

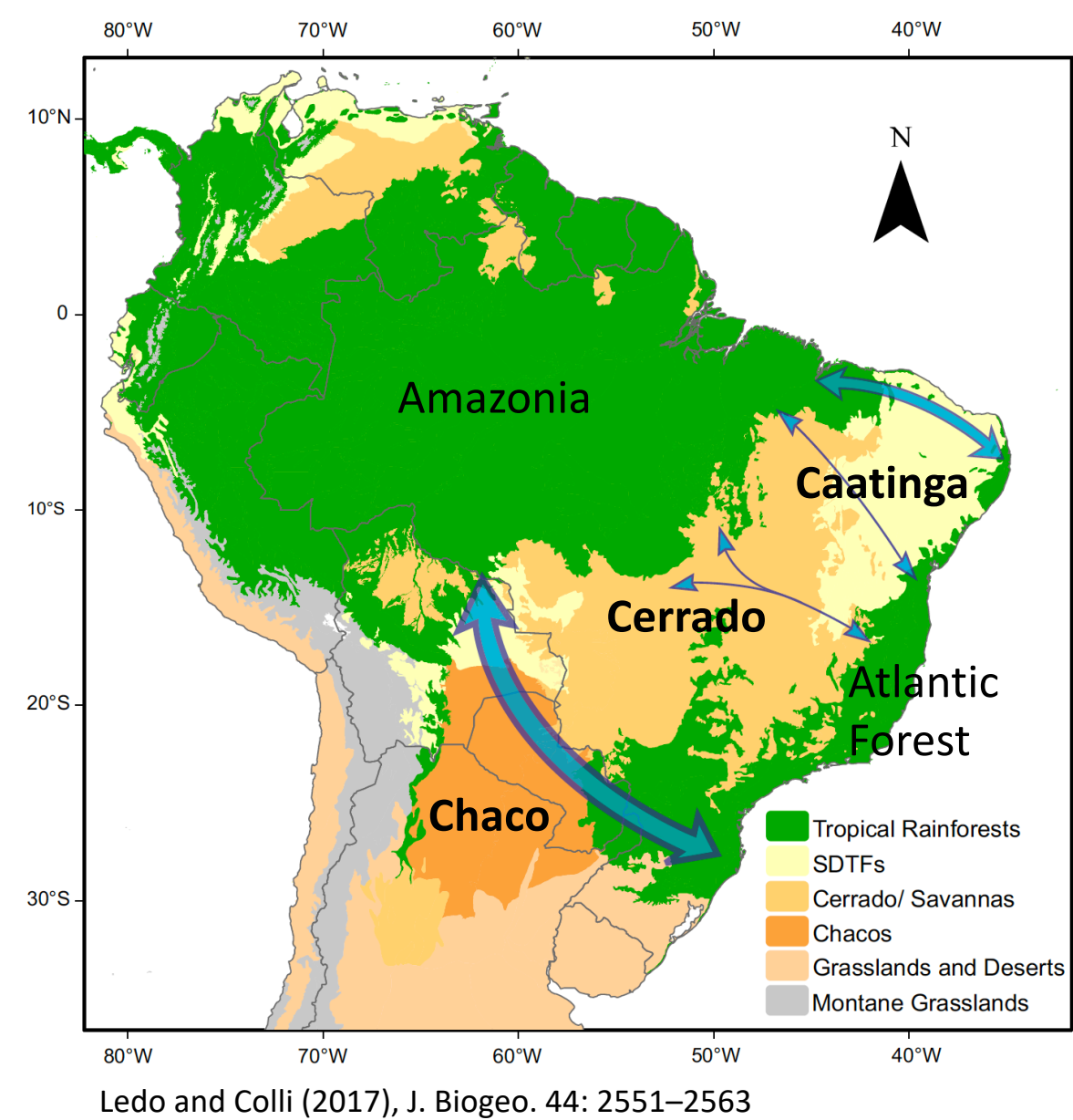
Phylogenetic Endemism of Birds: Insights from the Dry Diagonal

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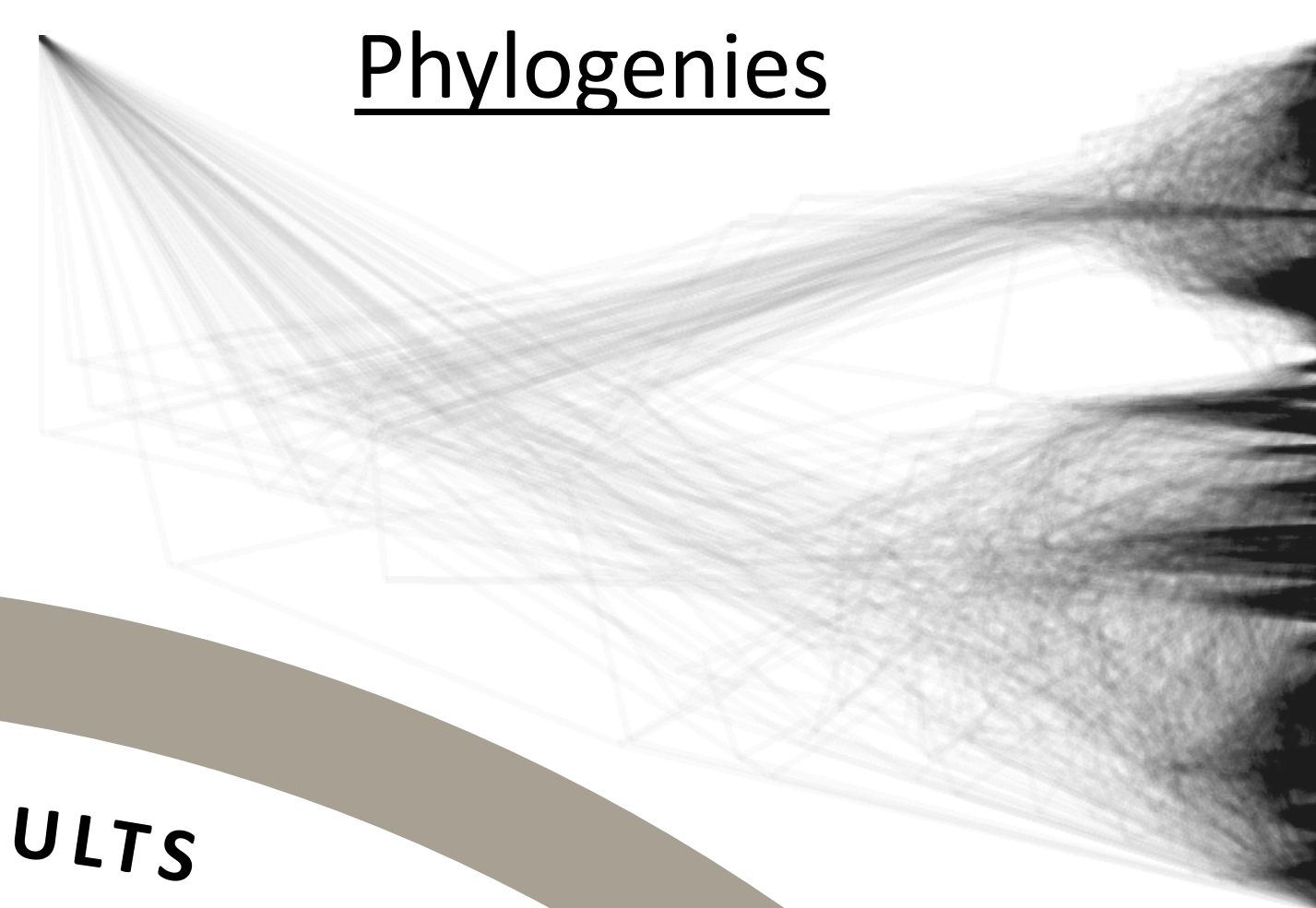
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BACKGROUND

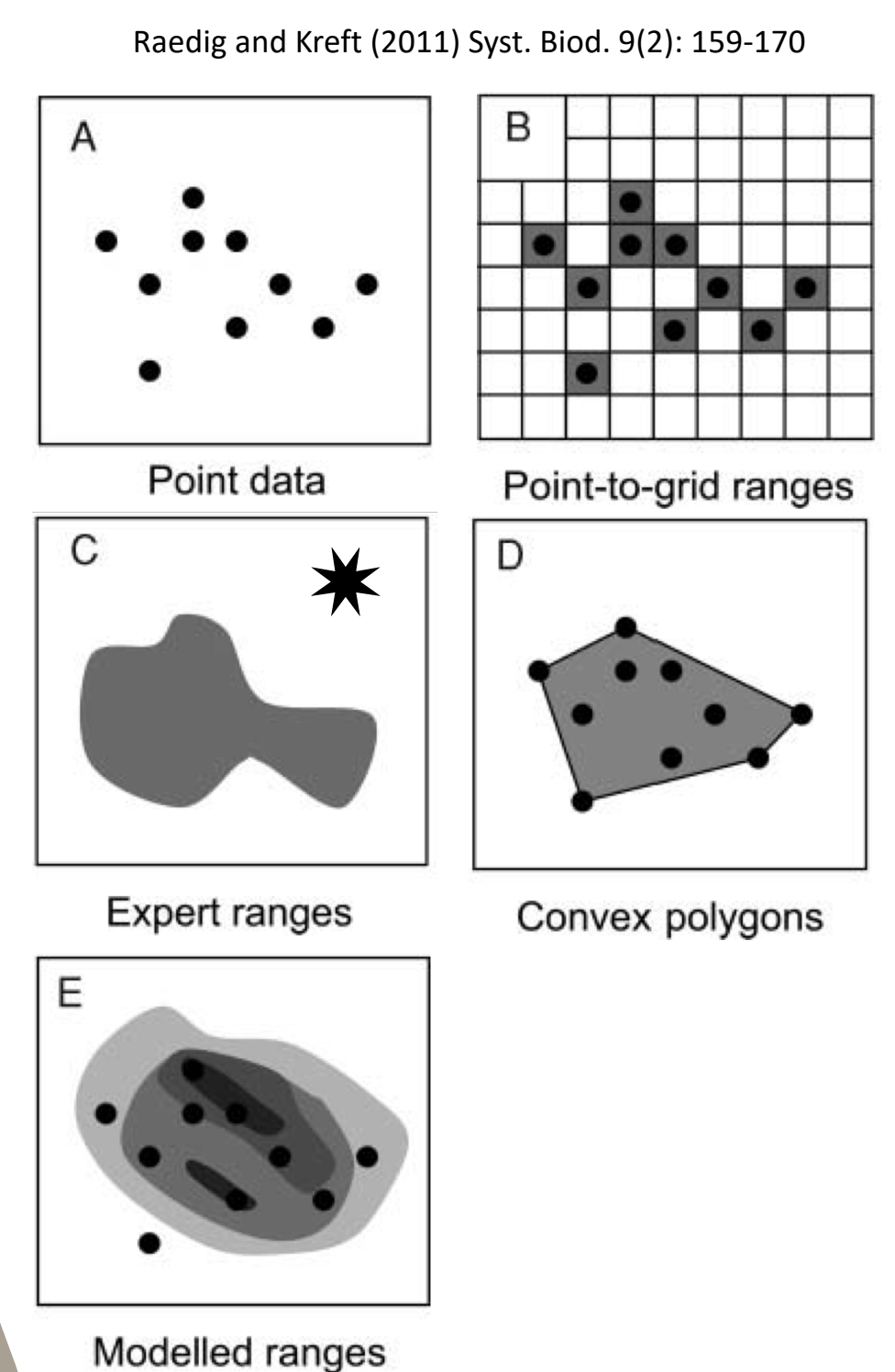


- Dry Diagonal (Chaco, Cerrado, and Caatinga)
- Heterogeneity
 - in species richness across the biomes
 - in evolutionary history

SOURCES OF UNCERTAINTY



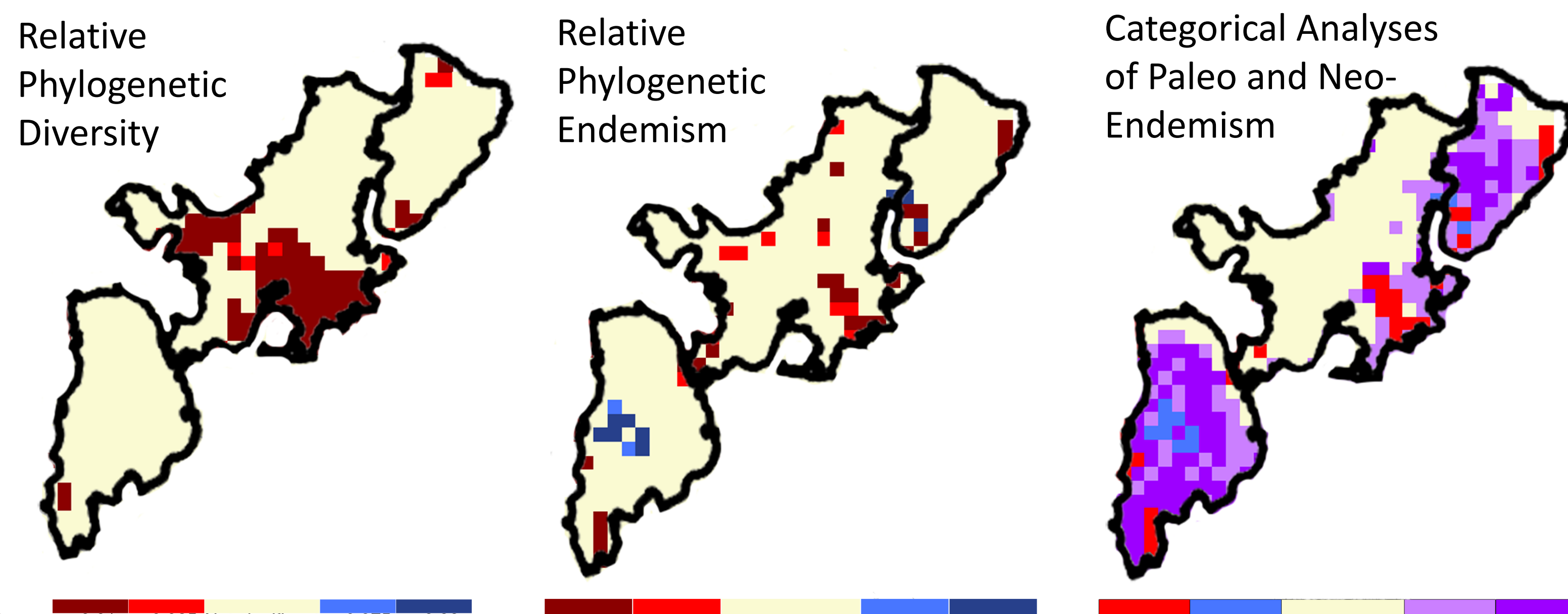
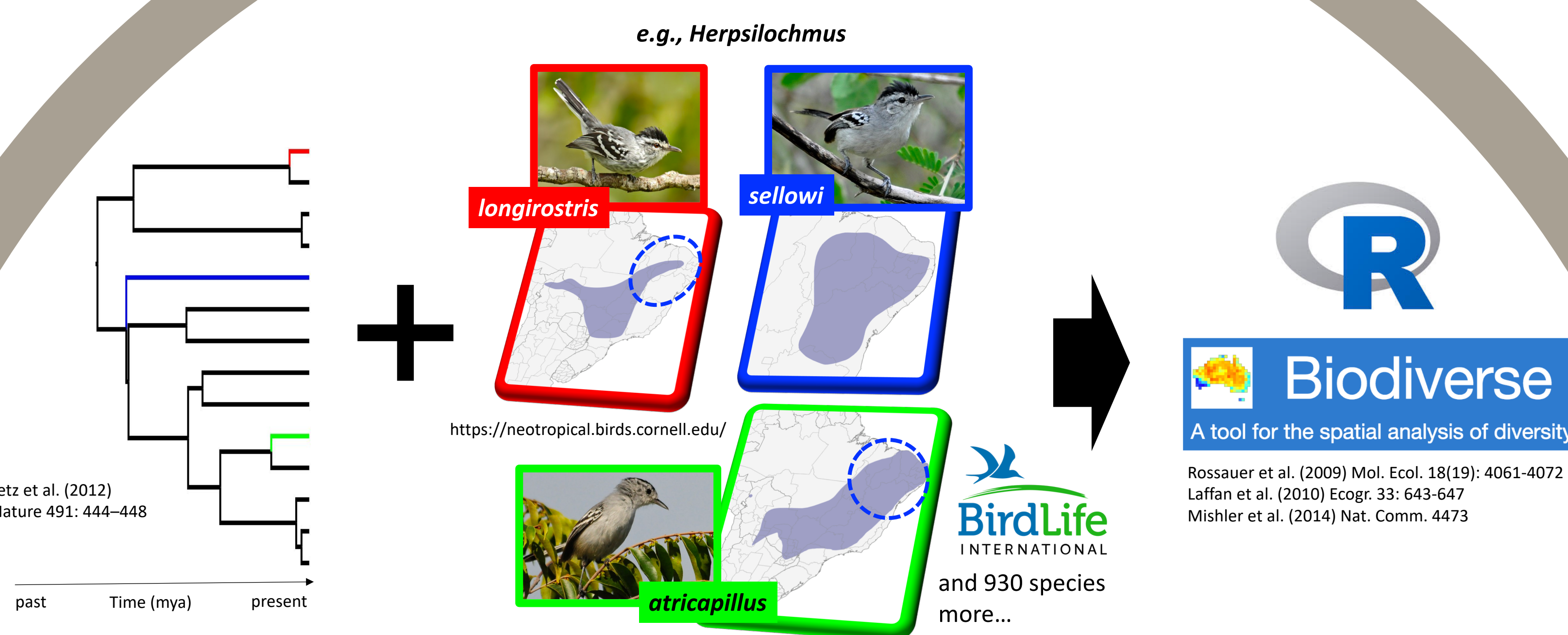
Spatial Data



* type of spatial data used in this study

METHODS AND RESULTS

BIRDS OF THE DRY DIAGONAL



- We used phylogenies and species range maps to identify non-random spatial distribution of phylogenetic diversity and endemism.
- This comparative analysis showed that the Dry Diagonal harbors areas of paleo- and neo-endemism associated with geography and past forest dynamics.

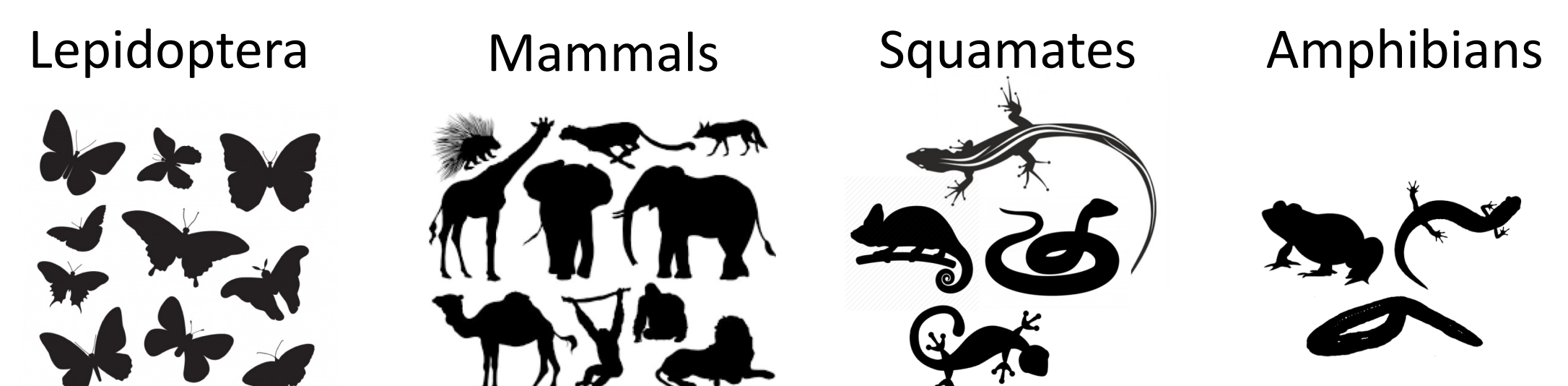
WHAT'S NEXT?

Correlated areas with non-random distribution of phylogenetic endemism with existing protected areas.

Investigate the evolution of species traits and their role in promoting diversification in communities that have contrasting patterns of phylogenetic endemism.

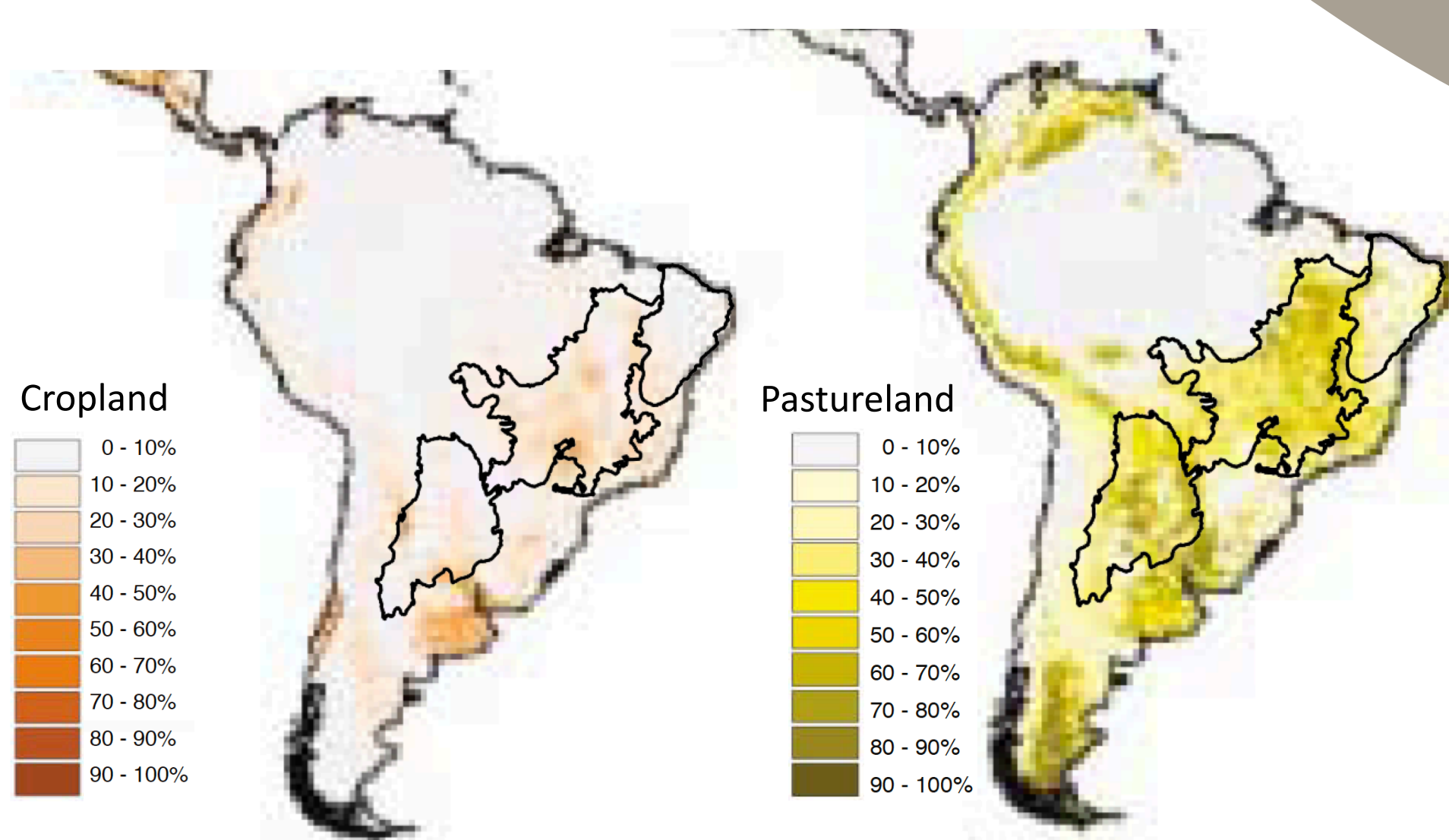
Identify the null distribution by using mechanistic models that take into account community assembly processes and the mid-domain effect.

Expand our analysis to include multiple groups, in addition to birds:



IMMEDIATE THREATS

- Climate change
- Landscape modification
- Politics



Foley et al. (2005) Science, 309: 570-574

Science Bockmann et al. (2018)
Brazil's government attacks biodiversity
Lei da Biodiversidade e Plataforma SisGen: Como não ser multado.

SUPPORT AND FUNDING

