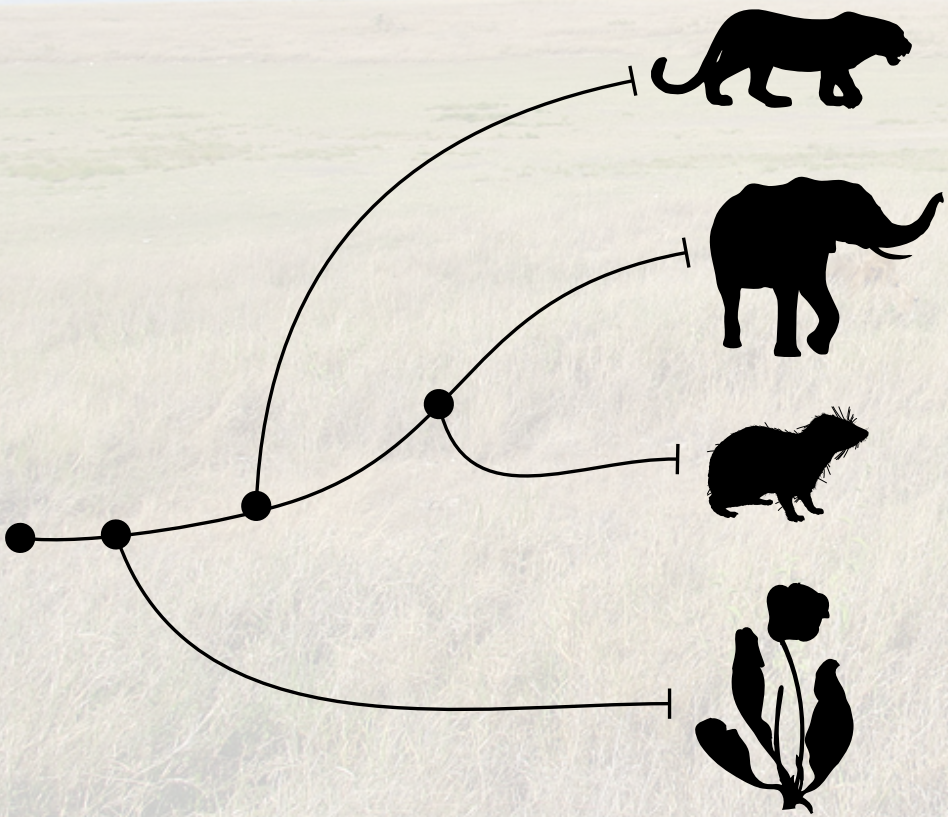
Stochasticity and Evolution in Food Webs

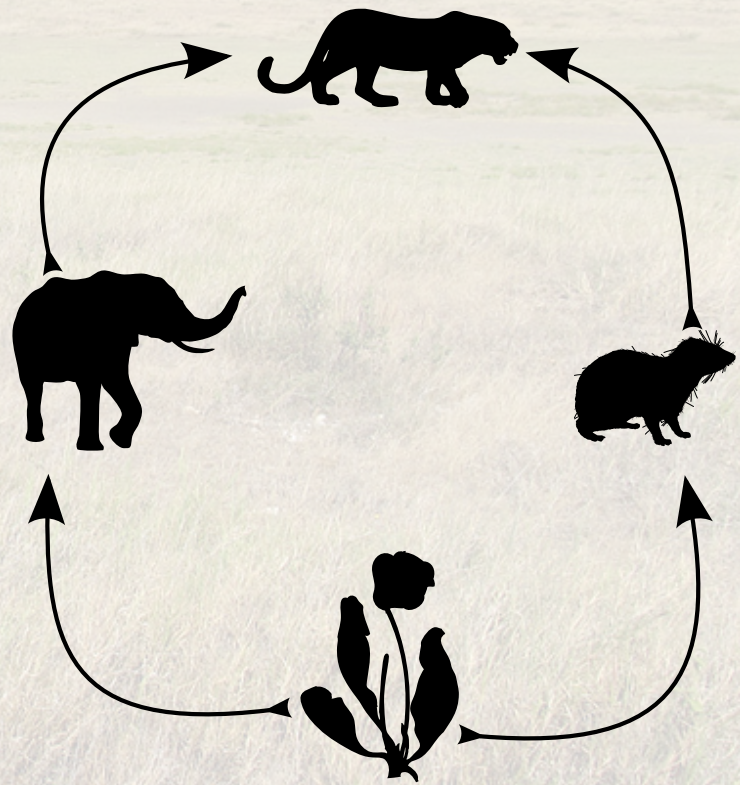
Giulio Dalla Riva
University of Canterbury, NZ

Granada Seminar June 16, 2015

species ARE related

Evolution	Ecology
ONE phylogeny	ONE food web



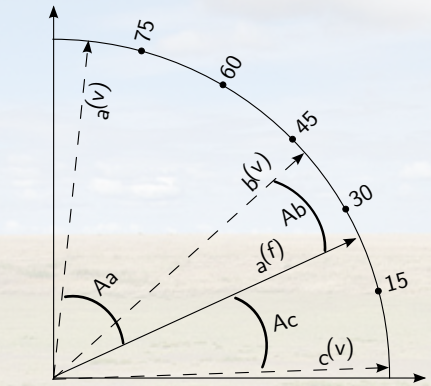


Evolution in/of Ecology

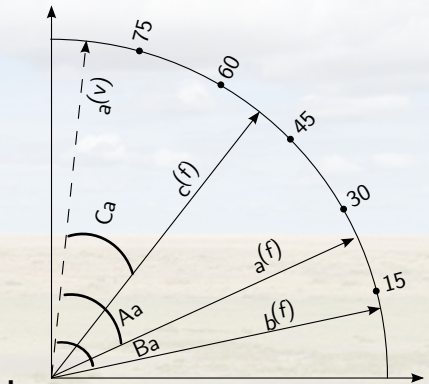
Evolution shaped the stochastic backbones of Food Webs

[Two images: Serengeti and Weddell]

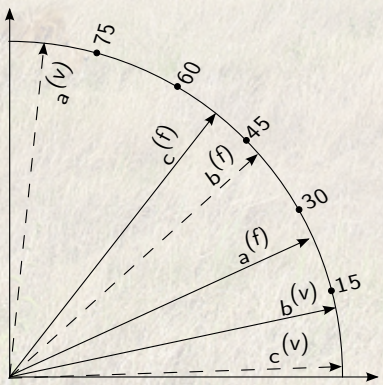
Food Webs embedded



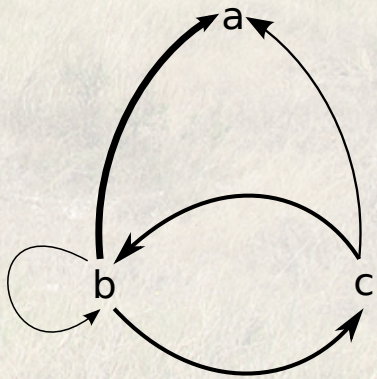
a



b



c



d

* Random Dot Product Graphs
* 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!

Joint work with Daniel B. Stouffer (University of Canterbury)

Many thanks to Mike Steel; Carey Priebe; A. Mooers', D.B. Stouffer's & J. Tylianakis's labs; ...

Funds by the Allan Wilson Centre for Molecular Ecology and Evolution.

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