Stochasticity and Evolution in Food Webs

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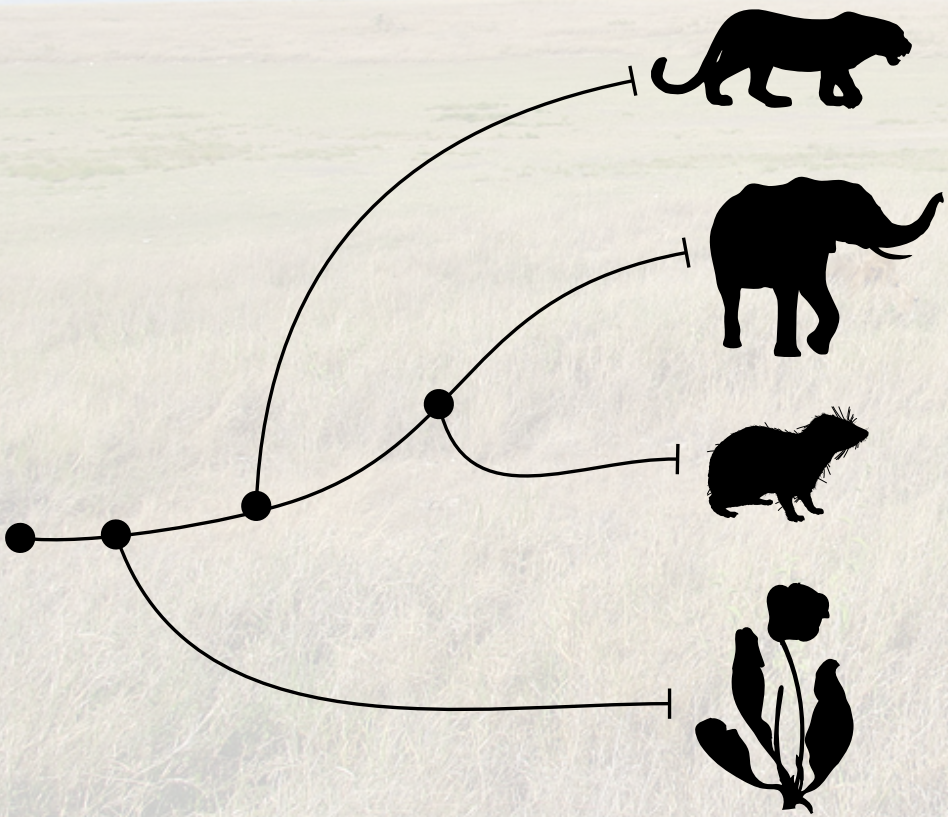
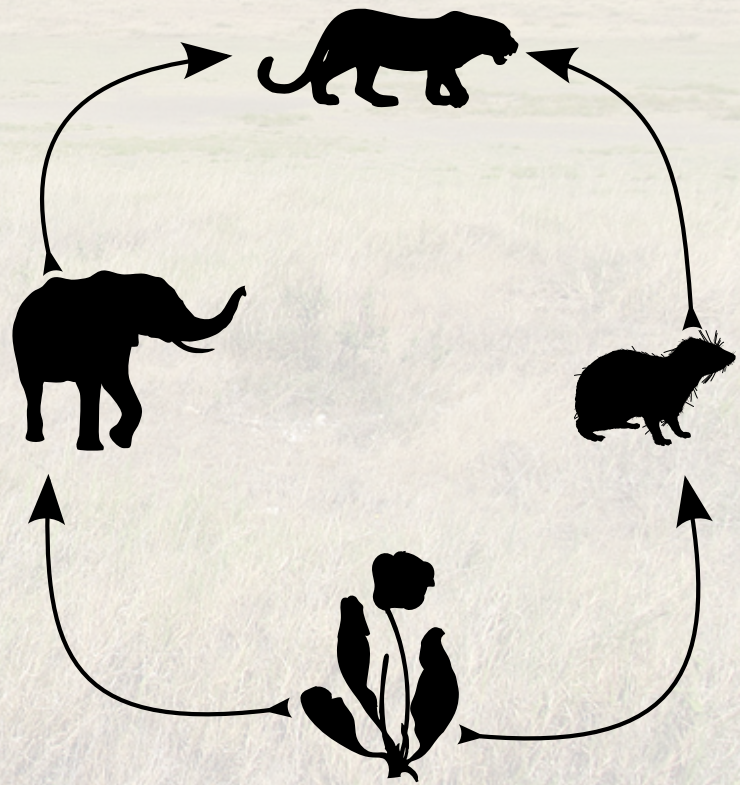
species ARE related

Evolution	Ecology
ONE phylogeny	ONE food web





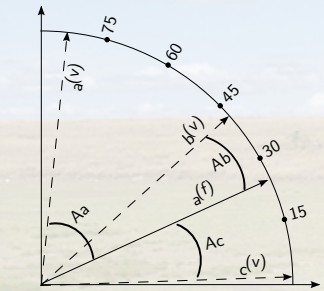
Evolution in/of Ecology

Evolution shaped the stochastic backbones of Food Webs

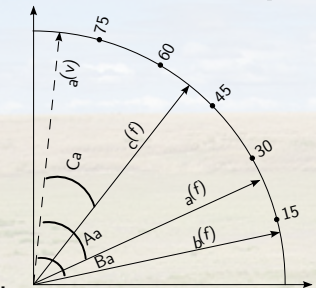
[Two images: Serengeti and Weddell]

Food Webs embedded

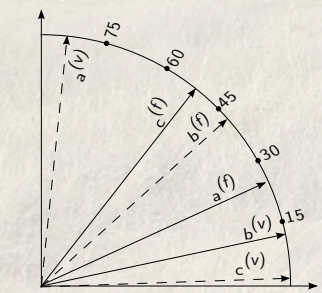
- Random Dot Product Graphs



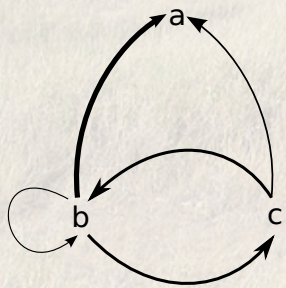
a



b



c



d

Food Webs embedded

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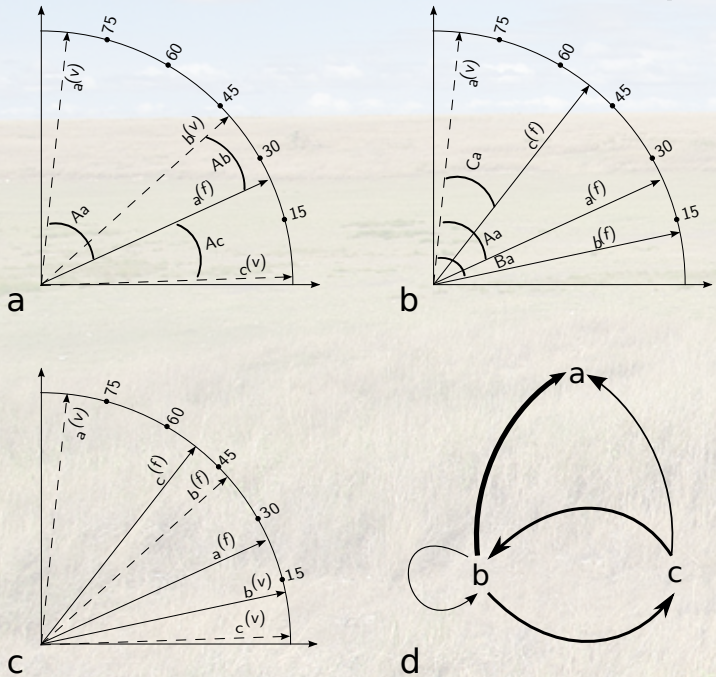

- Phylogenetic vs. Observed traits

$$vcv\left(\hat{X}|\text{ evolutionary model}\right)\text{ vs. }vcv\left(X\right)$$

More questions (than answers)

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- Evolutionary model is inadequate

(Not a) Conclusion

- Spoiler 1: Evolutionary distinctiveness vs. Web Centrality

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- Spoiler 1: Evolutionary distinctiveness vs. Web Centrality
- Spoiler 2: An ecological informed model of species evolution maybe it's (almost) there.

Thanks!

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By the way, I'm looking for a postdoc.