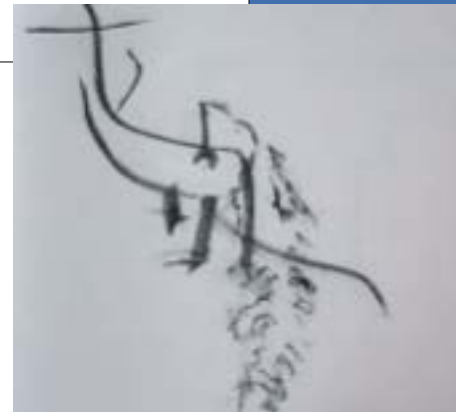




# What is a System?

<https://www.youtube.com/watch?v=eakKfY5aHmY>



- Parts
- Relationship of Parts
- Whole



- What is a Complex System?

- Order \_\_\_\_\_ Chaos

- Living Bodies
- Brains
- Ensembles of Animals



- Self-organization: Improvisation

- Emergence



- Complexity



- Swarm of Bees. Flock of Birds, School of Fish

- Structure
- Hierarchical Structures
- Non-Hierarchical Structures
- Linear Structures
- Non-linear Structures
- Networks

- Elements of Complex Structures
- Points of Criticality
- Nesting
- Tracking: Local, Regional, Global
- Amplification
- Negotiation of Roles

- Why Complexity in Nature?
- Robust and Adaptive
- Integration and Differentiation
- Order for Free
- The Adjacent Possible
- Creativity and Generativity

- Conflict Resolution Approaches:
- Attack/Defend, Accommodate, Avoid and Stalemate
- Mediation and Negotiation
- Adversarial vs. Collaborative
- Example of the Orange, the Pie and Complexity



- Skills and Capacities for Complex Systems Problem-Solving
- Negotiation and Mediation
- Pattern Recognition/ Feedback Loops
- Visual Mapping
- Complex Adaptive Design/Community Knowledge
- Collaborative Thinking and Processing
- Leverage Points: Local, Regional, Global