

was a time in Zoology when the external shape of the animals was considered quite sufficient for descriptive purposes; this period was followed by the period of, so to speak, anatomical character, naturalists discovered a new source of systematic characters in Comparative Anatomy, and believed its help to be sufficient for deciding the most complicated phylogenetic questions; the apparent success was so great that this conviction finds its echo in papers of very recent date—as for instance in v. Jhering's Monograph on the Mollusca. The time came, however, when zoologists became aware that their anatomical hopes were but illusions, and the word Comparative Embryology became the watchword of the day. That this department of Zoology also has not justified the hopes based upon it is but too well known, and the modern watchword is Comparative Physiology. Whether this study, at the present time in its infancy, will justify what it promises, will be seen later; on the whole, it is clear that in most cases not this alone but all branches of Zoology together will give us the answers we require; but in instances like that concerning the Keratosa, where almost all other lines of research are of no avail, this new science may be particularly welcome. The possibility of a disappointment is of course not excluded, and therefore further purely systematic papers on the Keratosa are of course very desirable. It would be, however, still more desirable that Science, hand in hand with this, would follow up also another way, that, namely, of Comparative Physiology. This is the immediate task to be executed, and in the case of spongiologists residing near the sea-shore it is very easily realisable.