

mollusks has this curious fact of pædophagy long been known it has been noticed among the Crustacea. Thus in *Daphnia*, the delicate water-flea, while the eggs are still in the tubular ovary, the ovigerous cell may divide into four, one of which becomes an ovum and increases in size by devouring the other three. In the Phyllopod *Apus*, the egg when first distinguishable, is not a single cell, but a group of four cells each with a large nucleus. The nucleus in one assumes a different character, becomes clearer, and more rotund, exhibiting two or more large granules or germinal spots, while the three others show a mass of granules in the nucleus. These three nuclei grow rapidly, elaborate food, and feed the fourth cell so that it survives, while they themselves disintegrate. No doubt this strange phenomenon of cannibalism, in the earliest stages of development, may be more widespread than is at present supposed. Botanists have long been familiar with a parallel condition in certain plants. Thus, in the Mistletoe (*Viscum album*), one seed may contain two or three embryo plants. Some years ago Dr. Beard, of Edinburgh, boldly compared the embryo of the highest Vertebrates to a parasite receiving nutriment by a placental arrangement from its parent. About the same time Professor McIntosh, of St. Andrews, published an account of the remarkable features of the ovary in *Zoarces viviparus*, the viviparous blenny, the ovarian walls being complexly folded and richly vascular so that the young fish inside are bathed in a nutritive serum until far advanced in larval life. In making sections of the ovary, and contained young, of that species over a quarter of a century ago, I found what appeared to me to be particles of yolk in the alimentary canal which I had difficulty in tracing to the so-called absorption or inclusion of the yolk-sac. Dr. Scharff, of the Royal Museum, Dublin, was at the same time making a study of the early egg in *Zoarces* and other fishes, and the number of eggs present in the ovary of the viviparous blenny struck me as remarkable if only 12 or 15 young were ultimately produced. Could it be that in some way the non-developing eggs served as food to nourish the rapidly growing larvæ emerging from a limited number of ova? The question presented itself to me. It appeared possible but hardly probable.

Dr. Gilchrist, a distinguished Scottish biologist, and officially in charge of the fisheries of Cape Colony for some years, has shown that such a surmise was not far astray. He has proved it to be true in the South African *Catylx messieri*, Günther, a fish 1 to 2 feet long, and occurring apparently at considerable depths ranging from 400 to 700 fathoms. H.M.S. "Challenger," in her famous scientific cruise, secured a male