

Cambridge Elements

Elements in the Philosophy of Biology

edited by

Grant Ramsey

KU Leuven

Michael Ruse

Florida State University

ADAPTATION

Elisabeth A. Lloyd

Indiana University



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Adaptation

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Elisabeth A. Lloyd
Indiana University

Abstract: Natural selection causes adaptation, the fit between an organism and its environment. For example, the white and grey coloration of snowy owls living and breeding around the Arctic Circle provides camouflage from both predators and prey. In this Element, we explore a variety of such outcomes of the evolutionary process, including both adaptations and alternatives to adaptations, such as nonadaptive traits inherited from ancestors. We also explore how the concept of adaptation is used in evolutionary psychology and in animal behavior, and the adequacy of methods used to confirm evolutionary accounts of human traits and behaviors.

Keywords: evolutionary adaptation, evolutionary causes, development and evolution, evolutionary by-products, methodological adaptationism

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