

- Theoretically, any degree-based metric has *no necessary* relation to a network's structure.
  - There are many graphs with *identical* degree distributions but very different topologies (enter ergm).
- Preferential attachment → scale free
  - Not (necessarily) vice versa
- Even finding a power-law degree distribution (but see previous slide), isn't enough to say much about global network structure.
  - (e.g., If *any* non-degree based patterns underlie network formation processes.)