

Worse-is-better

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CS380L

Worse is Better:

Simplicity, Correctness, Consistency, Completeness

MIT / “The right thing”

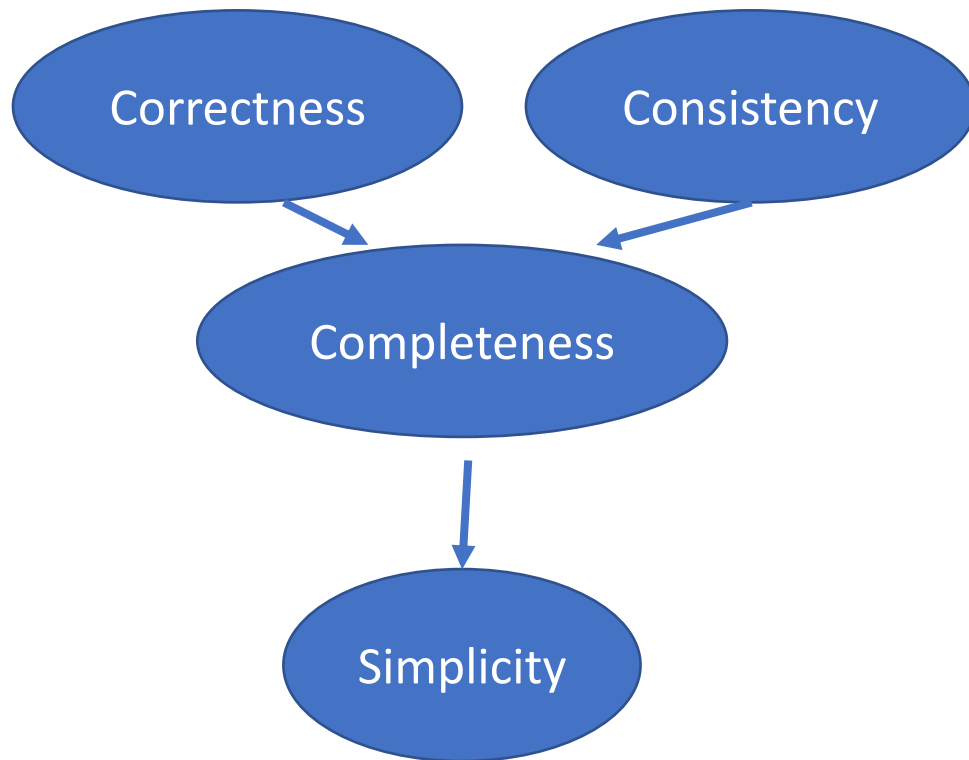
- Simplicity good
- Correctness: incorrectness not allowed
- Consistency: more important than simplicity, less than correctness
- Completeness: more important than simplicity

New Jersey / “Worse is Better”

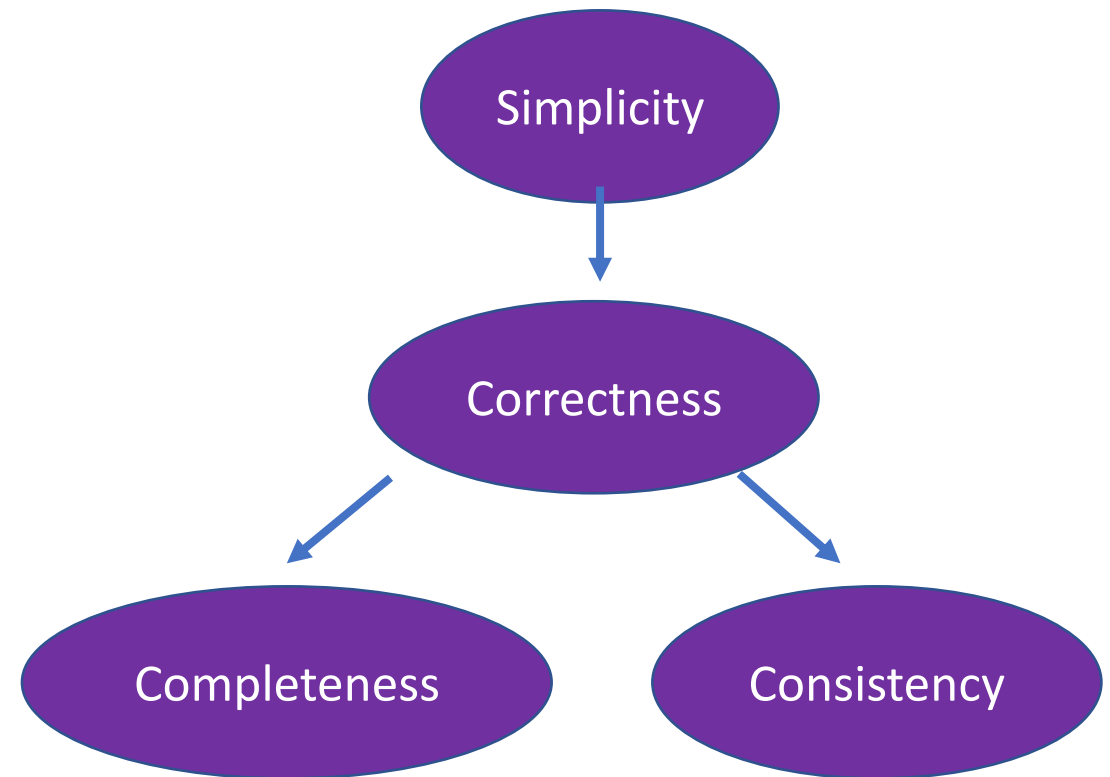
- Simplicity is most important
- Correctness: simple better than correct
- Consistency: drop things that introduce inconsistency
- Completeness: more important than consistency, less than simplicity

MIT vs New Jersey: partial orders

The right thing



Worse is better



Why is worse is better better?

- Who wants a simple but incorrect system?
- Implementation simplicity → easy to port → better adoption
- Programmers conditioned to trade safety/convenience for performance and reuse.
- Better to get half the right thing fast so it spreads.

Worse is better examples

- UNIX/C
- iOS?
 - Originally didn't have cut & paste
- x86_64 vs Itanium?
- ARM?
 - debuts without media acceleration instructions
 - Adds them later
- NoSQL? (Cassandra, MongoDB)
- MapReduce?