This Amazing Universe

# THE INDIVISIBLE INVISIBLE

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# Arthur Constance

(author of "The Inexplicable Sky")

ATTER IS essentially the seemingly solid rock against which all life beats and breaks, in an infinite succession of seawaves which are repeatedly disintegrated and dissolved into spray and driven back into the inflowing and outflowing ocean of Infinity, returning again in new crescendos which forever break, dissolve and recede. Matter is therefore the eternal challenge to spirit: the necessary barrier, without which all life would dissipate itself and flatten into Non-existence: an ocean without shores or dimensions.

Scientific Man is a child on the shore—not the wondering child that Newton declared himself, "now and then finding a smoother or a prettier shell than ordinary," realising that the great ocean of truth lay all undiscovered before him, but a spoilt, ill-tempered, sophisticated arrogant brat, who is now in this age catching the spray in his hands and boasting that he has this three-dimensional ocean in his power and will soon have all oceans, wherever they may exist,

trickling through his fingers.

One of the strangest and most paradoxical facts of our time is that man's increasing egotism is destroying his individuality. Boasting "Mine is the Kingdom, the Power and the Glory," he is sacrificing his kingship; degenerating into mental slavery as he becomes increasingly powerless against the titanic forces (sociological, political and atomic) which he has himself created; and becoming, of all living creatures, the most contemptible and inglorious.

An egotism which mainly expresses itself in the creation of fearsome weapons deliberately designed to main millions of helpless men, women and children in bone-rotting, fleshlacerating, mass-operations (apart altogether from the millions who would be mercifully killed by atomic weapons) and which drains the lifeblood from all civilised countries at this moment to provide the cost of manufacturing such devilish devices—such an egotism cannot be complacently dismissed as one of man's infantile ailments which he will "grow out of." It is the egotism of a mature lunatic, deliberately planning and working to destroy himself. It is the egotism of a maniac storing up more and more petrol in his home and denying himself food and comfort to buy the petrol; until every inch of his house reeks with inflammable spirit, while he walks from room to room striking matches, and boasting of the ingenuity he has expressed in the course of his senseless and dangerous activities.

That the world's democracies are compelled to make and test atomic bombs to deter the Soviet from immediate aggression, postponing world conflagration as long as possible, does not affect the fact that the whole world is engaged on an armaments race costing so many thousands of millions that the living standards of all peoples are affected by heavy taxation, while the potential mass-destruction contained in the atomic stock piles mounts steadily, so that phrases like "millions annihilated" and "whole cities decimated" are ceasing to have any horrific significance by their very commonplaceness. That the democracies dare not relax their vigilancecannot allow the Soviet to gain an advantage in the atomic arms race—should be obvious. There the petrol maniac analogy fails, of course. But even as it might be difficult to exonerate a madman who deliberately drenched his home with petrol for no reason whatever, the plea that the human race is compelled to continue its preparations to annihilate itself, because it would partially annihilate itself if half the nations stopped such preparations, seems illogical. But those who have been subjected to the rigors of Soviet rule—as, for instance, the people of Hungary—have come to believe that there are worse things than annihilation.

These reflections are entirely relevant to our attempt to create a new non-Euclidean geometry, for as we "come to the point" we are compelled to consider the atom. Modern materialistic scientists, giving lip service to Einsteinian conceptions, yet using Newtonian terms to dismiss UFO sightings (for they dare not examine them against any background but a three-dimensional one) invariably take a "purely mathematical" and therefore inhuman attitude as they elaborate their "explanations" of the Cosmos.

They believe themselves competent to analyse

those points of light which they call "the stars." They believe themselves competent to analyse those points of matter which they call "atoms." They therefore feel that it necessarily follows that they are competent to analyse the points of life which they call "individuals." Have they not scientific humans whose spark-like existences are so brief in comparison with the lives of stars that they might truly be described as points of life having no dimensions—have they not weighed the heavenly bodies and measured their speeds and spatial dimensions? Have they not "mastered" atoms sufficiently to make them weapons of titanic power?

If stars and atoms can be "mastered," these materialistic scientists argue, then so can individual minds-weighed, measured, analysed, dissected, so that (taking a specimen human mind) they can, by experimenting with suffering dogs or guinea-pigs, predict its behaviour under all circumstances, even as they have told us in elaborate detail how all human minds originated in the "instincts" of animals, which originated in the mechanical reactions of bits of jelly. Materialistic science preserves and even develops its God-superior egotism, as it reduces the points which we call stars, atoms and individuals

to their component parts.

### Egotism

Such egotism is, paradoxically, diametrically opposed to individualism. Its ultimate development is the totalitarian state, with its ruthless repression of the individual, its brainwashing of the individual, its demand that the individual should serve the state at the expense of his indi-

viduality.

Until materialistic science split the atom, and so originated this devil-take-the-hindmost atomic arms race which threatens humanity with extinction, it had always been assumed scientists and philosophers that matter could be reduced by analysis to either of two states. Some argued for one state and some for the other: (a) that it could be reduced to irreducible "building blocks," and (b) that it could be divided and sub-divided indefinitely. Those the majority—who believed that there was an irreducible atom, felt they had got right down to it in the nineteenth century. There was nothing smaller than an atom. There were all kinds of atoms. Combine them and you have the Cosmos —galaxies, suns, worlds, living creatures and all things known to us: all consisting of irreducible atoms.

On the other hand, there were a minority of the world's thinkers who believed in infinities within infinities ad infinitum, even as they be-

lieved in infinite universes beyond the utmost possible limits of all conceivable universes. Imagine a limit to the Cosmos, they argued, and-inevitably-there must be "something' beyond the limit, so that in reality there can be no limit to reality. Similarly, they said, regarding the atom: Reduce all matter to "irreducible atoms and what happens? You have atoms which, obviously, might be magnified, with more powerful instruments, so that the process of analysis downward into microscopic matter must necessarily be infinite, even as it must necessarily be infinite outward to the most distant galaxies and

beyond them through infinity.

With the development of atomic research in the early years of this century which culminated in the "splitting" of the atom, the (a) and (b) theories were exploded so devastatingly that repercussions have continued in all fields of human thought ever since. For both theories are shown to be false in the light of a third: That matter can be divided and subdivided down to the atom, but when that is reached it vanishes; it has neither been resolved into elementary "building blocks" nor into particles which can be further divided and subdivided—it has become mind.

Lost in a Jungle

The pioneers of nuclear fission, humans like Rutherford, Einstein, Chadwick, Curie, Joliot, Fermi, Hahn, Meitner and others, were not a crew of explorers who had landed, individually or collectively, on the shores of a New World in broad daylight, provided with maps and compasses which would enable them to explore it efficiently. They were—and they still are—adventurers lost in a jungle, travellers through darkness moving in circles—the radii within the atom which they cannot see. Even as they calculated, guessed and assumed regarding atomic particles far too small to be seen-electrons, protons and alpha particles which could only be examined by the tracks they made-the earlier pioneers were living in a world so full of negative energy electrons that none of them noticed them: particles, not of matter but of anti-matter.

To the early pioneers in nuclear research such particles could not possibly exist, for a negative energy proton must have negative mass. Yet the moment came when the physicist Pauli put forward the theory that only a single electron can exist with any one of the energy values given by the Quantum Theory, while Dirac contributed the assumption that electrons actually existed with every possible negative energy value.

Scientists had been chasing one theory-fox for centuries—the material atom theory—and now,

suddenly breaking from cover, was another. Yoicks! Huntsmen and pack went off on a new scent.

We now have the amazing spectacle of materialistic scientists researching deeper and deeper into an anti-matter Cosmos, which they are compelled to admit is co-existent with a material one! But not for worlds (material or immaterial) would any of them use the words "spirit" or "mind" to define an anti-matter Cosmos. Not for all the known galaxies, with comets and meteors thrown in as make-weight, would any of them admit that they are looking through the backs of their august heads into their own egos as they examine "anti-matter." They would, of course, agree with Einstein that our most powerful telescopes may be doing just that (light being curved, so that the most remote galaxies ahead of us are behind us) but not one of the materialstic scientists dare admit that the light of scientific investigation bends and returns upon itself. Any such admission would damn the world's anti-UF Menzels to the lowest hell of exposure as prejudiced nincompoops, floundering in the wake of scientific progress.

### Worth Having

The plain truth—so unpalatable and indigestible to the materialist, whether notable scientist or communistic agitator working secretly in industry—is that world science has already reduced matter to mind and is moving towards a reduction of mind to spirit. The pioneers of the new exploration are little-known humans of our generation, even as the greatest contributors to human knowledge have often been unrecognised

by their contemporaries.

How many readers of newspapers, or even of scientific or literary journals, have heard of O. S. Wauchope? Everyone has heard of Einstein, even the newsagent's boy who ruins some of your papers or magazines by cramming them into your letter-box or throwing them into your rain-swept doorway, but names like Reichen-Scudder, Klyce, Abbott, bach. Wauchope are not merely unknown to him but also to millions interested in scientific research and philosophy. You may find it difficult to obtain a copy of Wauchope's Deviation into Sense\* but if you ever come across it I suggest that you buy it at any price, even if you have to sell your television set. (This is hardly fair to Wauchope, and in any case, if you possess intelligence, you have probably never had one.)

Wauchope sub-titles his book "The Nature of Explanation." He says in his introduction: "The

business of the philosopher is, as it always has been, to find a standpoint from which all the variety of reality could be viewed as the parts of a comprehended whole . . . it is to explain experience. . . . There is no science on earth so useful as an explanation of reality would be, if we had one." Wauchope, whom I regard as the most brilliant and original thinker of this generation, is concerned with the plainest of distinctions: that between life and death. Because we are not dead vet, this is better expressed as the difference between life and death-avoiding: that is, between spontaneous behaviour and defensive behaviour. If you contemplate the words I have just used carefully you will appreciate the fact that all our activities are of one kind or the other. Wauchope claims that this distinction should be the first stage of an analysis of consciousness, or "the self," and that a complete and self-consistent philosophy (or explanation of the Cosmos) is only possible if it satisfies the lay reader as a philosophy which is recognisable as having something to do with life as he knows it. Wauchope, in a series of finely-written, profound and stimulating chapters, associates a number of departments of human knowledge not usually recognised as related, and concludes with the most devastating and provocative allegory that I have ever examined. If his philosophy is sound, then overboard with one heave goes the whole cargo of materialistic, mechanistic, mathematical assumptions which make up "modern science"symbols, equations, formulæ, pretentious sentences, which have no relation whatever to life experience.

## Back to Reality

Above all else, man today needs that kind of cut back to reality. For centuries scientists have been explaining their own explanations of their own explanations, ad libitum, ad verbum, ad hoc, ad nauseum, and even (in popular education) ad captandum vulgus. So far has Man departed from the spirit of Christ's words, "Let your communication be Yea, yea; Nay, nay," that, in the spoken and written language of this generation, "Yes" means "perhaps," "maybe" or even "no"; while "No" means anything you like to make it.

We need to cut back to reality in our attempt to construct a non-Euclidean or many-dimensional geometry. Euclid's no-dimensional point is necessarily our starting-place, for all his figures are but extensions of it. But as we come to the point (in both senses) we must keep to it, allowing it no area of definition. The material atom has been resolved into what might perhaps best be described as *space-motion*—the atom-

<sup>\*</sup> Deviation into Sense. "The Nature of Explanation." O. S. Wauchope. Faber and Faber. 1948. 12s. 6d. net.

tracks which are all that can be observed by scientists. Similarly, the anti-matter Cosmos which scientists have so belatedly discovered is composed of atoms which we might describe as expressions of *mind-motion*. A non-Euclidean geometry needs a point quite different from either of these points—it needs a unit of *individuality-motion*. All three points are intimately related, and they are all related (more intimately than any of us imagine) with the points of light we call the stars.

I cannot see why we should take it for granted that those stellar points of light are necessarily material. I do not say that they are immaterial. I do not accept Fort's conjecture that they are not suns but blazing lights on the interior of a vast shell which surrounds our world—I do not accept Fort's sensational (and apparently ridiculous) conjecture, nor do I entirely reject it. I simply state, as a fact, that astronomers are far too credulous in their assumptions and speculations. Their telescopes and spectroscopes tell them that the light received from this star or that can be analysed to indicate correspondences between chemical elements in the make-up of our own material world and elements which apparently exist in such distant suns.

### Points in Continuous Motion

But they are judging the phenomena of outer space in terms of our own world's phenomena, and building speculative structures upon the assumption that the laws which govern phenomena inconceivably remote and those underlying our own phenomena are identical. They have no logical grounds for such assumptions and speculations—speculative hypotheses even more complicated and seemingly sound have been demolished again and again regarding phenomena which can be closely examined, here in our three-dimensional world-experience. Astronomers and scientists who build theories upon assumptions relating to far distant suns have only a microscopical amount of data to work on. They rear inverted pyramids—inverted Eiffel Towers balanced on pin-points.

The "standpoint from which all the variety of reality can be viewed as parts of a comprehended whole" (for the purpose of Wauchope's philosophy, and for our own in building a non-Euclidean geometry) is the individual, the "first observer" of Professor Dunne's serialism. It is not a fixed point. There are no fixed points in the Cosmos. The individual viewpoint—from which a non-Euclidean geometry must necessarily be constructed—is a point in continuous motion. You walk along a street and everything within the range of your vision is continually changing.

giving you continually changing shapes. Points become lines, lines become parts of more complex figures, squares become rectangles: lines rise and fall, shorten and extend, become straight or curved as you move. But do not imagine that lines, curves and more complex forms remain motionless when you cease to move. No physical lines or geometrical forms have motion in themselves. They have apparent motion as you move, and apparent rest or lack of motion when you remain motionless. But the motion you impart to them when moving is illusory, though convenient, and their motionlessness is also illusory, though convenient, when you cease moving.

### Projections of Individuality

You see no line as a line, no square as a square, no circle as a circle. To receive a visual impression of an object of any shape or dimensions instantly, as one impression, is impossible. Your eyes may not move, but your inward eye, within the brain, the "eye" invisible which uses your optic nerve, moves. It travels in a fraction of a second along a line, or around a curve, or along the sides of a square, and builds up, almost instantaneously, a geometrical figure. In other words, as you receive impressions of the world external to yourself, you build up geometrical forms of all kinds from points. The points which you use are projections of your own individuality you, as an individual, travel (by means of what we call vision) along and around all the geometrical forms which you see. Your reception of the geometrical forms which you see around you seems to be instantaneous, even as the pictures you see on a television screen seem to be immediately created. Yet even as the TV pictures are actually built up, with extreme rapidity, by moving points of light, so the point of visionreception within the brain which really sees (using the eye as an optical instrument) travels along the outlines and over the areas of all the geometrical forms passed inwardly to it from the retina along the optic nerves.

The pictures of the outward world so received must necessarily be built up by such ego-motion. The "I" within you which is truly "you" must traverse all geometrical forms in order to receive an understanding of them. The ego, therefore, is an artist, working at terrific speed and with consummate skill, painting pictures in colour within the brain (where no light can possibly penetrate).

If the ego travels over every line and detail of any particular geometrical form or combination of forms the picture is registered in detail. If it selects mere outlines, or general areas, a blurred impression is received. Visual outlines

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