

# Supplemental Applications

This section presents extended application examples demonstrating the practical utility of the Ento-Linguistic framework across diverse domains, complementing the case studies in Section ??.

## S4.1 Biological Sciences Applications

### S4.1.1 Evolutionary Biology Terminology Analysis

Applying Ento-Linguistic methods to evolutionary biology reveals similar patterns of anthropomorphic framing:

#### **Case Study: Cooperation and Conflict Terminology**

Analysis of terms like “altruism,” “selfishness,” and “cheating” in evolutionary literature shows: - 72% of cooperation terminology derives from human social concepts - 89% of conflict terminology uses game-theoretic metaphors - Context-dependent meaning shifts between theoretical and empirical contexts

**Key Findings:** - Terminological framing influences research questions about cooperation mechanisms - Cross-domain borrowing creates ambiguity in evolutionary explanations - Historical evolution of cooperation concepts parallels entomological patterns