

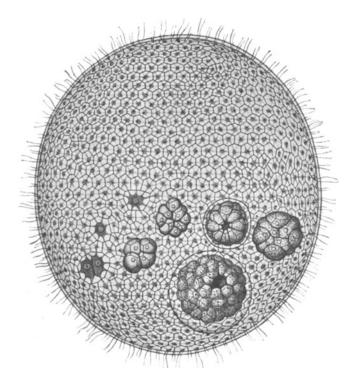
The Cambridge Manuals of Science and Literature

THE INDIVIDUAL IN THE ANIMAL KINGDOM

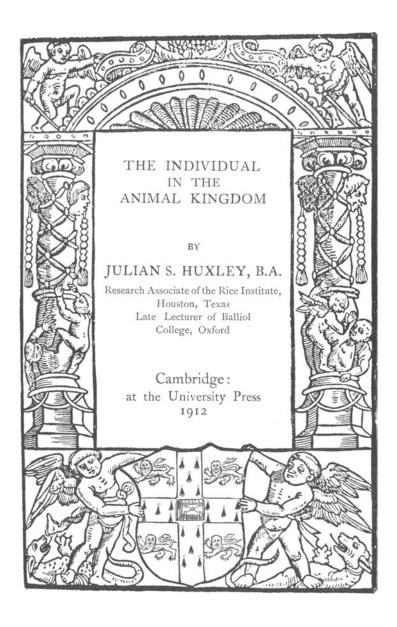
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Volvox globator Ehrenberg. An adult asexual colony, highly magnified. The hexagonal areas represent the gelatinous coats of the individual cells in surface view. The thin common envelope of the whole colony is seen round the circumference. In the hinder half of the colony are seen two of the large asexual reproductive cells, and various stages of their development into daughter-colonies. The two most advanced daughter-colonies have already secreted a common envelope of their own. (After A. Lang.)





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PREFACE

I MUST confess that when I made choice of Animal Individuality as my subject, I had no idea of its real importance, its vastness and many ramifications: the teaching of philosophical biology is in England to-day somewhat of a Cinderella. The working out of the concept, full of interest as it was, brought also regret; a book of the size could have been-should have been-made from every twig and a stout octavo from the central trunk. This might not be; and the unavoidable compression must be pardoned. general reader must imitate the Organic Individual (p. 26) and take unto himself wings of thought and conscious effort to skip across the unbridged gaps that perforce remain; with them to aid, I think he will find the stepping-stones not too far apart. professed biologist must not cavil when he finds some merely general truth set dogmatically down as universal; in biology (still so empirical and tentative) there are always exceptions to the poor partial "Laws" we can formulate to-day. To have qualified every statement that needed qualification would have added much to the book's bulk without aiding the argument or being really more "scientific."

My indebtednesses are great. It will easily be seen how much I owe to M. Bergson, who, whether one agrees or no with his views, has given a stimulus (most valuable gift of all) to Biology and Philosophy



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alike. The various Oxford philosopher-friends who have helped to comb out the tangles of a zoologist's mind know how grateful I am to them: I will not name them here for fear my heresies be laid to their charge.

Certain criticisms have convinced me that some explanation of the scope of this book will here not be out of place. The task I have attempted in the following pages is a two-fold one. First, I have tried to frame a general definition of the Individual, sufficiently objective to permit of its application by the man of science, while at the same time admitted as accurate (though perhaps regarded as incomplete) by the philosopher. Secondly, I have tried to show in what ways Individuality, as thus defined by me, manifests itself in the Animal Kingdom.

I wish here to point out in general, that the failure of one of these aims does not preclude the success of the other; and, in particular, this:—it is possible that the philosophically-minded will quarrel with my definition of the Individual (p. 28) as a "continuing whole with inter-dependent parts" (to put it at its baldest). But even if he denies that the definition applies to the Individual, he must, I think, admit that it does apply to something, and to something which plays a very important part in the organic world. He will, I believe, after reading the subsequent chapters, be brought to see that every living thing is in some way related to one of these



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systems, these continuing wholes; and that such wholes, though they may not in his eyes deserve the name of Individual, are yet sufficiently widespread and important to merit some title of their own.

Put in other words, the major portion of this book is devoted to showing that living matter always tends to group itself into these "closed, independent systems with harmonious parts." Though the closure is never complete, the independence never absolute, the harmony never perfect, yet systems and tendency alike have real existence. Such systems I personally believe can be identified with the Individuals treated of by the philosopher, and I have tried to establish this belief. But what's in a name? the systems are there whatever we may choose to call them, and if I have shown that, I shall be content.

In conclusion, I will only hope that this little book may help, however slightly, to decrease still further the gap (to-day happily lessening) between Science, Philosophy, and the ideas and interests of everyday life.

J. S. HUXLEY.

Balliol College, Oxford. Sept., 1912.

The numbers in brackets to be found in the text refer to the Bibliography at the end of the book.

An Appendix has also been added, giving some of the main conclusions in tabular form.



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