
Series Preface

The *Species and Systematics* series is a broad-ranging venue for authors to provide the scientific community with comprehensive treatments of the theoretical underpinnings, history, and philosophy of fundamental concepts in systematic biology and the science of taxonomy. The series also intends to link the historical landscape of ideas to new technology and expanding information in order to stimulate discussion among students and researchers in biology about the future course we are charting in biodiversity research.

There are many approaches to the study of biological diversity, and to embrace this, future volumes in *Species and Systematics* may include detailed development and comparisons of existing and novel methods in systematics and biogeography, empirical studies of exemplar organisms that provide new insight into old questions and raise new questions for biologists and philosophers of science, and historical treatises on central and reoccurring concepts that benefit from both a retrospective and a new perspective. Some volumes will address a single important concept at great depth, giving authors the freedom to present ideas with their own slant, while others will be edited collections of shorter papers intended to place alternative views in sharp contrast.

One of the most important tasks for philosophers and historians is to *stress test* our terms and concepts so that we are pushed to reevaluate what we know or think we know. To draw on popular culture, the film character Inigo Montoya's now meme-famous saying sums this up well, "You keep using that word, I do not think it means what you think it means" (*The Princess Bride*, 1987). This volume contributed by Michaelis Michael is a call to all biologists to consider if they really know what they mean when using or discussing one of our most central ideas—Darwin's theory of natural selection. From different vantage points, Michael shows how easy it is to use natural selection and, simultaneously, how hard it can be to directly access particulars. Readers are guided through carefully laid-out arguments that test the mettle of natural selection and put a spotlight on strengths and weakness, encouraging precise usage. In this way, *Evolution by Natural Selection: Confidence, Evidence and the Gap* is a valuable contribution that hits the mark intended for the *Species and Systematics* series.

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