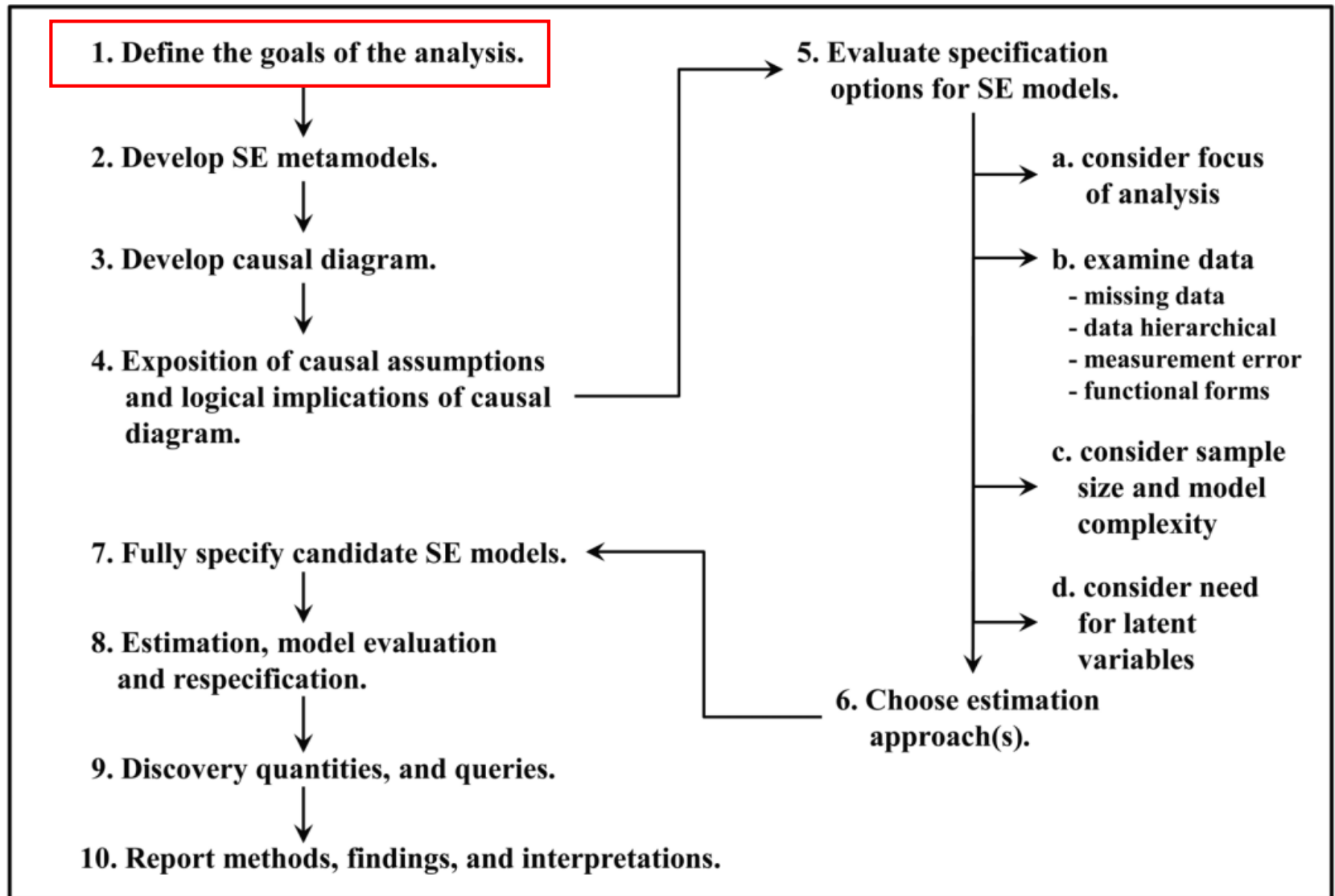
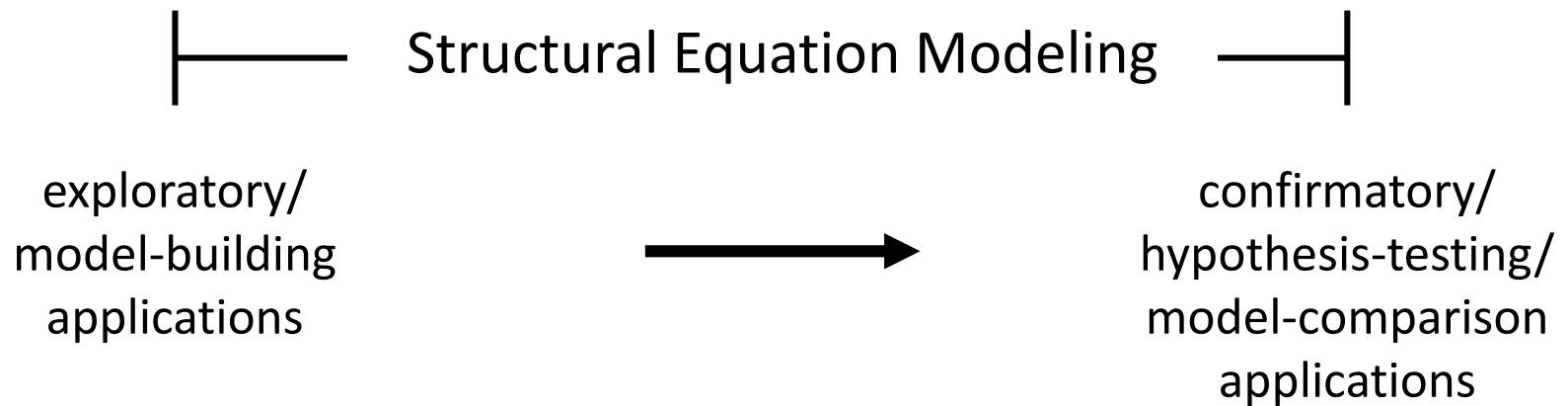


3. The Process

3. The process



3. The continuum of SEM



It all starts with an underlying model!

3. Exploratory SEM

- Evaluate *multiple models*, tweaking along the way
- Suspected causal relationships, testing if paths are *significant*
- Results should be proposed as '*preliminary*' until further confirmatory testing can be conducted

3. Confirmatory SEM

- Evaluate *a single model*
- Little doubt about causal relationships – interested in *strength* of relationships
- If model fails, go to *Exploratory*
- *Nested comparisons* can test multiple hypotheses about how systems work (model selection)

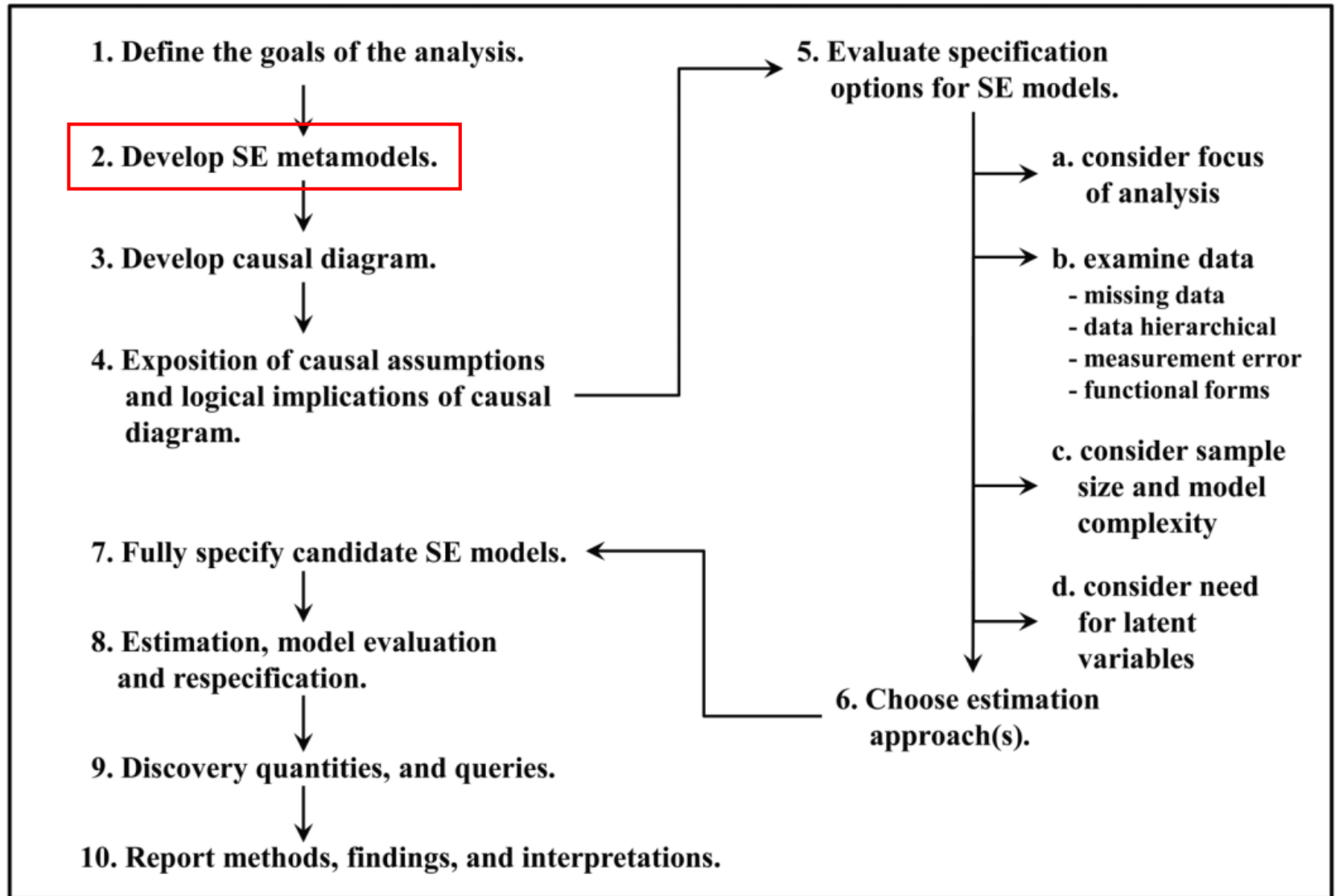
3. Exploratory vs. Confirmatory SEM



3. The truth is out there

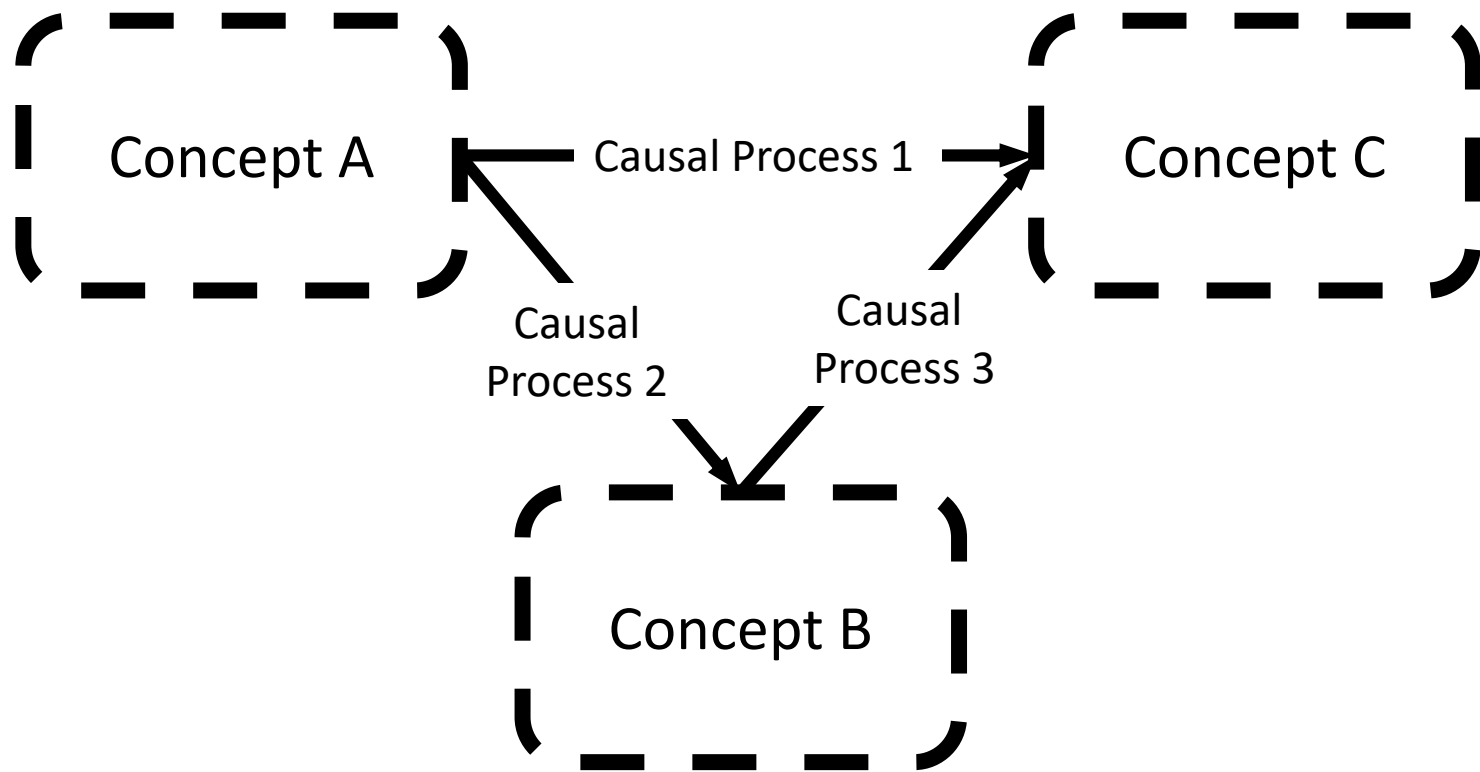
- Often have some (strong) sense of causal structure, may need minor tweaking to improve model fit
 - Generally a consequence of correlated errors generating unexpected relationships
- *Everybody* plays with the model a little bit

3. The process

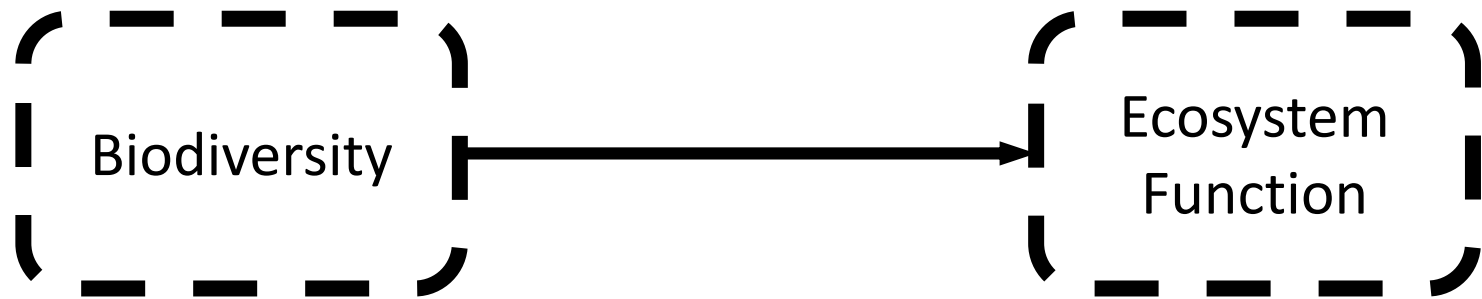


3. What is a meta-model?

- Start **BIG**
- Identify the general concepts and their relationships

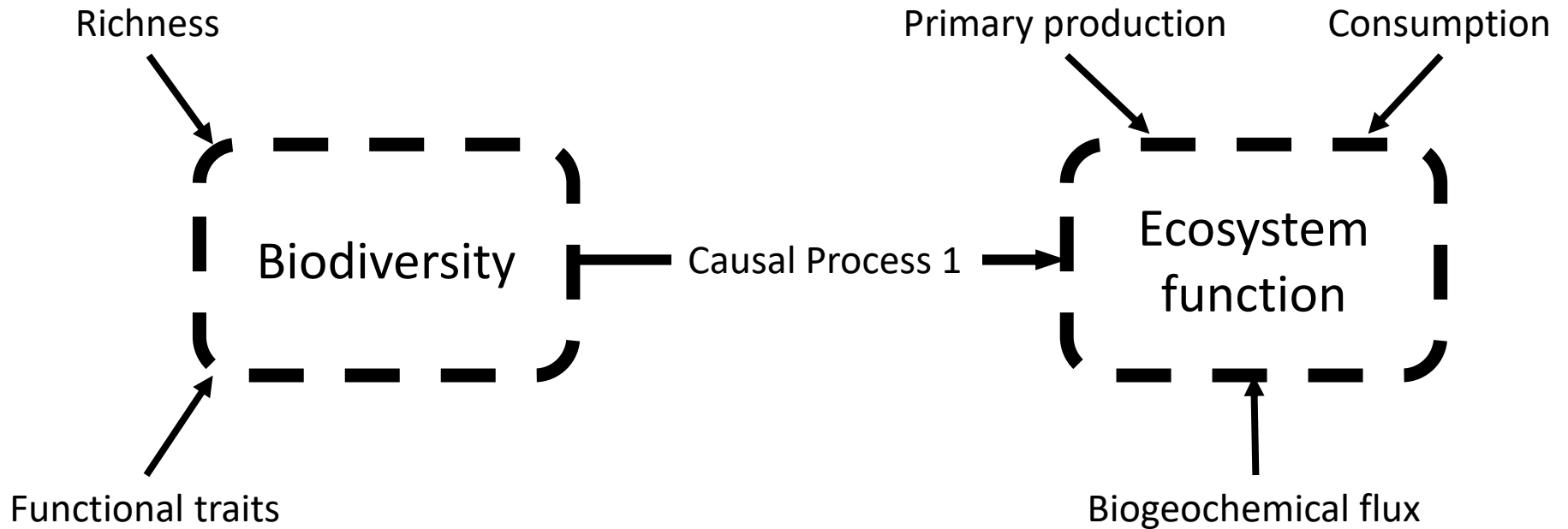


3. My meta-model

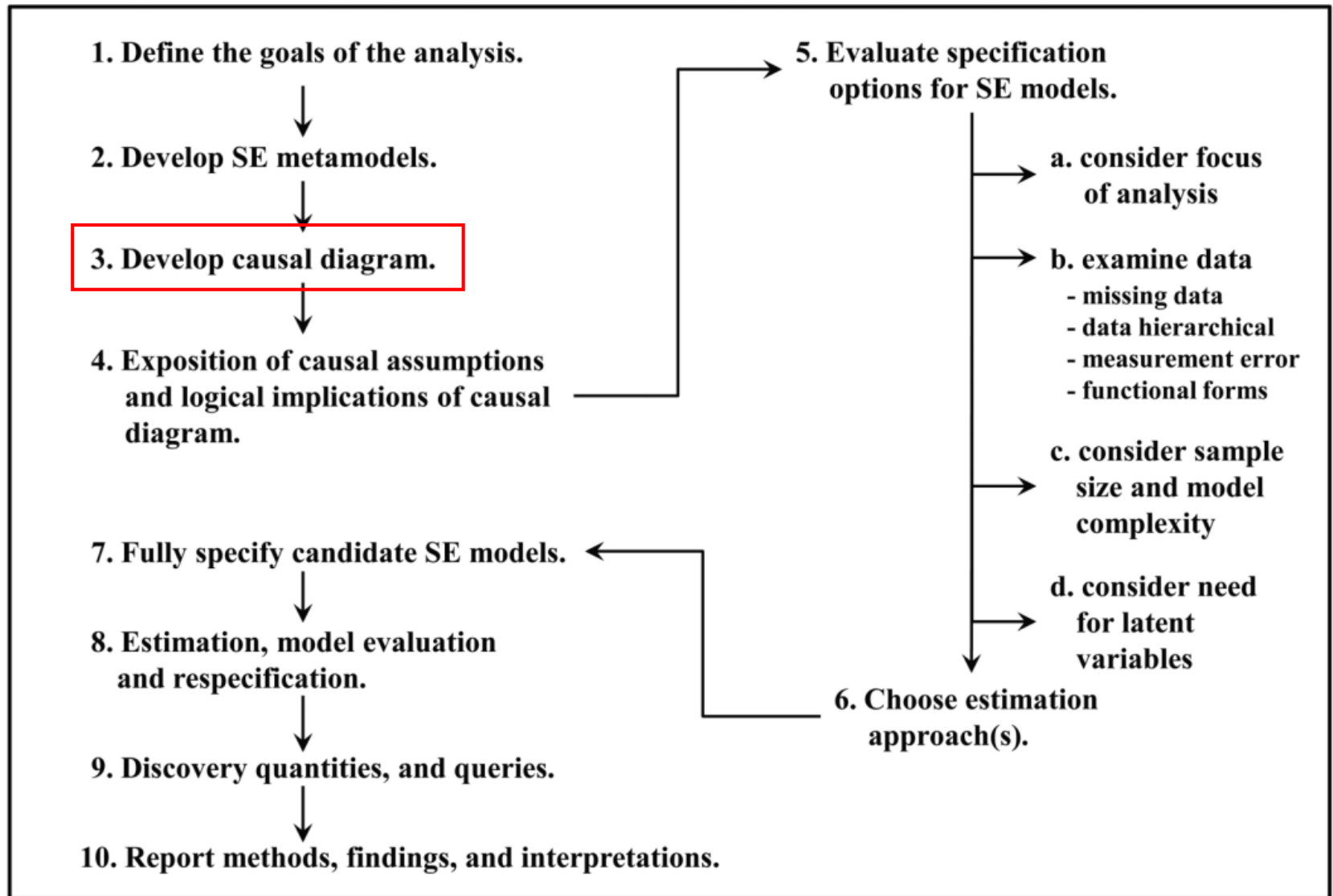


3. What is a meta-model?

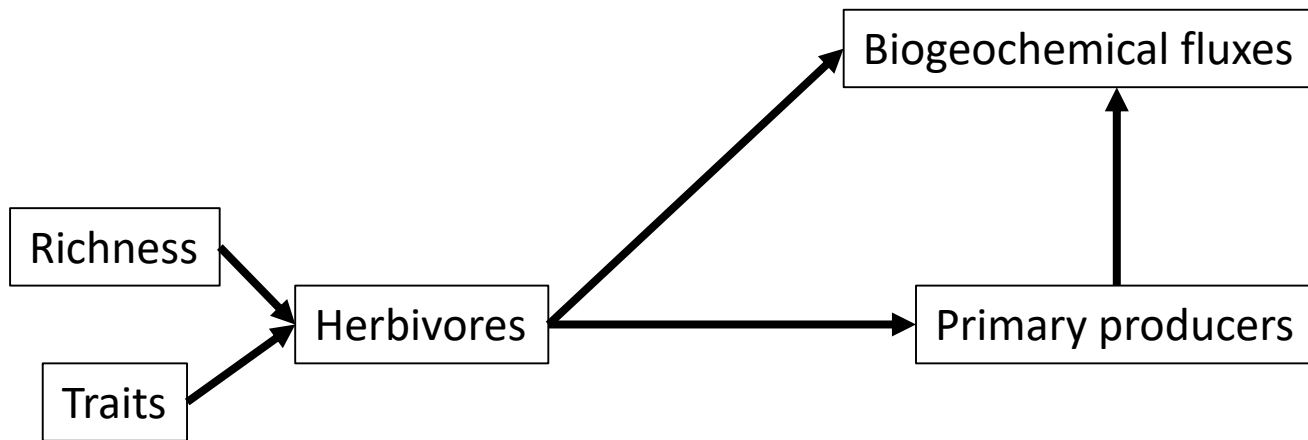
- Focus the question and begin to build out the model



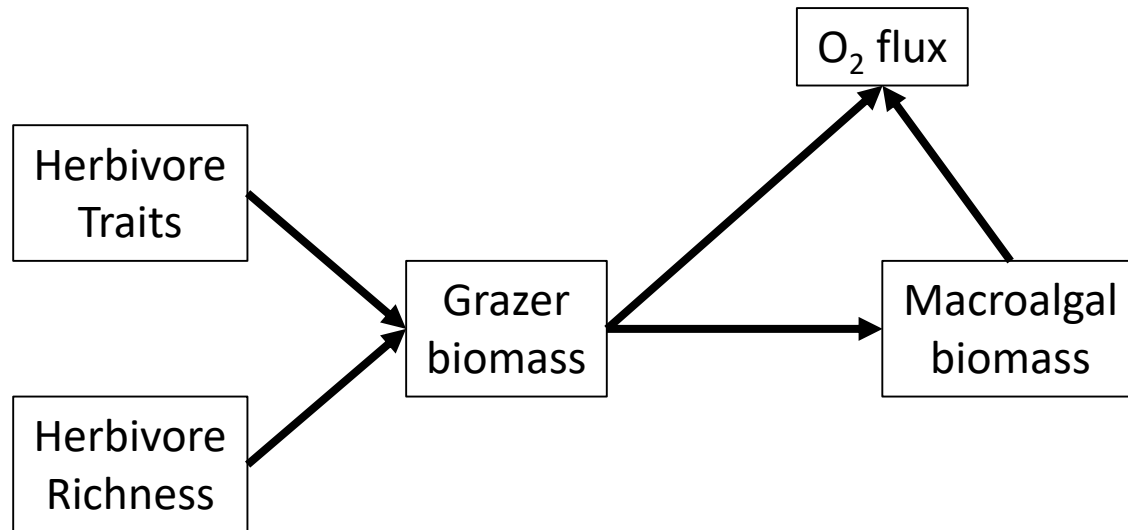
3. The process



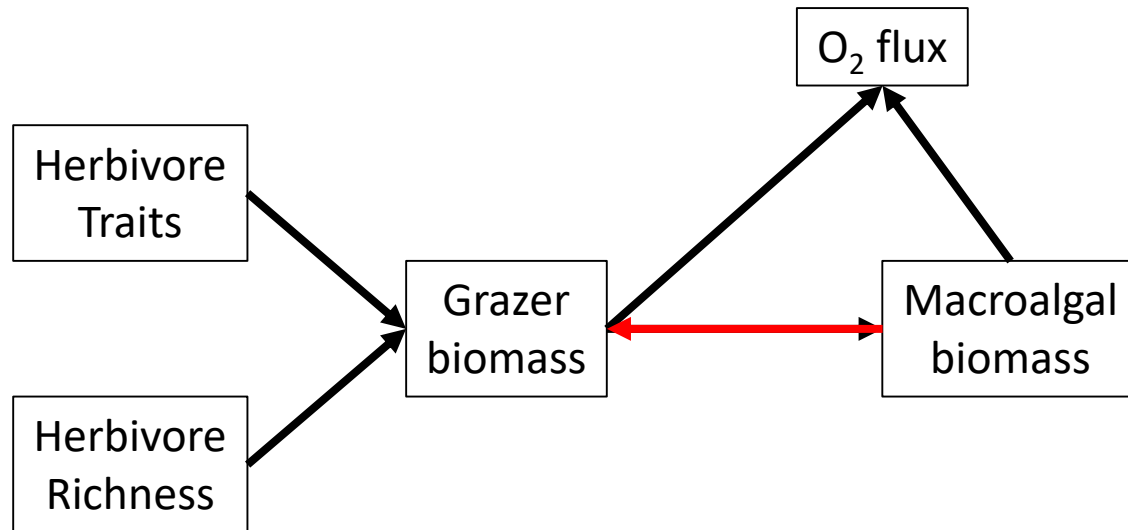
3. Build out the meta-model



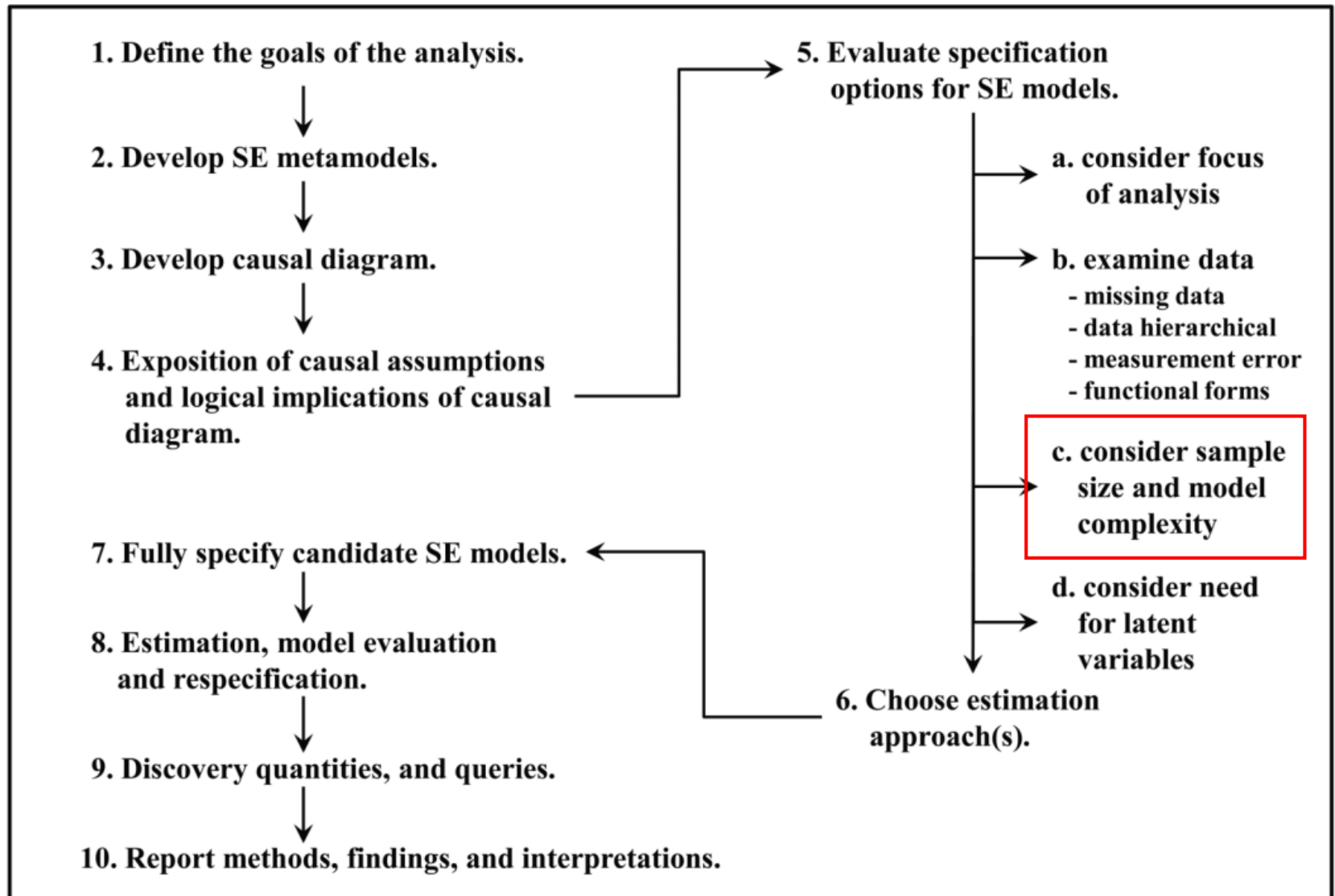
3. Populate the variables



3. Consider alternate models



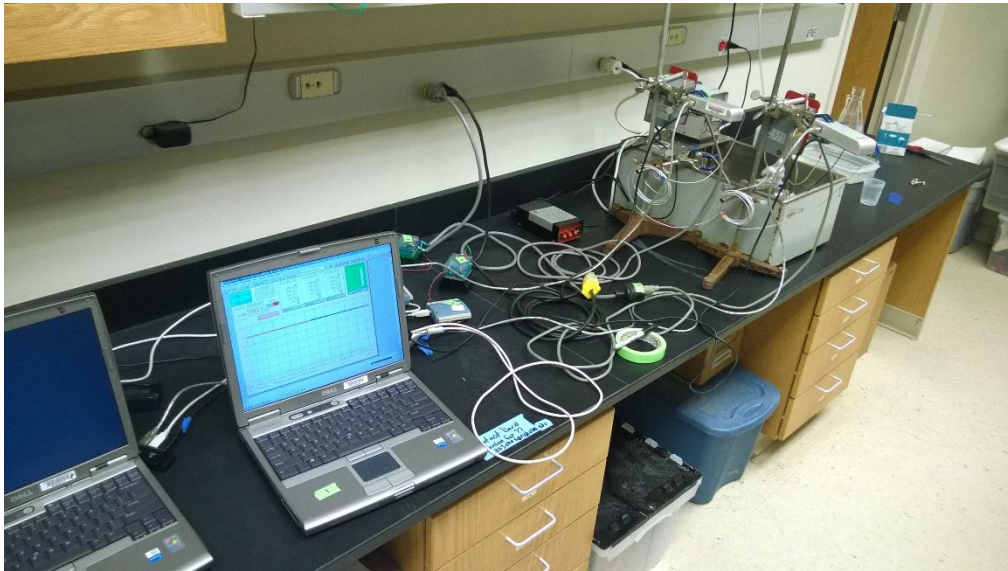
3. The process



3. Before you start...

- Justify the meta-model: literature, data, etc.
- Write it down! (Reviewers – aka, me! – love this)
- Consider complexity beforehand: simplify?
- Make up data and fit your SEM!
 - If fails, consider simplifying, running more replicates, etc.

3. Collect the data!



ACTIVITY

- Choose a dataset
- Come up with the meta-model
- Derive the full SEM
- Share!