

is here only the antennulæ which are peculiarly modified, as is also the case in the Copepoda.

*Homology of the Oral Parts.*—These appendages appear on the whole very dissimilar to those in other Branchiopoda, and their structure has consequently been adduced to show the closer affinity of *Nebalia* to the Podophthalmia. Especially is the great development of the mandibular palp certainly a very characteristic feature, since such a palp is never met with in any adult Branchiopod. In form this palp, however, exhibits, as has also been pointed out by Professor Claus, a much closer resemblance to that in the Amphipoda than to the palp in the Podophthalmia, and the structure of the mandible itself is also rather different, showing, by the reduction of the cutting edge and the great development of the molar surface, more similarity to that met with in the greater part of the Branchiopoda. In the Copepoda the mandibles are, as is well known, in most cases provided with a well-developed palp, but this palp is generally biramose or bears a so-called branchial appendage, which however is often very reduced in size and in some forms even quite obsolete, whereby the palp acquires a certain similarity to the mandibular palp in the Nebaliidæ. The very slight development of the posterior lip or metastoma in the Nebaliidæ is a character apparently more in accordance with the Entomostraca than with the Malacostraca, in which latter this part is always well developed and rather large. As to the structure of the maxillæ, both pairs seem to me to be essentially different from those in the higher Crustacea, and especially is the structure of the first pair quite peculiar and only admits of a very general comparison with those in other Crustacea. In the structure of the second pair I find, however, a well-marked resemblance to the maxillæ in a great number of Copepoda, and this resemblance is especially very striking in the case of the genus *Nebaliopsis*, as stated above. In the Copepoda, it is true, only a single pair of maxillæ are present, but this pair I think may more properly be regarded as homologous with the second pair in the Nebaliidæ, the first pair not being developed in the former Crustacea. The number of maxillæ in the Nebaliidæ cannot be adduced as showing their affinity to the Malacostraca, since we find at least in all Phyllopoda both pairs distinctly developed, though of a rather simple structure.

*Homology of the Branchial Legs.*—These limbs, in my opinion, undoubtedly stamp the Nebaliidæ as true Branchiopoda, agreeing, as they do, both in structure and function with the so-called branchial feet in other forms of this order. This has, however, been partly combated by some naturalists, who regard them as more closely agreeing with the thoracic legs in the Schizopoda; and, in fact, if we had confined our examination to the structure of these limbs in the above described genus *Paranebalia*, such a view might perhaps to a certain extent be advocated, as in this form they certainly exhibit an appearance somewhat approaching that of the legs in the Euphausiidæ. On the other hand, I think, that no one will find any trace of similarity between the simple lamelli-