

Diversity Patterns IV

Today's Agenda:

- Quiz
- Assignment: Conceptual Figures
 - Student Presentations

Conceptual figures

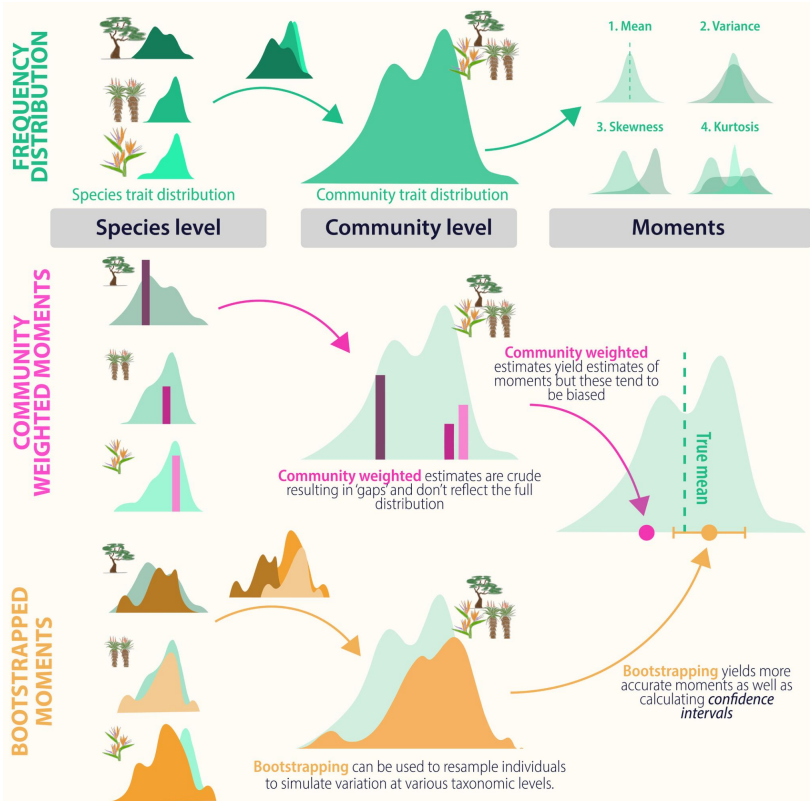
“visualisations that do not represent data itself, but help illustrate a theoretical idea or a methodological design. They are often relevant for scientific publications, and can help improve presentations and pitches by making an idea or approach more understandable for the audience.”

- https://sustainabilitymethods.org/index.php/Conceptual_Figures

Conceptual figures

- Make complex ideas more clear
- Show simplified views of a system
- Cartoon versions of mechanisms or methods
- VERY underappreciated/underutilized

Conceptual figures - Examples



BRITISH
ECOLOGICAL
SOCIETY

Methods in Ecology and Evolution

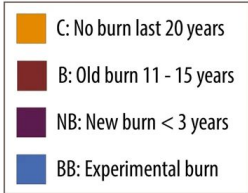
RESEARCH ARTICLE | [Open Access](#) | [CC BY](#)

Bootstrapping outperforms community-weighted approaches for estimating the shapes of phenotypic distributions

Brian S. Maitner [✉](#), Aud H. Halbritter, Richard J. Telford [✉](#), Tanya Strydom, Julia Chacon, Christine Lamanna, Lindsey L. Sloat, Andrew J. Kerkhoff, Julie Messier, Nick Rasmussen, Francesco Pomati, Ewa Merz, Vigdis Vandvik, Brian J. Enquist ... [See fewer authors](#) ^

Conceptual figures - Examples

TREATMENTS

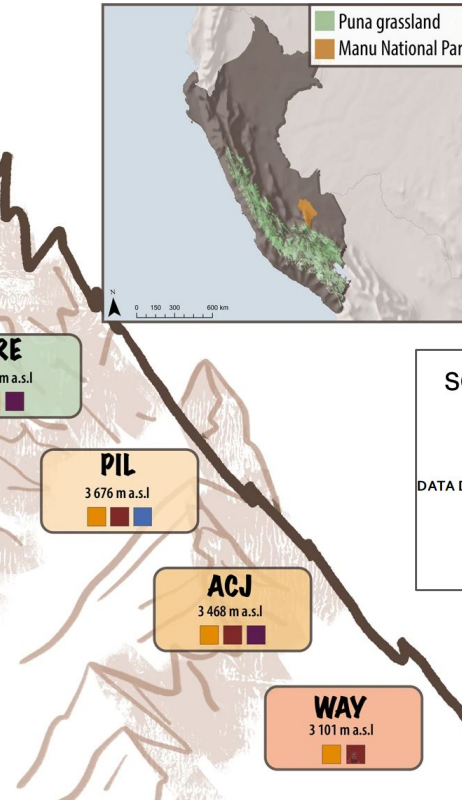


SEASON



DATASETS

	Community composition	Height & structure	Functional traits	Aboveground biomass	Ecosystem fluxes	Climate
OCC						
QUE						
TRE						
PIL						
ACJ						
WAY						



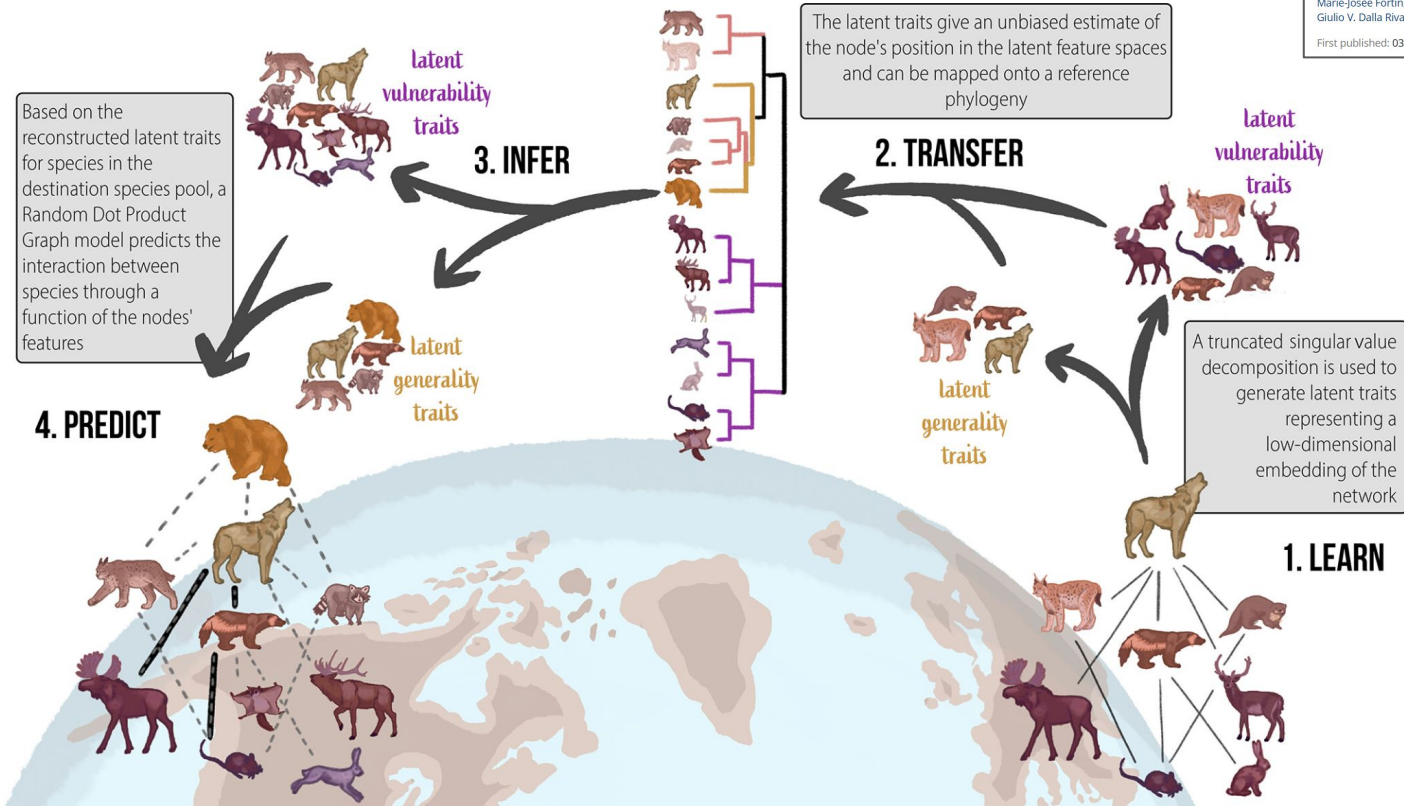
scientific data

OPEN
DATA DESCRIPTOR

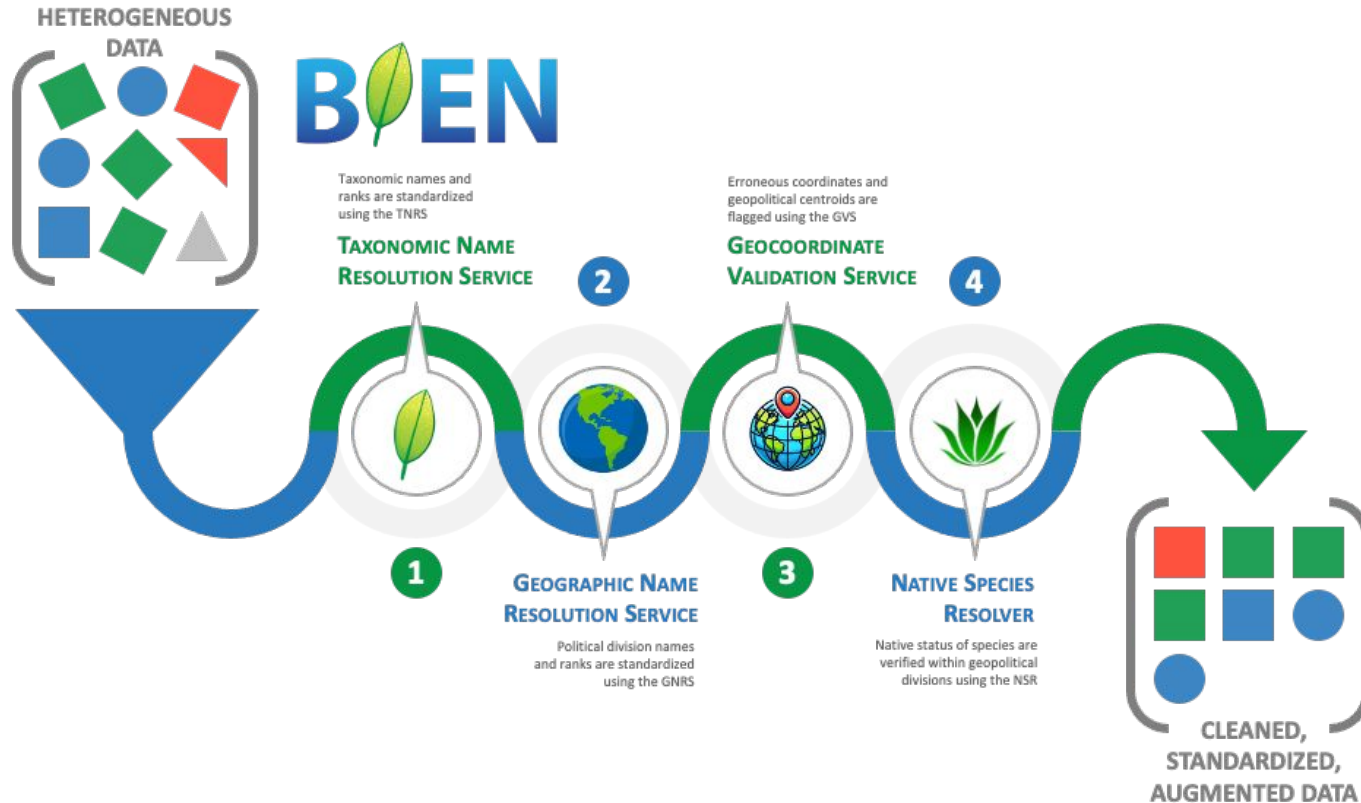
Plant trait and vegetation data along a 1314 m elevation gradient with fire history in Puna grasslands, Perú

Aud H. Halbritter et al.^a

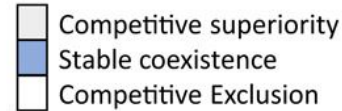
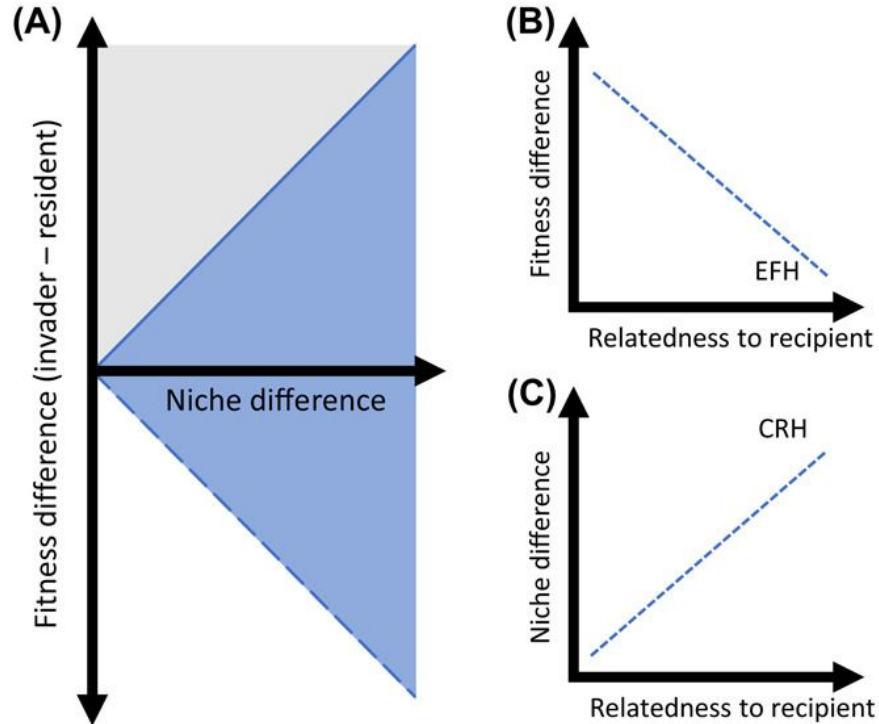
Conceptual figures - Examples



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Hypotheses

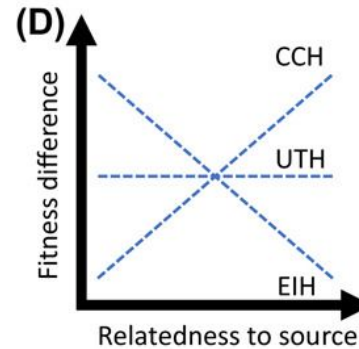
EFH = Environmental Filtering

CRH = Competition-Relatedness

CCH = Competitive Constraint

UTH = Universal Trade-Off

EIH = Evolutionary Imbalance



Conceptual Figure Assignment: Due by Feb 14th

- Select a paper that focuses on Biodiversity-Ecosystem Functioning
 - Should be one that doesn't already have a conceptual figure in it
 - Ideally will involve your focal system, but not required

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- Submit to canvas as a Word file or PDF
 - Conceptual figure, caption, reference

Conceptual Figure Assignment: Due by Feb 14th

- Questions?

Student Presentations

Next class: Biodiversity and Ecosystem Functioning!