

Philosophy 2000, 2017

Reflection Question 10

On "[Yes! There are resilient generalization \("laws"\) in ecology](#)" by Linquist et al. (2016)

To be submitted by Dropbox on **Wednesday April 5, by 3:00 pm.**

Consider the principle of competitive exclusion as an example of a candidate ecological law. It claims that two species cannot occupy the same niche indefinitely. Eventually, slight differences in their competitive ability will cause one species to exclude the other. However, when we turn to nature it is common to find species inhabiting the same niche. This would seem to suggest that the principle of competitive exclusion is not really a law of nature. Or, does it?

1. In the paper for this week, the authors distinguish the 'dispositional' account of laws from the 'ceteris paribus' account. These are two different philosophical theories about what a law of nature is. Based on their description, try to explain how each type of theorist (dispositional versus ceteris paribus) would explain the fact that species often coexist in the same niche. That is, how would each type of theorist account for this apparent exception to the competitive exclusion law?
2. Is there any possible observation of nature that could be used to determine which account of the competitive exclusion law is correct? Please explain why or why not.
3. According to Linquist et al. how could a scientist measure the invariance and the resilience of the competitive exclusion principle?