LEADING AND DECISION MAKING IN COMPLEX ENVIRONMENTS

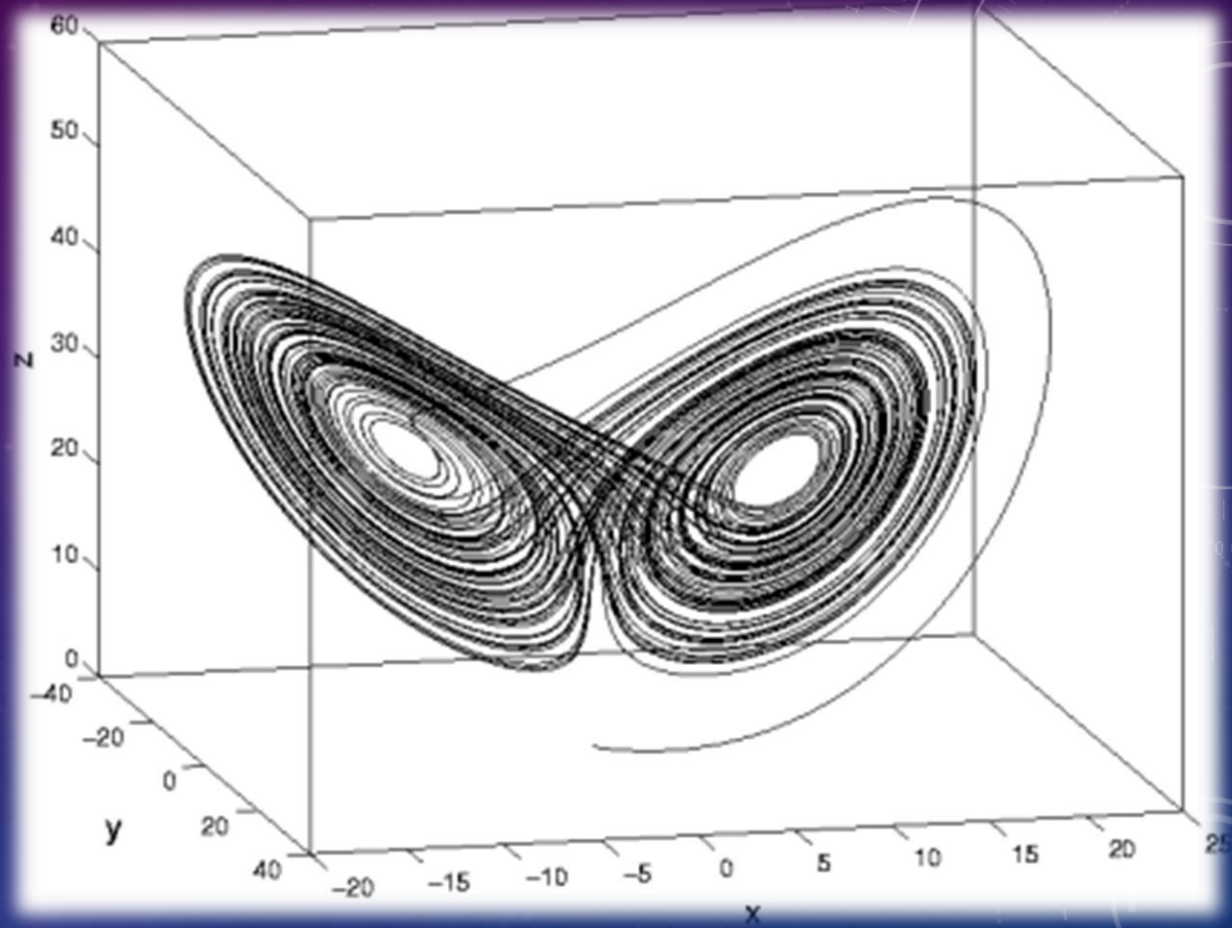
IDEAS FOR COOP/COG ENERGY SCENARIOS

GLEN WOODBURY

NAVAL POSTGRADUATE SCHOOL

CENTER FOR HOMELAND DEFENSE AND SECURITY

COMPLEXITY



How patterns and order emerge from the interaction of multiple agents.

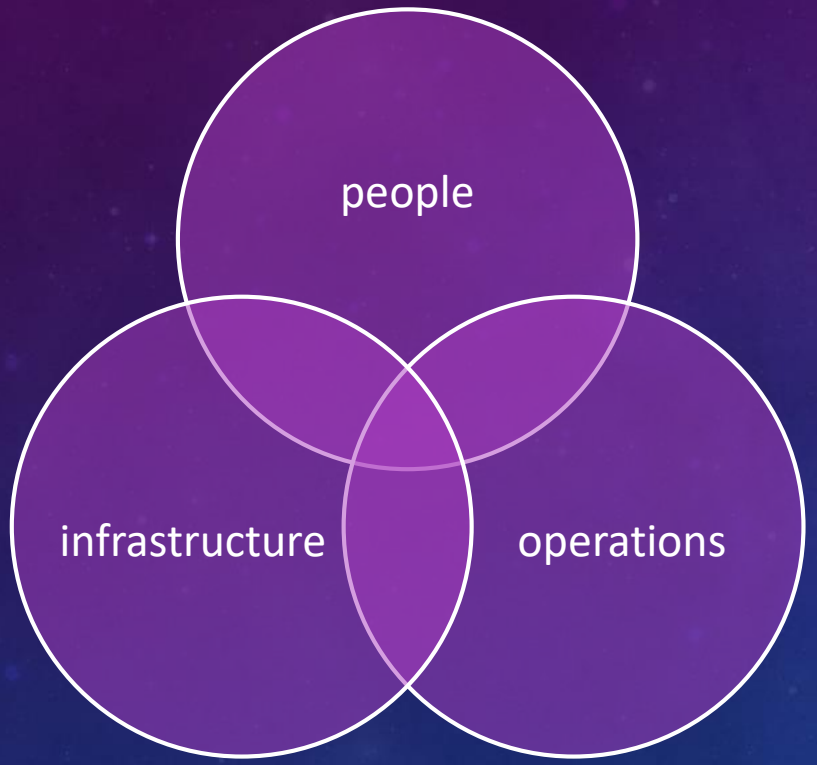
WHAT “AGENTS” DO YOU EXPECT TO SEE INTERACTING IN A SEVERE ENERGY EMERGENCY?

What patterns could you look for?

FALLACY CHALLENGES

- Historical precedent fallacy
- Analogy fallacy
- Planning assumption accuracy fallacy
- Expert leader fallacy
- Nostradamus fallacy
- Deity fallacy

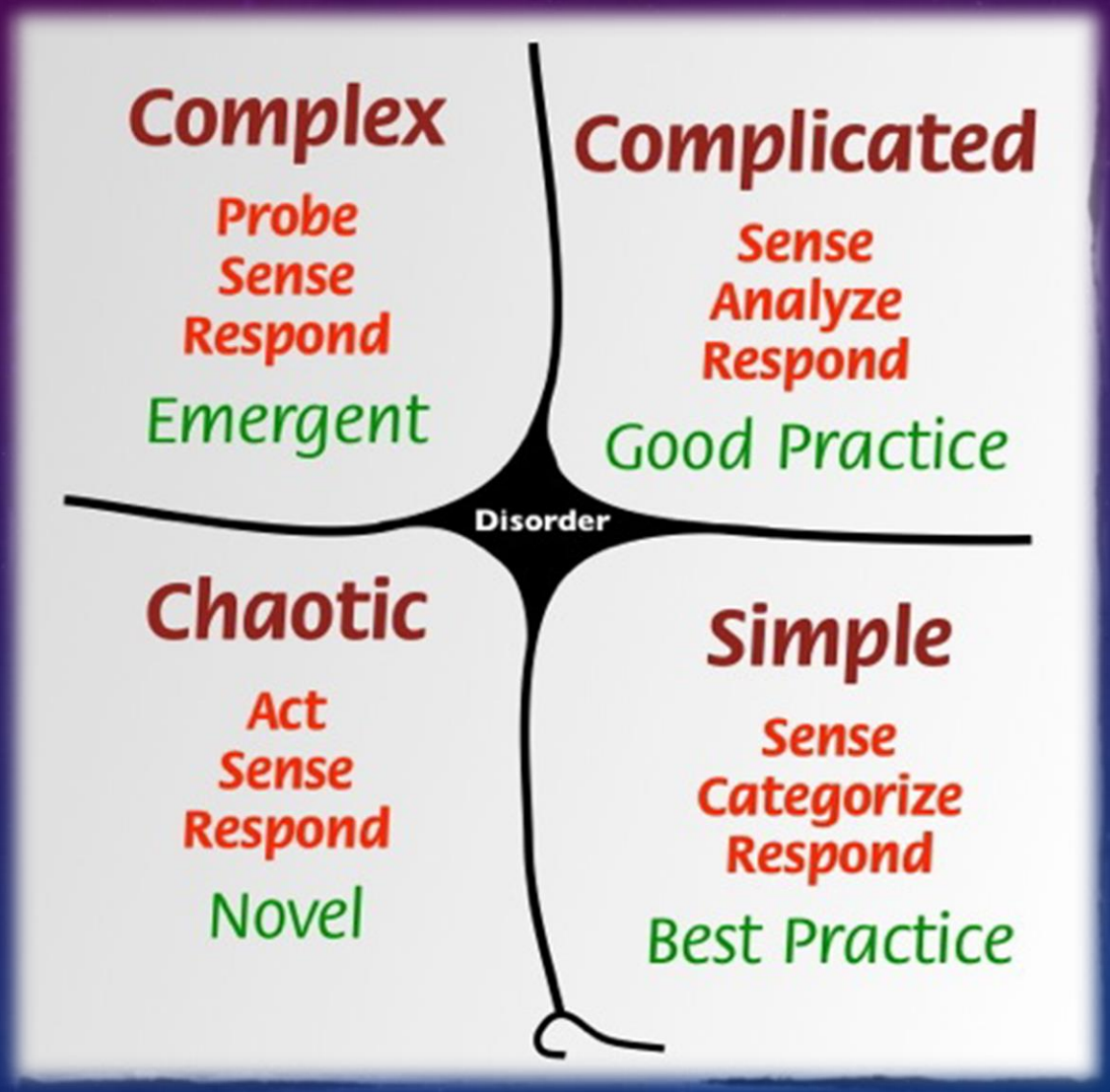
A COOP AND A COG FRAMEWORK



- Delegations of Authority
- Succession Planning
- Vital Records and Databases
- Devolution Plans

Transition and The Governor: A Planning Guide
NGA. NGA Consulting. 2018

A Leader's Framework for Decision Making
(David Snowden and Mary Boone. Harvard Business Review. November 2007)



The Cynefin Framework

THE ***SIMPLE*** DOMAIN – WHAT ARE SOME SIMPLE COOP/COG PROBLEMS WE CAN EXPECT TO SEE?

- **Sense**
- **Categorize**
- **Respond**

THE ***COMPLICATED*** DOMAIN – WHAT ARE SOME COMPLICATED COOP/COG PROBLEMS WE EXPECT TO SEE?

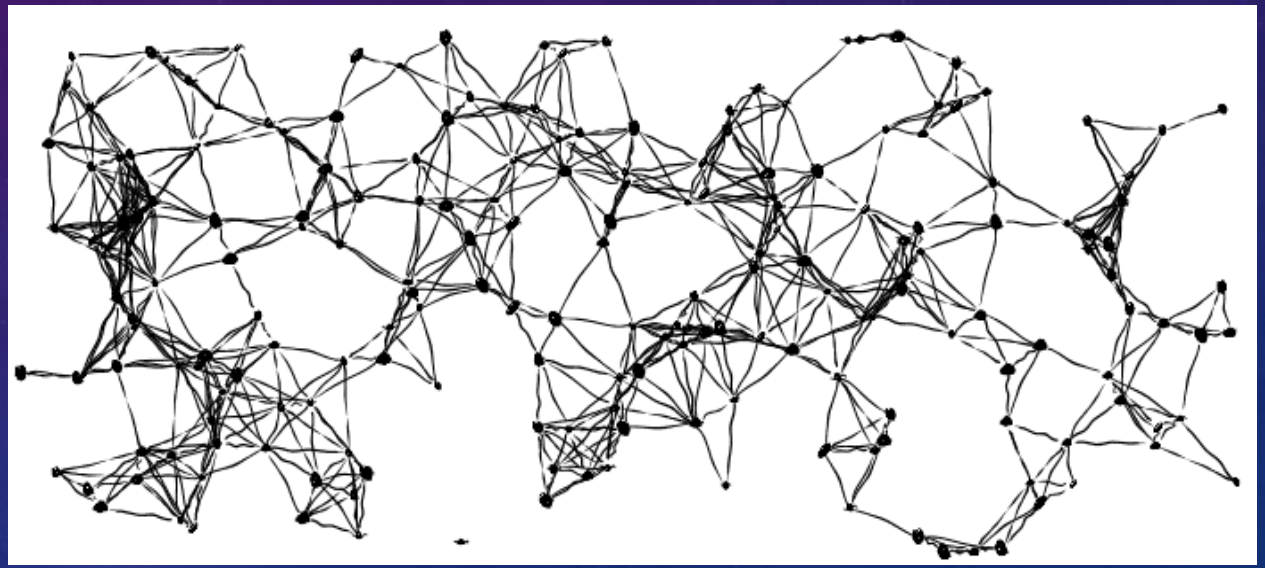
- **Sense**
- **Analyze**
- **Respond**

THE ***COMPLEX*** DOMAIN – WHAT COMPLEX PROBLEMS SHOULD WE EXPECT TO SEE?

- **Probe**
- **Sense**
- **Respond**

USING COMPLEXITY

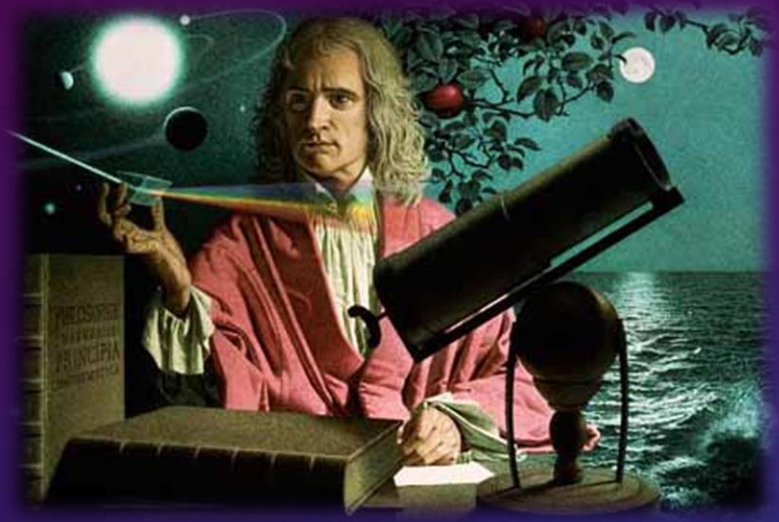
- **Recognize the domain, disabuse simple/complicated/chaotic**
- **Look for patterns, analyze for positive/negative**
- **Probe – experiment**
- **Amplify – Reduce**
- **Re-evaluate**



THE *CHAOTIC* DOMAIN – WHAT CHAOTIC PROBLEMS SHOULD WE EXPECT TO SEE?

- **Act**
- **Sense**
- **Respond**

NEWTON AND DARWIN



Simple and Complicated
(Ordered)

Complex and Chaotic
(Disordered)

APPROPRIATELY BALANCE THE MACRO AND MICRO VIEWS OF THE ISSUE

Patterns and Emergence

Details and Data

QUESTIONS? COMMENTS?

GLEN WOODBURY

NAVAL POSTGRADUATE SCHOOL

CENTER FOR HOMELAND DEFENSE AND SECURITY

WWW.CHDS.US

GLWOODBU@NPS.EDU