that Carlyle's great men were merely the product of the forces of their age, and that the primary causes in history were to be found in Climate, Soil, Food and Nature.

Buckle appealed to the science of statistics to prove that human actions seen in the large are governed by fixed and regular rules. By the discovery of these rules history could become a science. The new textual criticism seemed also to admit the scientific method into the study of history. But Buckle was almost alone among English historians of the nineteenth century in trying to create a rationale of universal history. Nor did the dialectical materialism of Marx commend itself to the English. Especially as the century proceeded, the multiplicity of facts seemed to elude the general rule. The monograph became the staple of the historian. The eleventh edition of the Encyclopædia Britannica (1910) thinks it impossible for anyone again to attempt a universal history.

Through all the nineteenth century there blows the comfortable wind of progress, and the historians are no exception. Whether it is Macaulay glorifying the great principles of the English Revolution, or Buckle deciding that Europe is the place where nature allows man to become more and more rational, or the many minor historians who saw the culmination of history in the new industrial techniques, there was a kind of general belief that the ascending line of progress could be observed in the course of recorded history, just as it could be seen in the ascent of the human species from the ape. The catastrophic events of the First World War shattered this complacent optimism, and it is significant that the new attempt in Germany to establish a universal view of history was an account not of progress but of decline—the *Decline of the West*.

Spengler's book at once raised again the question whether a universal theory of history is possible. Some weapons had been placed in the hands of twentieth-century historians which seemed

to strengthen this possibility. The rise of anthroposophy had given birth to the conception of cultures as well as of civilisations, and there were now a great number of such cultures investigated and available for comparative study. Accordingly, it has become the hope of some anthropologists that the general basis of development observable in cultures will also be found valid for civilisations. They believe that the enormous mass of material now available for many civilisations will be reduced to manageable proportions by the process of scientific sampling, which they claim has been proved valid by modern usage. At the same time the flight from the belief in cause and effect to the general belief that all we can know is that events form themselves into patterns, would seem to point to the possibility of finding such patterns in recorded history.

It must be admitted, however, that as soon as any historian claims to have found any such pattern, the whole fraternity rises up to destroy him. Spengler's organic pattern has been universally attacked—not least by his successor Toynbee—as an arbitrary Procrustean bed on which Spengler has stretched and amputated his facts to fit his theory. After the first hush of astonished admiration, Toynbee has been treated no better. It is true that Toynbee does not regard the collapse of any civilisation as inevitable. As long as it produces creative individuals to respond to the new challenges, it may go on for ever. But if the challenges are not met, a certain pattern of events will follow, because up to now it has been followed. It is this pattern—the theory of the Universal State and the Universal Church, etc.—which is assailed by other historians as being just as arbitrary as Spengler's organic processes, even if it is admitted that Toynbee has produced some new and fruitful ways of thinking about history.

In general, there are four main classes of historians to-day, if we exclude the special contribution of Toynbee. Those who are anthropologically minded, especially Americans such as Philip Bagby, still hope that something of a pattern will emerge from the study of cultures and civilisations, but only when we have collected sufficient data and are able to see those data from a sufficient distance. What we need, they say, is a *macroscope*, which will enable us to see the wood and not the trees. They are not concerned with the philosophical questions which the postulate of historical patterns raises. Like modern scientists, they are content if they can say this is how it works in practice.

The second group, among whom I would place Sir Isaiah Berlin, Professor Butterfield and Mr. A. L. Rowse, are much concerned with the freedom of the individual. If History works in patterns, if one condition is followed inevitably by another, is there any use in the individual making any effort?

Kant solved this problem—the ancient problem of reconciling free-will and necessity—by the distinction between *noumena* and

phenomena. The historical action as experienced by the actor is *noumenon*, and therefore free. The same action seen by the historian is *phenomenon*, and takes its place as a necessity in the great scheme of things. The English historians make less philosophical distinctions. While admitting that certain broad developments of history are inevitable and predictable, they insist that the more you turn your attention from the mass to the individual, the stronger you find the impact of freedom.

Butterfield argues that the present chaos of opinions, which is reflected in all departments of life and not least in religion, is something that ought to be welcomed by Christians, because it is a proof of the emergence of the individual principle for which Christianity stands. We should "first praise God for freedom of mind, and then pray for some degree of unison." Butterfield also shares with some other historians the interesting point of view that the scientific outlook has served religion well, because it has brought material things under the rule of necessity, and left religion free and unencumbered in the spiritual field. He claims that the more history deals with material things, the more it discovers the law of necessity; but as it advances to the spiritual, freedom increasingly operates.

Virtually all historians who deal with universal issues point, as do Spengler and Toynbee, to sequences of events or chains of development common to civilisations widely different in space and time. To an essentially materialistic historian such as Professor Gordon Childe, who may be said to represent a third view of history, there is one thing which makes nonsense of all cyclic or repetitive views of history — the story of man's inventions in the conquest of nature. You may properly compare Egyptian, Byzantine and Victorian portrait-painting, but you cannot compare the Shaduf, the Persian water-wheel, and the electric pump. In the last you have "three species in evolution measurable by efficiency in mathematical terms." Gordon Childe probably comes closest of all English historians to accepting the dialectical materialism of Marx and Engels, whom he quotes freely. Motives (which belong to individuals) are for him an unprofitable study. The laws of history are just "short-hand descriptions of the way in which historical changes do come about."

In tremendous contrast to this practical and common-sense view is the almost mystical approach to history of R. G. Collingwood and the Cambridge writer, whom he quotes with immense approval, Michael B. Oakeshott, who form the fourth school of thought. The Oxford philosopher Bradley had held that there is an absolute division between knowledge and experience. As soon as we raise experience to the level of knowledge, it becomes objective to us and is therefore no longer experience. Fundamentally, we can write history only as object, not the real history which was experienced.

This is of course the same distinction that Kant had made between history as *noumenon* and as *phenomenon*, seen from another angle. Now Collingwood and Oakeshott deny this absolute division between the thought and the experienced. Between subject and object, they say, there is not a *division* between two separate things, but a *distinction* within one total experience. Experience contains thought within itself. The real is not divided into the knower (who cannot be known) and the known (which cannot know). Mind has the right to know itself.

For history, this means that "the distinction between history as it happened, and history as it is thought must go: it is not merely false, it is meaningless." Because History is experience it is present, but because it is history — i.e., the formulation of experience as a whole *sub specie præteritorum*—it is the continuous assertion of a past which is not past, and of a present which is not present. History is not a series but a world, its various parts "bear upon one another, criticise one another, make one another intelligible." Past thought lives in every present thought. Thus the phenomena of history bear to historical consciousness something of the relation which percepts bear to concepts in the *Philosophy of Spiritual Activity:* they awaken an inner experience from without. In Kant's expression, the *phenomena* become *noumena*.

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In a variety of ways the Anthroposophical view of history complements these divergent views of history, and by complementing may even be said to unify them. There is, however, one fundamental postulate which is not shared, as far as I know, by any other view of history. All historians, materialists and idealists alike, assume that the process of human history has been one of the expansion of consciousness. We have come to know more and more about more and more. It is only Anthroposophy which speaks of the historical process as a contraction of consciousness. For it takes as historical fact the traditions to be found in all ancient peoples that they were given their social laws and taught the arts of life by the Gods. Moses received the law from God on the mountain. Before Menes, said the Egyptians, their country was ruled over by the Gods. The nymph Egeria taught Numa the laws of Rome. Athene gave Attica the olive; Ahura Mazdao taught the Persians the cultivation of wheat. It is useless to multiply examples of the universal belief that at one time men saw and spoke with the Gods. With the historical contraction of consciousness, human experience became limited to the sense-world. Through gazing on Helios, said Plutarch, men have forgotten Apollo.

This belief in the reality of the ancient Gods creates a new historical field. The ordinary historian is interested in ancient beliefs as they affect social, economic and political life; the anthropologist is interested in them as marking stages of culture; the

anthroposophist is interested in what they actually mean. This is a concrete way of saying that the anthroposophist believes in a real spiritual world inhabited by real spiritual beings who at one time actually directed, either by advancing or impeding, the course of events. There is thus often a spiritual bridge between events which are regarded in ordinary history as entirely discrete. The Sumerian-Babylonian civilisation which externally is quite unconnected with the Egyptian is seen as its twin-sister, with the difference that the former sought for the direction of the Gods in studying the world of the stars, while the latter did the same with the world of the dead. But both represent the stage of soul development when the Gods have withdrawn from immediate perception, or at most reveal themselves through the medium of the dream. Or events in the Celtic West, and even in the civilisation of Central America, are brought into relation to the central moment of history when the Christ entered the sphere of the earth.

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One of the most fruitful ideas which Toynbee introduces into world history is that of the changing nature of the challenges with which a civilisation is presented, a change from outer challenges to inner challenges. Anthroposophy applies this direction of development from outer to inner to consciousness itself, and in doing so finds the Ariadne thread which links together apparently unconnected cultures and civilisations.

It also approaches in a new way the story of man's mastery of the forces of nature. Toynbee challenges the position of those historians who measure historical progress by man's practical inventions with the flat assertion that superior technique has nothing to do with advance in culture or civilisation. He even calls antiquity to his side by pointing out that the Palæolithic peoples had worse tools than the neolithic, but were better painters! Now the anthroposophist is interested in the development of technique not so much for its practical results as for the evidence it gives of a change of consciousness. To smelt iron requires different powers of the soul from mixing copper and tin, or chipping stones. To work machines driven by the elements is in the reach of the Intellectual Soul; harnessing the mechanical forces of sub-nature could be only attained by the Consciousness Soul. What is cyclical in anthroposophical history is the succession of states of soul; and the same state of soul takes varied forms in different parts of the world. When the Sentient Soul was expressing itself in the necrology of Egypt and the astrology of Mesopotamia, the same soul was giving birth in the West to what later became the Arthurian legends, with their Sun King and Moon Queen and the twenty-four knights of the table round. It is always the leading civilisation which brings the new type of consciousness to its full expression, but echoes of it appear in all parts of the world.

The successive stages of mind reflected in the sequence of civilisation are steps in the contraction of consciousness. It is here that we see the larger meaning of the development of individuality, which Professor Butterfield regards as essentially Christian, in relation to the problem of freedom and necessity. The anthroposophical view of the great purpose of history is foreshadowed in the historical theory of Kant. The plan of history, said Kant, is the education of the human race towards freedom, and a necessary stage of this process is the appearance of man as a rational being. Man could not have foreseen this stage when he was still in a state of nature, which Kant, following Rousseau, seems to have seen as a state of harmony, though of a low kind. What drove man to leave the state of nature, and embark on the stormy voyage towards reason, was not the virtuous but the evil elements in his being, selfishness, greed, the lust for power, etc.

This is none other than the disturbance of the state of Yin (harmony) by Yang (disharmony) which Toynbee sees at the root of all civilisations. The anthroposophist sees it as the Luciferic temptation which set going the whole necessary process of history as a flight from the divine, the object of which is human freedom. But human freedom could not be willed out of human freedom. It is willed out of what for man is necessity. It is only when necessity estranges man from the divine that individual freedom can arise. The necessary in history is not the enemy, but the condition, of freedom.

Kant saw freedom as the end of history: the anthroposophist sees it not as the end but as a new beginning, the setting out on the long road which leads again to the divine. The first stage on that road is the overcoming of the rational, which gave man his freedom, by Imagination, which transcends the barrier that Kant raised between the knower and the thing-in-itself which is to be known.

This transcendence in history is the immediate experience of the past as present which Collingwood and Oakeshott are seeking for. Here again, however, Anthroposophy has a concrete view of the past-in-the-present in its understanding of reincarnation. It is undoubtedly true that in every word we speak, every thought we think, every deed we do, we are always unconsciously evoking the forces of the past and allowing them to *live* again in us. Dr. Johnson observed that if the simplest book could be written out of the unaided powers of one individual, it would be a stupendous achievement. But the stream of consciousness which descends down the generations, and makes the writing of a book possible, is met by another stream of which we are usually equally unaware. This is the stream of our own experiences in former earth lives, without which we should not have the forces to take hold of the inheritance on which we enter when we are born.

This conception of reincarnation also reverses what is still the unconscious assumption of historians. They study the process

of history, and even if they believe (and all do not) that the individual has a vital contribution to make to that process, or at least that some individuals have made such a contribution, still fundamentally they see the individual as serving the process of history, not the process of history the individual. Now when some people say that the individual exists to serve the State, we call this view totalitarian, and are proud of our western view that the State exists to serve the individual. All history, however, which denies reincarnation is totalitarian. It is only through the fact of repeated earth lives that the process of history can serve the individual. The humblest biography then takes a new significance from its historical setting. In the past we have all shared in the preparation of the present: in the present we are all preparers of what is to come. We serve the Muse of History. But equally Clio serves us.

Reflective Thinking and Creative Thinking

Michael Wilson

"WHAT'S the Big Idea?" Our modern slang, crude though it may be, often contains more truth than the polished conventional phrases which it replaces. We might of course have said, "Why are you doing that?", or used some other polite form of enquiry, but for sheer economy and force of speech, the slang expression just says everything.

We see somebody doing something, our curiosity is aroused; the one thing we want to find is the Idea which lies behind the action. So we ask for it in so many words. It is symptomatic of our whole quest for knowledge. We are continually seeking the ideas which lie at the back of all that we can experience with our ordinary senses.

We take it for granted that behind every human action that is not the result of pure mob instinct, there is some kind of idea, and it is abundantly clear that behind every man-made article there must also be an idea which we can comprehend if we study the subject. But here we stop short, and are mostly afraid to continue the enquiry into whether there might not be Ideas behind the world of nature which we have *not* created ourselves. Therefore, before speculating about such a possible idea, it is worth while following up more closely the relation of man-made objects to the kind of thinking that lies behind their origin.

Take, for example, a familiar object that has evolved within living memory and is still evolving, and which affects the lives of millions of people—the motor-car. How would we define it? Certainly not merely in terms of the materials of which it is made. Not even a list of the shapes and sizes of its parts would give us the car. Nor a statement of all the mechanical and electrical principles involved. These are all essential, but even if they were all there they could not assemble themselves into a motor-car. We cannot escape the fact that the most important and essential thing about a motor-car is the unifying Idea of it. Had something of the sort not been there in the first place, however primitive, the evolution of the car would never have begun. On the other hand, the idea of a car which men had in, say, 1900 bears very little resemblance to the motor-car as we know it to-day. The idea must have evolved together with the actual thing.

It is a fascinating study to look at the various parts of a car and try to imagine the reasons for their shape, for their design. If one had the mind of a Sherlock Holmes, together with a keen insight into mechanical principles generally, one could probably get a long way towards deducing the main outlines of the evolution of the car by simply studying one. But there would be certain

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gaps or sudden changes which such logical reasoning would be quite unable to get past without some knowledge of the history of the actual people who pioneered the industry, and of the places and social circumstances in which they lived and worked.

For example, it would be impossible to understand the motor-car designs of half a century ago if we did not know that they were based on the idea of the kind of carriage which had always been pulled by a horse, but that an engine had been fitted instead of a horse. In those days people thought that motor-cars looked ridiculous just because there wasn't a horse in the place where there should have been.

The web of living evolving ideas which lies at the back of the modern car is a widespread fabric. Some of it, but certainly not all, is literally *incorporated* into the car of to-day, and just to this extent an acute observer can read it out again. There may be a limit to how far back we can trace this with our logical reasoning alone, but that the *idea* of the car is every bit as real as the actual car which we drive can be denied only by someone who refuses to look the facts in the face. This is the first point I want to make. Our Reflective Thinking is the reply to our perception, and what it seeks is contact with the ideas which lie behind the things we perceive.

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Let us now look at the whole process from the other end, from the aspect of the inventor, the creator. The idea of a vehicle that propels itself is much older than the motor-car. The discovery that a vehicle runs much more easily on rails than on a road surface is older still. One of the deeply rooted, almost fixed, ideas with which the pioneers of the locomotive had to contend was that the source of motive power would have to be fixed to the ground *outside* the vehicle, and therefore pull it with cables, and that it would be quite impossible for a vehicle to propel itself from inside. It was an important moment when this idea was shown to be false.

In a quite different field there is a still more striking example. When Leonardo da Vinci tried to invent a flying machine, he had all the materials and technique necessary to construct a primitive glider that would fly. But another four centuries had to elapse before the necessary idea was arrived at. On the other hand, even when an idea is there, its evolution into the successful application of a new invention usually involves a great deal of work on the basis of trial and error, as well as the passage of time.

In earlier times men produced inspired creations which we now regard as consummate works of art. We still have echoes of this where the stream of inspiration seems to flow unhindered into an existing channel of expression, such as music; but the creation of a new idea, and of a fitting vehicle for its expression, now happens only through great individual effort and much hard work. The

elusive character of a completely new idea, and the patience required to allow it to germinate, are an absolutely real experience of the creative mind. Experience at this level is an intensely individual one and it is almost impossible to find a universal formula for it. Indeed, most creative artists have a horror of anything like a formula.

There is good reason for this. Any formula that is intelligible to the majority — and after all that is the chief purpose of a formula — must of necessity be the work of the intellect, and the creative mind recognises, rightly, that the intellect must be the servant, not the master, of the moment of inspiration. Were it possible to transcend completely the world of the intellect, the world of reason, and to retain level consciousness in that serene world where the creative ideas — we might almost give them the character of Beingness — seem to be at home, then I think the creative mind would admit that there *is* a form of knowledge which does not put a stranglehold upon the sources of inspiration.

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In these days, when Science is exercising the kind of influence upon the conduct of human life that Religion did in the past, it is interesting to find that many of the most eminent scientific minds, when they choose to sit back and survey the processes which go on in the depths of their own consciousness, describe the sources of their ideas, the moments in which a totally new concept begins to hover somewhere within reach, in very much the same kind of terms as do the poets, writers, musicians and painters. The source of the creative ideas seems to be in the same place for all of them, and the experience of it seems to demand a certain freedom from the processes and claims of the body, by whatever means this may be brought about. A number of such experiences are described in a little book called *The Creative Process*, edited by Brewster Ghiselin and first published a few years ago by the University of California Press.[1] For example, Albert Einstein describes this moment of productive thought as taking place ". . . before there is any connection with logical construction in words or other kind of signs which can be communicated to others."

The creation of something new in the world appears to follow a general pattern. The germinal idea needs the support and resistance of its earthly surroundings if it is to take root, grow and bear fruit. The first stages of this process are often beyond the reach of the intellect. All that the intellect can do is to prepare the ground, and wait for the germinal idea to place itself within reach. Eventually this can be given a form of thought which will at least retain it in the memory. Then it can be written down, or sketched, and contemplated again and again.

At this stage there is often a long period of interplay between

[1] Published here by Frederick Muller (Mentor Books) in 1956.

the creator and his material. The first sketch holds and reflects the creator's activity back to him, and gives him the basis for improvement. He alters it, stands back and surveys it, and alters it again. A kind of conversation takes place. The idea and its embodiment evolve together. Incidentally, this relationship between the artist and his creation has been the theme of many novels.

Soon an important thing happens. The first sketch or model is no longer capable of improvement. There is nothing for it but to start all over again with a fresh model, a clean sheet. The essence of this process is that the lessons that were learned through the details of the first model have to be incorporated in the basic design or layout of the next one. If this did not happen there could be no progress, since the shortcomings would only appear again when it was too late to allow for them. This has a significance to which I shall refer later, but what I want to establish at this stage is the importance of the material medium in holding and reflecting the artist's activity back to him so that he can survey it. I do not believe that any original individual creation can take place without this process being an essential factor.

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To come back to the motor-car. We may not feel that the inspiration of a motor-car comes from quite the same celestial region as that of, say, the later quartets of Beethoven, but the process of making sketch after sketch, model after model, follows the universal pattern. There is of course a great difference between a work of art which reaches its completion in a single example, and a thing made for general use, and repeated in thousands of identical examples. The latter will never reach a single perfect form of expression, but is continuously evolving together with the needs and demands of our civilisation. The Idea of the car has a continuous evolution, whereas the actual models which express the idea have only a very short life. The advertisers tell us in so many words that the newest models 'reflect' the very latest ideas of what a car should be. But what *should* a car be? Sixty years ago it was hardly more than a collection of mechanical contrivances attached to a modified carriage. To-day it is a kind of creature that comes alive when its driver sits in it, but doesn't quite know whether to try to be like boat or bird. Its dynamic principles are supposed to be 'expressed in every line of its elegant styling'. The ideas which in earlier days were superimposed on the material, now inhabit it through and through. This is true from the points of view of both engineering and appearance. The ideas have become thoroughly *incorporated*, and much unnecessary material has been eliminated.

Between the car of 1900 and the car of to-day there is also the development of a vast industry. This is just as much part of the car as are the materials of which it is made. A hierarchical

organisation has grown up, embracing many different trades and professions which evolve at their own level and have a continuity which is largely independent of the designs that are being produced at any one moment. The same rhythms of trial and error, development, obsolescence and replacement are as visible in the structure of the organisation as in the design of the single car. Even the factory grows old and has to die, and in the basic planning of the new one that has to replace it there is embodied the wisdom of perhaps half a century of human life and experience.

A similar rhythm prevails in the evolution of the administration. At the earliest stages it becomes clear that no progress is possible without division of labour. With division of labour comes multiplication of jobs. Someone has to supervise. With multiplication of departments, someone has to co-ordinate. With multiplication of factories, someone has to have control of policy. The rhythm between the spread of departments and the centralisation of control seems to lie in the nature of things, with control coming in at ever higher levels. But this cannot go on for ever. When Man has become wiser, has learnt his lessons from the present phase of civilisation, the industrial empires themselves will grow old and have to die, and the experience gained through them will form the seeds of the next phase. But who carries the wisdom over from one phase to the next?

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I have tried to characterise, in everyday terms, the kind of thinking that starts from the enthusiasm for an idea, and leads to the production of a piece of precision engineering such as a motor-car. Between the two there is the development of a vast industrial organisation. At some point in this, ideas are translated into material objects. Up to this point, the idea has evolved from the general to the particular, from the vague idea to the exact specification. Beyond this point, the process is reversed; the details are manufactured separately and are then assembled into the final product which, when set into motion, corresponds to the original idea which inspired it.

This represents the direction of the Creative thinking. The Reflective thinking, on the other hand, has to take the whole process in reverse. In the case of a man-made object, it first has to take the thing to pieces to see how it works and how it is made. It has to observe analytically and in great detail. When it comes to the threshold between the things and the ideas that gave rise to them, then it has to proceed synthetically, imaginatively. It has to rise from the purely mechanical, logical reasoning to an understanding of the methods of manufacture, and the working of the minds of the designers, first at the engineering level, and then at the more imaginative level of the concept of the whole car and its appearance.

The mechanical reasoning applies only to the lowest, more or

less automatic, level of manufacture, where there is an exact relationship between cause and effect. The original designer is not to be found at this level. Only the results of his work appear here. He himself works in quite a different place.

The distinction between these different types and levels of reasoning applies very widely in ordinary life. All living creative processes proceed from the general to the particular, from the fluid to the rigid. Only the dead constructions of man have to start from the rigid framework or skeleton, and then at the last moment achieve a semblance of life. The greatest mistakes have been made, particularly in our social life, through confusing the two processes, and trying to make human life fit into a preconceived framework.

Similarly, in the matter of the hierarchical structure of the world, though we would hardly blame the wages clerk for the financial policy of his firm, we have still not overcome the wish to explain the working of all creation by means of the deterministic laws of physics and chemistry. The rhythms of development, obsolescence, decay and renewal run through all evolution. Every pattern of life, every civilisation has its rise and its decay. At what level is the experience of one epoch carried over and embodied into the next? We do not find a satisfactory answer at the material level.

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So far I have described Reflective and Creative thinking as if they represented two quite different directions of development. In practice, one cannot develop far without the other, for there must always be a rhythmical interplay between the two. If our purpose is to understand the existing created world, and we come to the point where we need to transcend our purely logical, mechanical reasoning, we have to create new concepts, new tools of thought. We observe the way in which the things in the world are related to each other. We try to imagine the relationships as existing in their own right, not merely as properties of the things.

After a time we find that we have developed a new tool of thought, an instrument which is able to grasp the relationships themselves, just as our hand grasps an object. Then the new instrument of thought enables us to observe things which we did not know existed. Our observation is widened. Again we have to practise new kinds of thinking, and again new powers of comprehension develop. Our Creative thinking is continually called into play in the cause of knowledge. If our purpose is to help our fellow men, and to build a better life on earth, we look for new forms of thought which can be translated into action. But every fresh step must be observed, reflected upon, to see if it was good; and every reflection can give rise to further thoughts which can become the basis of action. What is important is to be conscious of which kind of thinking we are using.

Rudolf Steiner describes the evolution of our universe as starting from a state of pure Spiritual Being which was prior to any physical manifestation whatever. A condition of pure spiritual Will. This then begins to manifest itself in successive rhythmical phases through long periods of time, first as pure heat energy, together with an organising principle from which our present relation of radiation to matter has descended; then secondly as heat working in a gaseous element to which is added an organising principle corresponding to the present relation of light to plant growth; thirdly with the further differentiation of a fluid element, together with a rhythmical organising principle which produces animal movement and the beginnings of inner consciousness; and finally with the precipitation of a solid element, together with an organising principle that takes up its abode within the separate organisms that have thus far been evolved, and eventually appears as man's individual ego which progressively penetrates all the other strata.

These principles and processes are not deterministic in origin, but are the result of the living interplay of purely spiritual beings, known to us traditionally as the Christian Hierarchies, and eventually Man himself, together with the elemental life of the other kingdoms of nature. At the third stage there is a dramatic division into two streams of evolution, from which most of our present polarities, such as spirit and matter, male and female, light and darkness, and many others, have developed. Running through the entire evolutionary process is a rhythmic alternation between the embodiment of principles into material form and the withdrawal of these principles for further evolution in themselves. Since all this represents the evolution of actual spiritual beings, including Man, it must be they who carry over the results of one phase or "model" and implant them as the built-in features of the next. Thus the idea of reincarnation and karma is essential to this view of the world.

Dr. Steiner also describes the process of knowledge whereby one can rise towards a grasp of the ultimate truths of existence. Here the same rhythms are necessary, and the powers of perception can only grow in the same measure as one can rise from logical thinking to imaginative thinking, and ultimately to inspirative and intuitive thinking, at which level the creative agencies can be met face to face in their own living essence. He makes it very clear that the process of thinking is a purely spiritual activity.

Steiner's teaching arises from inner spiritual insight, but the truth of it can be read off in the common experience of our everyday life, if we will only look for it. It is just this that I have tried to show in this article. All evolution consists in making or finding an environment in which one can work. Through seeing the impression we have made upon our surroundings, we come to know ourselves, and without this there is no progress. If Creation is seen as the work of the Gods, then in former times we ourselves

must have been the model, the mirror, in which the Gods saw their own work reflected. The almost incomprehensible wisdom that flowed through the leaders of mankind in earlier epochs can be understood only as the thinking of the Gods reflected in the consciousness of man. This is the inspiration to which I referred earlier on. To-day the Gods have ceased to think through Man; they have endowed him with the power of individual thought and left him to think for himself. Thinking is really the creative force of the world, and we have not yet learned how to use it.

Our modern technical achievements go far beyond the mere discovery of the laws of nature. They constitute the creation of a new kingdom of existence. If we learn to perceive them imaginatively, we find that they are the mirror of our own thinking, and this can be a painful discovery. From here it is only a short step to the realisation that our own thinking is an immediate, though puny, picture of the processes that have brought the world into being; and that Man has in fact been created in the Image of God, although he is in imminent danger of betraying his Creator through the blind egoistic use of the powers that have been placed in his hand.

Once we have got used to the idea that the created world could be related to the Gods who produced it, in much the same way that man's creations are related to himself, then the whole world of our inorganic processes appears as the reflection, the memory of the deeds of the Gods, who have now withdrawn and allowed the machinery to go on working by itself. It no longer makes any sense to think that the secrets of our existence will be found at the level of the atoms and molecules themselves. Similarly with our edifice of knowledge, we shall come to see that all our mathematical principles, our units of measurement, our definitions and our very grammar, are no more than props to help our consciousness to find and to keep its bearings, until such time as it can learn to sustain itself without their aid in the realm of living, moving processes of creative thought themselves.

If we fail to do this, we shall be like a man who is convinced that the motor-car which he so proudly owns and drives has come into being through no other agency than the automatic machinery that he sees at work on the factory floor, and who is content to enjoy the sensation of driving it without worrying overmuch as to where he is going.

In Creative thinking, Man unfolds his newest powers. But since in this realm he is working out of his own freedom, he will not be able to escape responsibility for the world that he creates.

Gravity and Levity in Human Movement

Olive Whicher

ON a quiet evening, many years ago, a child was walking along the main street of a small town in southern England—a girl about eleven or twelve years old. Stars were shining, and the fresh-smelling air of the countryside blew through the deserted street. The child walked with even, swinging strides, listening to her footsteps on the smooth stone pavement. "I am going my way," she thought. "And under my feet I feel the ground." Then suddenly the wonderful feeling dawned: "Yes, I am walking upright! I am walking the earth with powerful strides and my head is held beneath the stars. I am carrying myself along!" It was a happy, unforgettable experience.

It is in ways such as this that our children experience themselves in their bodies, provided that for them the heavens are not darkened; and when in later life they meet ideas such as 'Threefold Man' or 'the up-bearing ether-forces', they often take them quite for granted.

Many years after I had first met Anthroposophia, and when I was able to entertain exactly formed thoughts about physical and ethereal spaces and about the forces of gravity and levity, I came to learn the Bothmer gymnastic exercises. The teacher responsible for gymnastics at Michael Hall had been called to the war; I had long since been devoted to the geometrical and mathematical research inspired by Rudolf Steiner, but now, as it seemed, destiny intended that at least for a while I should turn my attention to school gymnastics. So I began to learn the Bothmer exercises.

Count Bothmer, previously a cavalry officer in the German Army, was called by Rudolf Steiner to the Waldorf School in Stuttgart in 1922, and given the task of developing new methods in physical education to accord with the aims and ideals of this pioneer school of the Rudolf Steiner School Movement. Some sixteen years later the Waldorf School was closed by order of the Nazi Government, and when it was reopened after the war, Bothmer was no longer on earth to help rebuild it.

During those years which were given to him, however, first with Rudolf Steiner's active encouragement and help and then in the early years after his death, Bothmer worked with tremendous vigour and devotion, aided by the love and enthusiasm of the boys and girls who were his pupils, to create a sequence of gymnastic exercises, and also a new approach to the problems of physical education as a whole, in which the human body as a threefold organism should find its true relationship with the three dimensions of space.

Learning these gymnastic exercises, I realised with astonishment, yet at the same time with a feeling of absolute certainty, that the power whereby a limb is moved comes not only from within the body. In previous gymnastic schooling, the emphasis had always

been laid on physical strength, which one imagined to be stored up in the muscles and then released by them at will. We had practised hard to make the muscles strong, to jump, to throw—as high as possible, as far as possible. Perhaps we had tried to achieve power of movement through rhythm, but it had always been assumed that the centres of power were somewhere within the physical organism. In the muscles, in the sinews, at any rate within the body, was the force which brings the limbs into movement.

Here, however, was something quite different. Man reaches towards the stars; through bodily movement he can feel himself widened and expanded, as though his fingers could feel the distant horizon, as though as a physical-spiritual being he could permeate limitless space. But more—the most essential thing was this: *the power for movement springs not only from within the body; from the world-circumference also comes the force whereby the body is held erect and enabled to move.*

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The Will is asleep in the human body, glowing like a smouldering fire in the darkness. Left to itself, it makes no movement, or at most only uncontrolled twitching of the limbs. Noble movement is called forth, through the light of consciousness, from the world surrounding man. It is well to reflect, for example, on how the small child is first called to his feet and, standing erect, makes his first steps into the beckoning world about him, where exciting shapes, colours, human faces all ask to be reached and touched by little outstretched hands.

Indeed, throughout conscious life we are continually being called to activity and movement by the tasks which lie within our destiny in the world and among the human beings around us. The Will, hidden and secret, is related to the centre of the Earth, while the world of Light—the world perceptible to the senses—is spread around man and comes to meet him from the wide horizons of space. The Thinking-Sensing human being can live in a world of wide horizons. And *human movement*—dynamic, purposeful movement, spiritual as well as physical—is brought about not onesidedly by compulsion from either world, but through the balanced interplay of both.

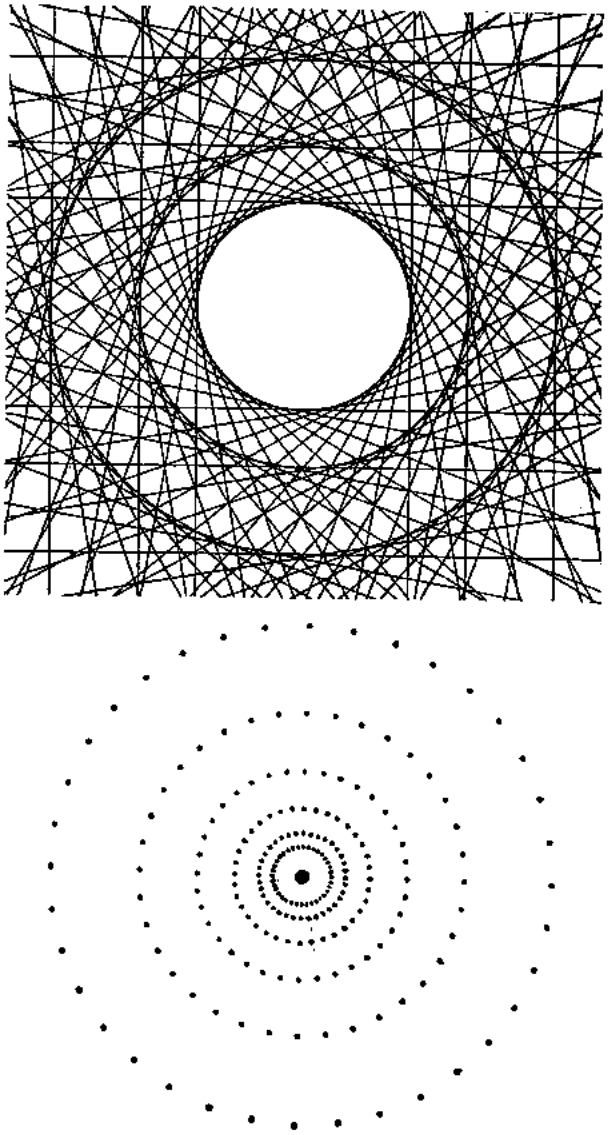
Two kinds of forces, springing from two different worlds, give man the possibility to stand erect and rejoice in his freedom of movement. They are the centric, earthly forces on the one hand, and, on the other, forces of quite opposite kind and quality, which we may call peripheral forces. In the early chapters of their book *Fundamentals of Therapy*, Rudolf Steiner and Ita Wegman describe how these peripheral forces work inward from the wide distances of universal space towards the living entities on earth. In contrast to the gravitational forces of the Earth, which work between point-centres, we must learn to know and understand these other forces,

carried plane upon plane, inward from world-horizons. Inasmuch as any earthly substance is endowed with life, these are the forces which raise it upward—plant substance, incarnate substance—overcoming gravity. These are cosmic, ethereal forces.

Thus man needs the power of the earthly, gravitational forces: the domain of Seraphim, Cherubim and Thrones. He needs also the cosmic, peripheral forces, which, from above, bear him upward, and here the Second Hierarchy work—Spirits of Form (Exusiai), Spirits of Movement (Dynameis), Spirits of Wisdom (Kyriotetes). Man lives and moves in the dynamic interplay of these great contrasting powers. The Will becomes formed—Light irradiates Warmth; the Thinking-Sensing man becomes active—Warmth glows through Light. This is the Threefold Human Being, whose life takes its course in the realm of the Third Hierarchy—Angels, Archangels and Archai.[1]

It is in the true balance of this his threefold being that Man is endowed with a freedom of movement not comparable with the movement of any other living creature. The movements of animals reach a state of perfection sometimes unattainable by man; but the animal is not really free in its movement. An animal is for the most part bound to a particular set of movements, just as it is bound to the kind of feelings and instinctive urges which belong to its species. It is as though the muscular system of an animal were set like the strings of an Aeolian harp; the astral winds blow through it, and the sound, beautiful as it may be, is predetermined. Each animal will sound the chord to which it has been tuned. Only man, who is upright, can play upon his own harp. He alone has a true rhythmic system through which he experiences a whole world of feelings and a great range of movements. Healthy feeling-life and healthy movement belong together. Human movement is unique; there is nothing like it in the whole world. Brought about through the forces of will from the depths and through the forces of the thinking-sensing, cosmic man from the heights, it is itself a manifestation of the *rhythmic* man.

Two qualities of force, then, must be taken into account if we would really understand "dynamic" movement. The essence of such movement is that it will be harmonious; it will express the harmony of interplay between the two polarities. If the movement falls into one or other extreme, it becomes dead. One-sided, inharmonious movements may be heavy and slow, or reveal too strongly the push and pull and thrust, the physical aspect of the earth-forces; then the centric gravitational forces of mass, inertia and weight predominate. (These forces may well express themselves explosively.) On the other hand, a human movement may be too severely formed, too much controlled by thought. In *both* extremes, movement will become stiff and deadened and its effect will be tiring. A healthy movement always has something of both worlds in it, perhaps striking a lower chord and revealing more



Geometrical illustrations of the polarity of physical and ethereal spaces (related to the levitational and gravitational types of force). The drawings show only diagrammatically what is meant by the two polar opposite kinds of force; they should be brought to life and movement in imagination.

the gesture of thrust or lunge; perhaps showing more the plastic, planar quality of an upward-bearing, more winglike movement, but

always sustained by the living, dynamic forces which arise only through the working together of gravity and levity. Such movements bring about healing, physically as well as psychologically.

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To-day we think a great deal about the forces of gravity and of momentum, but we are only just beginning to understand the ethereal forces of levity—those which act contrary to gravity. We know that all heavy bodies are drawn towards the earth's gravitational centre, and that a powerful concentration of the same, essentially physical type of force is expressed in the momentum of a body which is ejected outward into space.

This centric type of force operates both centrifugally and centripetally. The ethereal forces also have this twofold aspect, but they are of quite another nature. They work not with heavy downward pull or explosive outward thrust, from point to point, but gently, plastically, as though from plane to plane.[2]

A man standing upright is supported by his legs and by the wonderful structure of his skeleton, bone upon bone. Were this structure to give way, he would fall to the ground. But it is also by the light of his consciousness that a man holds himself erect and vertical amid his encircling horizon, and were his consciousness to be darkened, he would also fall. In this wide-awake pole of his being he is functioning in a world of forces which enable him to move against the force of gravity and to overcome it. The life-sustaining ethereal forces flow inward, plane upon plane, bestowing life; they draw the heavy body upward, away from the earth's centre of gravity.

It is in physical space that the physical forces work; but Rudolf Steiner was at pains to convey to his scientific audiences that the ethereal forces belong to what he called "counterspace" (*Gegenraum*). Quite opposite in quality to the forces of the dead physical world are the forces of life which permeate it.[3]

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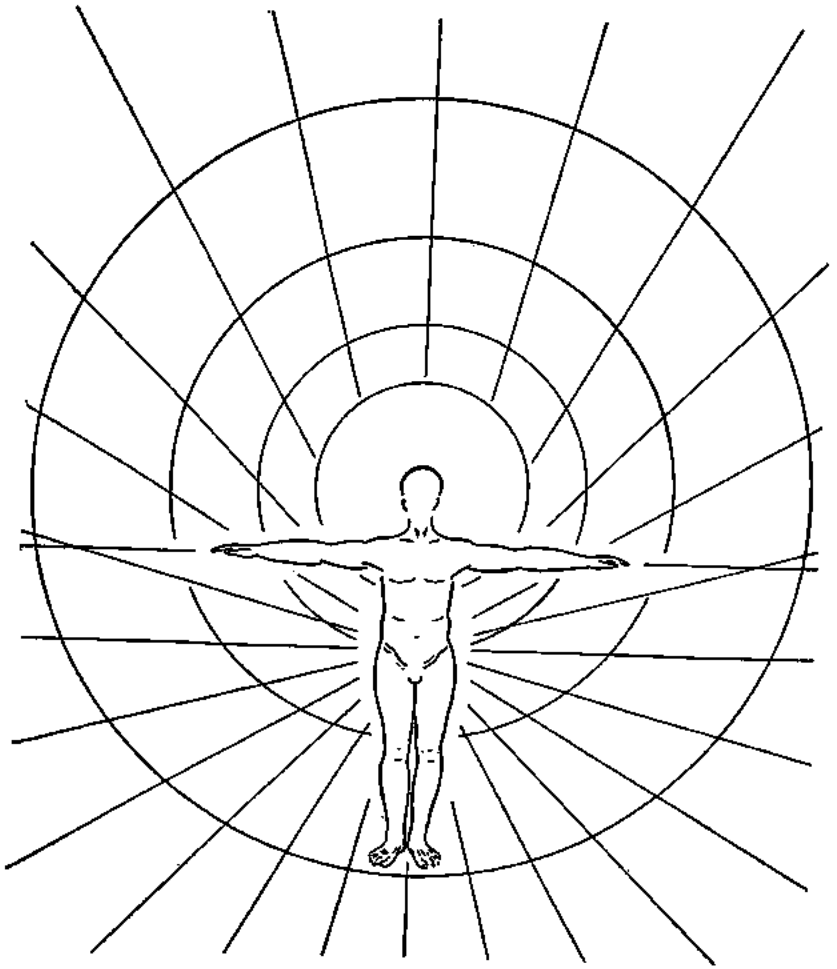
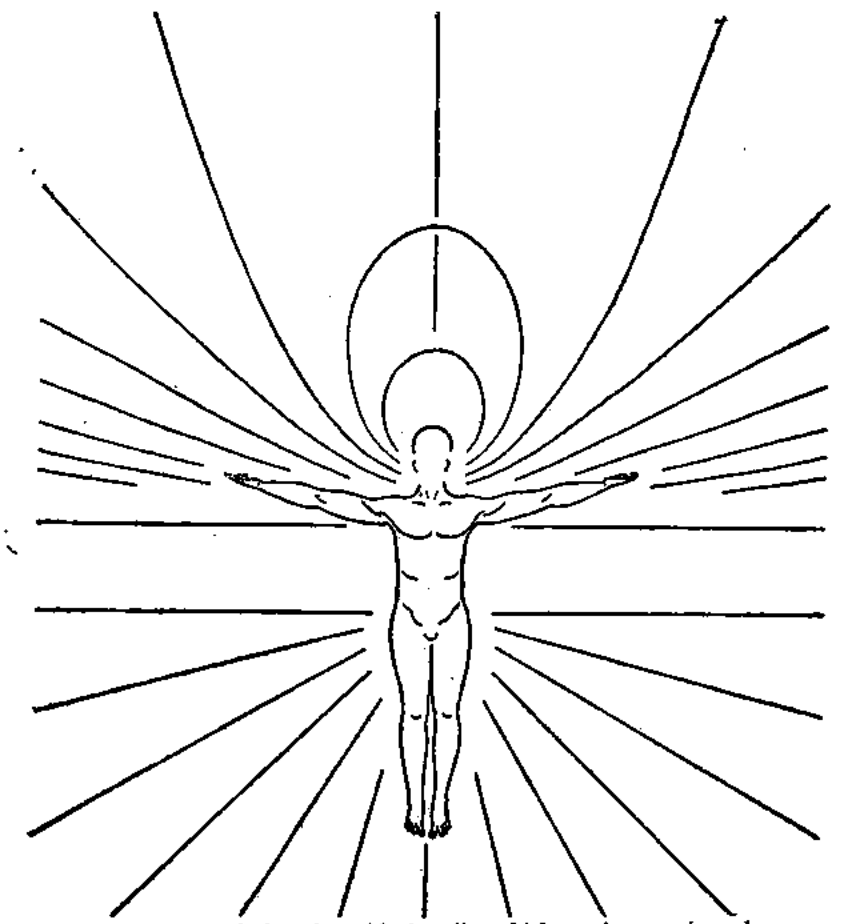
Rudolf Steiner once spoke to teachers[4] about physical training towards the end of a lecture otherwise devoted to the rhythmic system of man; he had been speaking at length about the worlds of speech and music. "Every child," he said, "is a musical instrument and feels the pleasant quality of sound within him." The rhythms of sound build a bridge between his own inner world and the great world around him. In gymnastics, said Rudolf Steiner, man places himself into space; he finds his bearings in it. He puts himself into the harmonious balance of space (*Gleichgewicht des Raumes*). It is a task of the greatest urgency to awaken to an understanding of what Rudolf Steiner really means when he speaks in such contexts about *space*, and insists that the body does not just move in "abstract" space.



Two kinds of forces, springing from two different worlds, give man the possibility to stand erect and rejoice in his freedom of movement.

Often and again in his sequence of exercises, Bothmer starts from the movement—or position—described by Rudolf Steiner in the lecture just referred to. The body is vertical; the eyes look forward; the arms are outstretched with palms downward, "laid" into the horizontal direction, usually sideways, though sometimes forward; the legs and feet are together, or nearly so.

It makes a great difference whether the arms are merely stretched out, or if they reach out livingly into the surrounding horizontal plane; that is to say, if they are not just stuck out, but spread horizontally, the palms of the hands coinciding with the horizontal plane which extends from the horizon and passes through each



The horizontal plane is an ideal reality which can be experienced in bodily movement.

individual, upright human body. The great horizontal plane which reaches to the far horizon can then be actually experienced as a sustaining, upbearing plane. Though not there physically, "the horizontal plane" is an ideal reality which can be experienced in bodily movement. Once awakened to perceive it, the eye sees it too, when watching others move. To watch a healthy, active child running along a wall, jumping over a rope, or engaged in the many other happy, unconscious movements of play throughout the day, gives constant opportunity of recognising this ethereal plane and also the many others associated with it; they are revealed in the gesture of movement.

Standing with his feet on the ground and arms outspread in the plane of the infinitely distant horizon, man can experience how he

is firmly placed in the physical, gravitational realm of the dark earth, while at the same time he is upheld in the world of the planes of light. Truly, man sets himself in the focal balance of cosmic space! For Bothmer, this position is like a gateway through which, in many different exercises, the child or young human being may enter into the heights and depths of human movement. Though hardly itself yet a movement, this position, when rightly achieved in the Bothmer exercises, is pregnant with the dynamic forces which flow into human movement when it is truly alive.

The exercises created by Bothmer come nearest to what in gymnastics we usually call still-standing exercises, which are carried out on the floor without apparatus. But especially in the later part of the sequence, stepping movements are introduced, where the exercise moves across the floor and is not held to one spot. Each exercise consists of a sequence of movements and is complete in itself; as Bothmer himself expressed it, "each is a *whole*, a movement-picture into which the child can grow."[5] The complete sequence of exercises covers a period of twelve school years; the child advances in the sequence as he grows through the school.

Bothmer was right when he said that words could not adequately describe his exercises: they must be done to be experienced. If—and only if—the *planes of levity*, which are all the time playing through the exercises with their cosmic, ethereal, upward-bearing power, are really experienced as they should be, then the new gymnastics will develop and grow into its own. Then something entirely new enters into physical education and the children are happy with it. They remember unconsciously the starry world which permeates human beings and their movements, and they experience powers of resurrection.

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[2] Lecture by Rudolf Steiner at The Hague, April 9, 1922.

[3] *The Plant between Sun and Earth*, by George Adams and Olive Whicher. (Published by the Goethean Science Foundation, Clent, Stourbridge, Worcs.) Also by George Adams: *Physical and Ethereal Spaces*, in the quarterly, *Anthroposophy*, 1933, Nos. 3 and 4; and *The Threefold Structure of the World*, in the *Golden Blade*, 1953. See also the relevant chapters in *Man or Matter*, by Ernest Lehrs (revised edition, 1958).

[4] Rudolf Steiner: *Lectures to Teachers*, Torquay, 1924; Lecture 6.

[5] *Gymnastische Erziehung*, by Fritz Graf von Bothmer. (To be published shortly in German and English by the Philosophisch-Anthroposophischer Verlag, Dornach, Switzerland.)

We regret that owing to illness Mr. George Adams has not been able to write the intended sequel to his last year's article, "The Hidden Forces in Mechanics". We hope to include it in a later issue.—*The Editors.*

The Mysteries of Hibernia and Lord Lytton's "Zanoni"

John Muller

LITTLE is known of the Mysteries of the East. But far less is known of any Mysteries once situated in the West, in Ireland. We have to-day only a few vague traces of these Mysteries towards the West of England, and we could hardly begin to decipher them if it were not for Rudolf Steiner, who gave us a detailed picture of these profound Mysteries of the past.

Indeed, the Mysteries of Hibernia were one of the most important channels for the entry of Divine impulses into the civilisation of mankind, and they reach back to the far past, when our post-Atlantean civilisation was about to be born. But certainly one of the most astonishing things to discover when studying these Mysteries is to realise that they were still alive well into our Christian Epoch.

In his Mystery Plays, Dr. Steiner first gave some indications regarding these Centres of Hibernia, showing how one of the leading figures in these plays, Maria, was in a former incarnation sent by the Hibernian Mysteries to the Continent.[1] As a Christian missionary from Ireland, she was to bring Christianity to the young Germanic tribes which had entered Europe from the East. These Irish missions to the Continent took place from the 7th to the 10th century of our Christian era—thus at a time when the Mysteries of the East had already vanished into the past.

But only at the close of the year 1923, on the eve of the foundation of the Anthroposophical Society at Dornach and again during the actual foundation meeting, did Dr. Steiner speak in detail of the Hibernian Mysteries. It would be a mistake to endeavour to give the content of these lectures here. It is necessary to read and study them in exactly the wording given by Dr. Steiner. But to understand what follows, I must indicate in a few words the steps the pupil of the Hibernian Mysteries was led to take.

First, he had to experience doubt—doubt with regard to knowledge. Does knowledge contribute to human happiness? We know to-day only too well that it does not. Many to-day already ask—should we not renounce our further scientific effort? Does it not lead to self-destruction? In contrast with the gradual emergence of these doubts and questionings in modern times, the pupil of the Hibernian Mysteries was quickly led to turn away in his inner feelings and understanding from the abyss to which knowledge by itself must lead, and to seek joy and happiness.

[1] *The Portal of Initiation*, Scene VII.

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But when he had turned his inner striving towards joy and happiness, he was led to another abyss—the abyss of disillusion that man experiences when he seeks joy and happiness only. Again the pupil would be seized with doubt.

After these first experiences of doubt, the pupil would be confronted with two colossal statues. They were put there as external "letters," by means of which he was to begin to decipher the Cosmic Secret placed before men.

One of the statues was a male figure of huge dimensions; above its head there was something which represented the Sun. It signified the manifestation of the whole macrocosm, the created world. But on touching this statue, the pupil found it to be hollow. Through this figure the world of the past spoke to the pupil—a world once full of the warmth and the life of creation, but now only an empty shell, cold and dismal. Experiences of desolation, loneliness and chill were connected with this statue.

How different was the second statue, a female figure, of the same huge dimensions, but full of light raying from inwards. It was not hollow, but soft, easily dented. A feeling of warmth and happiness was experienced by the pupil. Through this statue spoke the world of the future, full of expectations.

Then, after these feelings had worked deeply into the soul and spirit of the pupil, more vividly than anything we can imagine to-day, so that he was tortured by the question which way he should go, to which statue should he give himself, a third statue, a Christ-image, was shown to him, and these words were spoken: "Receive the Word and the Power of this Being into thy heart. And receive from Him what the two Images wished to give thee—Science and Art."[1]

Thus the pupil had experienced in the male statue all that can be expressed through the word *Science*, and in the female statue all that we understand by *Art*. And through his long path of initiation, the pupil had found the limitations of Science and Art, if they are not dedicated to Christ.

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For reasons stated by Dr. Steiner, these Mysteries were well hidden from mankind, and they still are. We cannot expect to be led by a guide to the place where the statues once stood and to admire their remains. First, the statues were made of perishable material, and secondly the traces were carefully shielded from inquisitive eyes when the Mystery Centres were closed. But—as stated earlier—traces there are. We must not forget that these Mysteries were still alive up to somewhere near the 10th century A.D. And after that they went on working, but in a less physical and more hidden way. A person through whom they once worked in

[1] *Mystery Centres.* Lecture VII, 7 Dec., 1923.

the 19th century was Edward Bulwer, late Lord Lytton, who was born in London in 1803.

It is known that Bulwer Lytton was a member of the Society of Rosicrucians.[1] Not that we have to read too much into this. In these occult societies, Rudolf Steiner says, "many things were preserved as tradition from the findings of the ancient wisdom. All this was accepted without understanding, although it often penetrated as an impulse into business transactions. Men could only get an idea of these things; they could not push on to actual experience. A few individuals had inklings of them, no more. Through these inklings many men did certainly penetrate into the regions of experience now in question. And such men have often adopted strange external ways of life—as, for example, Bulwer Lytton, who wrote *Zanoni*. What he became in his later years is to be grasped only if we know, for example, how he absorbed the tradition of human self-knowledge, and how, through his peculiar individual constitution, he was able to penetrate into certain mysteries."[2]

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Bulwer Lytton was inspired with the main outlines of his novel, *Zanoni*, by a dream, after he had occupied his mind with the study of some mediæval treatises upon astrology and the so-called occult sciences. It is perhaps not a coincidence that at the end of his lectures on the Hibernian Mysteries, and still in the framework of these Mysteries, Dr. Steiner speaks of the *Chemical Wedding* of Christian Rosenkreuz—the same source, therefore, from which Bulwer Lytton was inspired to write *Zanoni*.

That we are to expect something more than the outward romance, which takes place during the French Revolution, can be deduced from the introduction to *Zanoni*: "It is a romance, and it is not a romance. It is a truth for those who can comprehend it, and an extravagance for those who cannot." Or in the dedication to the First Book, "The Musician": *Due Fontane. Che di diverso effetto hanno liquore!* Two founts that give draughts with very different effects.

One of these founts is the remarkable story shortly before and during the French Revolution. The scenery of Naples and Rome appears before our enchanted eyes; then we are taken to Paris during the ghastly days of the Revolution. Children of their time, leading personalities, or people such as the robbers in the woods near Rome, pass across the stage of this drama. All is colourful and exciting and our sympathies and antipathies are aroused.

And now the astonishing phenomenon takes place. While reading, we observe in ourselves the same inner feelings as were

[1] Otto Palmer, *Bulwer-Lytton: a Study* ("Golden Blade," 1953).

[2] *Fundamental Impulses of Old and New Mysteries.* "Goetheanum," Vol. X., No. 13.

experienced by the pupils of the Hibernian Mysteries—to which side should our sympathies be drawn, to Mejnour or to Zanoni? We become ourself the neophyte, like Glyndon, ever seeking and ever doubting. And, which is worse for a pupil of the Mysteries, impatient. But ever in search of the supernatural.

And then it is as if this colourful scenery is only projected on to a transparent veil: suddenly the lights behind the veil are dimly lit and there stand the two colossal statues of the Hibernian Mysteries, Zanoni as the female statue, representing Art, and Mejnour, the male statue, representing Science. Looking through the veil of the French Revolution, we perceive the second fount of this remarkable story. Through the veil of romance and extravagance we comprehend the truth.

First there is Zanoni, all beauty and everlasting youth. Surrounded by shapes of glory and light, his countenance is radiant with celestial joy. All in him is given to Art. "Of Art! Do not so profane that glorious word. What Nature is to God, Art should be to man — a sublime, beneficent, genial and warm creation." (Book II, Chapter 7.)

Or watch Zanoni's dramatic appearance on Vesuvius. Amidst fire, flames, heat and sulphuric vapour he appears—"a colossal shadow—a shadow that seemed partially borrowed from the human shape, but immeasurably above the human stature." (Book III, Chapter 10.)

Zanoni refuses to live in the past; his is the future, his interest the Revolution, the cradle of the future, rocked by the storms of history. He wishes to watch the world while its elements are still struggling through the chaos of birth.

But Zanoni's way leads only to disillusion, and so Glyndon now desires knowledge and power and turns to science and to the mastery of the supernatural. In many ways Zanoni tries to tempt him to renounce knowledge, to turn to a tranquil home, a happy and serene life. "Vain man!—knowledge and power are not happiness." (Book III, Chapter 11.)

So we turn with Glyndon to Mejnour, the second gigantic figure, austere and remorseless. He offers no choice of happy love and serene enjoyment. He has no friends, no associates, no companions, except books and instruments of science. Mejnour's knowledge leads to the past: "On these shores, on this spot have I stood in ages that your chroniclers but feebly reach. . . . In the herbs, elements, in the black abysses of earth, everywhere are given to mortals the resources and libraries of immortal lore" (Book III, Chapter 18). "My life is the life that contemplates—Zanoni's is the life that enjoys; when I gather the herb I think but of its uses; Zanoni will pause to admire its beauties. His is the existence of youth—mine of age" (Book IV, Chapter 2). "Living on—living ever—as Science that cares alone for knowledge, and halts not to consider how knowledge advances happiness; how human improvement, rushing through civilisation, crushes in its march all who cannot grapple to its wheels" (Book VII, Chapter 14).

As we have watched with Glyndon the appearance of Zanoni on Vesuvius, so now we follow Glyndon into the icy atmosphere of Mejnour, into the forbidden inner room, perceiving a mist like a snow-cloud. "A mortal cold struck to the Englishman's heart, and his blood froze" (Book IV, Chapter 2).

Mejnour's way leads to intense horror. Glyndon has met with the Guardian of the Threshold, who will not leave him again, and of whom he is not master. Only after long sufferings he eventually learns how to conquer—through Virtue. "Hast thou never said, 'Come what may, to Virtue I will cling?'" Here the third statue is vaguely to be seen; it becomes perhaps more distinct at the very end of the novel, in the Child: "See! the orphan smiles! The fatherless are the care of God."

But where the two gigantic statues of the Hibernian Mysteries are most clearly to be perceived through the veil of outer romance, where the secret is revealed, is when Glyndon has learnt to master the Guardian of the Threshold and Zanoni now can speak to Glyndon of his own and Mejnour's real meaning: "We are the types of the two essences of what is imperishable—*Art* that enjoys, and *Science* that contemplates!" (Book VII, Chapter 9.)

There is one last link to be mentioned between Lord Lytton's novel, *Zanoni*, and the Hibernian Mysteries: the obligation of Zanoni and Mejnour to help Glyndon, and to fulfil his desire for initiation. In Book III, Chapter 4, we hear Zanoni speak: "You ask me why I have shown this interest in your fate? There is one reason which I have not yet told you. There is a Fraternity as to whose laws and whose mysteries the most inquisitive schoolmen are in the dark. By those laws, all are pledged to warn, to aid, and to guide even the remotest descendants of men who have toiled, though vainly, like your ancestor, in the mysteries of the Order. We are bound to advise them of their welfare."

Compare this with what Dr. Steiner says of Garibaldi in his lectures on Karma, where in the lecture of March 23, 1924, he shows how Garibaldi had to help King Victor Emanuel, although he himself was a republican at heart. In a former incarnation, passed in the Irish Mysteries, the Hibernian Mysteries during the 9th century of our Christian era, Victor Emanuel had been the pupil of Garibaldi, who because of this was bound to help him. It is significant that Bulwer Lytton could not speak in the 19th century of reincarnation, but had to see this link in the form of ancestry.

We have to record with deep regret that (as many readers will know) Dr. Muller was drowned while bathing off the Irish coast last summer, shortly after he had corrected the proof of this article.—*The Editors.*

The Sickness of Johannes

Adam Bittleston

THE work of Rudolf Steiner is open to two principal lines of criticism. First, it can be said that while the results of scientific research can always be checked by further observation or experiment, the results of Rudolf Steiner's spiritual research depend upon his unsupported statements, which no-one has been able to check. Thus it is possible to regard his work simply as the product of fantasy.

The second line of criticism is perhaps both more modern and more subtle. It is concerned to question, not the reliability of his statements in themselves, but their effect upon those who accept them. Critics of this kind may point out that the fundamental need of modern man is not for the accumulation of any more facts or doctrines, but for transformation at a much deeper level. Sometimes they are prepared to accept Rudolf Steiner's results as practically useful, say in education or in other fields, but they regard them as irrelevant where the deepest needs of the human soul are concerned. Conscientious and thoughtful criticism along these lines has appeared, for example, from Lutheran circles in Germany.

No theoretical answers are adequate to meet either of these lines of criticism. They can be refuted only by actual human lives. Rudolf Steiner himself looked forward to the testing of his results by every conceivable method—so long as these methods do not involve any misuse of living things; and he hoped that his followers would reveal beyond question the healthy results of spiritual knowledge in social relationships.

But he knew that these results do not follow automatically. He spoke in the strongest possible terms of the psychologically destructive effects of spiritual knowledge if it is not assimilated in the right way—of the growth of human egoism and the poisoning of social life where spiritual knowledge is received without a real inner awakening, and without carrying it over into positive action. It may reasonably be asked: "Why then did he impart so immense a mass of spiritual facts? And why did he not do more to help his followers to assimilate them?"

These questions, too, cannot be answered satisfactorily on the level of an intellectual argument; but only by coming to feel in some measure the immensity of effort and patience which went into the last twenty-five years of Rudolf Steiner's life. On the one hand, he regarded it as a necessity that great windows should be opened into the spiritual world, for humanity as a whole, in order that a beginning should be made in redressing the balance between spiritual understanding and knowledge of the physical world; on the other, he was concerned to find every means, consistent with their freedom, to help the groups of people with whom he was in

immediate contact towards the realisation of spiritual knowledge in living practice.

A first step in this direction, and one far-reaching in its implications, was taken when he produced, each year from 1910 to 1913, one of his four successive Mystery Plays. These were produced at Münich by his followers, who acted the parts, painted the scenery, and made the costumes under his direction. Very few of these people had any previous theatrical experience; and Rudolf Steiner emphasised that they were not intending in any way to compete with the professional theatre.

Later on, in September, 1924, he was to give one of his last and greatest courses of lectures, attended largely by professional actors, about the mystery of their vocation.[1] But in 1910–1913 he was concerned with people who in ordinary life might be doctors or government officials, land-owners or society women. He gave them an opportunity to learn how that spiritual world of which they had heard so much through him could reveal itself in colour and movement, and in the sounds of their own voices. And he put at the heart of the whole sequence of Mystery Plays this great problem—how can spiritual knowledge be assimilated in such a way that it has its right effect in human relationships and in human action?

The central personality of the four Mystery Plays is a young artist who bears the name Johannes Thomasius. He has been led by an older woman, Maria, into a circle of people who are pupils of a spiritual teacher, Benedictus. Maria has long believed that the teaching of Benedictus would enable Johannes to achieve far greater things as a painter than he could otherwise have done. But the result is in fact the opposite; Johannes becomes utterly discouraged and unable to do any effective work at all.

This situation was of course not devised by Rudolf Steiner to point a moral. He was himself creating the plays as an artist, and did not know where the creative process might lead him. He was representing people felt by him as concrete individualities, not as general examples. Yet we can see that he had certain definite starting-points. He looked at the effects of his work over the past eight years since he had shown himself as a spiritual teacher. And he carried within him, as vivid pictures, together with all that had developed from them over many years, the events described in Goethe's fairy-story, *The Green Snake and the Beautiful Lily*. For in this story, too, Goethe had been concerned with the problem of assimilating Wisdom, as he saw it.

Not long before, Schiller had contrasted two conditions in which man is unfree. If the human soul is entirely under the influence of what the senses perceive and of the bodily instincts, it is gripped by natural necessity; while if its actions are purely reasonable, it is

[1] *Sprachgestaltung und Dramatische Kunst*. An English translation by Mary Adams, entitled "Speech and Drama", will be published shortly.

controlled by logical necessities. There is something unhuman about both conditions. For Schiller, the truly human condition lies in between the two, when understanding penetrates the senses and when the visible is raised in artistic creation to the level of the spirit. The artist, or the child when he plays, lives in freedom between the two worlds.

For Goethe, although he was in close sympathy with Schiller on this subject, the form of expression chosen in the *Æsthetic Letters* was too abstract and one-sidedly philosophical. (Rudolf Steiner writes of this in the twelfth chapter of his autobiography.) He preferred to express the ways in which genuine humanity can be achieved in the form of a myth: the fairy-story which tells how a bridge is built across a great river dividing two kingdoms. And Goethe pictures the condition in which the natural instinctive life is lamed by a spiritual influence which it cannot truly assimilate, in the form of a young prince who has fallen in love with the beautiful Lily, queen of the region beyond the river. The way in which this young man is introduced into the story is very characteristic. A talkative old woman is walking beside the river, hoping to get across into the region of the Lily, when she notices a figure going in the same direction:

> His noble form and his strange dress made a deep impression on the old woman. His breast was covered with gleaming armour through which moved all the members of his beautiful body. A purple mantle hung from his shoulders. . . . "Look at me," he said to the old woman, "at my age, what a miserable condition I must bear! This armour which I carried in battle with honour, this purple which I sought to deserve through wise rule, are left to me by destiny, the one as an unnecessary burden, the other as a meaningless ornament. Crown, sceptre and sword are gone; I am otherwise as naked and as needy as any other son of earth; for her beautiful blue eyes have so miserable an effect that they rob all living beings of their strength. Those who are not killed by the touch of her hand feel themselves transformed into living and walking shadows."

This young prince reappears in the first Mystery Play as Johannes Thomasius; and the beautiful Lily as Maria. This is no conjecture; in an early draft of the play, which has been published, some of the characters still bear their fairy-story names. And Rudolf Steiner often pointed in a general way to the connection. Every figure in the fairy-story appears in a metamorphosis in the play; though there are three characters in the play who are not in the story. Everyone, both in story and play, is concerned in the process through which the one who has been lamed by the Lily's influence is restored to full life, to true humanity.

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It is not everyone who is lamed as Johannes was by the influence of spiritual knowledge. Yet it is a general fact, which shows itself in various ways, that the natural instinctive life in the human being feels itself oppressed and denied by the enthusiasm for spiritual knowledge. It is from this instinctive life that artistic creation

comes; so that it is easy for an artist to feel spiritual knowledge as endangering the sources of his work. (Frau Margarita Woloschin has given a wonderful and deeply honest account of this in her book, *Die Grüne Schlange.*) In someone who is not an artist, very much the same thing can show itself as a loss of vitality, or as a sense of meaninglessness and discouragement. We can be effective as human beings only through the assent of all parts of our nature to the way of life we choose.

How can this assent be won? It cannot be compelled; nor can the forces in the depths of human nature, which are more varied and more significant than we generally suspect, be argued into submission. In both the fairy-story and the Mystery Play, a Temple is represented where the sources of genuine humanity are to be found. What has been lost under conditions of earth can here be recovered; according to the pictures of the fairy-story, crown, sceptre and sword are here given back to the young prince, and as he receives them life returns into his members, light into his eyes, and he begins to speak. He has passed through a kind of death, and has been given fresh powers by the grace of the whole universe, mediated through the figures who stand around him. They seem to bring him everything as a free gift; and a superficial reading of the fairy-story might lead to the objection that the young man does not in the least deserve all this. He has simply let himself be paralysed, and finally brought into a death-like condition, by his love for the Lily, without any positive achievement on his part.

What Goethe has here represented is the aspect which Initiation had in the old Mysteries; it appeared to be a passive process in which the candidate submitted to the solemn ceremonial of the hierophants, by which his being was transformed. This could indeed include the experience of a condition like death, lasting about three days. At the end of this he received new life through the chief of the hierophants, and spoke words which they had laid into his soul.

In the post-Christian Mysteries, the individual effort of the aspirant for initiation is much more evident. During his own struggles the great transformation is to come about, through which he can become worthy to be recognised as a citizen of the spiritual world. And it is this aspect which we find more evident in the first Mystery Play—Johanne's own efforts and achievements on his way to spiritual reality.

But the contrast is by no means so complete as it appears. In the old Mysteries the candidate had to pass successfully through many inner battles, and in the modern Mysteries the candidate comes to recognise how infinitely much is given to him, how much it is a question of recognising that even his own thinking and feeling and willing are valueless unless the good Cosmic Powers are able to manifest themselves through these as their instruments.

The assimilation of spiritual knowledge within ordinary practical life has the same character as an initiation. Unless we are prepared to go through something which resembles the experiences undergone by Johannes in the Mystery Play, however little this may be evident to anyone round us in ordinary life, the possession of spiritual knowledge remains something unsocial and eventually destructive. To see this, we have to be able to interpret what happens to Johannes in terms of more familiar, everyday experiences—which need not have any conscious clairvoyant character about them at all.

For example, Johannes has the terrible and overwhelming experience of seeing his own Double—the grotesque form which reveals all the evil and weakness hidden in his character. The full clairvoyant vision of the Double remains mercifully, for most people, something very remote. And yet it is possible in ordinary life to catch very significant glimpses of our faults, in a way which does not remain abstract, but which conjures before our minds something like a very searching and candid caricature of ourselves. At such moments an insight can be developed which is a great defence against subsequent illusion. Yet care is needed; it is possible to lose all faith in oneself, or to allow sheer disgust to make one weak and useless, through the shock which such a moment brings. Spiritual knowledge can be assimilated only if self-knowledge proceeds in a calm and practical way which does not destroy our confidence.

It is similar with other spiritual experiences through which Johannes has to pass. However lofty and remote they may seem—and the first Mystery Play does indeed reach into regions which ordinary language can hardly begin to describe—there are nevertheless always analogies within ordinary experience.

At a great turning point of the play, Johannes is able to observe, in the spiritual world, Maria's true being. He then knows for the first time with absolute certainty that what his vision brings to him is real, and no subjective fantasy; here *is* Maria herself, and not any dream or picture about her. He will in future be able to trust his newly won spiritual senses wherever they show him anything that is as clear and as decisive as this.

When in ordinary life we know another person, we do not draw only upon the familiar senses of sight and hearing and the rest—there is also a subtler meeting of consciousnesses, a direct realisation of the soul of the other person. But this meeting can easily be a dream-like one to which we pay little practical attention. There is always a certain danger, in the part of our consciousness which is most wakeful, of treating other people like objects—forgetting, as it were, that they have a consciousness like our own. Of course hardly anyone when challenged would easily admit that he forgets this; it is a question of how we treat other people in practice.

When anyone takes up spiritual knowledge seriously, his own consciousness necessarily becomes increasingly interesting to him—indeed, he can become fascinated by it. Here a conscious effort is necessary in order to achieve greater and greater wakefulness towards the souls of others. That another thinks as he does, feels as he does, wills as he does, must become to us a reality as impressive as the structure of the visible world around us. His differences from ourselves must acquire something of the massive necessity we see in the movement of sun, moon and stars. Where this does not happen sufficiently, a spiritual movement quickly becomes the scene of endless conflicts.

A conscious awakening towards the soul of another person is something like an everyday equivalent for the experience of Johannes towards Maria. In friendship and in love, what we see or hear of another person all contributes to a recognition which is beyond sight or hearing—we feel what we may call the 'form' of the other soul, and yet the word 'form' is here easily misleading. It is something at once familiar and indescribable; we can rely on it, though it is in no way to be measured.

If anyone studies spiritual knowledge without loving and honouring other souls deeply enough — other people he actually meets, not only great personalities of the past — he inevitably goes through something like an inflation, an unnoticed swelling-up of his own sense of significance and of the absolute validity of his own opinions. Only the awakening to others can reduce him into the right scale — which is a merciful liberation. For without it the pressure of his own importance becomes an intolerable burden. By the recognition of others he acquires a precious touchstone of reality. There is no-one whose judgment or feeling on some subject or other may not be an invaluable help, and he learns to seek this help.

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In the course of the scene when Johannes recognises Maria in the spiritual world, he also encounters the spiritual form of someone who is closely connected with Maria, a woman who is at times seized by prophetic inspiration, Theodora. And it is she who describes to him in what way Maria and he were connected in an earlier life on earth. It is one of the themes of all four Mystery Plays that the circle of people there described gradually learn something about their personal Karma. It is very significant that this process begins for Johannes through words spoken by the spiritual form of Theodora. For she, who now tells him about the past of his own individuality, had spoken before, in the physical world, about the future of mankind. It is the prophetess who reveals the meaning of the past.

In the first scene of the play, Theodora comes among the circle of people who have been listening to a lecture by Benedictus, and passes over almost at once into a peculiar condition in which she

is no longer aware of her immediate surroundings and speaks directly out of vision. This is unexpected, both for her and for the others; though such moments had often come before when only one or two other people were present. Now she speaks before the whole circle, which includes both followers of Benedictus and others entirely sceptical, words which can be rendered in English something like this:

I am impelled to speak.
Before my spirit stands
A form in shining light,
And from Him there come words.
I feel myself in future times
And human beings I can see
Who are not yet in life.
They too behold the Form,
They too can hear the words.
Which sound like this:

"You have been living in faith,
You have had comfort in hope,
In vision now have comfort,
Receive new life through Me.
I lived within the souls
Who sought Me in themselves
Through My apostles' word
And through their powers of prayer.
You have beheld the senses' light
And had to believe
In the creative world of spirit.
But now is won for you
A drop of the pure gift of spirit vision;
O feel it in your souls."

A human being
Separates from the shining light,
And speaks to me:

"Thou shalt proclaim to all
Who have the will to hear
That thou has seen
What as experience will come to men.
There lived once Christ on earth
And from this life has come
That He in the form of a soul
Accompanies the history of man.
He is united with earth's spirit-part.
Men could not yet behold Him
As He reveals Himself
In such a form of being
Because they lacked the spirit-eyes
Which later should be theirs.
But now the future is near
When earthly man should be endowed
With the new power of sight.
What once the senses could behold
When the Christ lived on earth,
Souls will behold it
When soon the time has been fulfilled."

In these words a prophecy is expressed of which Rudolf Steiner spoke directly on a number of occasions, particularly between 1910 and 1914. He spoke of the approach of a time when it would become more and more possible for human beings to be given a vision of Christ through which they would find themselves in His immediate presence, and would receive His help and counsel in their need. Christ would appear to them in a form not composed of earthly matter, but as one dwelling in that spiritual world which is in the most immediate contact with the earthly world presented to our senses. From the end of the first third of the twentieth century such real visions would gradually become more frequent, and would begin to play a significant part in the history of mankind. The way would be open for human beings to ask the Christ directly about their deepest problems, and receive His answer.

But Rudolf Steiner often gave the warning that all this might go on unnoticed and ignored by humanity; there might be too little activity from the human side coming to meet the great opportunities which were present. And when he was asked in what way it was possible to prepare for these events, he would sometimes indicate that through learning to feel the seasons of the year in their wonderful, varied significance, men could make themselves open for a right meeting with what is to come. For the Christ Who is to be seen is not only the Redeemer and Helper of men, but is at work as Healer within the kingdoms and processes of nature.

Quite specifically, Rudolf Steiner said that the Christ would wear in our time the form of an Angel, just as at the time of the Incarnation He wore the form of man. Thus to understand what an Angel is and does can be some help towards understanding the character of the meeting with Christ for which men can increasingly hope.

The Angel is the companion of an individual human being, all through earthly life. He has led the soul down into birth, and will lead it after it has left the body at death. And at every hour of the earthly life these other conditions, the heavenly destiny of the soul, are as it were present to the Angel. But he can look further; he recalls the previous incarnations of the soul in his care, and observes the gradually forming destiny of future incarnations. It is sometimes possible for him to give the human being indications about these things long before they could be directly known in clairvoyant vision.

As Christ is Divine Man, in whom every possibility of God-willed manhood is realised, so is He also in our time as it were archetypal Angel, in whom all the functions and purposes of the Hierarchy of Angels are fulfilled to the uttermost. Thus in the relationship of Christ to an individual man, the fundamental direction and meaning of former and later incarnations are implicit. What each spirit has done and can do for the earth is known to Him.

It is a foreshadowing of all this that Johannes learns from Theodora, in words that echo in some respects her prophecy about the coming vision of Christ, of a life on earth in which his spirit had received Christianity through a great teacher, in whom worked the spirit later incarnated in Maria. In this knowledge he begins to find the deep sources of Will which can overcome his present lameness and renew his creative power.

What had crippled him? Benedictus says simply (though this simplicity is mysterious enough) that the touch of the Eternal necessarily kills what belongs only to the temporal. There is a great deal in everyone that belongs as it were exclusively to *this* incarnation, and which is tempted to detach itself as thoroughly as possible from anything before or after. For this part of man, Eternity seems to offer nothing but death. And yet in each incarnation the forces of Will have to be enkindled afresh, in harmony with present opportunities and powers.

The work of Christ in earthly history bears eternal purposes into human life in such a way that man's natural being is not annihilated or denied, but reconciled. In the meeting with Christ, the wishes and needs which belong to this incarnation can raise their voice, and receive a hearing. They are led patiently into harmony with the purposes of the eternal Self within man. And thereby the will broken within itself can be made whole.

Direct knowledge of former incarnations lies for most students of spiritual knowledge still further in the future than the encounter with the Double. And yet the *essence* of such knowledge is present at each moment when the reality of the Being of Christ is deeply felt. And we assimilate spiritual knowledge best when we begin to recognise in each part of it an element in the vocabulary of Christ. Rudolf Steiner spoke of this: that it is the will of Christ to be able to speak with man in the language of spiritual knowledge. If we regard the work of Rudolf Steiner in this way, there can be no pride in the accumulation of spiritual facts, with the resultant poisoning of human relationships. A language is something alive, developing constantly as it is used; it lives *between* people, not as the possession of separate souls.

If we can overcome the initial difficulties, the Mystery Plays of Rudolf Steiner can be a particularly rich source of help when we want to bring into life and movement ideas which we have perhaps learnt at first in a rather schematic way. The plays illustrate the boundless variety of ways in which human beings can approach and assimilate spiritual knowledge, and how it can influence their relationships to one another. What is contained in them only seems remote — it is a bringing into clarity of infinitely much that is working among us like a dream.

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The sickness of Johannes is healed in a dramatic, decisive turning-point of his life. In the eighth scene of the first Mystery

Play, Capesius describes how he saw the change in Johannes; how the man who seemed obsessed by grief, and utterly alone with his troubles, changed in a short time into a figure filled with enthusiasm, and able to produce painting after painting in which a steady development of his powers was visible.

This change had come for Johannes through great conscious spiritual experiences. But to others a comparable healing can come, perhaps over a long period of years, perhaps over half a lifetime; and the decisive factors may not be very conscious. Yet in every such healing something akin to the sacrifice described in Goethe's fairy story must happen: that giving by the Green Snake of itself, by which a bridge of love is built between the visible and invisible worlds.

The reconciliation of natural man with the eternal heavenly purposes does not come about through the rejection of Time, but through the discovery that in the rhythms of Time heavenly love reveals itself, with which human love can be united. The meditation given by Benedictus to Johannes at the moment of his greatest difficulty leads him to realise this. The same experience is contained in every true, spiritual celebration of a Christian Festival in the course of the year. For this reason, festivals have such a powerful healing effect on social relationships. Rudolf Steiner often pointed out that the social problems of humanity in general can be solved only by an effective, spiritually genuine renewal of the festivals of the year, and in particular by the inauguration in autumn of a Michael festival, with a new content.

When a true festival is celebrated, it is always as if we were approaching a Temple which is invisible to physical eyes and can draw its worshippers from all humanity. The hierophants in this Temple are spiritual Beings, who continually weave afresh the archetypal pictures which contain Man's true form and purpose, in head and heart and limbs. The whole work of Rudolf Steiner was a heroic attempt to help men to find this Temple and to bear themselves rightly within it.

Mr. Koestler and the Astronomers

Owen Barfield

BEFORE a man can take off a pair of tinted spectacles, he must first discover that he is wearing them. He can then remove them and, in doing so, may learn for the first time that it was they and not his eyes which were making the world look all that one peculiar colour. After that he can put them on and off at will.

One of the most significant changes now going on around us is that more and more people are beginning, very slowly and tentatively, to look not only with, but *at* the so-called scientific outlook—'so-called' because what is ordinarily meant when 'science' is referred to is in fact a particular philosophical theory. This theory is beginning dimly and doubtfully to take objective shape in our minds as an historical phenomenon. I do not know if it was Sir Herbert Butterfield who coined the phrase "the Scientific Revolution" in his book *The Origins of Modern Science*, published in 1949, or if it was in use before that. It is at all events one which we meet with more and more often to-day; and it is one which is frequently employed by the author of a book, with an Introduction by Sir Herbert and the formidable sub-title "A History of Man's Changing Vision of the Universe," which appeared in the early part of 1959 and met with an immediate and enthusiastic response.

Arthur Koestler, the well-known author of *Darkness at Noon* and *The Yogi and the Commissar*, started his career as a student of science in Vienna, and was at one time science editor of a chain of newspapers in Germany. When he gave up political writing in 1954, he began work on this book, *The Sleepwalkers*,* which is intended, he says, to contribute toward "the ending of the cold war between the humanities and the sciences."

"The dilemma of our time," his publishers add on the dust-cover, "is rooted in the split between science and religion," and the purpose of the book is,

> by an inquiry into the obscure workings of the creative mind and an analysis of the changing relations between scientific and religious insight, to find out whether mankind may yet hope to find a new unified line of thought—a way of escape from our present impasse.

The purpose of this article is to examine, in some detail, the quality, scope and value of the book, and, in the course of doing so, to consider how far the publishers' claim is justified.

*

The Sleepwalkers is a substantial work of 624 pages, of which about 80 are devoted to notes, bibliography and index. A surprising feature is the high proportion of space given to the biographies of

* Hutchinson, 25/-.

two or three leading astronomers: Copernicus gets a hundred pages, Kepler nearly two hundred, and we are even given a brief account of their ancestors and collaterals; so that we close the book with the feeling, on the whole, of having been engaged in a biographical rather than a philosophical or scientific voyage of discovery. Koestler has his reasons for this. He is interested, not only in the results, but in the psychological process of discovery. "The progress of Science," he writes in his Preface,

> is generally regarded as a kind of clean, rational advance along a straight ascending line; in fact it has followed a zig-zag course, at times almost more bewildering than the evolution of political thought. The history of cosmic theories, in particular, may without exaggeration be called a history of collective obsessions and controlled schizophrenias; and the manner in which some of the most important individual discoveries were arrived at reminds one more of a sleepwalker's performance than an electronic brain's.

If, even so, the quantity of biographical material makes the book somewhat lopsided, having regard to the sub-title and the declared predominant purpose, I should hesitate to stigmatise those parts as blemishes. In dealing with the history of thought, there is something healthy about an attempt to take into account the whole man instead of isolating the workings of his cerebellum. It tends for one thing to advance us beyond the prevailing contemporary notion that the history of thought is a purely dialectical drama, towards the concept of an evolution of the thinking-process itself; and few things are more necessary than that such an advance should now be made.

Moreover, the biographies are extremely well done. One hardly knows whether more to admire the accumulation of industrious research which underlies them or the skill and lightness of touch with which the hoard is exploited. Whether he is retailing the vagaries of "the timid Canon," Canon Koppernigk (known to the learned world as Copernicus) and his Uncle Lucas, the Bishop, or the melancholy boyhood of Johannes Kepler, or the latter's peculiar method later on of choosing a wife, or again, the artificial gold-and-silver tip of Tycho Brahe's nose, which he frequently rubbed "with some ointment or glutinous composition", Koestler does it all with a verve and gusto which make it prodigiously readable. An outstanding merit of the book is the smooth way in which it passes from anecdote to history, from history to astronomical and physical theory, and from these back again to anecdote. One thing or another—the easy-going, unpretentious English in which it is all written flows equably on. Occasionally, it is true, it falters. Narrative stride degenerates into pedestrian *cliché* when Kepler is patronisingly referred to as "our hero," and gusto disappears in vulgarity each time his mother (who was once nearly burned as a witch) figures jocularly and pointlessly as 'Ma Kepler.'

These lapses into literary nudgings and thumb-jerkings are of

no particular significance, though they are unworthy, so long as they are confined to the anecdotal parts of the book. It is a different matter when we find them spilling over into the scientific and philosophical passages; as when, after briefly referring to the Aristotelian and medieval conception of the moon's orbit as the boundary between the earthly and the celestial realms, the author finds it necessary to add:

> The space enclosed by the sphere of the moon and containing the earth—the "sub-lunary region"—is now considered definitely non-U.

The sporadic occurrence of such consciously contemporary *facetiae* indicates a fundamental lack of sympathy with the past which stands in the way of that very historical imagination which "our author" nevertheless makes outstanding efforts to exert. It is one of the minor marks of just that 'hindsight' (the projection back on to the past of a sophistication subsequently acquired) against which he more than once goes out of his way to warn the reader; and we find in fact that Koestler over-estimates the degree to which he has succeeded in entering into the mental processes of mankind before the Scientific Revolution.

Curiously enough, he over-estimates it even quantitatively, seeming to think that he has devoted much more attention than he has to the relation between the scientific and other approaches to the nature of reality. Thus he tells us on page 426 that "one of the points I have laboured in this book is the unitary source of the mystical and scientific modes of experience; and the disastrous results of their separation"; but in actual fact it is very difficult to find a single passage in which this unitary source is explicitly referred to, let alone 'laboured.'

*

The book begins with a brief account of pre-Socratic—and particularly Pythagorean—Greek philosophy. Pythagoras is warmly praised, and an interesting and not unsympathetic account is given of the Pythagorean attitude to the mystery of number. But for Koestler this "Pythagorean dream of musical harmony governing the motion of the stars" was important mainly because it foreshadowed modern mathematics and the Scientific Revolution. Religion and science are also said to have "met" in the relation between the Orphic and the Dionysian cults, and one would have thought that here, if anywhere, was an opportunity to say something about the source of mystical experience, if Koestler wished to do so. But no:

> The cult of Dionysus-Bacchus, the "raging" goat-god of fertility and and wine, spread from barbaric Thracia into Greece. The initial success of Bacchism was probably due to the general sense of frustration which Xenophanes so eloquently expressed. The Olympian Pantheon had come to resemble an assembly of wax-works, whose formalised worship could no more satisfy truly religious needs than

> the pantheism—the "polite atheism" as it has been called—of the Ionian sages. A spiritual void tends to create emotional outbreaks; the Bacchae of Euripides, frenzied worshippers of the horned god, appear as the forerunners of the medieval tarantula dancers, the bright young things of the roaring twenties, the maenads of the Hitler Youth. . . .

If Dionysus and the labouring of unitary sources are the order of the day, compare this bit of twentieth-century animistic anthropology, laced with conventional twentieth-century psychology, with, let us say, Nietzsche's *Birth of Tragedy!*

We find the same sort of 'hindsight,' when Koestler touches on Plato. All that Plato meditated and taught on the relation between Being and Becoming, the Permanent and the Changing, the whole great symphony of the later Dialogues, is cheerfully assigned to "an unconscious yearning for stability and permanence in a crumbling world where 'change' can only be a change for the worse and 'progress' can only mean progress toward disaster." It was, moreover, "Plato's loathing for change—for 'generation and decay'—which made the sub-lunary sphere such a disreputable slum-district of the universe." This may be Russell on Plato, or even (for we are assured that Plato hated the artisan class) Marx on Plato. It is of course not Plato—nor even a touch of him.

After this we do not expect, and we do not get, a particularly sympathetic sketch of St. Augustine and the City of God ("The Rectangular Universe") or of the "Dark Interlude" of the eleven or twelve centuries which followed. It is with the sixteenth century and the entry of Copernicus on the stage, as the book begins at last to deal with thinkers whom the author knows at first-hand and not by hearsay—and knows, I should surmise, about as well as any man now living—that *The Sleepwalkers* really gets into its stride.

Skilfully interwoven with the racy biographical yarns to which I have already referred, we find ourselves absorbing almost without effort a clear, cool and corrective account both of the genesis of the famous Copernican theory and of the theory itself. Copernicus did not teach that the sun is at the centre of the solar system. He supposed that it is *near* the centre both of the solar system and of the universe, but that the earth and the planets revolve in perfectly circular orbits round an empty point in space. Nor was his system an improvement on the Ptolemaic system from the point of view of geometrical simplicity. If Ptolemy required forty epicycles in order to "save the appearances," Copernicus needed forty-eight! Nor did he come into collision with the Church. Copernicus had an unbounded respect for the ancients and is described by Koestler as "the last of the Aristotelians."

The real astronomical issue in the Scientific Revolution, the really vital change in men's thinking about the heavenly bodies, was not the change from a geocentric to a heliocentric system, or the assumed rotation of the earth about its own axis. Both these ideas

had been put forward in pre-Christian times. What was entirely new, and fraught with such momentous consequences, was the dawning notion that, in forming hypotheses about the nature and motions of the heavenly bodies, it is proper to bring in the *physical laws* which are found by bodily experience to apply to objects on earth.[1] For this way of looking at things carried in its womb the modern assumption that the 'laws' by which we calculate the motions of the heavenly bodies are not merely geometrical *devices*, to help us with those calculations, but are an actual *description* of the reality. From then on the starry heavens gradually ceased to be a visible representation of a purely spiritual source, in which the origin of physical earth and physical man must be sought; for they were themselves physical. New heavens, in fact, were very like old earth writ large. It was this metamorphosis, combined with the heliocentric hypothesis, which led to the modern 'speck of dust' fixation and Pascal's "*Le silence éternel de ces espaces infinis m'effraie.*"

In the age of Copernicus, 'gravity' was still a synonym for 'weight,' and the notion that the heavenly bodies possessed a quality which could properly be called 'weight' was conceived and born in the mind of man only with enormous difficulty. Kepler was the first to explain 'weight' as the *mutual attraction* between two bodies, and it was Kepler who, with the utmost reluctance, first abandoned the assumption of circular orbits for the planets and introduced the ellipse. One of the best things in the book is its account of the haphazard way in which Kepler hit on these two notions, while he was searching for something totally different—namely, an explanation of the relative *distances* of the planets from the sun. He had formed the theory that these could be found by constructing concentric spheres proportioned to each other in such a way that one of the five Platonic solids could be exactly inserted between each pair. It was in pursuit of the same quest—which in the end he had to abandon—that he arrived quite empirically at his third law: that the squares of the periods of revolution of any two planets are as the cubes of their respective distances from the sun. Yet the three laws, which Kepler discovered in this surprising way, are "the pillars on which Newton built the modern universe."

In the first edition of the *Mysterium Cosmographicum*, Kepler had spoken of the "souls" of the sun and of the planets and raised the question whether "the souls which move the planets are the less active the farther the planet is removed from the sun, or there exists only one moving soul in the centre of the sun . . ." In the

[1] We are brought up to take this for granted and therefore think nothing of it. It is, however, a pure hypothesis and must remain so unless and until a human being is actually lobbed on to one of the planets to prove it on his muscles. Meanwhile an innocent glance at the night-sky should be enough to convince anyone that, until we did get used to it, it was a very startling hypothesis indeed.

second edition he suggested, in a note on this passage, that the word "force" should be substituted for the word "soul" and added:

> Once I firmly believed that the motive force of a planet was a soul. . . . Yet as I reflected that this cause of motion diminishes in proportion to distance from the sun, I came to the conclusion that this force must be something substantial—"substantial" not in the literal sense but . . . in the same manner as we say that light is something substantial, meaning by this an unsubstantial entity emanating from a substantial body.

It is worth while quoting at length Koestler's comment on all this. "We are witnessing," he says,

> the hesitant emergence of the modern concepts of "forces" and "radiating energies" which are both material and non-material, and, generally speaking, as ambiguous and bewildering as the mystical concepts which they have come to replace. As we watch the working of the mind of Kepler (or Paracelsus, Gilbert, Descartes) we are made to realise the fallacy of the belief that, at some point between the Renaissance and the Enlightenment, man shook off the "superstitions of medieval religion" like a puppy getting out of the water, and started on the bright new road of Science. Inside these minds we find no abrupt break with the past, but a gradual transformation of the symbols of their cosmic experience—from *anima motrix* into *vis motrix*, moving spirit into moving force, mythological imagery into mathematical hieroglyphics—a transformation which never was, and, one hopes, never will be entirely completed.

The above is one of a number of isolated passages scattered throughout the book—most of them shorter, and many of them no longer than a sentence—which make it difficult not to believe that the author has true historical imagination and with it a real sense of the evolution of human thinking as distinct from a supposed purely dialectical "progress" of ideas. It is odd that the effect of the book as a whole should be to make it equally difficult to believe that he has. In the passage quoted he describes as a fallacy the belief that the advancement of science is simply the shaking off of illusion and superstition. But elsewhere that is just how he appears to think of it. It would be difficult, he says, to overestimate "the revolutionary significance" of this new notion of "forces" instead of "souls" and the assignment of physical causes to celestial phenomena. Yet he never seems really to have opened his imagination to the universe as it stood before that revolution. Why does he write of Pythagoras and his followers with such deep respect—and then by way of contrast present Aristotle to us as a kind of scientific zombie, with a capacity for "terrifying verbal acrobacy" and "a highbrow system of animism"? In my opinion because, in spite of the Preface and the Epilogue, and the scattered passages to which I have alluded, and after carefully tracing the origin of the startlingly new concept of a celestial *physics*, Koestler *still* assumes at the bottom of his thinking that this very concept was there in men's minds from the beginning.

Thus, the "revolution" turns out to have been after all some-

thing more like a revival of learning. It was really only a return from Aristotle to Pythagoras. The Pythagoreans, we are told, had not only described heavenly motions in geometrical terms, but had assigned them a *physical cause*. Is this true? Where, then, does the mystery of number come in? Koestler has never asked himself, it seems, whether the word 'physical' may not have so altered its meaning since (and because of) the Scientific Revolution as to render its use quite inadmissible in connection with the philosopher who founded all on the harmony of numbers and the music of the spheres.

This element of what we might perhaps term "subconscious hindsight" is equally apparent in his scattered allusions to that principle of "saving the appearances," which played such an important part in the speculations of astronomers from the time of Simplicius in the sixth century A.D. down to and including Copernicus:

> The original meaning of this curious phrase was that a theory must do justice to the observed phenomena, or 'appearances'; *in plain words, that it must agree with the facts.* But gradually the phrase came to mean something different. The astronomer 'saved' the phenomena if he succeeded in inventing a hypothesis which resolved the irregular motions of the planets along irregularly shaped orbits into regular motions along circular orbits—regardless whether the hypothesis was true or not. Astronomy, after Aristotle, becomes an abstract sky-geometry, divorced from physical reality. Its principal task is to explain away the scandal of non-circular motions in the sky.

The italics are mine. But suppose that Aristotle did not experience *phænomena*—appearances—in the same way that we do. Suppose that before the Scientific Revolution there was a fundamental difference between the meaning of 'phænomenon' (appearing) and the meaning of what we call 'fact'! It then becomes unnecessary to invent a change of meaning for the phrase, for which, as far as I know, there is no evidence.

Now Koestler himself speaks in his Epilogue of "a new innocence of perception liberated from the cataract of accepted beliefs." He appears therefore to be aware that *what is taken for granted in the act of perceiving becomes part of the perception.* Does it not follow from this that, just as *we* perceive the absence, so the man of the Middle Ages and his predecessors perceived the *presence* in the universe of a noumenal or spiritual reality, of which the phenomena of heaven and earth were essentially *images*? Unless this is conceded, it is impossible to enter with any sort of sympathy or understanding into the astounding tenacity with which practically all astronomers from Pythagoras to Copernicus insisted on presuming that the only *real* motion of any celestial body must be that motion in a perfect circle which Plato in the *Timæus* described as "having the most to do with mind and thinking". We are reduced, instead, to the lame device, or the defence-mechanism, of making fun of it. But there is no space here to go

further into this aspect of the matter, which I endeavoured to consider in my book, *Saving the Appearances.*

*

Koestler calls his book *The Sleepwalkers*; yet he never seems to have considered the significance of actual sleep, and the dreams that go with it, for man's relation to the Universe, nor the veridical element in imagery as such and in the apprehension of nature as image. If he were to take into account—to give a random example —the 'universal symbols' of which Dr. Erich Fromm has written in his book *The Forgotten Language* and to consider what bearing they have or had on the possible meaning to others than ourselves of the word 'appearances,' he would be able to remove a good many irregularities from his own cosmos, without the help of awkward philosophical or speculative 'epicycles.' He would, for instance, no longer find it necessary to explain, or fail to explain, Aristarchus of Samos and his heliocentric hypothesis as a "paradox," to write off the philosopher whose thinking dominated the civilised world for 2,000 years as a clever, self-deceiving word-spinner, and to diagnose the entire intellectual life of the Middle Ages as the product of "double-think" and schizophrenia.

To admit that nature may be validly apprehended as imagery will be found to involve admitting a supersensible link between the mind of man and the wisdom immanent in the universe; whereas Koestler's "creative mind" is no more than the personal intelligence in each man's head, "creating" an empty reflection of a universe, from which it is quite shut out. Any idea that the mind of man, whether sleeping or waking, is part of the *structure* of the universe, and that therefore the universe itself has changed with man's idea of it—this is as remote from his approach as it has always been from the "positive" philosophy which has distorted the Scientific Revolution and arrogated to itself the name of "science".

Some members of the Anthroposophical Movement are inclined to think that the progress of scientific enquiry along its present course will of itself lead to a crossing of this difficult "threshold" out of positivism and into a participating knowledge. Others feel that there must first be an abrupt break, and a right-about-turn away from spectrum and cloud-chamber, from genes and particles, and into the Goethean method, which is based on the development of man's powers of perception and their application in the exact and imaginative observation of phenomena on the macroscopic, that is the human, scale. They doubt whether such a *volte face* can ever come about except as the result of a new beginning, based on the spiritual science to which Rudolf Steiner has shown the way.

Whichever view is taken, the appearance of *The Sleepwalkers*, and its reception by the reviewers, would appear to be a portent of some significance. Its very inconsistencies and the unstable equilibrium of its standpoint make it so.

I have already referred briefly to some of these inconsistencies, and many more examples could be picked out. Thus, on the one hand it is said to be a fallacy (see the comments on Kepler quoted above) to believe that after the Renaissance men shook off the superstitions of medieval religion; there was no abrupt break with the past. On the other hand, Ptolemaic astronomy was "a monstrous system . . . which strikes us to-day as an affront to human intelligence". But on the other hand again, our own present-day notion of "a ball of fire hurtling across the sky through eternity, without burning out", is itself "a preposterous idea at which the mind boggles". The teaching of Pythagoras is in one context serious and important; in another it is obliquely alluded to as "hocus pocus". And the doctrine of "saving the appearances", when it appears in Osiander's famous Preface to Copernicus's *De Revolutionibus Orbium Cœlestium*, is ascribed to the "timid Canon's" timidity and guyed mercilessly:

> The Copernican revolution entered through the back door of history, preceded by the apologetic remark: "Please don't take seriously—it is all meant in fun, for mathematicians only, and highly improbable indeed."

Yet when it reappears in the Epilogue (described now, for some reason, as "Urban VIII's famous argument"), it is treated by the author himself with the deepest respect, and we are admonished that:

> If there is a lesson in our story, it is that the manipulation, according to strictly self-consistent rules, of a set of symbols representing one single aspect of the phenomena may produce correct, verifiable predictions, and yet completely ignore all other aspects whose ensemble constitutes reality.

Well—and is not the whole self-consistent apparatus of physical laws and explanations "one single aspect"?

Readers of Ovid's *Metamorphoses* will recall that he is apt to describe the actual process of metamorphosis in unexpected detail, so that we get disconcerting and even ludicrous moments in which someone is half a human being and half a bird or a tree—with arms perhaps of flesh and blood terminating in twigs and leaves instead of fingers. In something the same way the author of *The Sleepwalkers* seems partly to have emerged from the contemporary scientific world-view and to be looking at it from outside with a cool, appraising glance, and partly to be still nestling within in as snugly as any Encyclopædist or *philosophe* of the Enlightenment, or as the late H. G. Wells, for ever rapping cloth-headed antiquity on the knuckles with the tartness of an exasperated pedagogue. Now one thing, now the contradictory other, the ensemble does really suggest an ungainly, hobbledehoy sort of moment in the emergence of a later stage in some life-process out of an earlier one that has not yet been discarded.

Or so it may appear to a future generation, if the former of the two views about the future of science turns out to be correct and science is reaching a point at which it will undergo a fairly smooth metamorphosis. But if the other view is correct, and there has to be something like a breakdown before the threshold can be crossed out of the *impasse* towards which its ingrained positivism is steadily forcing it, the book will still, I think, be seen as a significant landmark. For this is not a case of yet one more detached and philosophic mind coming to realise that the ice of scientific assumptions is getting too thin to bear. What makes it significant is just that the author is *not* a retired philosopher, but a busy journalist and political novelist, plunged up to his neck in "the cataract of accepted beliefs". What is so striking is that certain loud and ominous cracks should be becoming audible even to someone who has not seen the Warning Notice and is still energetically skating.

All this is not to say that the book is valuable only as a symptom. Far from it. How much easier it is to criticise a book than to write one! How much this one gives to us in its own special way of historical understanding and appreciation, of intimate personal acquaintance with the protagonists, of unfamiliar facts skilfully marshalled and entertainingly presented! We have had to conclude that it does not by any means do what is claimed for it; but how very much it does do which no one else has ever done, which no one else could have done, which no one else will ever do again with just that peculiar emphasis and in that genial style!

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