A Concrete Proposal

- Start with higher order logic
  - simple type theory
  - e.g. HOL logic, Isabelle/HOL or PVS logic
- Add set theory
  - axiomatise a type V using ZFC axioms
- Embed ‘specification logics’ into set theory
  - typechecking derived – not ‘hardwired’
- Case studies
  - Simply typed higher order logic
    * proof of concept
  - add dependent subtypes and record types
    * to show ‘soft’ types are flexible
  - add Σ and Π types
    * to show can get beyond simple types