

**WHAT IS  
ADAPTATION?**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649511686

What is Adaptation? by R. E. Lloyd

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd.  
Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

[www.triestepublishing.com](http://www.triestepublishing.com)

**R. E. LLOYD**

# **WHAT IS ADAPTATION?**



**WHAT IS ADAPTATION ?**

*BY THE SAME AUTHOR*

**AN INTRODUCTION TO BIOLOGY.**

For Students in India. With 15 Plates of  
Diagrams. 8vo, 5s. 6d. net.

**THE GROWTH OF GROUPS IN THE  
ANIMAL KINGDOM.** With 2 Coloured  
Plates. 8vo, 5s. net.

**LONGMANS, GREEN AND CO.**

LONDON, NEW YORK, BOMBAY, CALCUTTA, AND MADRAS

# WHAT IS ADAPTATION?

BY

R. E. LLOYD, M.B., D.Sc. (LOND.)

MAJOR, INDIAN MEDICAL SERVICE  
PROFESSOR OF BIOLOGY, MEDICAL COLLEGE, CALCUTTA

LONGMANS, GREEN AND CO.

39 PATERNOSTER ROW, LONDON

FOURTH AVENUE & 30th STREET, NEW YORK

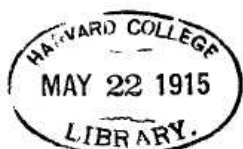
BOMBAY, CALCUTTA, AND MADRAS

1914

*All rights reserved*

S 7930.50

~~NH 5609.14.13~~



*Hall fund*



## PREFACE

THIS book is a sequel to another, published two years ago, under the title 'The Growth of Groups in the Animal Kingdom.' It is not, however, a continuation of the chief subject of the latter, but of a side issue. On the previous occasion, I expressed the opinion that adaptation did not, in itself, need explanation: but certain critics soon inculcated that it was unwise to make such an assertion, without properly defending it. Consequently, I shall here endeavour to show how the need for an explanation of adaptation has arisen, and why such an explanation seems unnecessary.

Some critics noticed that I was biassed against the selection theory. Indeed, I was careful to say so at the outset. 'No one should be biassed,' they advised; 'keep your mind open and wait for evidence.' But they fail to see that the selection theory, whatever its value, is the expression of a certain bias, a certain mental requirement, the need for an explanation of adaptation.

The tone of much of the criticism, directed against my last book, was as follows—"The selection theory is settled, you cannot alter it. If you have anything to say about evolution, you must take that theory for granted. Even the leaders of the mendelian school 'accept the

principle of natural selection in its wider import."\* But this is, I think, far from true. They may perhaps accept the theory in its wider import, whatever that may be; but they do not accept it in itself, as their writings show.

What is the selection theory? It does not lie merely in the fact of evolution and in the fact of competition. It lies in the proposition that competition causes evolution and this proposition was made in order to explain adaptation and life in general. It regards organisms as fitting into something, which is called their environment; somewhat like the wax fits into a seal. It holds that every item in the organism has a corresponding item in the environment, and it holds that this correspondence was brought about by the elimination, from the one side, of all that would not fit. This is the selection theory as commonly understood and it is, I think, impossible for any one person to hold this theory and to believe in the origin from mutants at the same time. Origin from mutants is origin without selection. Darwin himself pointed this out. Some critics carelessly informed their readers that I was ignorant of the fact that Darwin admitted the origin from mutants. I have known it for the last twenty years and I was very careful to say that I knew it, on the second page of my book. Darwin finally admitted that groups of like organisms might sometimes arise directly from sports; but stated clearly that such events would occur "independently of natural selection." Selection among mutants does not explain adaptation in the least. That is why so many object to

\* *Sociological Review*, July, 1913.

PREFACE

vii

discontinuity in evolution. They need an explanation of adaptation. They see purpose, as a special human attribute, pervading all life and are perplexed thereby.

This book is an attempt to show how such perplexity may be overcome, and that there is nothing in adaptation to be explained. It is not scientific in the usual sense, being influenced considerably by M. Bergson's philosophy.

R. E. L.

MEDICAL COLLEGE,  
CALCUTTA,  
June, 1914.