A Principled-Behavioral Conceptual Model of Individual and Collective Decision-Making

Richard K. Norton

Adaptation in the Great Lakes Region
Ann Arbor, MI
June 26, 2014
Change is happening...

How should we (or someone) adapt?

Why would we (or someone) want to do so?
CONDITIONS
Extant natural systems
Extant social systems
Extant human-nature dynamics
Historical changes / experiences (past)
Trends (ongoing present)
Opacity / stochasticity / purposive change (future)

CULTURE / WORLDVIEWS
Deeply held causal beliefs (heuristics) and values
CONDITIONS
Extant natural systems
Extant social systems
Extant human-nature dynamics
Historical changes / experiences (past)
Trends (ongoing present)
Opacity / stochasticity / purposive change (future)

KNOWLEDGE

Understanding / knowing        Meaning / insight

Logical positivist      Interpretivist/constructivist    Divine
Pragmatic                   Critical                        Reasoned
Intuitive

Genesis / Source
- Learned / vicarious / logical-analytical
- Formal / investigated / experimental
- Informal / experiential / local

CULTURE / WORLDVIEWS
Deeply held causal beliefs (heuristics) and values
**CONDITIONS**  
Extant natural systems  
Extant social systems  
Extant human-nature dynamics  
Historical changes / experiences (past)  
Trends (ongoing present)  
Opacity / stochasticity / purposive change (future)

**KNOWLEDGE**

*Understanding / knowing*  
*Meaning / insight*

Logical positivist  
Interpretivist/constructivist  
Divine  
Pragmatic  
Critical  
Reasoned  
Intuitive

*Genesis / Source*

- Learned / vicarious / logical-analytical  
- Formal / investigated / experimental  
- Informal / experiential / local

**ABILITY**

Capacity to learn  
Opportunity to learn  
Ability to act (actual / monetary)  
Institutional / Legal authority to act

**CULTURE / WORLDVIEWS**

Deeply held causal beliefs (heuristics) and values
**CONDITIONS**
- Extant natural systems
- Extant social systems
- Extant human-nature dynamics
- Historical changes / experiences (past)
- Trends (ongoing present)
- Opacity / stochasticity / purposive change (future)

**KNOWLEDGE**
- Understanding / knowing
- Meaning / insight
- Logical positivist
- Interpretivist/constructivist
- Divine
- Pragmatic
- Critical
- Reasoned
- Intuitive

**Genesis / Source**
- Learned / vicarious / logical-analytical
- Formal / investigated / experimental
- Informal / experiential / local

**ABILITY**
- Capacity to learn
- Opportunity to learn
- Ability to act (actual / monetary)
- Institutional / Legal authority to act

**COMMITMENT**
- To recognize a problem
- To address the problem
- To prioritize the problem
- To decision-making process
- To decision-maker’s authority

**CULTURE / WORLDVIEWS**
- Deeply held causal beliefs (heuristics) and values
CONDITIONS
Extant natural systems
Extant social systems
Extant human-nature dynamics
Historical changes / experiences (past)
Trends (ongoing present)
Opacity / stochasticity / purposive change (future)

KNOWLEDGE
Understanding / knowing
Meaning / insight
Logical positivist Interpretivist/constructivist Divine
Pragmatic Critical Reasoned Intuitive

Genesis / Source
• Learned / vicarious / logical-analytical
• Formal / investigated / experimental
• Informal / experiential / local

ABILITY
Capacity to learn
Opportunity to learn
Ability to act (actual / monetary)
Institutional / Legal authority to act

COMMITMENT
To recognize a problem
To address the problem
To prioritize the problem
To decision-making process
To decision-maker’s authority

CULTURE / WORLDVIEWS
Deeply held causal beliefs (heuristics) and values
CONDITIONS
Extant natural systems
Extant social systems
Extant human-nature dynamics
Historical changes / experiences (past)
Trends (ongoing present)
Opacity / stochasticity / purposive change (future)

DECISION-MAKING PROCESS
Expert ... Collaborative

KNOWLEDGE
Understanding / knowing    Meaning / insight
Logical positivist  Interpretivist/constructivist  Divine
Pragmatic    Critical    Reasoned    Intuitive

Genesis / Source
• Learned / vicarious / logical-analytical
• Formal / investigated / experimental
• Informal / experiential / local

ABILITY
Capacity to learn
Opportunity to learn
Ability to act (actual / monetary)
Institutional / Legal authority to act

COMMITMENT
To recognize a problem
To address the problem
To prioritize the problem
To decision-making process
To decision-maker’s authority

CULTURE / WORLDVIEWS
Deeply held causal beliefs (heuristics) and values
CONDITIONS
Extant natural systems
Extant social systems
Extant human-nature dynamics
Historical changes / experiences (past)
Trends (ongoing present)
Opacity / stochasticity / purposive change (future)

EXTANT NATURAL SYSTEMS
Extant social systems
Extant human-nature dynamics
Historical changes / experiences (past)
Trends (ongoing present)
Opacity / stochasticity / purposive change (future)

ACTION
Earn / Tax/ Spend
Regulate / Mandate
Educate / promote
Forebear

KNOWLEDGE
Understanding / knowing
Meaning / insight
Logical positivist
Interpretivist/constructivist
Divine
Pragmatic
Critical
Reasoned
Intuitive

Genesis / Source
• Learned / vicarious / logical-analytical
• Formal / investigated / experimental
• Informal / experiential / local

ABILITY
Capacity to learn
Opportunity to learn
Ability to act (actual / monetary)
Institutional / Legal authority to act

FINDINGS
Particularized, context- and purpose-specific understandings and insights

DECISION-MAKING PROCESS
Expert ...
Collaborative

DECISION

COMMITMENT
To recognize a problem
To address the problem
To prioritize the problem
To decision-making process
To decision-maker’s authority

CULTURE / WORLDVIEWS
Deeply held causal beliefs (heuristics) and values

Assessment

Reflection on values

Perception of abilities
CONDITIONS
Extant natural systems
Extant social systems
Extant human-nature dynamics
Historical changes / experiences (past)
Trends (ongoing present)
Opacity / stochasticity / purposive change (future)

CONCEPTS
Knowledge
What, how, and why to decide, act

ABILITY
To learn, decide, act

DECISION-MAKING PROCESS
Expert ... Collaborative

ACTION
Earn / Tax / Spend
Regulate / Mandate
Educate / promote
Forebear

FINDINGS
Particularized, context- and purpose-specific understandings and insights

DECISION
What the outcome of acting will likely be

INTENT
Particularized, context- and findings-specific assertion of purpose

FINDINGS
Particularized, context- and purpose-specific understandings and insights

EDUCATION / TRAINING
(Content & Conveyance)
Decision-making processes
Factual conditions
Value systems
Institutional authorities

CULTURE / WORLDVIEWS
Deeply held causal beliefs (heuristics) and values

COMMUNITY
To learn, decide, act
For a particular end

DECISION
Perception of abilities
Reflection on values

KNOWLEDGE
What, how, and why to decide, act

ABILITY
To learn, decide, act

CULTURE / WORLDVIEWS
Deeply held causal beliefs (heuristics) and values
Lessons (Hypotheses?)

• For practitioners
  – Knowledge is necessary, but not sufficient
  – Understand institutions, value systems, motivations
  – Engage as informed, collaborative participants

• For theorists
  – Black box and simple models are both underspecified
  – Specifying “how to” models doesn’t a priori address or explain “why should we want to” questions/phenomena
  – People are more than merely self-interested rational actors, or even members of communities (reciprocity); also principled/purposive actors