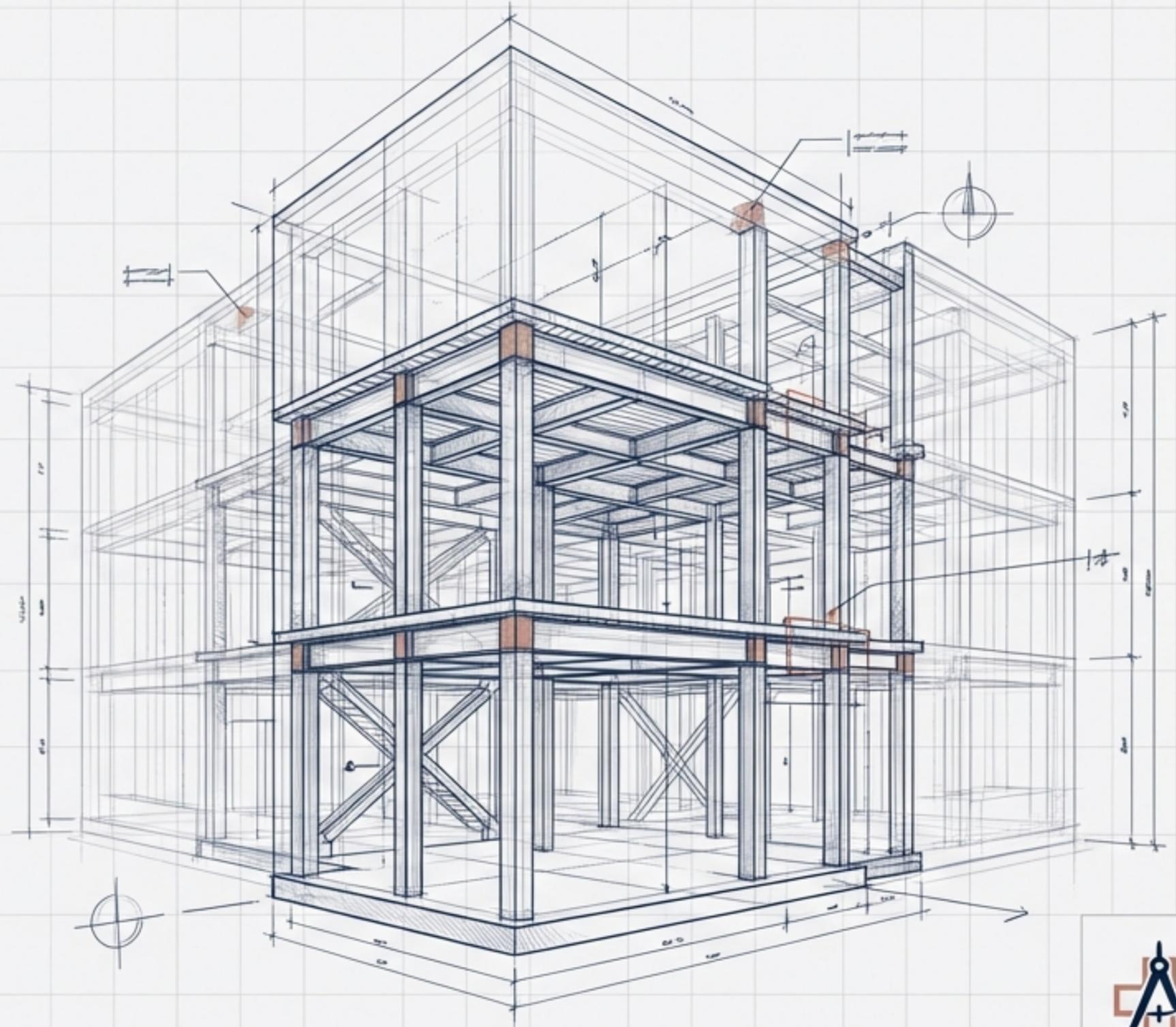


The Architecture of Clinical Consult Practice

Making Invisible Reasoning Visible

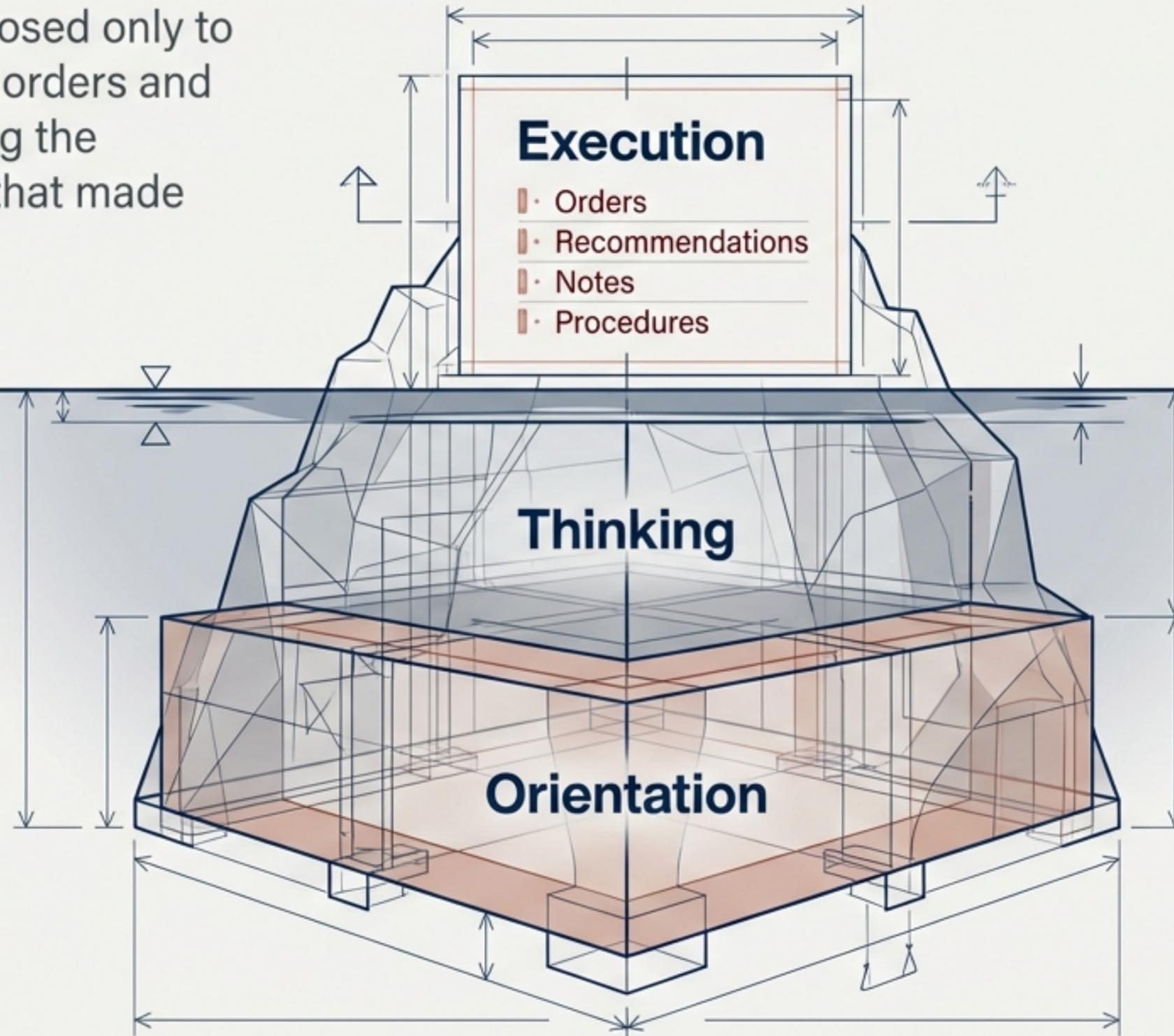
Based on the work of William Aird



The Problem with the Checklist

Most clinicians are exposed only to **Execution**—the visible orders and actions—without seeing the cognitive architecture that made those actions safe.

The Cognitive Architecture

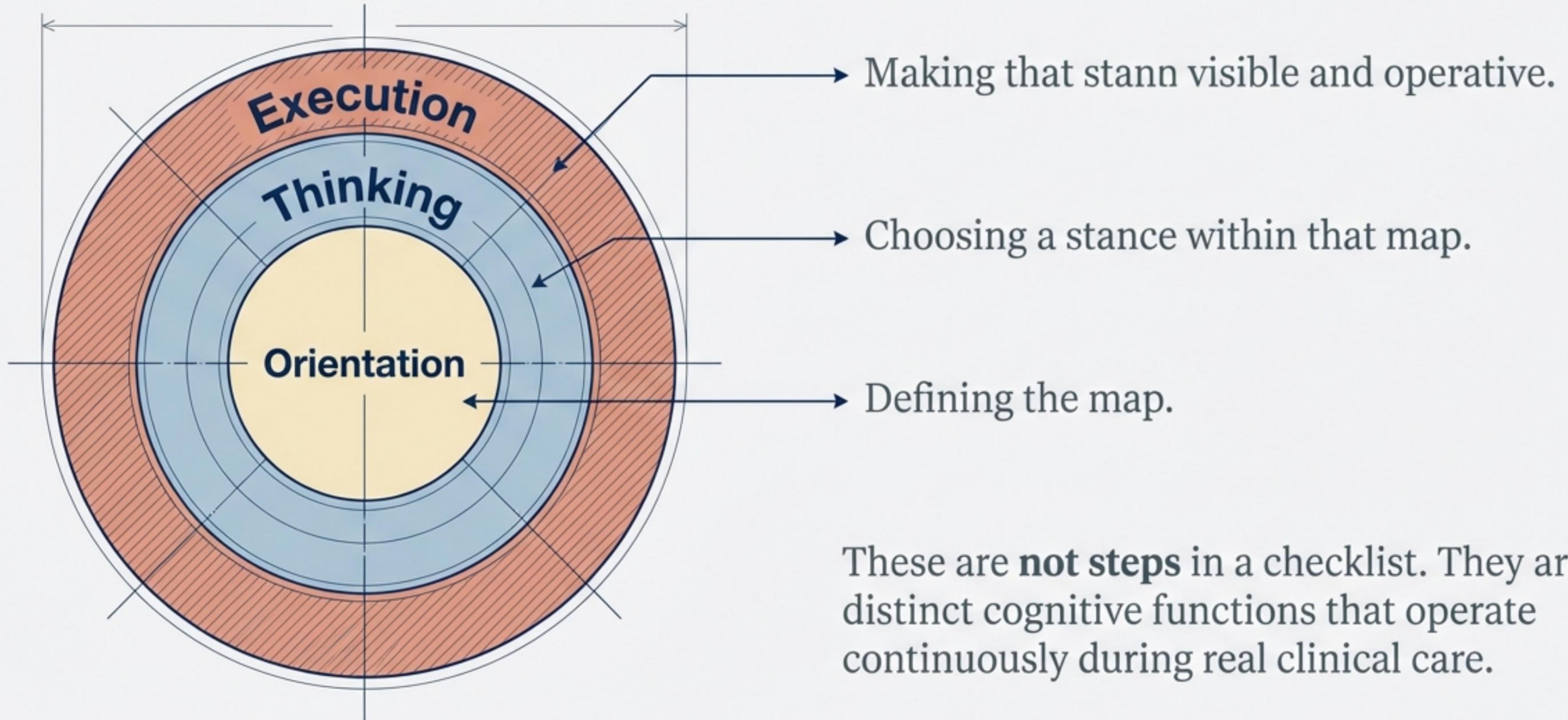


Consult Practice works backward to make this invisible reasoning explicit.

KEY INSIGHT

Expert judgment isn't just *what* you do. It is how you decide what kind of situation you are in, and what matters most within that situation.

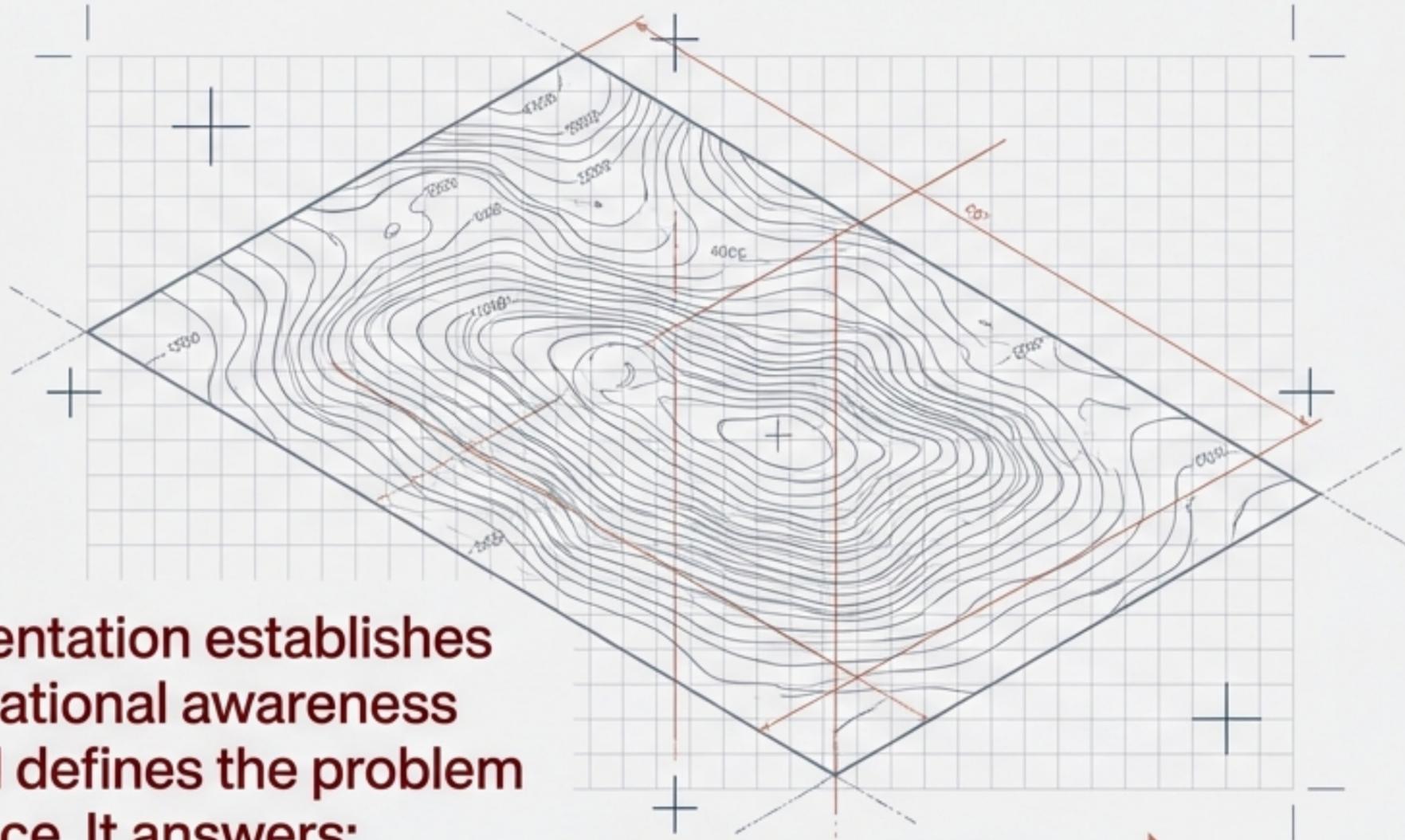
The Triad of Expert Judgment



These are **not steps** in a checklist. They are distinct cognitive functions that operate continuously during real clinical care.

Layer 1: Orientation (Defining the Terrain)

Situational Awareness



Orientation establishes situational awareness and defines the problem space. It answers:
What kind of clinical world am I standing in?

IS NOT

Diagnosis
Instruction

IS

Classifying the situation to enable the right reasoning.

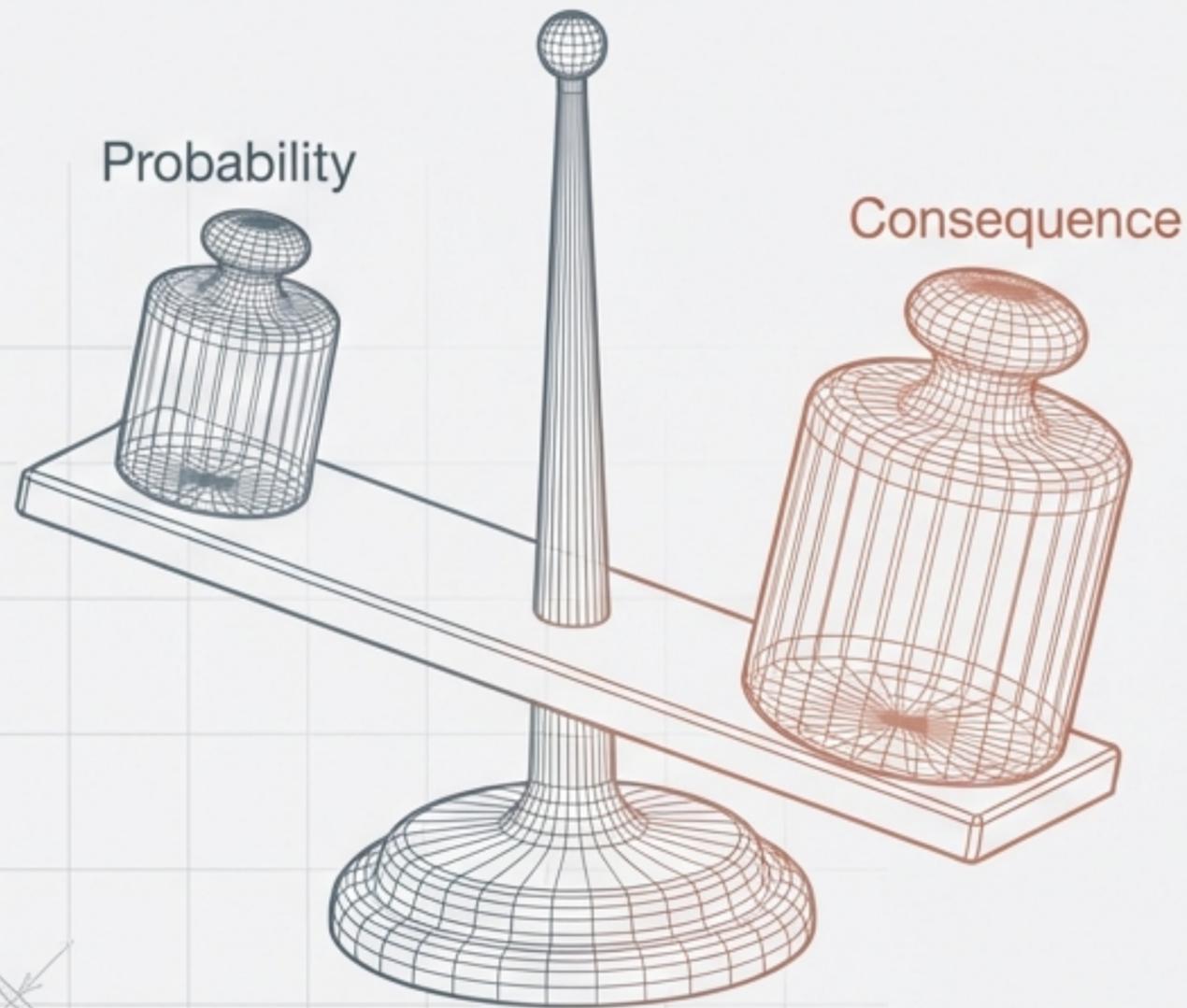
KEY QUESTIONS

- What kinds of danger are plausible?
- Is this a fast-moving, high-risk situation or a contained, watchful one?
- How much uncertainty can safely be tolerated?

The Goal: To prevent Category Error.

Layer 2: Thinking (The Stance)

Cognitive Weighting

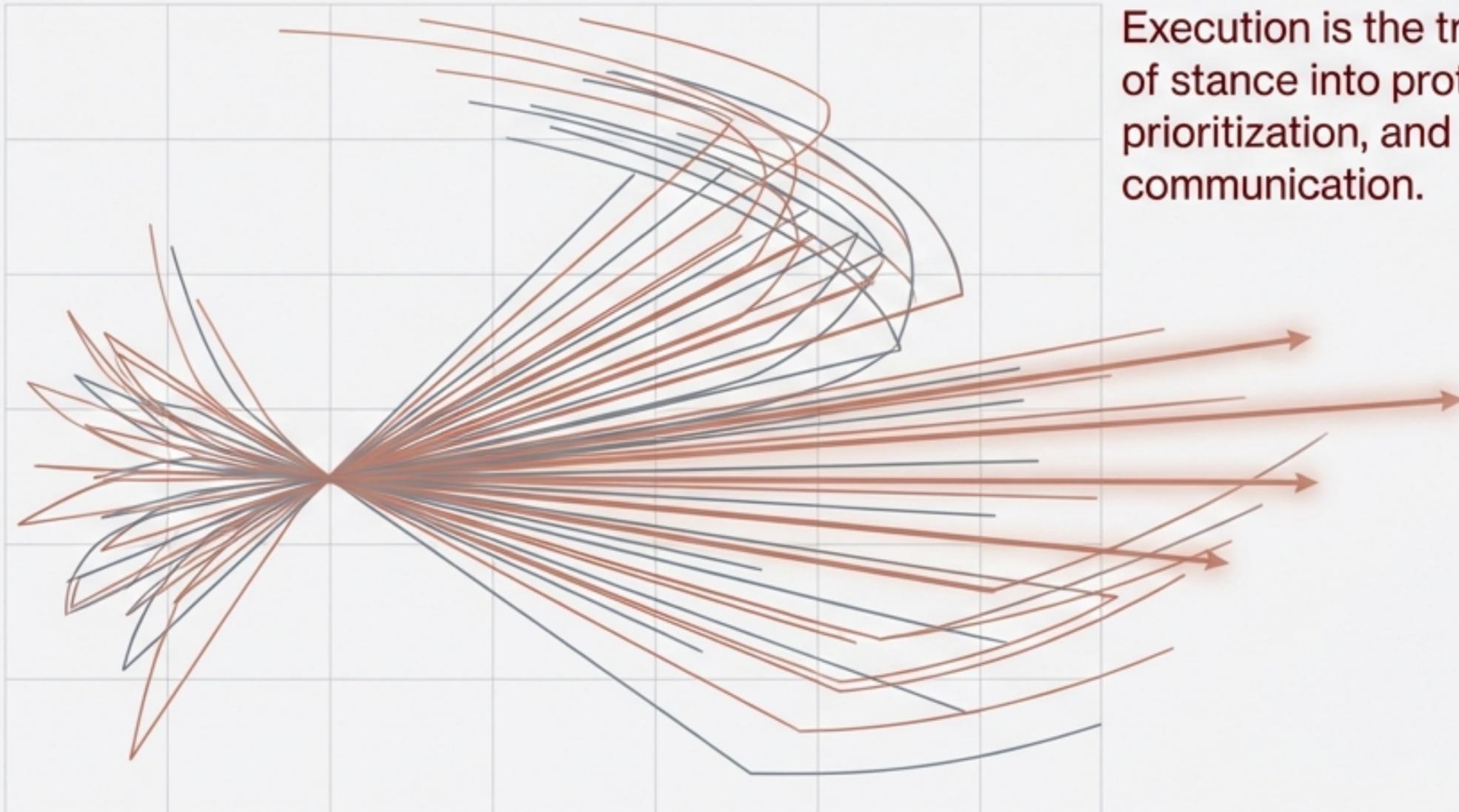


Thinking assigns and revises cognitive weight within the terrain Orientation has defined. It is not just Bayesian ranking (“What is most likely?”). It is priority-setting under uncertainty and asymmetric risk (“What matters most if I am wrong?”).

- Deciding which possibilities deserve the most attention right now.
- Identifying which missed possibilities carry the greatest harm.
- Determining how much uncertainty is tolerable.

Layer 3: Execution (Judgment in Motion)

Translation of Stance



IS NOT

A checklist or order set.

IS

How internal judgment becomes shared, timed, and protective at the bedside.

KEY COMPONENTS

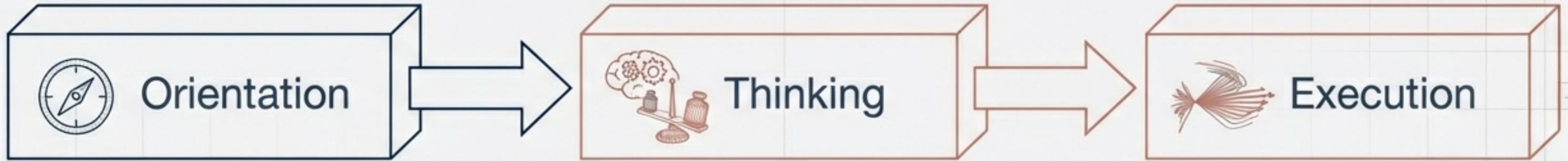
- Communicating urgency
- Explaining uncertainty
- Coordinating with teams

Without Execution, judgment remains private. Private judgment does not protect patients.

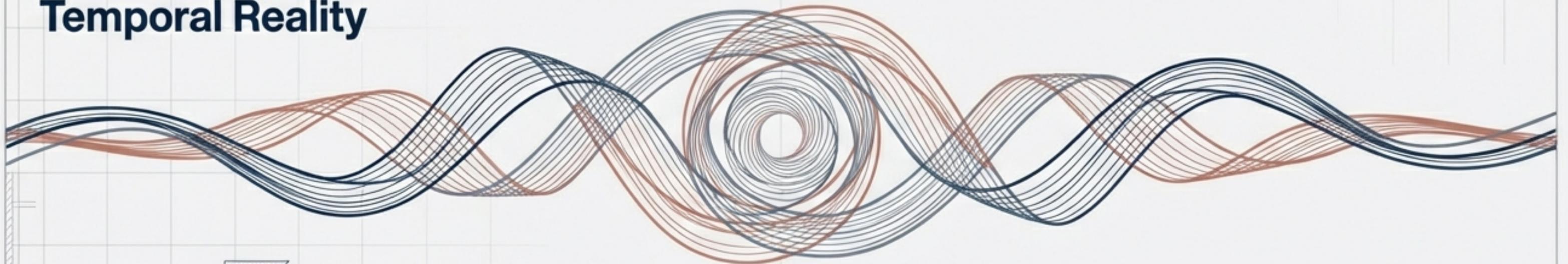
Logic vs. Time

Consultants think while they are executing. They execute while they are still thinking.

Logical Order



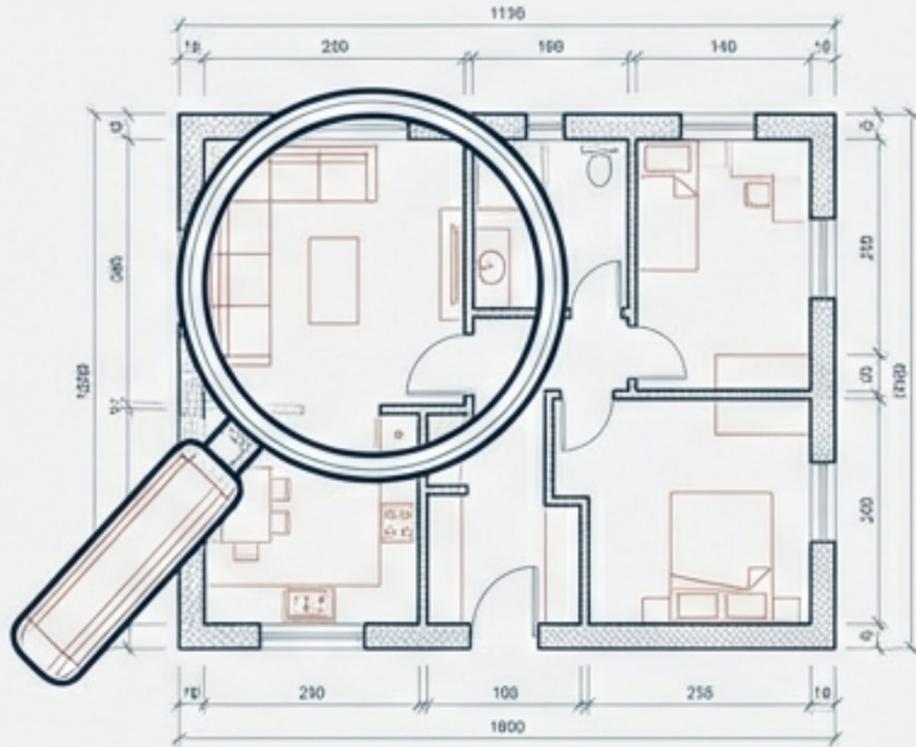
Temporal Reality



“Let’s do this for now, but I’m not convinced yet.”

– Thinking and Execution running in parallel.

Two Metaphors for Expert Judgment



The Detective

Interrogating the scene. Must establish the timeline and physical space first. An interrogation before understanding the scene creates false narratives.



The Fire Response

Assessing the alarm. Smoke? Fire? Malfunction?
A crew that charges in without assessing the alarm risks catastrophe.

Acting before defining the terrain confuses speed with judgment.



BARRIER TO EFFECTIVE DIAGNOSIS

Why Orientation Must Come First

In medicine, failures often occur not because clinicians lack knowledge, but because they commit too early.

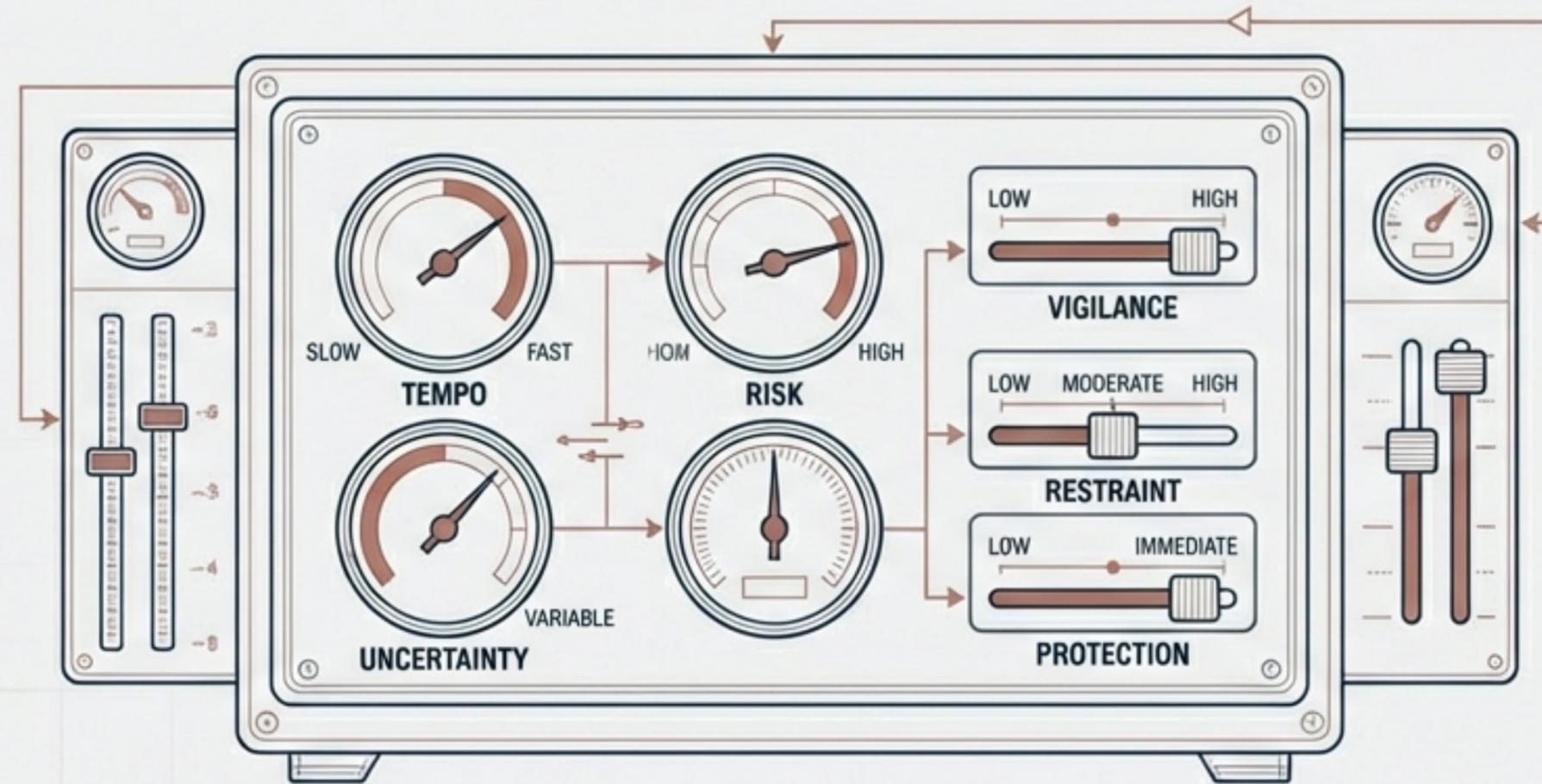
Failures of Orientation

1. **Premature Commitment:** Locking onto a diagnosis before the terrain is clear.
2. **Forced Unification:** Trying to fit all data into one story when they don't belong.
3. **Treating Noise as Signal:** Over-weighting irrelevant data.
4. **Misjudging Reserve:** Failing to see how fragile the patient is.

Orientation selects the Governing Logic. It chooses the rules of reasoning for the specific case.

Different Terrains, Different Logic

You cannot apply the same reasoning tool for every problem. Consult Practice organizes judgment by **cognitive demignitive demand, not just by diagnosis.**



Rather than applying a single reasoning style to every situation, each disease module names the **Dominant Cognitive Force.**

The same laboratory value can require vigilance, restraint, or immediate protection depending on the terrain.

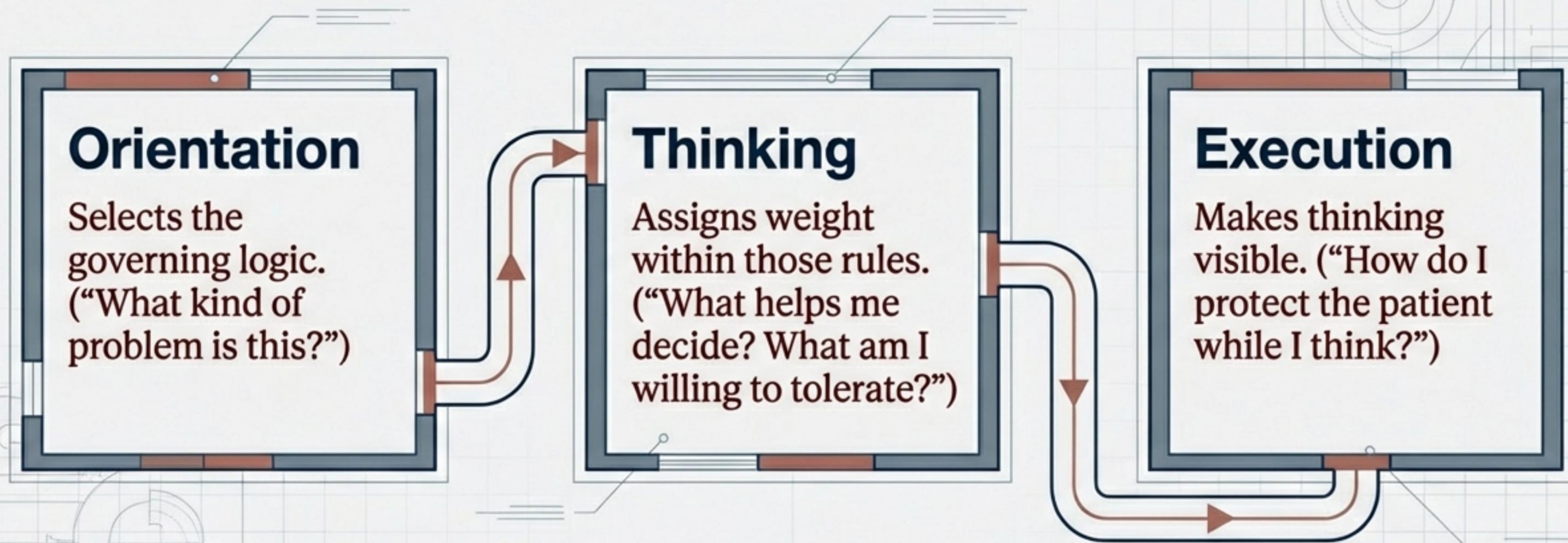
The Cognitive Matrix: Urgent Threats

Clinical Domain	Dominant Cognitive Force	Governing Question
Neutropenia	Reserve-threat reasoning	Is host defense insufficient right now?
Anticoagulation	Competing-harms reasoning	Which danger dominates if I act or don't act?

The Cognitive Matrix: Patterns & Signals

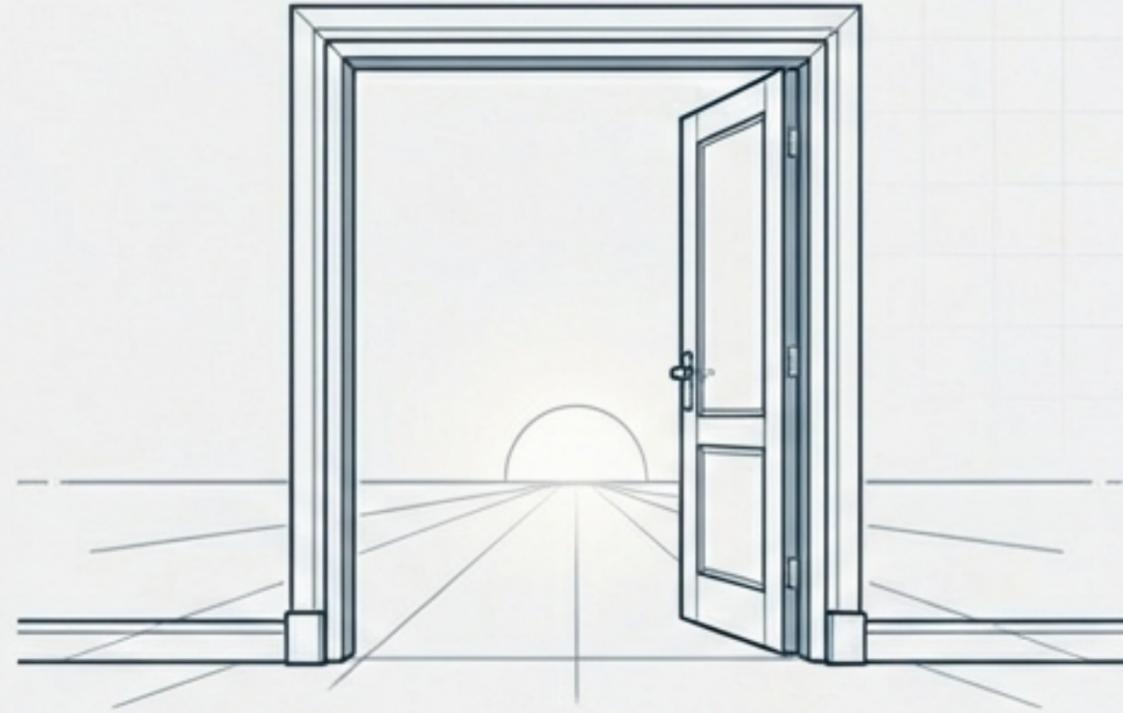
Clinical Domain	Dominant Cognitive Force	Governing Question
Leukocytosis	Signal-discrimination reasoning	Is this a dangerous signal or contextual noise?
Suspected Hemolysis	Pattern-discrimination reasoning	Does this pattern mean what it appears to mean?
Severe Anemia	Threshold / Tempo reasoning	Has physiologic reserve crossed a dangerous limit?

The Complete Architecture



Result: Uncertainty is made safe for patients and teams.

Beyond the Answer



Consult Practice does not teach answers. It teaches how experts decide what kind of situation they are in *before* answering.

Reference texts assume Orientation has already occurred.
Consult Practice makes that upstream cognitive work explicit.

Making the invisible visible makes medicine safer.