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CHAPTER I

THE CHILDHOOD  
OF ANIMALS

*Sir Peter Chalmers Mitchell*

1911

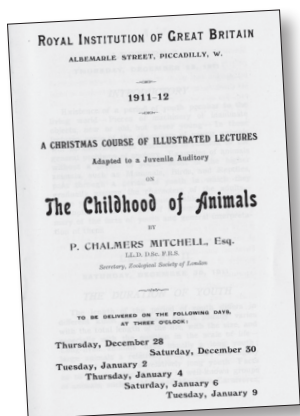


What better place to start our explorations of life on earth than at the beginning of life for the millions of animal species that live here. Childhood can progress in many ways, as we'll see, from miniature-adults that simply grow bigger, to youngsters that undergo radical transformations. We tour this early world in the company of a zoological expert who has helped rear many young animals. Chalmers Mitchell will show us how tough those early years can be and how young animals do all they can to stay alive.



‘Complicated pieces of machinery, like watches or motor cars, resemble animals in many ways, and like them may be new or old, but are never young,’ begins Chalmers Mitchell. ‘Youth is a property of the living world.’ He chooses not to strictly define when childhood begins and ends – the living world is too variable for that – but he does bring into the Lecture Theatre several babies to show the audience what young animals can look like; there’s a year-old jaguar, a squirrel monkey, several snakes and a young alligator.

Animals, he says, can be placed in three groups according to their childhoods. The first contains



*Lecture programme  
(front cover).*

creatures with no period of youth, things like single-celled amoeba that make more of themselves by simply splitting into two identical copies. The second group is where humans belong, together with all the other animals in which the young more or less resemble their parents.

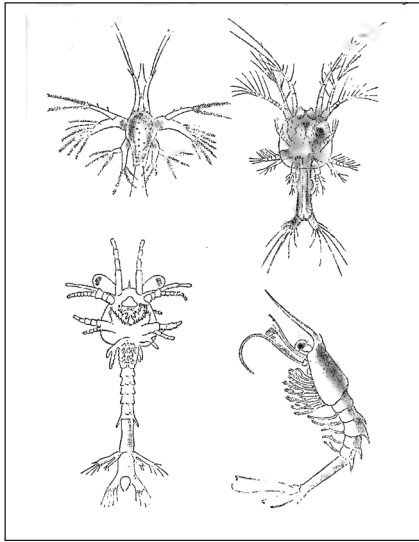
Curiously, the young of different species within this second group often look a lot like each other. A reporter from the *Aberdeen Daily Journal* wrote on 29 December 1911 that ‘ripples of laughter greeted my ears as I entered the lecture room’, as Chalmers Mitchell pointed out how baby gorillas and baby humans look alike, showing pictures on the lantern slide to prove his point. Chalmers Mitchell tells another story of similar babies from the time he imported a young hippopotamus from Africa to London Zoo. A customs officer detained the hippo, convinced it needed examining for infectious livestock diseases because, in his view, it was quite obviously a pig.

In the third group of animals, the young differ so much from the adults that it is almost impossible to work out what they’re going to turn into when they grow up. Chalmers Mitchell paints a vivid picture of what it might be like if humans underwent such radical change. He asks the audience to imagine a human baby starting out as a fish, swimming in an aquarium and eating water fleas. When his skin grows too tight, it cracks and splits and a hedgehog creeps out onto land. After eating earthworms in the garden for some time, he once again becomes

too big for his skin and, after a second split, climbs out as a fully grown boy.

There are no mammals in this third group, but mainly insects and marine invertebrates, including crabs, lobsters and shrimp, which grow up as a series of distinct larvae. To metamorphose between each stage, they moult their hard exoskeleton and reveal a new, bigger one underneath, which can look radically different to the last, growing new legs, swimming appendages and spines (we'll hear more about insect metamorphosis in Francis Balfour-Browne's Christmas Lectures of 1924–5; see page 37).

Considering the duration of youth, Chalmers Mitchell describes how this can vary enormously between different animals. Elephants are some of the largest and longest-lived animals and also have some of the longest childhoods. Twenty years before Chalmers Mitchell became its secretary in 1921, London Zoo was home to Jumbo the elephant who, at 3.35 m (11 ft) tall, was the world's largest captive elephant at the time. Like all African elephants, Jumbo would have reached maturity only after twenty to twenty-four years. Large size, however, doesn't necessarily tell us that an animal



*Various stages of prawn larvae, from Chalmers Mitchell's book accompanying his Lectures.*

has a long childhood; a hippopotamus becomes fully adult after just five or six years.

Among the insects, many species spend only a very short time as adults. Mayflies live as aquatic larvae in ponds for two years before emerging as adults for just a few hours. Even more extreme are cicadas, which spend seventeen years as larvae buried underground before metamorphosing into