Masters, lackeys and serfs: How can complexity science assist public policy development
July 7th 2018

SFI’s 30th Anniversary Alumni Fiesta
@CarlosViniegra
(CSSS Class of 2017)
Income, Democracy and Countries by Type of Regime

- Authoritarian Regimes
- Hybrid Systems
- Dysfunctional Democracies
- Full Democracies

© Carlos Viniegra
Not everything was fine

Image 1: From the book Hungry Planet: What the World Eats ©2005 by Peter Menzel and Faith D'Aluisio. Images present a photographic study of families from around the world, revealing what average families ate during the course of one week”.
http://www.menzelphoto.com/books/hp.php
Policy Making Stopped Working

• You come from 24 different countries.
• About half are not native speakers of English.

Now that you’re here...
• It’s normal to be “weird” and interdisciplinary.
• You won’t be asked “But is that physics?” biology, economics, etc.)
Social science foundational paradigms:

Three approaches of complexity in social science:

1. The illuminating axiom (God’s equation)
2. Plug and Play (idiographic approach/data science)
3. Gordian knot (start over, first principles)
From Complexity Science to Public Policy

- **Philosophy of Science Tower** (Nomothetic approach)
- **Behavioral Modeling Tower** (Cultural Evolution approach)
- **Physics** (Thermodynamics)
- **Biology & Evolution**
- **Tools**: e.g., Network theory
- **Information Theory** (Culture)
- **Social Sciences**
- **History**
- **Economics**
- **Politics**
- **Complexity is just theory chasm**

© Carlos Viniegra
The Masters, lackeys and serfs project

English Edition Premiere (Today)

Spanish Edition Sept 2017
What’s the Status Quo? (Rational Choice)

Agent: Rational & Selfish

Institutions

Political System

- Institutions or Rules
  - Restrict
  - Enable

- Actors (intention)
  - Individuals
  - Groups

Incentives

Power to model institutions

© Carlos Viniegra
Q: What is power?

A: The capacity to influence the behavior of others.
II. Power as a metaphysical entity
(most common)

- Agentes are:
  - Heterogeneous
  - Interdependent
  - Deferential
  - Static or dynamic
- Resources aren’t uniformly distributed.
- There’s innovation.
II. Power as a metaphysical entity

(most common)

• Agentes are:
  ✓ Heterogeneous
  ✓ Interdependent
  ✓ Deferential
  ✓ Static or dynamic

• Resources aren´t uniformly distributed.

• There’s innovation.
The problem of these models

II. Power as a metaphysical entity
   (most common)

- Agentes are:
  - Heterogeneous
  - Interdependent.
  ✔ Deferent.
  - Static or dynamic

- Resources aren’t uniformly distributed.

- There’s innovation.
Where’s freedom?
In many complex systems agents always choose the optimum
However...

“Errare humanum est”, Saint Agustine
A different modeling approach

- Agents are:
  ✓ Heterogeneous
  ✓ Interdependent
  ✓ Free to choose

- Resources aren’t uniformly distributed

- There’s innovation.

- Power is emergent, dynamic, and conditioned to the network’s quorum.
A 2 Rule Complexity Based Behavioral Model

Los agentes son:
✓ Heterogeneous
✓ Interdependent
✓ Free to choose

Common Good

1. Collectivism  2. Liberalism

Self Interest

Submission  Freedom

More Throughput

Cooperate / Optimize

Compete / Maximize

Alfred Hubler (1957-2018)
Why is it relevant?
How to move forward?
Democracy Innovation Network
(Beyond Masters, lackeys and serfs)

1. Changing the quorum
   • Find the liberals *(in progress)*
   • Create a new pedagogy of freedom
   • Create new methods and tools for democracy

2. Digital governance
   • Awareness
   • New knowledge
   • International collaboration
   • Development of digital public policies and social activism
   • Digital public goods

3. Network Topology (Vascular loops)
   • Knowledge
   • Innovation
   • Development of public policy proposals
   • International collaboration
   • Experimental public policy
Time for Questions
THANK YOU