

THE NATURE OF PERCEIVED REALITY

Each person has one ultimate point of reference - himself. He may choose delegated reference points, such as a universe, a star, a mother, a lover, a god or a pope, but their authority for him derives from his decision under whatever pressures there may be, to make the delegation.

Around him lies a world relating to himself, even if it is only to ignore him. How he sees it depends partly on his personal powers of observation. Passers-by may register merely as faceless shadows or more deeply as a succession of individuals marked with the details of life's scars and triumphs. A piece of music may register as being of the 'squeak squeal ' variety or as a special point of contact with the divine. Some have more discriminating senses of smell and taste than others; some more delicate fingers. For some tension is the norm, for others it is rare; no doubt colours are perceived with differing degrees of intensity.

All of these powers of perception derive from inherited physical make-up. Many clearly run from parent to child like the quality of Mendel's peas, although like those of Mendel's peas these capacities are prone to considerable modification by training, effort, changes in body physiochemistry and medication.

Sight, sound, smell, taste, touch - these are the basic parameters; but then there are emotions. Emotions are capable of modifying body physiochemistry to the extent that powers of perception undergo a massive change, ranging from their elimination to their upgrading almost beyond recognition. In addition emotions may cause an observation to take on, by association, a meaning for one individual that it does not possess for another. A religious devotee may for example be moved to an intense and all-embracing ecstasy of oneness by a ceremony that to an uncommitted observer is merely quaint enough to be photographed.

Emotions can change. Love can grow cold. The oracle that formerly seemed all wise may appear to utter tendentious pedantries. Keats was not the only poet to note that Spring loses its freshness. It is a function of the sum of the internal and

external actors that go to make up an individual's attitude.

Medication is obvious in its more extreme effects - elimination of pain, removal of masks of convention, dulling or sharpening of colour and sound, hallucination. To a large extent the same effects can be willed by a trained mind. The production of these effects does not change reality but temporarily changes the way in which the individual perceives reality at the time, as opposed to the way in which he otherwise perceives it.

Since the perception of reality is so highly subjective, one might question whether it has any absolute form. Taking the extreme case, one can experimentally demonstrate that hallucinations are entirely personal to the individual, but there is no doubt that there is a 'consensus world' that is the sort of average of human perception. Around this consensus world lies a blurred range covering the normal viewpoint of most individuals who do not suffer from some demonstrable defect and excluding periods affected by medication, mind control and intense emotion.

This consensus world is a logical place where observed events and objects seem always to fit together insofar as we are able to check by controlled experiments. By no means do we fully understand it, but our understanding is constantly growing and each new piece of knowledge fits into place like the lattices of a crystal. It is the recent explosive growth of this sort of systematic knowledge that makes the boundaries of our consensus world so much wider than they were in the times of our father's fathers, albeit the limits are shrouded in fog as they always have been.

We cosily cohabit in this consensus world, or rather in various restricted corners of it, somewhat like clusters of black fly hopefully clinging to the tips of broad bean plants. Intelligent black fly though, who have developed means of perceiving, occasionally at least, not merely the form of the bean plants, but that of the surrounding vegetables, much about the methods of the gardener, what he grew last year and what is beyond the garden fence. All the same, for most of us for most of the time, only true reality is the familiar green surface of the beans into which we plunge our proboscis, and the plump jostling forms of our fellows. The fact is of

course that this is a very partial aspect of consensus reality as it has now developed. The floors of the great oceans are just as real as our jostling fellows and not all that far away; the hearts of the neutron stars are just as real; the comings and goings in a corpuscle of haemoglobin are just as real.

A factor that diminishes the reality of the everyday human consensus world is scale of time and space. Our perceivable scale of time is not that of the electron vibrations that produce a beam of light, or even the wing beats of a fly; nor is it that of the drifting continents. We do not comprehend the surface of a nucleus or the core of the sun in our daily thinking. Big and small mean only big and small in relation to the consensus world at the tip of our bean.

A more fundamental problem of reality is posed by the nature of matter, comprising interacting positive and negative forces interchangeable with energy and possibility in total equalling zero, and that are far from fully understood. One thing for sure is that solid objects are by no means as solid as they seem, atoms of all things mostly comprising large emptiness.

We can, all the same, begin to discern several related consensus worlds - at one end of the scale looms that of total reality, framed in the blurred infinities of time and space, and at the other end lays the consensus world of human daily reality in which we live on a biological level as specialised mammals. In the consensus world of the human animal we are well advised to ensure that we make enthusiastic efforts to provide ourselves with adequate food, drink and shelter, otherwise we will be in trouble. In the world of total reality each of us is just another intelligent mammal of average size going about its particular biological cycle at the appropriate rate in a standard fashion; it is difficult to regard its personal comfort as a matter of great moment.

Bumblebees, slow worms and blue whales also, as a matter of biological necessity, have their consensus worlds. Like us these animals build up their perception by receipt of outside signals through groups of cells specialised into sensory organs and fed into a group of specialised coordinating cells called the brain. Simpler

animals do not possess specialised cells of these types and in these simpler forms undifferentiated cells perform the necessary sensory and coordinating functions cooperatively.

It is not necessary to have a brain to have simple perception and a coordinated response, although it appears necessary where the requirement is complex. It is difficult for us to quantify the degree and nature of perception of an insect with a central nervous system, let alone that of an animal with undifferentiated cells. Clearly none are capable of the complexity and flexibility of response that a large brained primate can achieve, but it remains to be proved that their degree of self-awareness is less. A fish wriggling on a hook gives as much indication of wishing to retain the self-awareness of life, as a man would do in similar circumstances, as indeed does an earthworm with no central nervous system. All of these life forms are made of cell material that bio chemically is essentially identical.

Simpler animals have therefore not only the sensory organs they require for their particular life mode, but also the means whereby their bodies can react appropriately to incoming signals, plus at least the possibility of self-awareness as a primate? Specialised brain cells are designed for flexibility of response - they are not necessarily more charged with the vital spark of life than are undifferentiated cells built to the same ground plan, although an adult human is undoubtedly very much geared to the concentration of his awareness in certain of his cells alone.

Of course, it is not necessary in discussing self-awareness to draw analogies with other species - each one of us possesses through a succession of more primitive forms in our personal development from egg to embryo to infant. The fact that we do not recall having had any self-awareness at the time of our early stages relates only to the lack of development than of our memory facility. A newborn baby instantly gives every indication of awareness and response; moreover the instant our memory function is phased in at however young an age, we recall our total awareness. If it be granted that awareness does not necessarily depend on having the power to recollect it, there is no overriding reason to deny the presence of a degree of awareness comparable to that of an adult human not only in a human

infant but in other life forms with less developed brains or even those without them.

Is it reasonable to expect individual self-awareness in plants? We know of the somewhat suspect experiments that purport to demonstrate that plants can recognise hostile or friendly intent in humans, but is it basically reasonable to expect that they might be endowed with the sort of self-awareness that is much more readily acceptable in animals, in particular those with complex brains?

At the end of the day it is not possible to escape the fact that the only significant difference between a plant cell and an animal cell is that the former normally manufactures its own food by photosynthesis that implies often-complex activity. Hence an animal's need for movement plus the necessary coordinating system. Is there some magic about this difference of role that makes the flame of life burn brighter in an animal than a plant? Maybe, but maybe not. The passivity of plants gives the impression of lack of individual personality and their lack of most of our specialised organs of perception and communication discourages discourse. Their particular niche however, has little requirement of these capabilities as we understand them and the absence of specialised organs does not alter the basic likeness of the building blocks of all life. It could very well be that in the absence of specialised sensory organs and a nervous system, the whole cell complex of a plant could act as such. Could it be that when we stand in a meadow or on a hillside we are surrounded by a green ocean of a myriad individuals, preoccupied, conscious and capable of a degree of perception but silent?

Whether this is or so or not, we are part of one and the same life mass, differing only in the distinguishing facilities provided by some of our specialised cells.