

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

Richard K. Norton



Adaptation in the Great Lakes Region

Ann Arbor, MI

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Climate Change in the Great Lakes Region

GLISA GLAA-C
Great Lakes Adaptation Assessment for Cities

How should we (or someone) adapt?

A Behavior
President
ELINOR

The Struggle to Govern the Commons

Thomas Dietz,¹ Elinor Ostrom,² Paul C. Stern^{3*}

Extensive studies show how reputation, section re an initial reciprocity

Human institutions—ways of organizing activities—affect the resilience of the environment. Locally evolved institutional arrangements governed by stable communities and buffered from outside forces have sustained resources successfully for centuries, although they often fail when rapid change occurs. Ideal conditions for governance are increasingly rare. Critical problems, such as transboundary pollution, tropical deforestation, and climate change, are at larger scales and involve nonlocal influences. Promising strategies for addressing these problems include dialogue among interested parties, officials, and scientists; complex, redundant, and layered institutions; a mix of institutional types; and designs that facilitate experimentation, learning, and change.

international agreements on ozone depletion, was signed in 1987. Before then, ODS concentrations were increasing faster than those of CO₂; the increases slowed by the early 1990s and the concentration appears to have stabilized in recent years. The international treaty regime to reduce the anthropogenic impact on stratospheric ozone is widely considered an example of a successful effort to protect the global commons. In contrast,

SPECIAL SECTION

Why would we (or someone) want to do so?

Change is happening...



Available online at www.sciencedirect.com

Knights et al.

Global

Operational Model for Conservation Planning 411

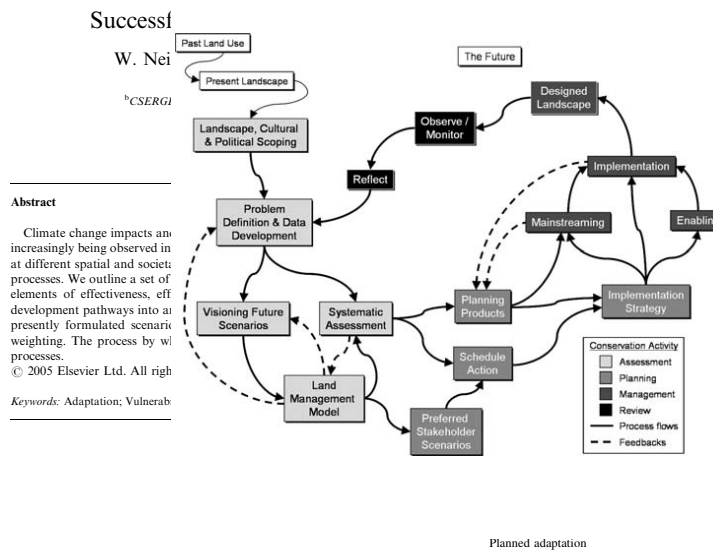


Figure 2. An operational model should reflect a complex, heuristic, web-like structure because conservation planning processes rarely unfold as a suite of linear stages. Feedbacks (dashed lines) are typically required between stages to ensure the effectiveness of conservation planning processes, for example, iteratively refining planning products with stakeholders before delivering them for use (see Pierce et al. 2005). Stages of systematic assessment, planning, and management are followed by stages of review, which completes an action research cycle (sensu McNiff & Whitehead 2003). This requires the linking of social learning institutions (Fig. 4), such as research forums and landowner groups to the planning process to ensure the ongoing refinement of the operational model, empowered stakeholders, and a more effective conservation planning process. Adapted from Brunckhorst (2002).

Table 1 presents key station. Burton and 1 and adaptation re-work Convention on ved much greater ity than adaptation, respective. The most action is its ability to re systems whereas or many systems. It how Pacific coral ostential rise in seas of mitigation are e root cause of the climate-change problem whereas the effectiveness of proactive adaptation to climate change often depends on the

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

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KNOWLEDGE

Understanding / knowing

Meaning / insight

Logical positivist Interpretivist/constructivist Divine

Pragmatic Critical Reasoned Intuitive

Genesis / Source

- Learned / vicarious / logical-analytical
- Formal / investigated / experimental
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Opportunity to learn
Ability to act (actual / monetary)
Institutional / Legal authority to act

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COMMITMENT

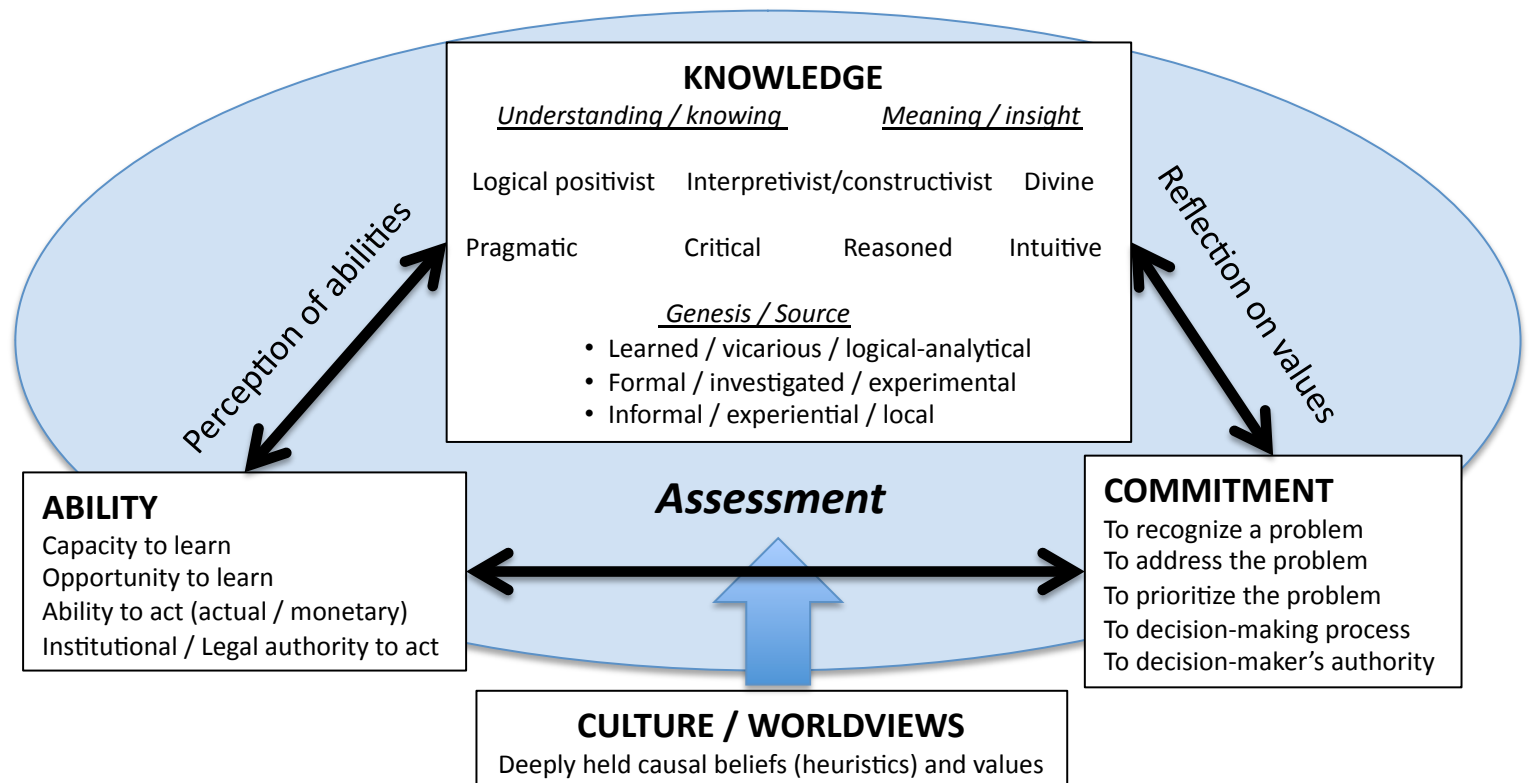
To recognize a problem
To address the problem
To prioritize the problem
To decision-making process
To decision-maker's authority

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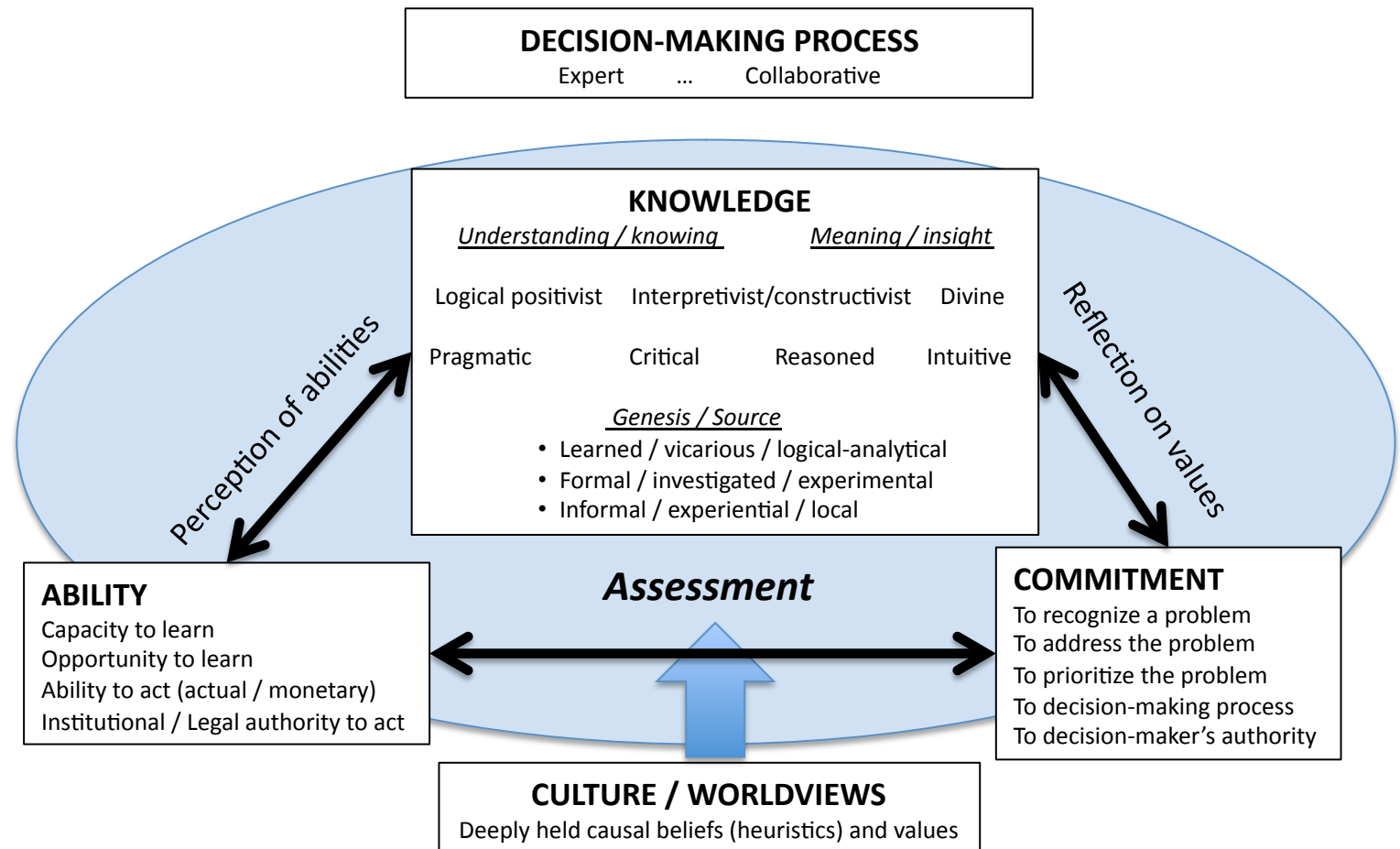
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FINDINGS

Particularized, context- and purpose-specific understandings and insights

Decision

INTENT

Particularized, context- and findings-specific assertion of purpose

DECISION-MAKING PROCESS

Expert ... Collaborative

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Perception of abilities

Reflection on values

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ACTION

Earn / Tax/ Spend
Regulate / Mandate
Educate / promote
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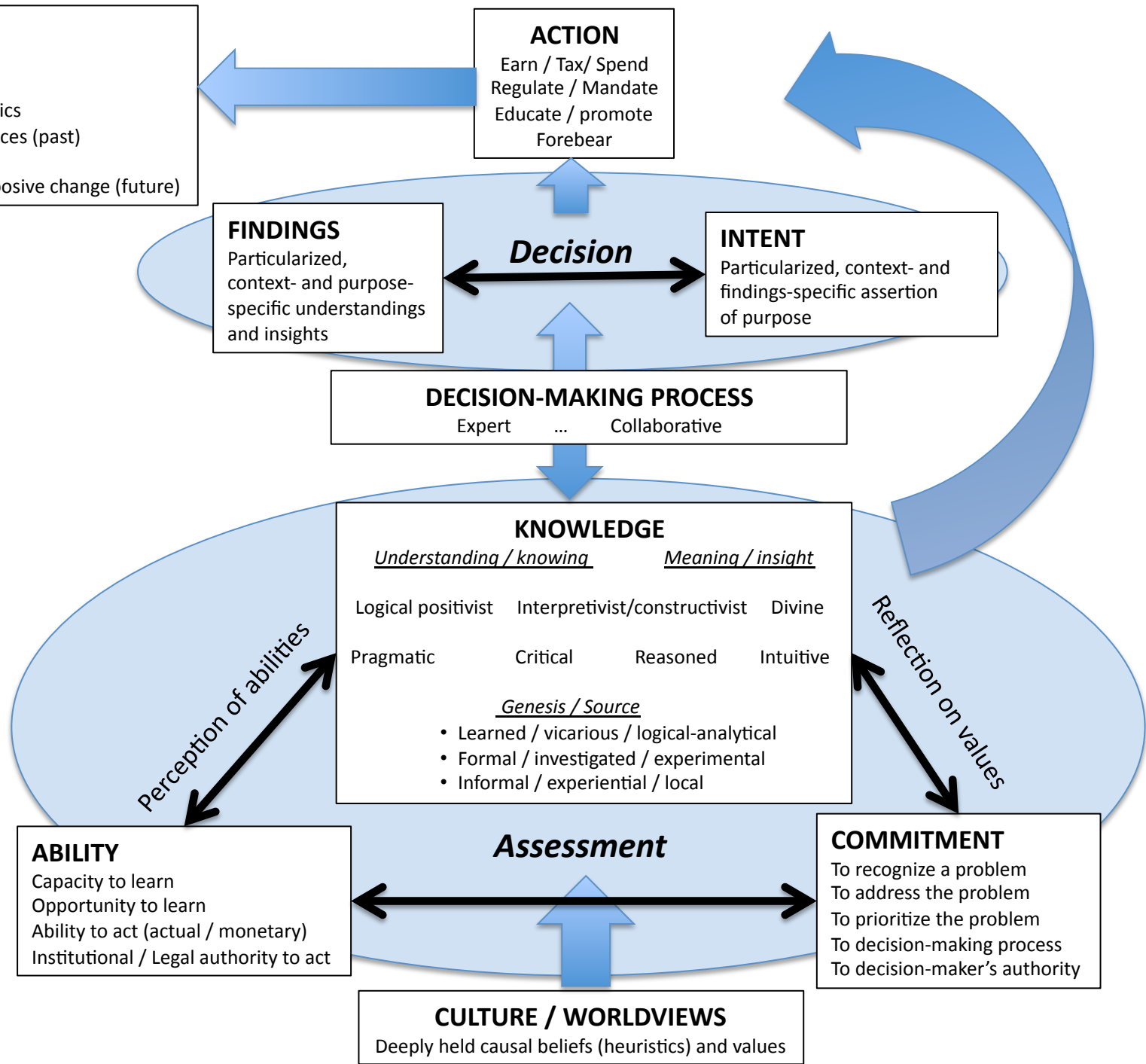
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EDUCATION / TRAINING
[Content & Conveyance]
 Decision-making processes
 Factual conditions
 Value systems
 Institutional authorities

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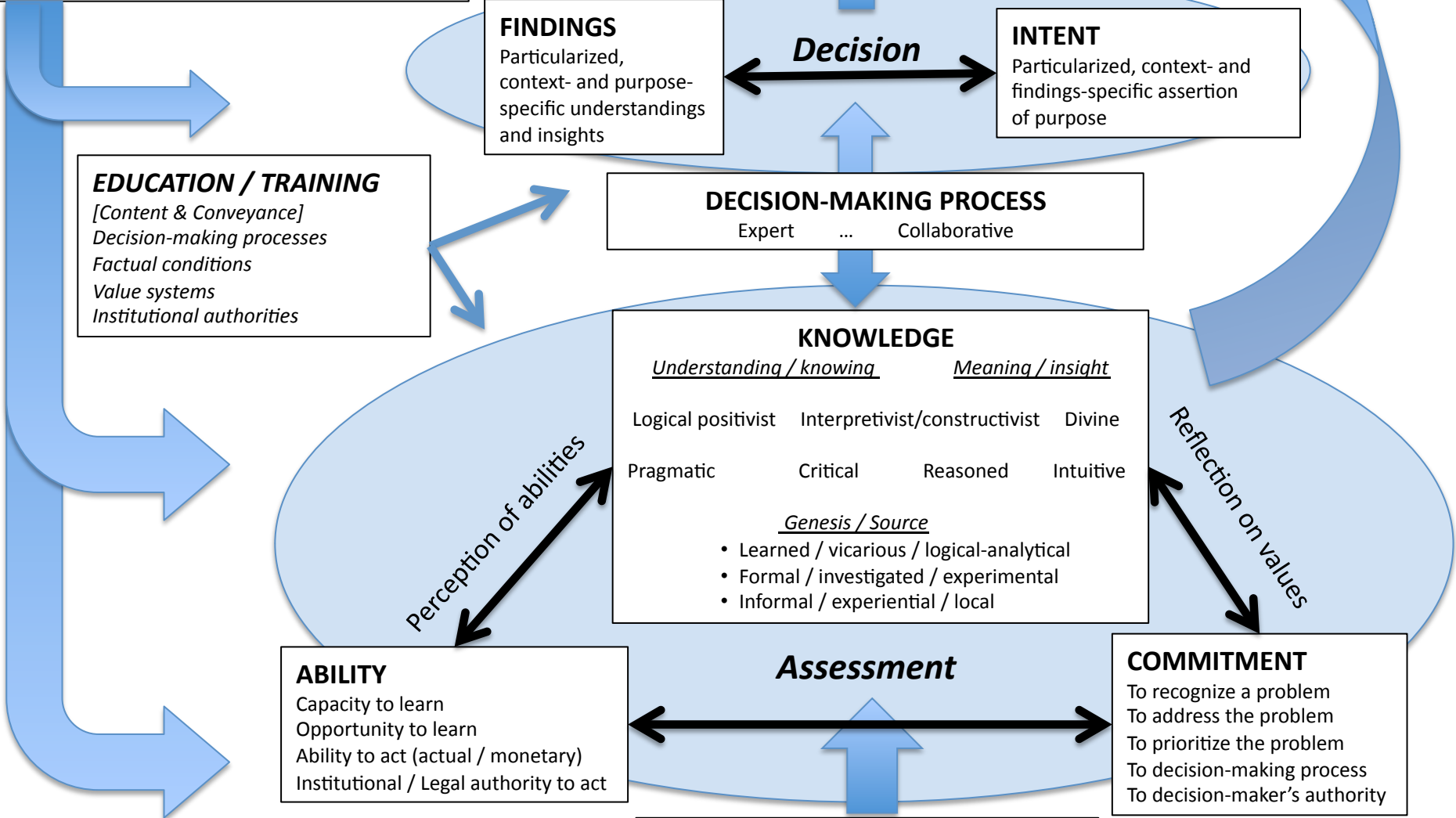
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Value systems
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DECISION-MAKING PROCESS
Expert ... Collaborative

KNOWLEDGE
*What, how, and why
to decide, act*
*What the outcome of
acting will likely be*

Perception of abilities

Reflection on values

ABILITY
To learn, decide, act

Assessment

COMMITMENT
To learn, decide, act
For a particular end

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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