
Optimal Foraging Models and The Impact of Culture on Behavioral Variation

Kenneth Vernon*¹

¹University of Utah – United States

Abstract

Physical anthropologists recognize that modern hunter-gatherers (HG) are not "living fossils." They recognize that history and culture have played a large role in shaping modern variation in behavior, but insist that one can infer variation in past behavior based on modern variation. Critics argue that culture mediates between ecological and behavioral variation making any such inference impossible. This criticism has different senses based on the nature of the mediation. I argue that in some of these senses, at least, the impact of modern culture on HG behavior can be treated as an experimental intervention. In that sense, it does not limit evidence. In fact, it provides additional evidence. Using optimal foraging models, I explore various ways that culture mediates between behavioral and ecological variation and consider what sense the general objection has in each case. I conclude that reconstructing human evolution based on modern human behavioral ecology is enormously difficult, but not impossible. And, although modern HG groups are not "living fossils," investigating systematic variation in their behavioral responses to a changing ecology provides a wealth of information that can be used to reconstruct the history of our species.

*Speaker