

Reply

Idiographic and nomothetic approaches to heterogeneity are complementary: Response to comments on "Evaluating the influences of temperature, primary production, and evolutionary history on bivalve growth rates"

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We thank Vermeij (2020) for his comments on Saulsbury et al. (2019), which provide an opportunity for us to clarify and expand on some points raised in the original paper. The goal of our study was to evaluate the degree to which relationships between environmental factors and growth rate observed in populations and species can be generalized across the entire bivalve clade. In our view, Vermeij's idiographic focus on specific examples complements rather than contradicts our nomothetic search for overarching patterns. We highlight three points of apparent contention where we see no inherent contradiction between Vermeij's arguments and our findings.

1. Vermeij points out that the estimated dependence of growth on different factors (temperature, food supply, phylogenetic history) should be sensitive to sampling (Vermeij's point 4). Indeed, we recovered especially strong environment–growth relationships within a handful of families (Fig. S4, our study), with weak relationships

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