Engineering Sermon 1: Simplicity

1.1 Motivation

Simplicity is an absolute good, not a tradeoff.

Lots of forces against simplicity:

Intelligence ?= complexity

Marketing -> complexity is good (more features)

I don't buy it! Engineering -> make things simple!

1.2 Reasons for simplicity

1. Can't sell it if you don't understand it (or if you can't build it!)

2. Easier to build, easier to maintain

Fundamental problem with computer systems. Hard to understand them.

Paradox: Must make things simpler to make them more powerful.

3. Faster -- again paradox. Hard to make big, complex things go fast.

4. Cheaper -- quicker to market

1.3 How do you make things simpler?

0. Humility! Use creativity to simplify, not to show off!

1. Don't accept complexity Design then code

2. Be extremist. Max simplicity