



Adventures in Participatory Nation-Building

Eleanor Saitta, CAST
@dymaxion | @ConstDotIS

Systems and Systems Failures

- **The complexity of our systems mirrors the complexity of our society**
- **All systems can fail**
- **Complex systems fail complexly**
- **Any system can be analyzed**
- **Different kinds of analysis are acceptable for different [social] systems**
- **A lack of systems thinkers is causing problems**

What is Law?

- **System of formal rules that govern a society***
- **Contextual**
- **Temporary settlement between competing interests**
- **Often very, very messy**
- **Embedded in the full breadth of human tradition**



How is Law Created?

- **Enabled and empowered actors accrete law over time**
- **Constitutional processes are often unique**
- **Don't (necessarily) need to deal with full complexity of the legal system**
- **Must pay attention to cultural and logical context**

A Brief History of Analytic Law

- **Romans**
- **Liebniz & Civil Law**
- **Civilization of Common Law**
- **Other traditions are more complex for analytics**

What Happened in Iceland?

- **Economic collapse and civil unrest**
- **Demand for fundamental changes in government**
- **National Forum**
- **Constitutional Assembly**
- **Court hijinks**

What Happened in Iceland?

- **Assembly seated by fiat in May**
- **Agile process**
 - **Three sub-teams**
 - **Week-long sprints**
- **Took longer than originally planned**
- **Posted each week's drafts online**
- **Comments by message board and Facebook**
- **Document submitted in Alpingi in August**

Icelandic Law

- **Individual defense in court is taken seriously**
- **Literal interpretation of text beats case law**
- **Law becomes more code-like**
- **A constitution is self-contained and tractable**

Wait, you did what?

So, I met this crazy guy in a Thai place in Reykjavik and we got to talking....

What We Did

- **Analysis of the “security of law”, using the tools of the security world on law**
- **Analysis of law is much easier, theoretically, if you have write access**
- **Entirely unaffiliated amateur process**
- **Four processes, conducted in parallel**

Four Part Project

- Translation
 - Textual Analysis
 - Design Review
 - Threat Modeling
-

Four Part Project

- Translation
 - Textual Analysis
 - Design Review
 - Threat Modeling
-

- Complexity and reading level statistics
- Weasel words
- Boolean structure analysis
- Unbound variable checks
 - 19 terms in the current draft
- Ambiguous statements analysis
- Deconstruction into predicate phrases

Four Part Project

- Translation
 - Textual Analysis
 - Design Review
 - Threat Modeling
-

- **Fast and expedient, but informal and limited**
- **Focused on identifying responses to anomalous conditions**

Four Part Project

- Translation
 - Textual Analysis
 - Design Review
 - Threat Modeling
-

- **Constructing a formal threat model**
- **Built around work on the Trike project**
- **Most direct application of security techniques to law**

The Trike Threat Modeling Method

- **A tool for building formal models of processes and implementations**
- **Usually business processes and software**
- **Can be any systems with actors and assets**
- **Best tool for complex adversarial processes**
- **Makes smart people smarter**

A Separation of Powers Bug

- **Particular concern in Iceland**
- **Three-branch parliamentary democracy**
- **Supreme court has seven members except when it has another eight**
- **Alpingi gets to pick who supplements when ruling on constitutionality of law**
- **Encapsulates what TMs are good at**

Civil Rights and Completeness

- **Statements of rights often have loopholes**

“Congress shall make no law... abridging the freedom of speech....”

- **Incomplete:**
 - **Only controls congress**
 - **Regulatory capture**
 - **Chilling affects**

Results in Iceland

- **Hampered by resources, coordination, and access to process**
- **Only presented results informally**
- **Many suggestions included in final document**
- **Significant improvement in overall quality**
- **Three articles adopted verbatim**

Transparency, Governance, and Resilience

- **A crisis in governance**
- **Mass regulatory capture**
- **Taking action for resilience**
- **Transparency in power**
- **Prototypes for how to run a planet openly**



Coming Soon

to a Post-Revolutionary State Near You

CAST: <http://const.is>
Trike: <http://octotrike.org>



Thanks to:

- **Smári McCarthy**
- **Jón Eðvald**
- **Gunnar Hólmsteinn**
- **Clara, Ltd.**
- **International Modern Media Institute**
- **Constitutional Assembly Members:**
 - Katrín Oddsdóttir**
 - Vilhjálmur Þorsteinsson**
 - Pawel Bartosek**
 - Finnur Magnusson (CTO)**
- **Brenda Larcom**
- **Tómas Árni Jónsson**
- **Herbert Snorrason**

Eleanor Saitta
@dymaxion
@ConstDotIS