

In order to get a clear conception of the bilateral promorph of the Siphonanthæ (very unnaturally described by many authors), it is very important to distinguish the three primary dimensive axes, and to compare them with those of man or of some other bilaterally symmetrical animal. The first or principal is the vertical main axis, the longitudinal axis of the tubular stem; its upper or apical pole bears the pneumatophore in the majority of Siphonanthæ, the primary nectophore in the Calyconectæ. The opposite end is the lower or basal pole.

The second dimensive axis is the sagittal diameter; its ventral or anterior pole is marked by the series of buds, and usually by a ventral groove of the tubular stem. The opposite dorsal pole is distinguished in the Auronectæ by the aurophore, in *Physalia* by the crest of the pneumatocyst. The vertical plane, which is determined by the sagittal and the principal axes, perpendicular one to another, is the median or sagittal plane; it separates the right and left halves of the body.

The distinction between right and left halves (often confounded by different authors, and described in striking contradiction) is always clear, when the ventral side is constantly defined in the same sense as that side of the body from which the buds arise. Therefore, the two poles of the frontal diameter, or the third dimensive axis (right and left pole), must be always the same. In the monogastric Calyconectæ, for instance (*Eudoxia*, &c.), the single siphon is placed on the ventral side of the bract (or the modified umbrella); in the polygastric Calyconectæ, correspondingly, the trunk is placed on the ventral side of the first or proximal nectophore (the nectosarc, therefore, on its dorsal side). In the Diphyidæ, the ventral sides of the two nectophores are opposed one to another.

The bilateral promorph of the Siphonanthæ is at the same time quadriradial (or by duplication of the parameres octoradial). This radial structure, inherited from the ancestral quadriradial Medusæ, is not only evident in the four radial canals of the gonophores and nectophores, the eight hepatic stripes and mouth-lobes of many siphons, &c., but also in the structure of the primary larval umbrella, and the pneumatophore arising from it. The majority of the Siphonanthæ exhibit in the basal part of the pneumatosaccus eight (more rarely four or sixteen) radial pouches, which are separated by vertical septa and comparable to the radial canals of a Medusa.