## **Specification: Historical**

- Original approaches considered equivalence only
  - Model M<sub>1</sub> implements model M<sub>2</sub> exactly
- Duality between model and specification
  - The specification is itself a model
  - But the big innovation is that it can be a partially specified model
    - And can have loose definitions of timing, e.g. something eventually happens
  - Specification is typically higher-level, abstract behavior
  - Language considerations
    - Specification language should be sufficiently different from the implementation language
    - i.e. can always prove that  $M_1 \equiv M_1$ , but that's useless