

# Systemic and Scientific Methods

**Scientific Method**

- hypothesis  $A=B$   $A>B$
- controlled experiments
- document + data
- conclusion tied to hypothesis
- Establish causation
- quantify + publish
- replicability for **VALIDITY**

• hundreds of years

• prove tiny bits about material objects

• build foundation of firm knowledge

• Lab protocols + Standards

**SYSTEMIC METHODS**

- pre-hypothesis ~ open & exploratory
- rich pictures of the whole issue - expansive
- identify patterns + emergence
- process standard not product standard
- diverse participants accelerate knowledge-sharing
- aligned with nature of complex issues - ever evolving parts & opportunities
- disciplined and principled practices
- generate, refine + test improvements + pathways