[Towards a macroecology of dynamics]

At the community scale, macroecology has historically focused on patterns in the states of communities captured at a single moment in time, or aggregated over an extended time period. However, a macroecological approach can also be helpful for identifying and understanding common themes in *how systems change* over time. A “macroecology of dynamics” would help us recognize the predominant trajectories of change across diverse communities; could help us pick up on the conditions or attributes that often accompany particular signatures of change; and could help us develop and test hypotheses for what forces or characteristics might drive communities to change in particular ways.

[Existing examples]

My **impression** is that we have a stronger tradition of

* Documenting how things are changing
* And bits of why

for **species** and **populations**

than for **communities.**

To the extent that we have done synthesis work for **dynamics** of **communities**,

* It has focused on species richness and diversity?

There’s a tension around this step, because I’m not confident that I have a wide view of the state of work on this general topic:

* Synthesis work on **community** level change
  + BioTIME
  + Considerable BBS work

And I have an intuition but not a specific articulation of, why the community scale is an important or valuable perspective?

[Limiting reagents]

* Data: Community-level timeseries are scarce, particularly if we are interested in currencies beyond the number of individuals per species.
  + BioTIME, LTER data, the MATSS compilations are valuable resources
  + We can use metabolic scaling to estimate other currencies
* Analytical methods: We need ways to describe the dynamics of interest that are generalizable but are faithful to the main signal (i.e. don’t over simplify)