- automatic gen of stubs (NFS, RMI, SOAP/XML).
- RPC looks like procedure call, appears to be transparent, but it isn't.
- Client must be prepared for server failure!

NFS
- split F's in client tensor
  - rename (e.g., "a" to "b")
  - different semantics
  - less robust
  - bad for performance (e.g., x-bar).
- marshaling and other
- marshalling clients may be
  - always have client version

mainly transparency difficult.

RPC semantics
1. at least once (casual - persistent).
2. at most once (error: don't know what happened).
3. exactly once (close to synchronous)

NFS
- split F's in C + S
- transparency violated
  - on failure (rename("a", "b")),
  - performance (e.g., X-bar) close
  - concurrency
  - security.