## OSON'OT OEDEROOMS!

waves are not perceived directly by us at all: but they provide us with radio, television, radar and X-rays. These waves pass right through us without our feeling them. Hence the painlessness of being X-rayed, despite the real hazard of radiation sickness from over-exposure.

All other sense - sound, touch, taste, smell - are infinitely cruder. They involve perception only of massive movements of millions of molecules. And what are molecules? Essentially constellations of minute packages of energy convertible into matter or matter convertible into energy. Hence atomic energy, hence the similarity of microphysics to astronomy.

The galaxies of outer space, just like the molecules of my hand and my desk as I type these words, are alike compounded of particles of energy in orbit round each other. Relative to their size, the molecules of material things are scarcely more densely packed than the stars in the Milky Way. Moreover, they have this in common: they are in constant regular motion. Nothing is still in the entire physical universe; something as intangible as light is both particles in motion and waves of



energy, all travelling at around 186,000 miles a second.

Apply more energy to the system (heat it up, in fact) and its physical structure changes. Fire is only one example. Sealing wax and those little glass toys that spurt coloured liquid upward despite gravity when you hold them in your warm hand, are others. If Uri Geller happens to be closer to this invisible restless universe which is the reality behind our perceived world, then he needs no conjuring tricks to change metallic shapes or perceive patterns through opaque envelopes.

Extra-sensory perception is more natural than supernatural. The surprising thing about telepathy is not its proven existence, but its comparative rarity, in everyday experience. If you find this hard to accept, read Eddington's famous lecture on the Two Tables or learn about the universal phenomenon of Brownian

movement.

Our daily life is lived in a world of concepts and constructs, fashioned for us by the relatively minute collection of data garnered by our senses. The real world is pure energy in motion - of which we are a part. Intangible by our sense, unknowable except through our instruments, inconceivable except by our ideas, (and the more imaginative, the better), and inexpressible except through mathematical concepts incomprehensible to most of us, or by

oversimplified analogies supplied by Eddington, Jeans, Pioncare and Carroll (to select a few at random), it is nevertheless the nearest we can get to ultimate reality.

The fact that conjurors can fake Uri Geller's claimed accomplishments doesn't matter. If Geller himself were proved to be simply a brilliant conjuror, that wouldn't matter either. Conjurors can fake television, but television remains closer to raw natural physics that conjuring. I once encountered a man who, having had metallic fillings in most of his teeth, discovered to his amazment (and, at first, his consternation) that he could hear radio broadcasts in his heed, without a radio set or earphones. Nothing impossible about that: saliva, metal, dental enamel and nervous tissue can easily become capable of transistor function.

Stars we can see tonight, millions of light years away, may have burnt out 1,000 years ago. If we could construct the appropriate kind of receiving apparatus, we might be able to see the Crucificion on colour television today, or watch the fatal arrow enter Harold's eye at the Battle of Hastings. There are fewer than a million days since the former, fewer than half a million since the latter. Energy, in our finite world, is infinitely indestructible, and the patterns traced in it through history need not have vanished forever.

As human beings, we are not only like Keats, "more than half in love with easeful death . . .", but also with blinding mystery. Awe is all very well, but uncritical awe is awful. Magic dulls our senses, but creative imagination quickens our perceptions and heightens our sensibilities. We must learn again to live with wonder, and to wonder at life. We may never understand completely, but this is no excuse for not seeking understanding.

Three wonderful quotation might help: "He has made everything beautiful in his time; also he hath set the world in their heart, so that no man can find out the work that God maketh from the beginning to the end." Ecclesiastes 3.11

"A particle can have a position or it can have a velocity, but in the strict sense it cannot have both . . . Nature puts up with our probings into her mysteries only on conditions. The more we clarify the secret of position, the more deeply hidden becomes the secret of velocity. It reminds one of the man and woman in the weatherhouse: if one goes in, the other comes out . . . The product of the two unknowns is always an integral multiple of an elementary quantum of action. We can distribute the uncertainty as we wish, but we can never get away from it." Werner Heisenberg (Zeitschrift fur Physik Vol 43, p. 172 et seq, 1927).

"Oh, let us never, never doubt what nobody is sure about." Hilaire Belloc.

It does make us think, doesn't it! Or, if it doesn't, then we alas, are the losers. Without intelligent imagination, understanding may be the one thing that does remain impossible.



