

# Howard Harper



**Then**

**DSDP LEG 56 – JAPAN TRENCH SITES**



**Now**

**SEPM Executive Director and UTD Lecturer**

# Basic CV

## ▶ Education

- ▶ BS - Geology - The Ohio State University
- ▶ MS - Geology-Statistics - Louisiana State University
  - ▶ Thesis - Statistical evaluation of the distribution of Miocene-Pliocene siliceous phytoplankton, D.S.D.P. Hole 71, equatorial Pacific
- ▶ PhD - Geoscience - Harvard University
  - ▶ Dissertation - The Miocene-Pliocene Boundary in the North Pacific Region

## ▶ Work

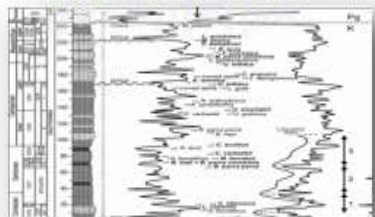
- ▶ Atlantic Richfield (ARCO) Research and Technology
- ▶ Society for Sedimentary Geology (SEPM)
- ▶ UT Dallas
- ▶ Areas worked geologically
  - ▶ GOM, East Coast US, West Coast US, Japan, Sakhalin (Russia), North Sea, Chile, .....

## ▶ Memberships

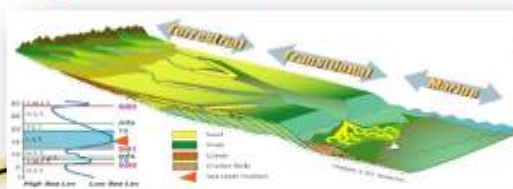
- ▶ SEPM; GSA Fellow; AAPG; correspondent (AGU, IAS, GSL, .....
- ▶ Commissioner - North American Commission on Stratigraphic Nomenclature

# Research Arc

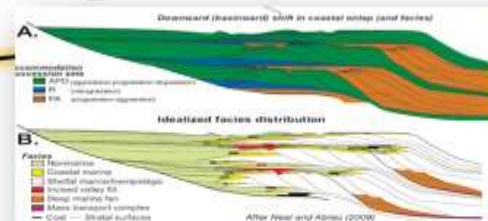
## Quantitative



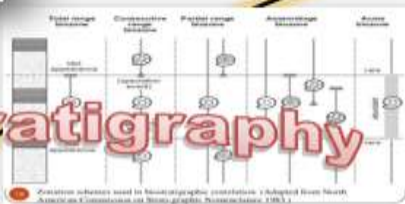
## Depo Systems



## Sequence Strat



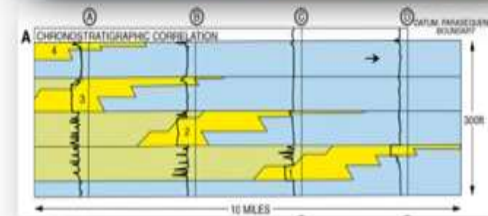
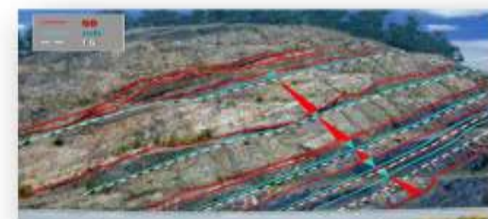
## Biostratigraphy



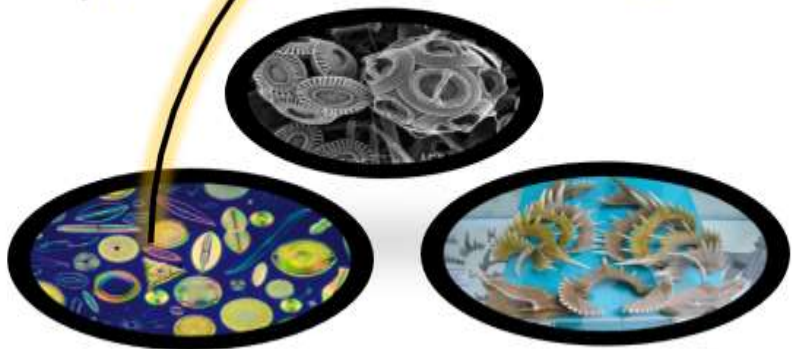
## Time Scale



Theory  
↓  
Reality



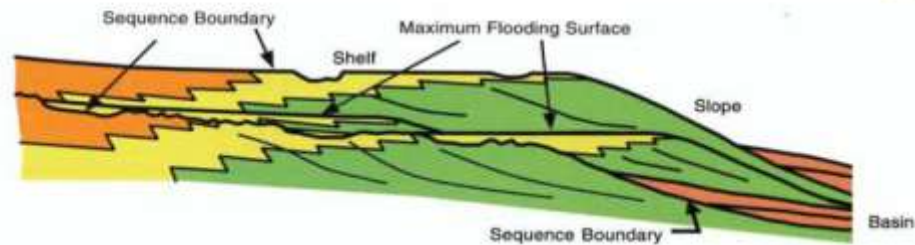
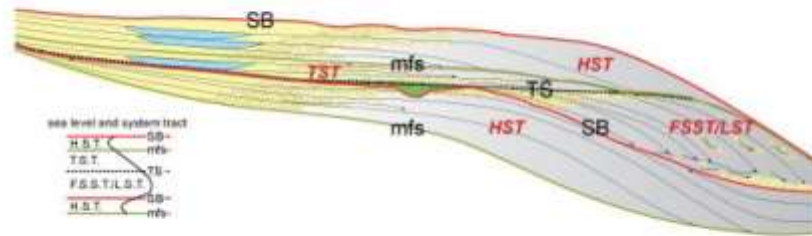
## Micropaleo



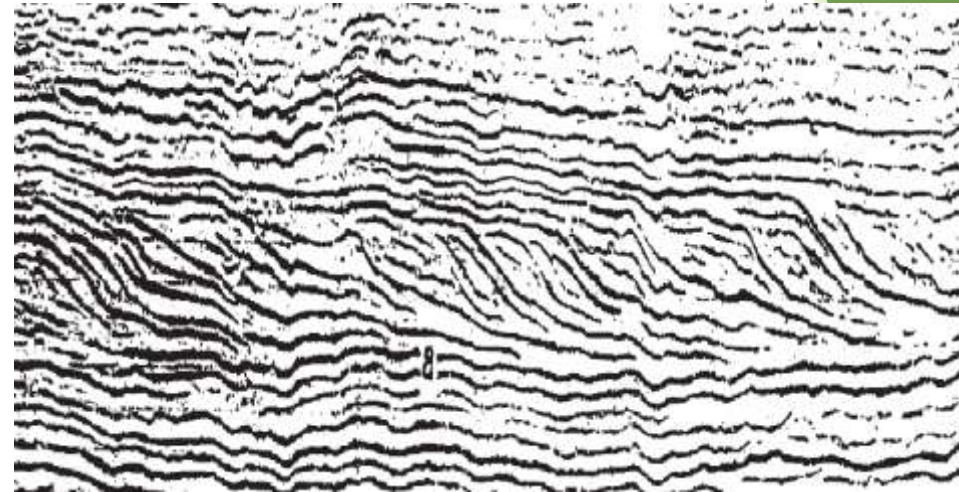
# Deposition and Sequence Stratigraphy

- ▶ Theory vs Reality / Models vs Application

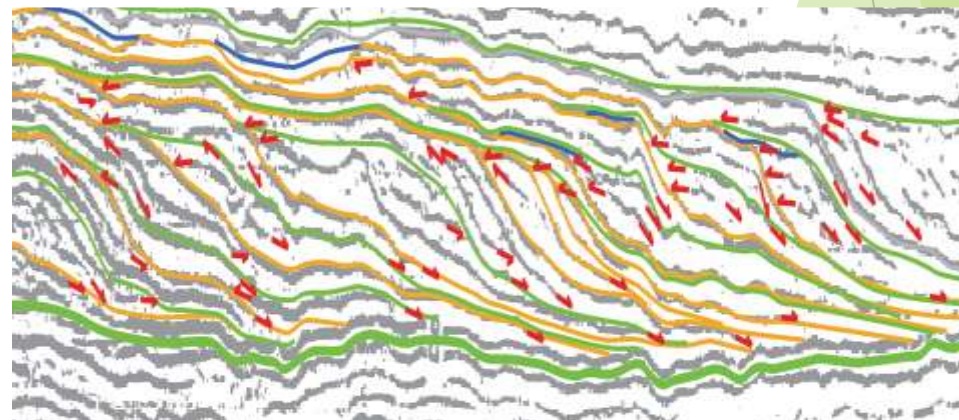
## The 'Slug' Model



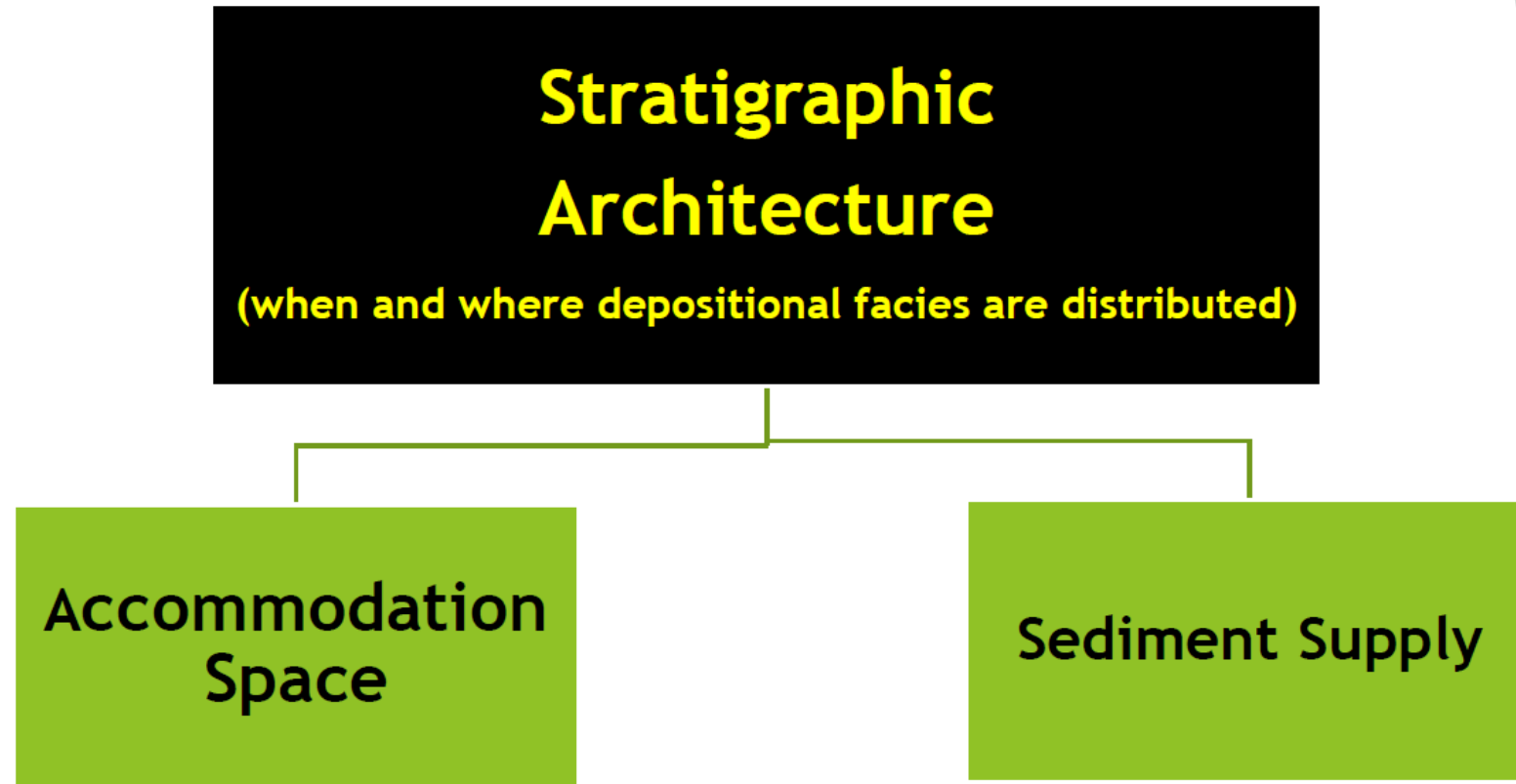
## Real Seismic



## Interpretation

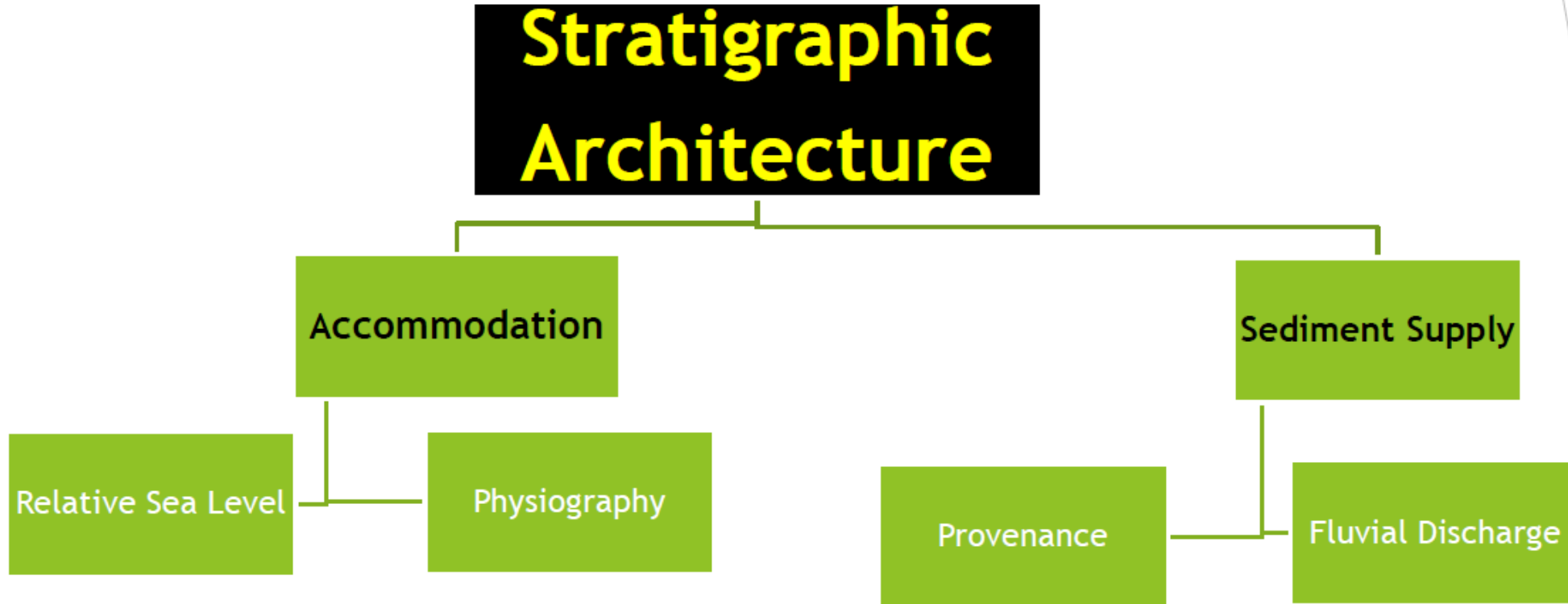


# Theory vs Application



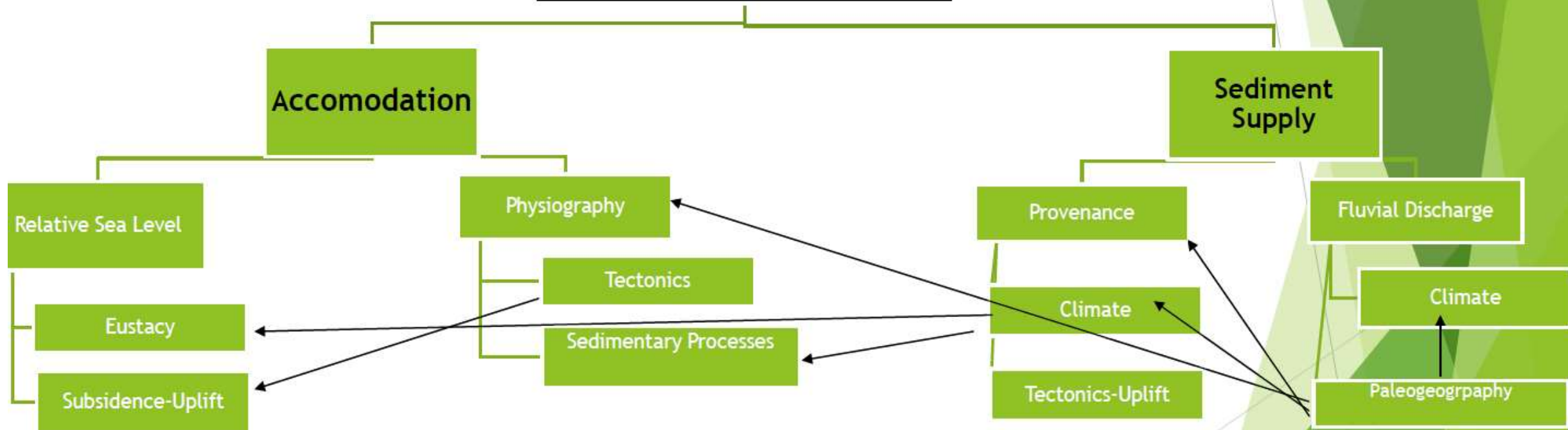
So what controls these two?

# Variables Affecting Stratal Sequences



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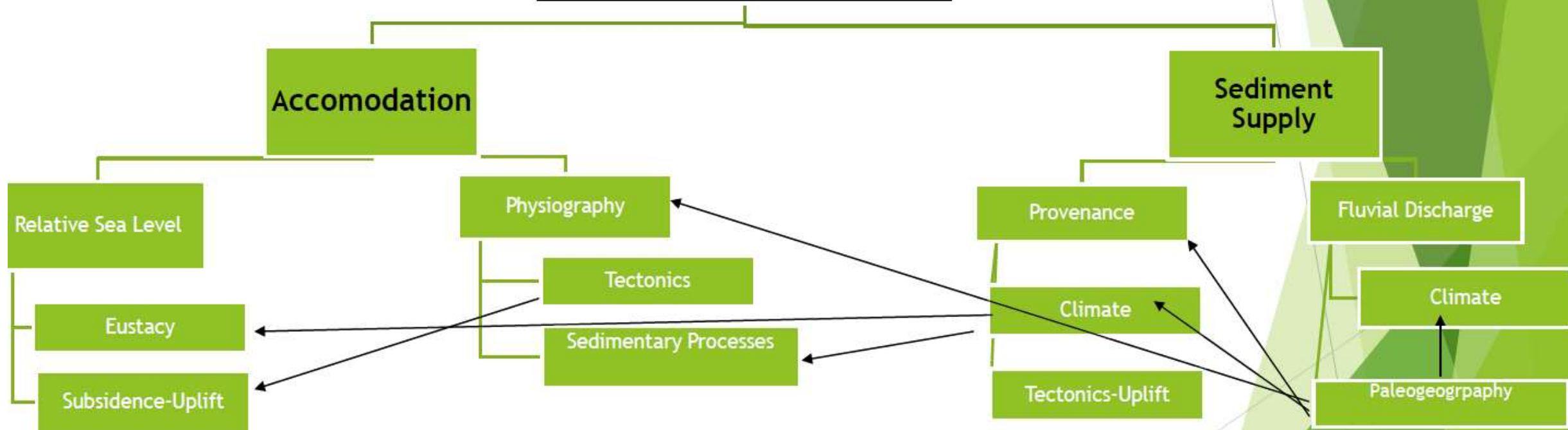
## Stratigraphic Architecture



Earth systems with multiple feedbacks

# Variables Affecting Stratal Sequences

## Stratigraphic Architecture



Earth systems with multiple feedbacks

**Every Basin and every part of every basin is a unique set of these variables!**



# Rest of my Story



Radical Rodder

Cherry St. Western Pleasure  
World Champion

