

Multiplex Systemics

*A Both-And Framework for Navigating AI
in Mental Health and Psychosocial Support*

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AI in Humanitarian Mental Health

The Landscape:

- 1 in 8 people live with mental disorders; 75% in LMICs receive no treatment¹
- AI chatbots already deployed—Crisis Text Line, Woebot, WHO Step-by-Step
- Patients using AI to regain voice and control in healthcare²

¹WHO World Mental Health Report, 2022

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Cautionary Cases

- Character.AI teen suicide lawsuits (2024–25)
- Crisis Text Line data-sharing controversy (A non-profit shared crisis talks with for-profit AI)
- WHO: No AI chatbot FDA-cleared for mental health diagnosis/treatment

¹WHO World Mental Health Report, 2022

Multiplex Philosophy: Navigating Between Extremes

Nostalgic Idealism

Reject technology
Romanticize human care

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But: Human care
is already flawed—
empathy deficits
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patients disclose
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due to power asymmetries.
(Charlotte Blease,
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Techno-Utopianism

AI solves all problems
Efficiency > relationship

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Techno-Utopianism

AI solves all problems
Efficiency > relationship

But: AI has systematic limits—
overfitting, bias,
hallucination.

Cannot *feel* what
patients feel;

risks “psychopathic” systems
fluent in simulating empathy
(Charlotte Blease,
Dr. Bot, 2025).

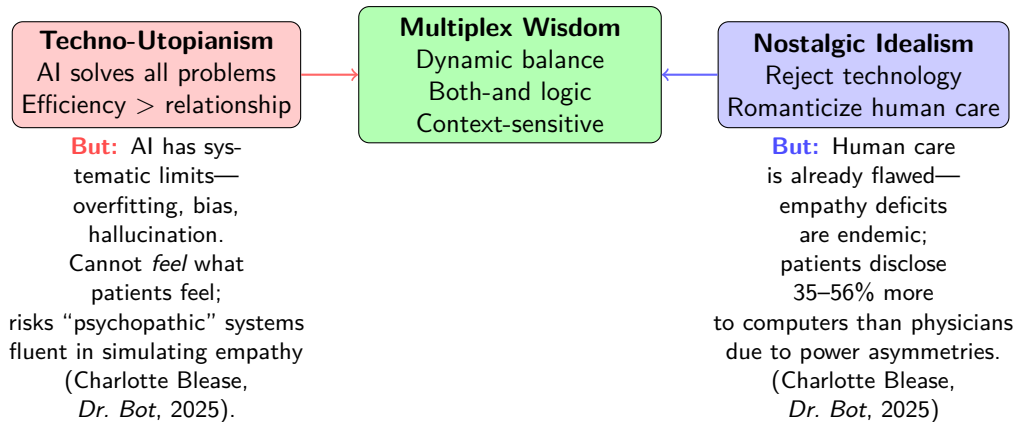
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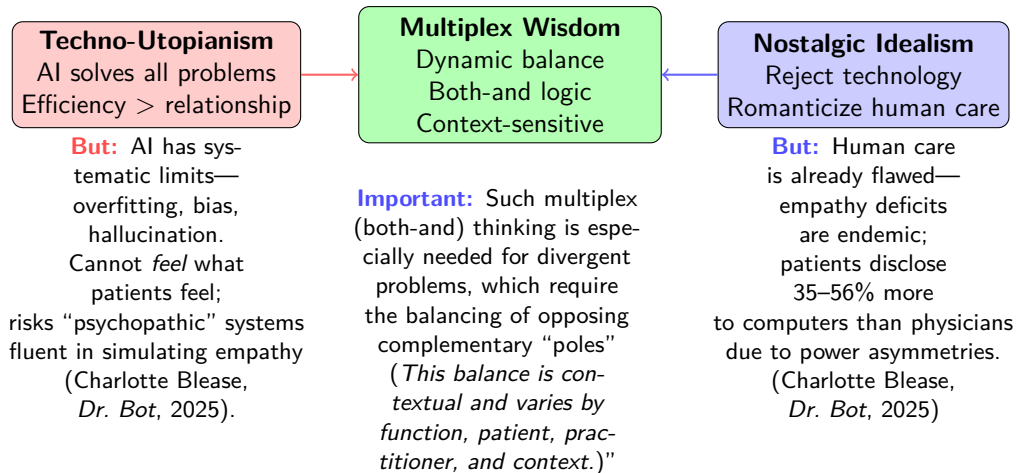
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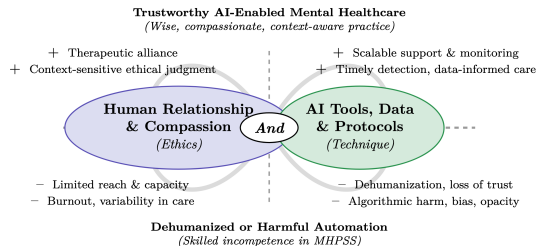
¹Qadir, J., Qoronfleh, M. W., & Senturk, R. (2025). *Toward Multiplex Health: Integrating Complexity, Normativity, and Open Science. Frontiers in Psychology*, 16, 1603474.

The Multiplex Dimension: Both-And & Multi-Layered Thinking

Dimension 1: Both-And Thinking

Key Distinction

Challenges as **polarities to manage**, not problems to solve



Problems: Solvable, stay solved

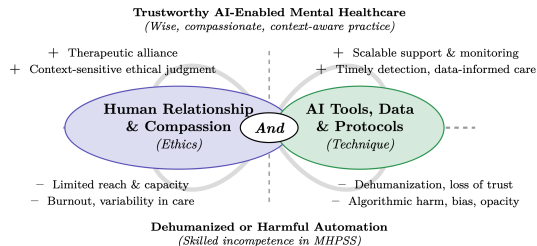
Polarities: Ongoing tensions—*both poles necessary*

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Dimension 2: Multi-Layered Reality

Key Insight

Implementation operates across **three interdependent levels**



Material: Technical, measurable

Social: Relationships, trust

Meaning: Values, dignity, culture

AI for MHPSS requires both: navigating polarities (access AND quality) **and** addressing all levels (material AND social AND meaning)

The Systemics Dimension: Beyond Linear Thinking

From Science to Systemics:

- **Science** (*scire*, “to separate”): analytic understanding through decomposition
- **Systemics** (von Foerster): synthetic understanding through integration and circular causality

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Three Core Principles:

1. See the Bigger Context

- No intervention exists independently
- Everything embeds in webs of relationships

2. Feedback Loops and Circular Causality

- Effects become causes
- Reinforcing and balancing loops

3. Emergence & Leverage Points

- Wholes exhibit properties unpredictable from parts
- Small changes at key points → large effects

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Systems Thinking Insight

Most powerful leverage points involve **paradigm shifts**—changes in underlying assumptions and mental models

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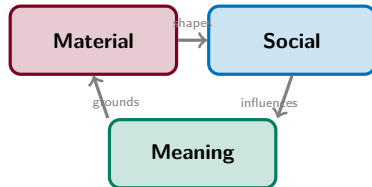
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Feedback Across Levels:

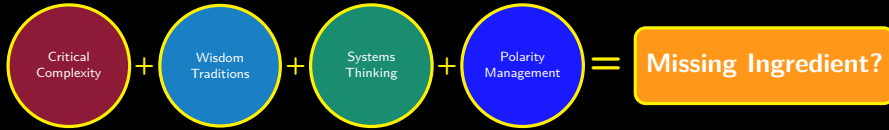


Implication: Meaning-level interventions (framing, values alignment) may be more powerful than technical improvements alone

Multiplex Systemics & Implementation Science: Mutual Enrichment?

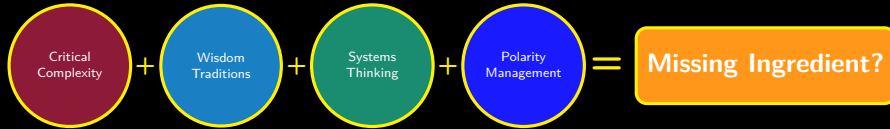
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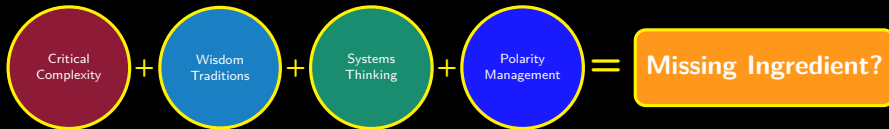


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- Clarifying *implementation determinants* for AI tools across clinical, organizational, and cultural settings

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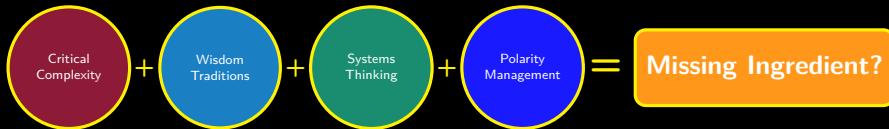


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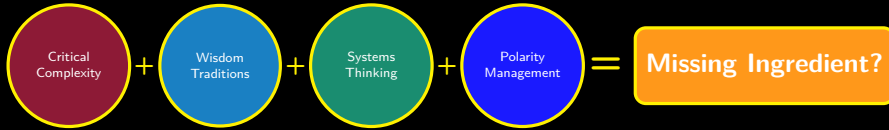


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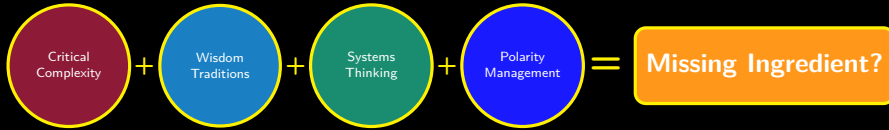


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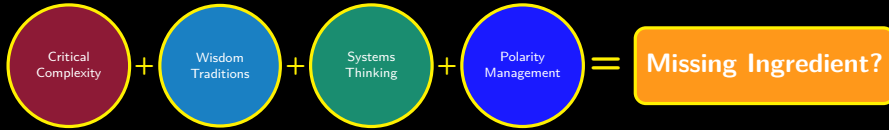


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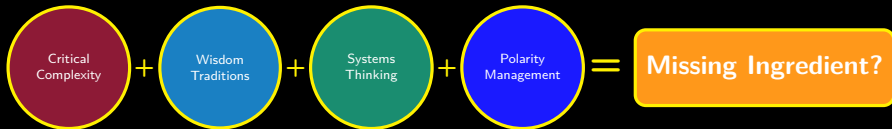


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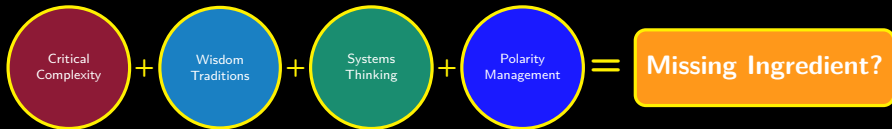
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- Humanity-centered (not just user-centered) design
- Multiplex [multi-layered] thinking from wisdom traditions

What We Seek?

- Partners for operationalization
- Critical dialogue on implementation and evaluation
- Collaboration on **Multiplex AI for Mental Healthcare**

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Questions & Discussion

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