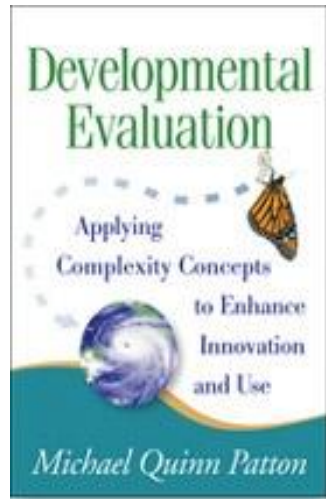


# *Developmental Evaluation:*

Applying Complexity Concepts  
to Enhance Innovation and Use



Michael Quinn Patton

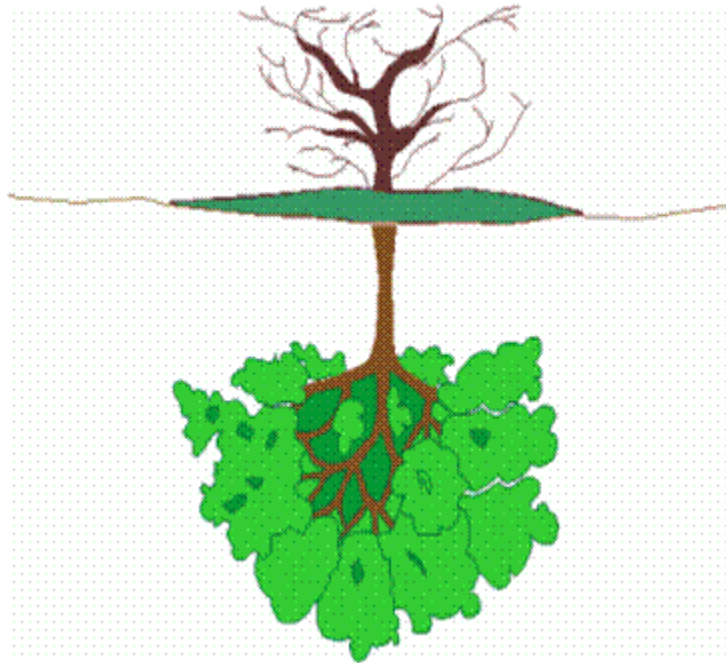
**Oregon Program  
Evaluators Network**

**September 22, 2010**



**Burkina Faso**

# In the beginning...



**Systems thinking &**

**complexity concepts**

as frameworks for conceptualizing  
interventions (replacing linear logic  
models)

**Developmental Evaluation**

# Original Primary Options

**Formative**

**and**

**Summative**

**Evaluation**

(Mid-term and End-of-Project Reviews)

# Blandin Community Leadership Program



# An Option

Beyond Formative and Summative to

## **Developmental Evaluation**

as an option in the repertoire of approaches

# Challenge:

**Matching the evaluation process and design to the nature of the situation:**

**Contingency-based  
Evaluation**

# Conditions that challenge traditional model-testing evaluation

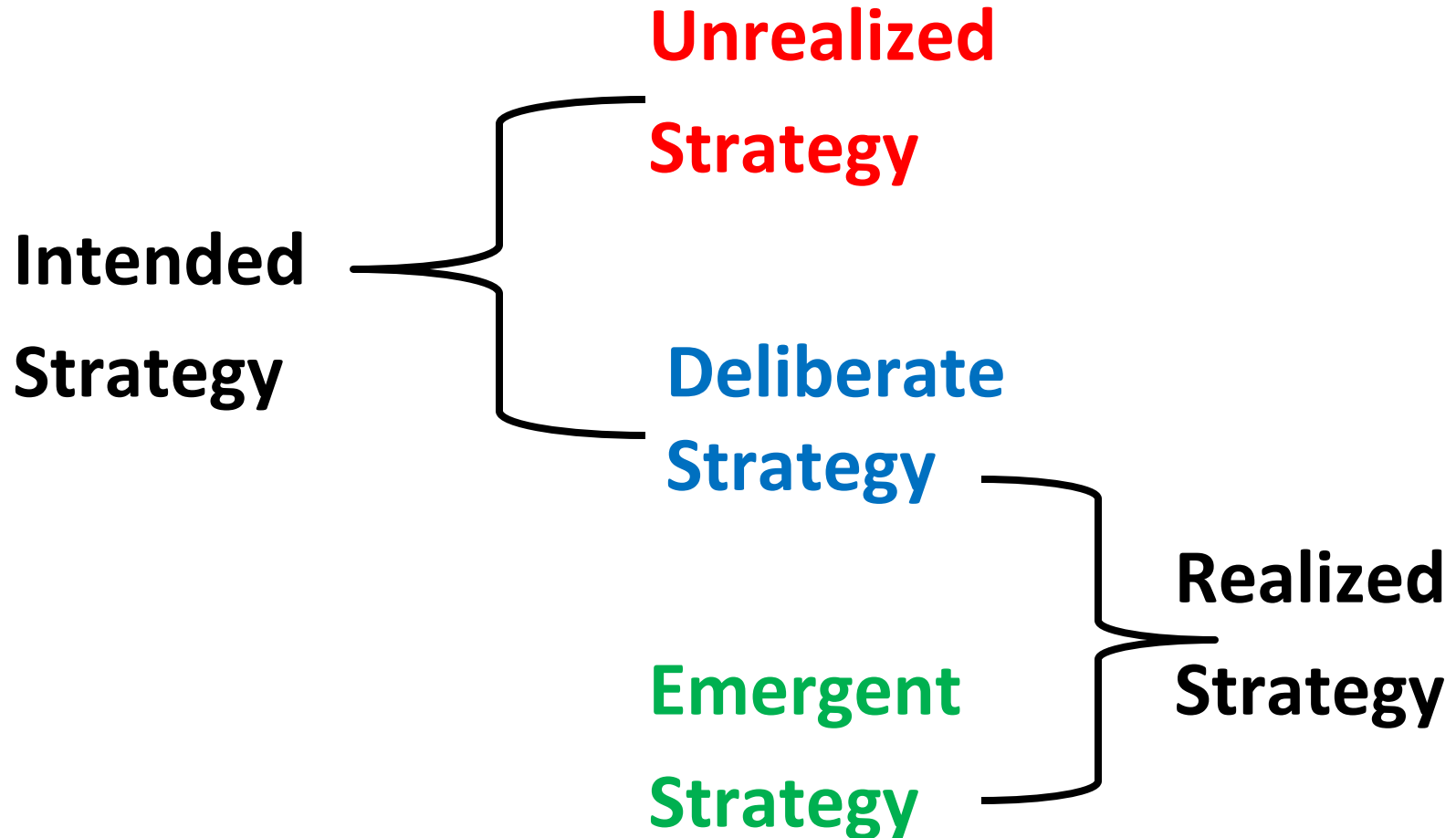
- **High innovation**
- **Development**
- **High uncertainty**
- **Dynamic**
- **Emergent**
- **Systems Change**



**Adaptive  
Management**

# Mintzberg on Strategy

Two types of strategy: Intended & Emergent



# First DE Type

***Ongoing development*** in adapting a project, program, strategy, policy, or other innovative initiative to new conditions in complex dynamic systems.

***Example:***



Founded in 1994

<http://twincitiesrise.org/>

# Reflective Practice & TCR! Developments

- Initiated a 2-month probation period to assess whether the program and participant match.
- Began targeting men and women, including whites in poverty driven by changes in welfare to work laws.
- Made empowerment the focus of participant engagement, not just hard & soft skills.
- Brought specialized training in-house.

# Uncertainty and Emergence

*“No battle plan ever survives contact with the enemy.”*

Field Marshall Helmuth  
Carl Bernard von Moltke

*“Everyone has a plan...until he gets hit.”*

Former World Heavyweight  
boxing champion, Mike Tyson

Tom Peters (1996) *Liberation Management* :

*“READY. FIRE. AIM.”*

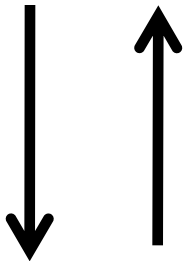
# Fundamental Issue: How the World Is Changed

**Top-down dissemination of**

**“proven models”**

**versus**

**Bottoms-up adaptive management**



# Models vs. Principles

Identifying proven principles for adaptive  
management

(bottoms-up approach)

*versus*

Identifying and disseminating

proven models

(top down approach)

# Systems

- **Parts are interdependent such a change in one part changes all parts**
- **The whole is greater than the sum of the parts**
- **Focus on interconnected relationships**
- **Systems are made up of sub-systems and function within larger systems**

# ***Systems Concepts in Evaluation –***

*An Expert Anthology.* 2006.

Bob Williams and Iraj Imam

AEA Monograph,

EdgePress/AEA Point Reyes CA.

# **Understanding the Elephant from a Systems Perspective**

# Teen Pregnancy Program Example

# Logic Model for Pregnant Teens Program

1. Program reaches out to pregnant teens



2. Pregnant teens enter and attend the program (participation)



3. Teens learn prenatal nutrition and self-care (increased knowledge)



4. Teens develop commitment to take care of themselves and their babies (attitude change)

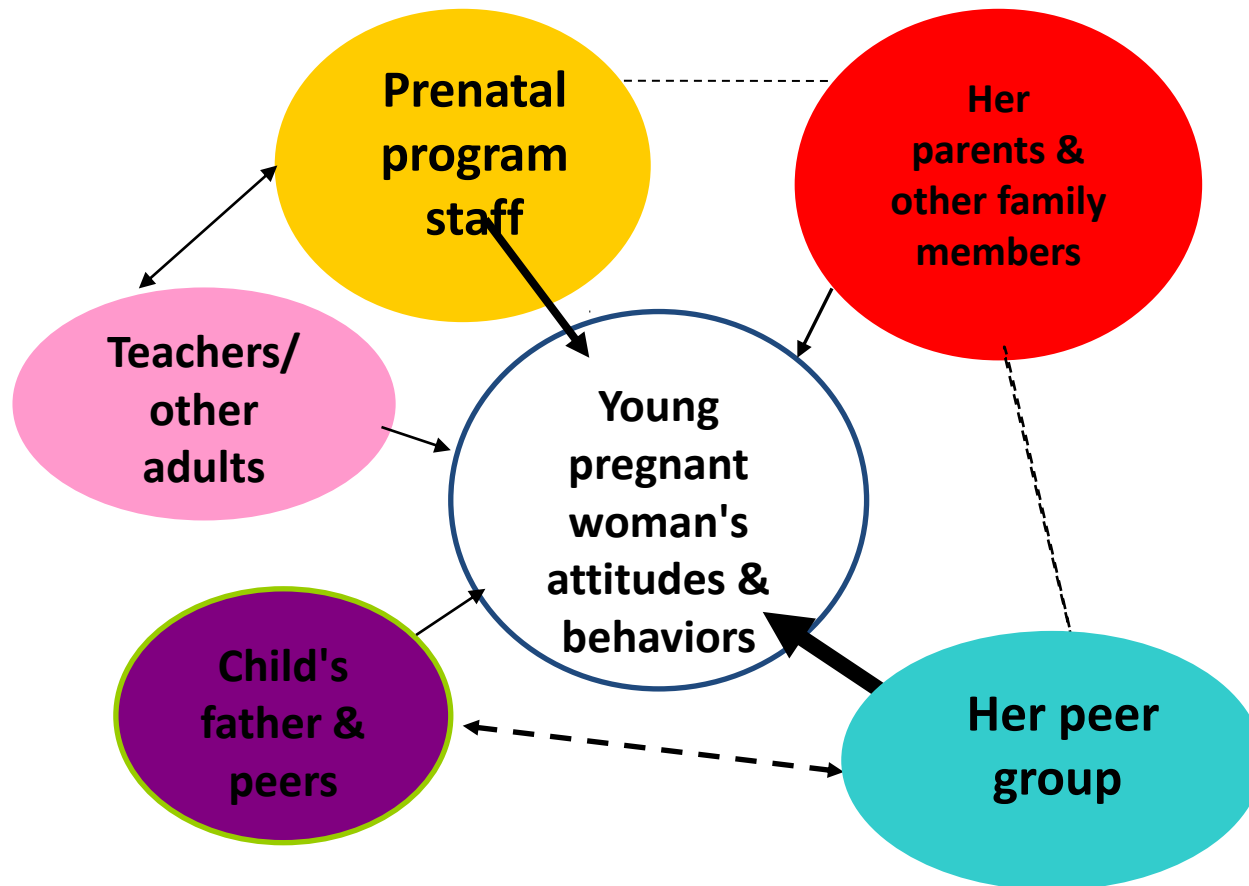


5. Teens adopt healthy behaviors: no smoking, no drinking, attend prenatal clinic, eat properly (behavior change)

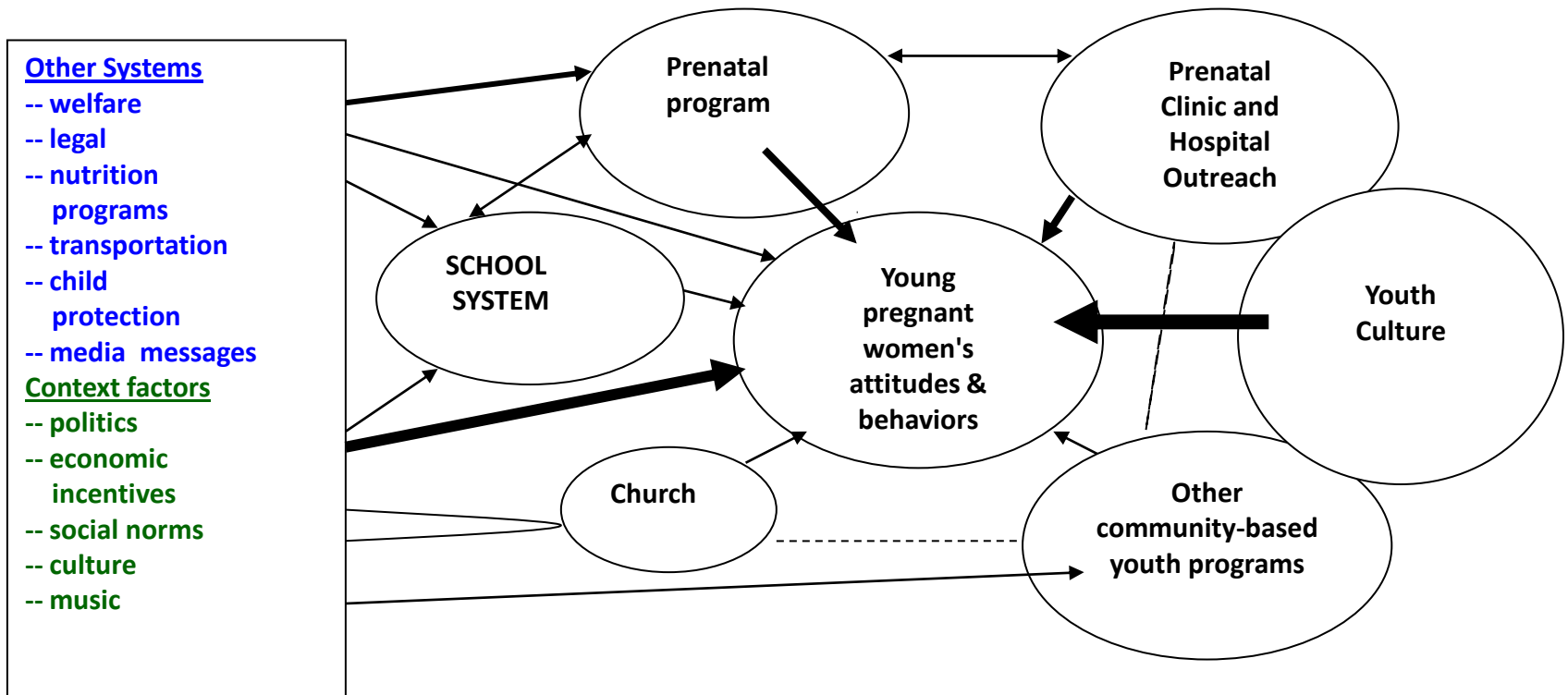


6. Teens have healthy babies (desired outcome)

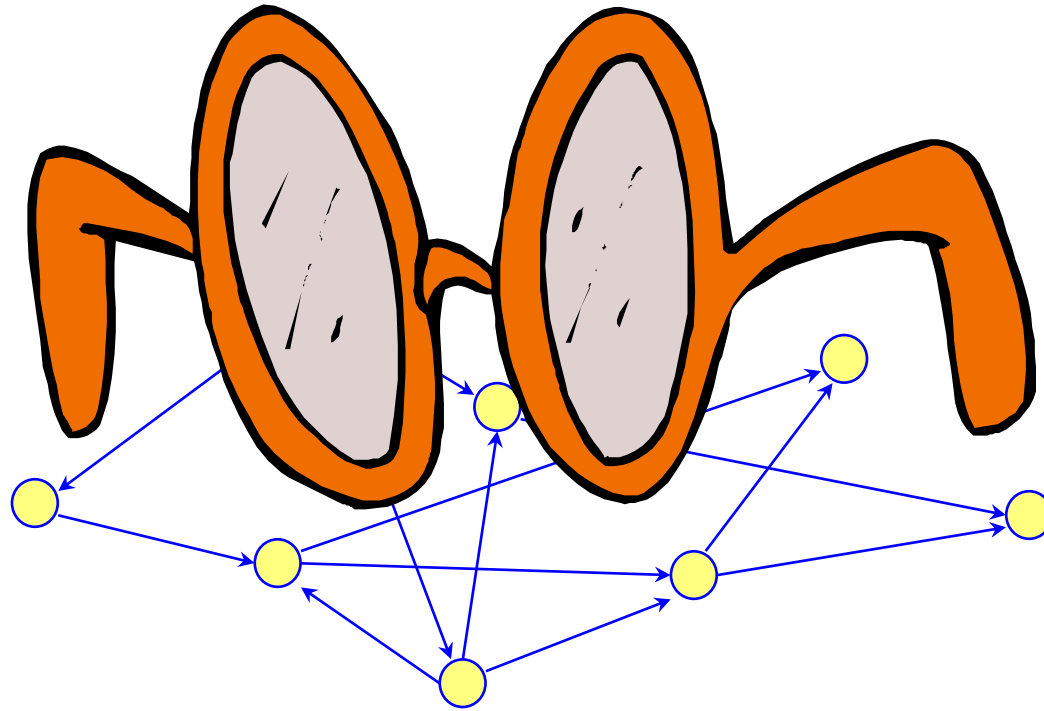
## Systems web showing possible influence linkages to a pregnant teenager



# Program systems web showing possible institutional influences affecting pregnant teenagers:



# Seeing Through A Complexity Lens



***"You don't see something until you have the right metaphor to let you perceive it".*** Thomas Kuhn

# Complex Nonlinear Dynamics

- **Nonlinear**: Small actions can have large reactions. *“The Butterfly Wings Metaphor”*
- **Emergent**: Self-organizing, Attractors
- **Dynamic**: Interactions within, between, and among subsystems and parts within systems can volatile, changing
- **Getting to Maybe**: Uncertainty, unpredictable, uncontrollable

**“A Leader's Framework for Decision Making”  
by David J. Snowden and Mary E. Boone,  
*Harvard Business Review*,**

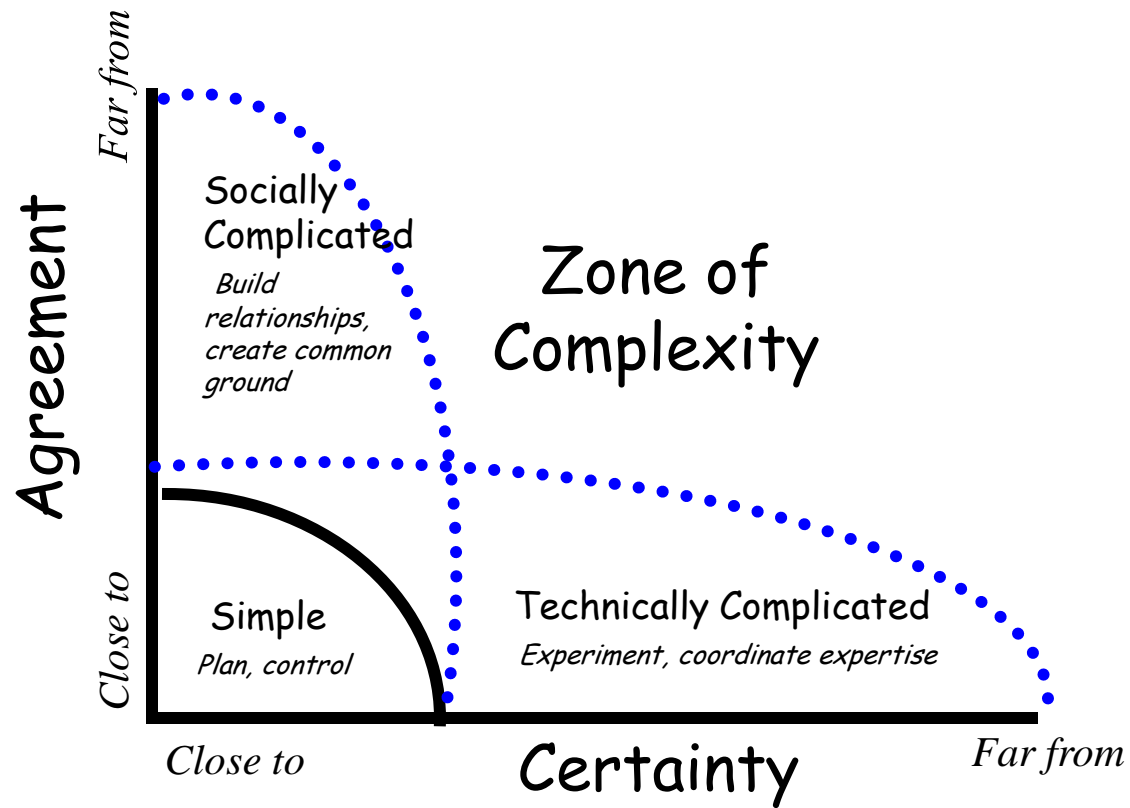
November, 2007:

*Wise executives tailor their approach to fit  
the complexity of the circumstances they  
face.*

# Conceptual Options

- **Simple**
- **Complicated**
- **Complex**

# Know When Your Challenges Are In the Zone of Complexity



# Simple

# Complicated

# Complex

## Following a Recipe

⌘ **The recipe is essential**

⌘ **Recipes are tested to assure replicability of later efforts**

⌘ **No particular expertise; knowing how to cook increases success**

⌘ **Recipe notes the quantity and nature of "parts" needed**

⌘ **Recipes produce standard products**

⌘ **Certainty of same results every time**



## A Rocket to the Moon

• **Formulae are critical and necessary**

• **Sending one rocket increases assurance that next will work**

• **High level of expertise in many specialized fields + coordination**

• **Integrating parts is essential**

• **Rockets similar in critical ways**

• **High certainty of outcome if....**



## Raising a Child

• **Formulae have only a limited application**

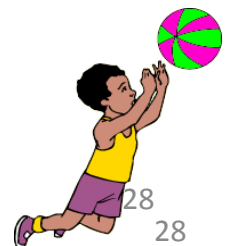
• **Raising one child gives no assurance of success with the next**

• **Expertise can help but is not sufficient; *relationships are key***

• **Can't separate parts from the whole**

• **Every child is unique**

• **Uncertainty of outcome remains despite....**



*Wise evaluators tailor their approach  
to fit the complexity of the  
circumstances they face.*

# The McGill-McConnell Leadership Program Example

**Simple elements**

**Complicated elements**

**Complex elements**

# *Alice in Wonderland*

- Evaluation lesson from her encounter with the Cheshire Cat

# 5 Types of DE

1. Ongoing development and adaptation
2. Preformative evaluation to support exploration and innovation
3. Supporting local adaptation of general principles to navigate top-down and bottom-up forces for change
4. Evaluating major systems change
5. Evaluating in turbulent, disaster situations

# Some Particularly Appropriate Applications of DE:

## Examples of Innovative Arenas

- Social Movements and networks
- Advocacy Evaluation
- Large-scale, cross-sector, collaborative initiatives
- R & D in public health, technological innovation, science
- Public policy implementation

# Personal Factor

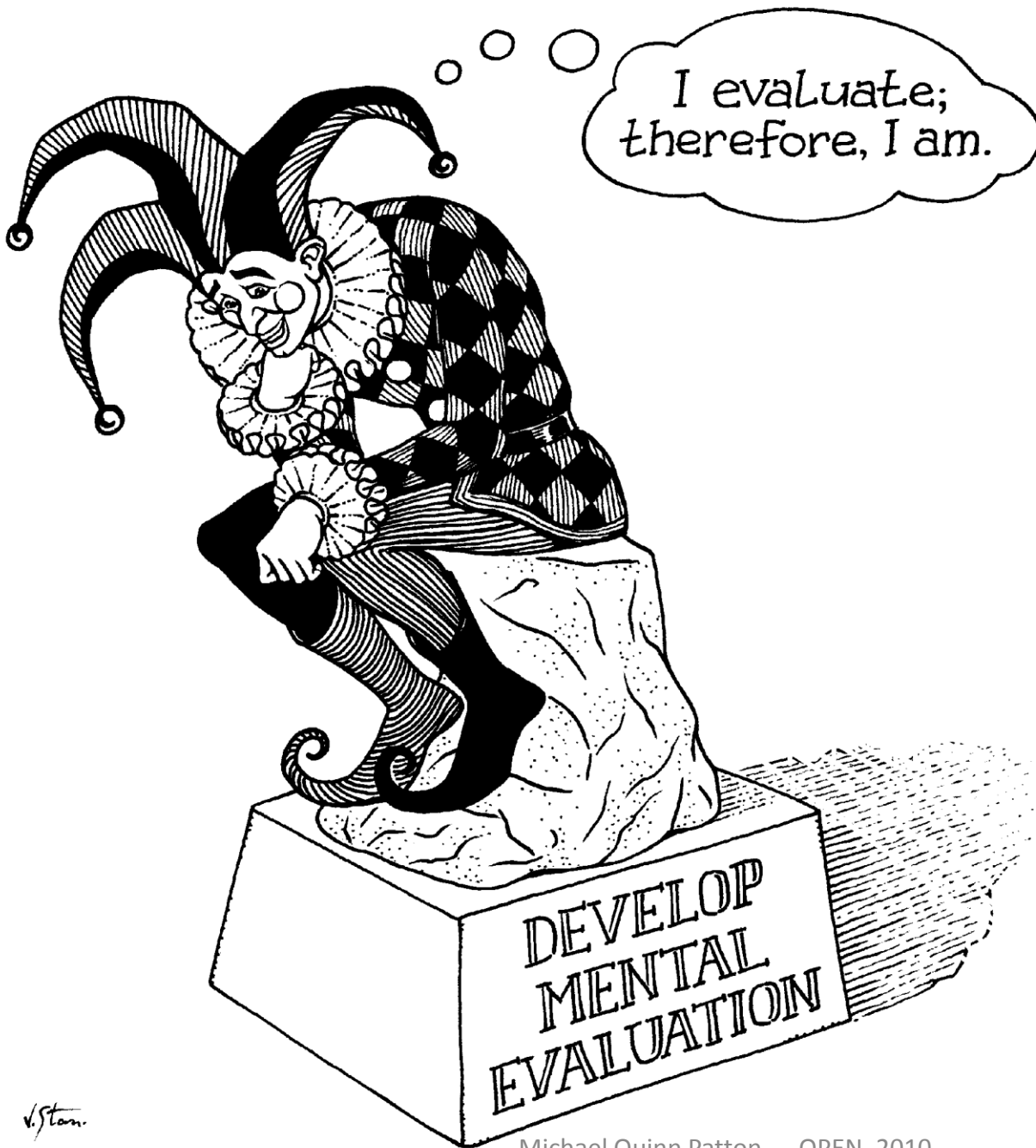
- *Damiano* example

# **What role can evaluation play with complex dynamic innovations?**

# Challenge:

**Matching the evaluation  
process and design to the  
nature of the situation:**

**Contingency-based  
Evaluation**



v. Stan.

# References

*Developmental Evaluation: Applying Complexity Concepts to Enhance Innovation and Use.* Guilford Press, June 2010.

*Getting to Maybe: How the World Is Changed?*

Frances Westley, Brenda Zimmerman, Michael Q. Patton, Random House Canada, 2006

*Utilization-Focused Evaluation, 4<sup>th</sup> ed.,*

Michael Quinn Patton, Sage, 2008.