

no material element in the organism which is not to be found in the inanimate environment. It is all a question of chemical composition. The results of synthetic chemistry have broken down the supposed barrier between the organic and the inorganic.

Nor can any foothold be found in emphasizing the co-existence of psychical phenomena and life, for it is plain that we know, to say the most, very little as to psychical phenomena in the simplest animals, and nothing as to their expression in plants.

The difficulty of defining vitality remains when we contrast not the bird and the pebble, but the living bird and the corpse, the quick and the dead.

The Quick
and the
Dead.

Even in practice it is often difficult to tell whether an organism is alive or dead; the theoretical distinction is not less difficult. The contrast is indeed great between the soaring lark and the dead bird at our feet; but what if we contrast the corpse with the entranced fakir, or with the dried-up bear-animalcule, or rotifer, or paste-eel, or even more familiarly with the seed many years old?

As far back as 1719, Leeuwenhoek wrote to the Royal Society of London an account of the revivification of the little bear-animalcules or Tardigrada, animals distantly related to mites, which occur for instance in the gutters of house-roofs and have extraordinary powers of surviving drought. The same is true of many small Crustacea and of some rotifers or wheel-animalcules, and is perhaps most securely known in regard to the minute thread-worms (*Anguillulidæ*) known as paste-eels and vinegar-eels, which may "come to life again" after being dried up for fourteen years. It is less surprising that the same should be true of many eggs and spores and unicellular organisms, where the structure is much simpler.

Now it is plain that these organisms in a state of latent life, as Claude Bernard phrased it, or "potential life", as Preyer calls it, are not dead, since they may live; yet beyond this potentiality it is difficult to say what characteristic of livingness they possess.

Of interest in the same connection are the phenomena