

Writing, a formalised offshoot of picture-making, and verbalised vocal communication have, of course, been developed as our major means of transmitting and recording information, but they have also been utilised as vehicles for aesthetic exploration on an enormous scale. The intricate elaboration of our ancestral grunts and squeaks into complex symbolic speech has enabled us to sit and 'play' with thoughts in our heads, and to manipulate our (primarily instructional) word sequences to new ends as aesthetic, experimental play-things.

So, in all these spheres-in painting, sculpture, drawing, music, singing, dancing, gymnastics, games, sports, writing and speech-we can carry on to our heart's content, all through our long lives, complex and specialised forms of exploration and experiment. Through elaborate training, both as performers and observers, we can sensitise our responsiveness to the immense exploratory potential that these pursuits have to offer. If we set aside the secondary functions of these activities (the making of money, gaining of status, and so forth), then they all emerge, biologically, either as the extension into adult life of infantile play-patterns, or as the superimposition on to adult informationcommunication systems of 'play-rules'.

These rules can be stated as follows: (i) you shall investigate the unfamiliar until it has become familiar; (R) you shall impose rhythmic repetition on the familiar; (3) you shall vary this repetition in as many ways as possible; (4) you shall select the most satisfying of these variations and develop these at the expense of others; (5) you shall combine and recombine these variations one with another; and (6) you shall do all this for its own sake, as an end in itself.

These principles apply from one end of the scale to the other, whether you are considering an infant playing in the sand, or a composer working on a symphony.

The last rule is particularly important. Exploratory behaviour also plays a role in the basic survival patterns of feeding, fighting, mating and the rest. But there it is confined to the early appetitive phases of the activity sequences and is geared to their special demands. For many species of animals it is no more