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Preface

Imagine a field in which nearly all important theory is written in Latin, but most researchers can barely read Latin and actively cannot speak it. Everyone cites the Latin papers, and a few even struggle through them for inspiration. However, most rely upon a tiny coterie of fluent Latin speakers to develop and write important theory.

Things aren't quite so bad as this in evolutionary biology. Like all good caricature, it exaggerates but also contains a grain of truth. Most of the important theory developed in the last 50 years is at least partly in the form of mathematical models, yet few animal behaviorists and behavioral ecologists understand formal evolutionary models. The problem is more acute among those who take an evolutionary approach to human behavior, as students in anthropology and psychology are customarily even less numerate than their biology colleagues.

We would like to see the average student and researcher in animal behavior, behavioral ecology, and evolutionary approaches to human behavior become more fluent in the "Latin" of our fields. Increased fluency will help scientists better appreciate the power and limits of the theory, and more sophisticated consumers will encourage theorists to address issues of empirical importance. Both of us teach courses to this end, and this book arose from our experiences teaching analysis, paper, and hard-working students the basic tools and results of theoretical evolutionary ecology.