

structure of the antennulæ in the latter forms by instituting a comparison with the corresponding limbs in the Copepoda. Thus, in the Harpactoidea we find that the anterior pair of antennæ, which undoubtedly answer to the antennulæ in the Nebaliidæ, are composed each of two rather distinctly defined divisions, a thicker proximal part and a much narrower distal part, the former consisting pretty constantly of four articulations, the last of which forms anteriorly a lateral expansion bearing a slender, ribbon-like appendage, the latter composed of a varying number of articulations but always very sharply marked off from the proximal part. There cannot in my judgment be any doubt that the proximal part of the anterior antennæ in these Copepoda answers to the antennular peduncle in the Nebaliidæ, and the distal part to the flagellum. The lateral expansion of the last joint of the proximal part in the former is also well seen in the Nebaliidæ, and, moreover, in all probability the ribbon-like appendage affixed to that expansion in the Harpactoidea is a homologue of the setose lamella in the Nebaliidæ. Thus, all parts of the antennulæ in the latter forms seem to be in fact represented in the Copepod antennula, and the apparently abnormal number of joints in the peduncle as compared with that in the higher Crustacea, will turn out to be quite normal in relation to the Copepoda.

*Homology of the Antennæ.*—In comparing the antennæ in the Nebaliidæ with those in the higher Crustacea, we find at once their structure very different from that in any known form of the Podophthalmia, whereas they at first sight somewhat resemble the lower antennæ in the Amphipoda. On closer examination, however, it is easily found that they differ materially also from those in the last named group of Crustacea by the peduncle being only triarticulate, whereas in all known Malacostraca the number of joints is far greater, generally amounting to five in all. Moreover, the peculiar geniculate bend at the middle of the peduncle is rather different from what is generally met with in the Malacostraca. I think we may also in the case of these limbs more properly derive their structure from that met with in the Copepoda, especially those of the Harpactoid group. In these Copepoda the posterior antennæ are, as is well known, very small but composed of three distinctly defined segments, the last of which forms with the preceding a strong geniculate bend, and it may readily be found, by comparison, that these three segments together perfectly agree in form with the antennal peduncle in the Nebaliidæ. At the tip of the last joint, moreover, in some forms a small imperfectly defined terminal joint may be distinguished, representing a rudiment of the flagellum. The accessory branch generally found affixed to the middle of the second segment is sometimes quite obsolete, whereby the accordance becomes still more pronounced. The peculiar modification of the flagellum in the male of *Nebalia*, somewhat similar to what is met with in the Amphipoda and Cumacea, does not seem to have any more general significance, since in the nearly related genus *Paranebalia* there is no difference whatever to be found in the antennæ of the male and female, whereas it