Rules and Complexity

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Thought Experiment #1

Imagine that our 125,000 pages of health care legislation were perfectly encoded into an automated rule system, monitoring every interaction to insure that it perfectly follows the rules. Would our health care system

A) work perfectly
B) get better
C) get worse
D) collapse
Thought Experiment #2

If you didn't answer "work perfectly" to the preceding, then how many more pages of legislation do we need to write until we get it perfect?

A) 100,000 pages
B) 500,000 pages
C) 1,000,000 pages
D) Can't get there from here
Toaster-Like Complexity

- Toasters can be taken apart and reassembled
- Replacing broken cord can repair toaster
- Toaster is exactly the sum of its parts
- Toasters don’t make baby toasters
- 10 toasters in a room = 10 x 1 toaster
Cats are Different

- Dissected cats can’t be put back together
- Replacing lost tail is unlikely to benefit cat
- Living cat is more than sum of dissected parts
- Cats have kittens, fight, get sick, evolve
- 10 Cats in room: who knows what will happen?
Fundamental Conflict: Health Care is Cat-like BUT We’re using Toaster-like thinking to deal with it
Some solutions

- Move to higher level of abstraction - meta rules
- Ensembles rather than Enterprises
- Transformations rather than Transactions
- Future Binding – bind today to tomorrow’s meaning
- Pattern language to define generative flows
- Create path of least resistance, rather than “one correct way”
The things that *don’t* happen can be the most important

- Transactions only track things that happen
- How do we track what doesn’t happen?
- Pendex - Pending Index
- Build anticipatory model of expectations
- Future “pull” vs. past “push”
- Expectation failures are learning opportunities.
- Associative State management
- Pattern Language to define expectations