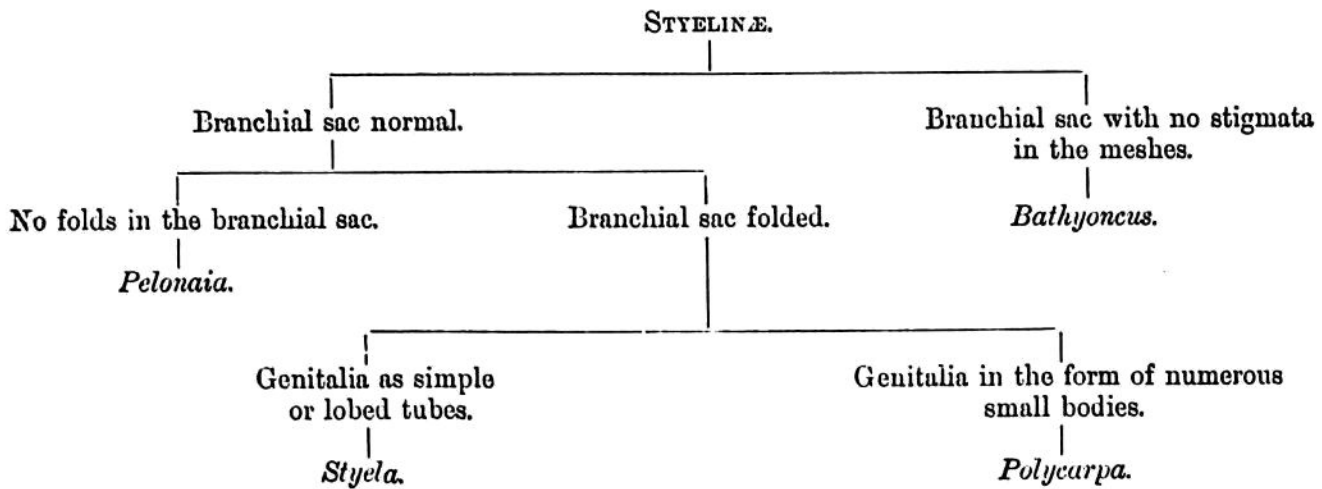


Heller in 1877,<sup>1</sup> distinguished *Polycarpa* from *Styela*, on account of the condition of the intestinal loop, and of the genital glands. This separation has not been accepted by Traustedt, but, although *Styela* and *Polycarpa* are undoubtedly very closely allied, I find it convenient, on account of the large number of species in both genera, to recognise the distinction until some species turns up which unites the characters of the two groups, and cannot therefore be placed in either. Consequently, with the addition of the new genus *Bathyoncus*, discovered by the Challenger expedition, I recognise four genera in the Styelinæ, and distinguish them briefly as follows :—



### *Styela*, Macleay.

- Ascidia*, Linnæus, Sys. Nat., Edn. 12. 1766. In part.  
*Ascidia*, O. F. Müller, Zool. Dan. Prod. 1776. In part.  
*Cynthia*, Savigny, Mém. sur les Anim. sans Vert. Pt. ii. fasc. 1. 1816. In part.  
*Styela*, Macleay, Anat. Observ. on the Tunicata. 1823.  
*Pandocia*, Fleming, British Animals. 1828.  
*Cynthia*, van Beneden, Recherches sur les Ascidiées. 1846. In part.  
*Cynthia*, Forbes and Hanley, Brit. Moll., vol. i. 1853. In part.  
*Styela*, Hancock, Anat. and Phys. of Tunicata, Journ. Linn. Soc. 1868. In part.  
*Cynthia*, Kupffer, Jahresber. der Commiss., &c. 1875. In part.  
*Styela*, Heller, Untersuchungen ü. d. Tun. d. adriat. Meeres, Abth. 3. 1877.  
*Styela*, Traustedt, Oversigt over de fra Danmark, &c., Ascidiæ Simplicis. 1880. In part.

*Body* attached, sessile or almost so, rarely incrustated with sand. Branchial and atrial apertures either four-lobed or cross-slit.

*Test* usually thin but leathery, rarely thick and cartilaginous.

*Branchial Sac* with four or less than four folds upon each side.

*Tentacles* always simple.

*Intestine* forming a narrow loop.

*Genitalia* in the form of one or more simple, lobed, or branched tubular bodies.

<sup>1</sup> Untersuchungen ü. d. Tunicaten d. adriat. Meeres, Abth. 3, p. 19.