

EPILOGUE

This is the story of the development of the eye from the primitive undifferentiated protoplasm of the simplest protozoon to become the most highly efficient sensory mechanism in the animal kingdom in the eyes of Birds. It is the story of the development of the sense of vision from an automatic response, associated at some stage with a vague awareness, to the capacity to be enraptured by a sunset or a rainbow or to create a thing of beauty. The first story is factual; the second speculative.

The subject of the second is fraught with difficulties so great as to make a final solution impossible. In the physical world material things are incomprehensible to each other and can be analysed only on a higher level by the senses; the sense-organs know nothing of each other for sensations can be analysed only by perceptions; we have no access to a platform wherefrom to look down upon perceptions and subject them to analysis. It follows that our consciousness is to us unknowable and will probably remain so—until or unless we acquire other and higher faculties. And if we, in our wordy thinking, cannot mutually compare the symbolic representation that each of us creates perceptually of the outside world, how much more difficult to analyse what the animal world in its wordless thinking makes of it.

A hypothesis might run like this. There are three stages in the evolution of vision. It started as a motor taxis, appearing initially in the simplest unicellular organisms as an automatic response which eventually became more plastic to reach its culmination in the homing bird; as such it need not enter consciousness. From this emerged perceptual vision, a pragmatic sense, essentially a passive registration of objects in the outside world, serving primarily the biological needs of hunger, fear or sex. Initially a minor, it eventually became a major determinant of conduct. Dependent on a central nervous organization to create its symbolism, it started in worms and reached its highest level in man. From this emerged imaginative vision with its aesthetic and creative qualities, with its inquisitive, exploratory drive, seeing beauty. It depended on the almost explosive development of the frontal brain in the highest Primates. It first appeared, presumably, during the ape-man's arboreal adventure and certainly is present in the chimpanzee; it was well established when modern man migrated northwards following the melting of the ice 20,000 years ago to replace his Neanderthal predecessors and establish the Aurignacian and Magdalenian cave-civilizations in south-west Europe, and reaches its greatest development, perhaps, in the human mind relieved of the chemical servitude of inhibitions, as by mescaline.

It is a fascinating story extending back to where life started, a story mostly of steady progress, now in this direction, now in that, as one expedient after another was tried, this one to be discarded, that to be perfected. It is a long story, and in this Volume it can only be sketchily told.

In the volumes of this series which follow we will discuss in more detail the visual apparatus of man—its structure, its development, its function, and the effects upon it of disease and injury.