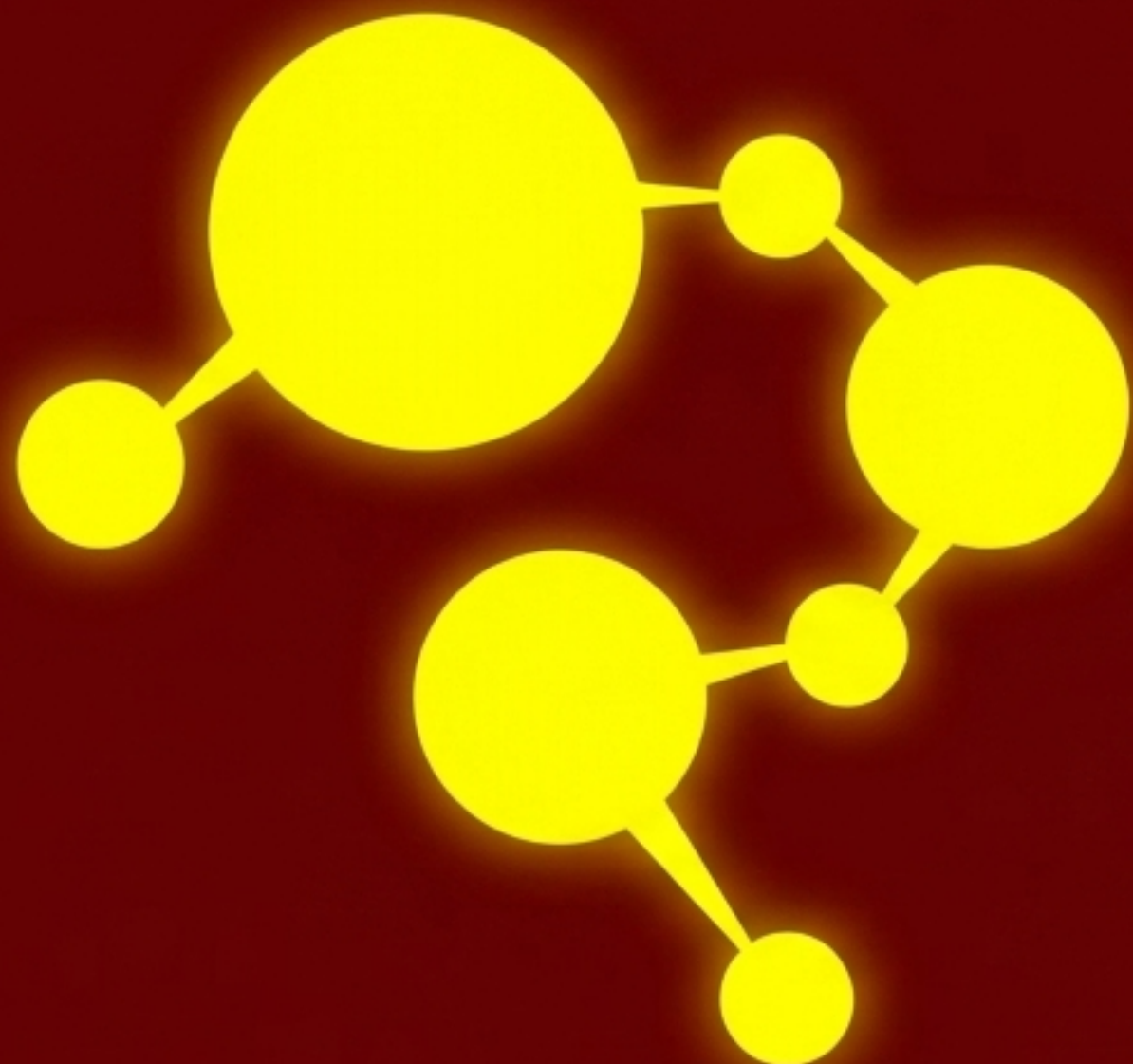


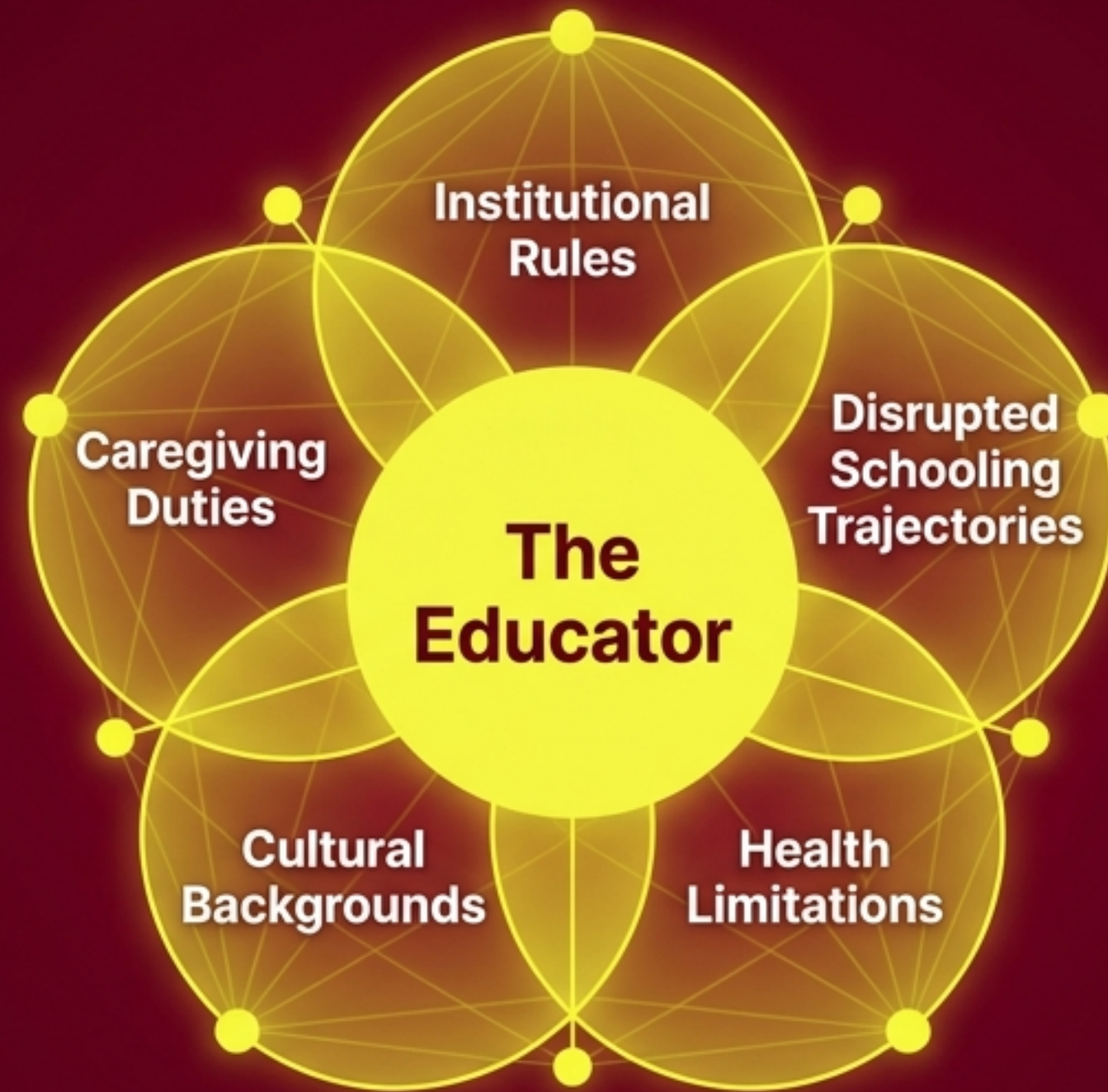
Artificial Intelligence as a Tool for Inclusive Educational Planning: Case Studies from Residential Childcare

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Journal: BRAIN. Broad Research in Artificial
Intelligence and Neuroscience (2026)



The Cognitive Overload of Residential Care



Educational work in residential childcare unfolds in instability. Professionals must continuously translate heterogeneous, conflicting sources of information into meaningful care.

The Gap in Existing AI Research

Formal Schooling

Predictable
structures

Academic
focus, stable
institutional
environments

Standardized
instructional
models

Residential Childcare

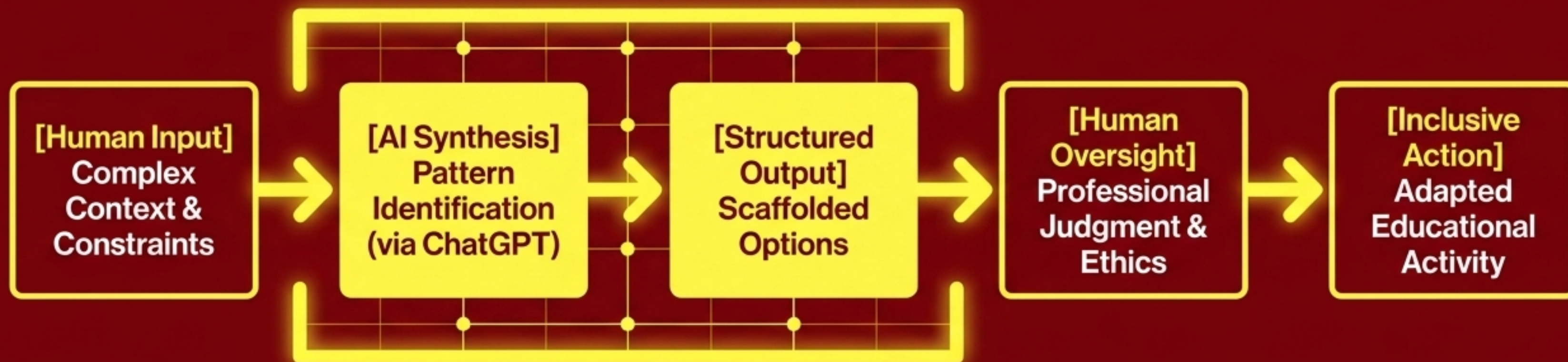
Unstable
trajectories

Intertwined
care and
education

Complex
identity and
health barriers

Most AI education research assumes stable classrooms. Residential care requires tools for contextual sensitivity, not just standardized instruction.

AI as Cognitive Scaffolding, Not a Decision-Maker



Generative AI synthesizes vast textual information to structure complex tasks. It is an analytical instrument, remaining firmly subordinate to human professional judgment.

The Diagnostic Matrix: AI in Practice

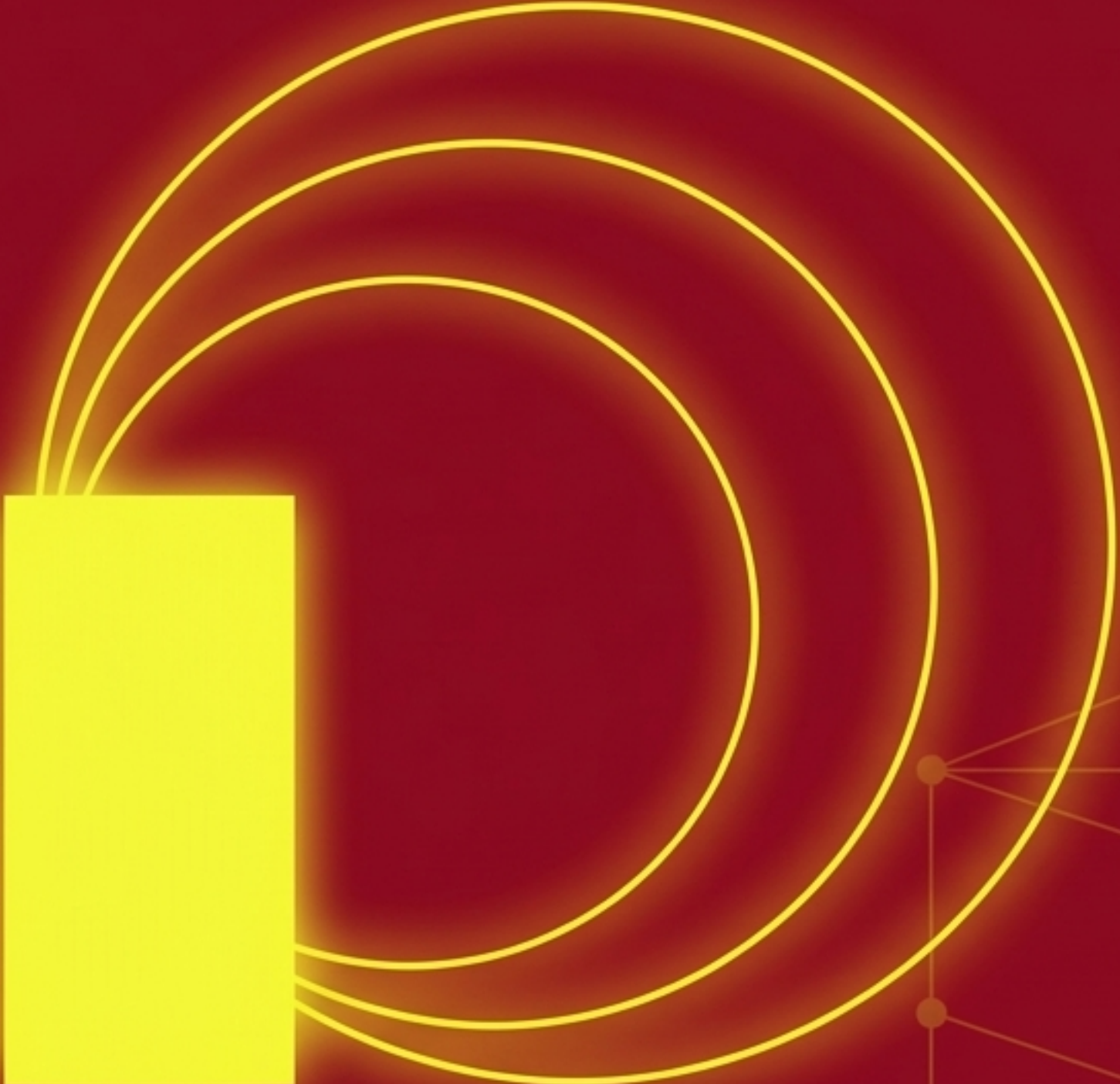
SCENARIO	PRIMARY CHALLENGE	AI-ASSISTED OUTPUT	HUMAN ACTION
Arab/Muslim Cultural Background	Tension with institutional routines	Mapped dietary & schedule intersections	Adjusted daily routines respectfully
Gender Identity Sensitivity	Communication uncertainty in group settings	Recommended cooperation-based activities	Adopted affirming language & collaboration
Metabolic Health Limitations	Balancing physical activity with safety	Proposed lower-intensity adaptations	Integrated dietary awareness into excursions
General Educational Support	Maintaining learning motivation	Suggested interspersed tutoring & leisure	Balanced cognitive load to reduce fatigue

Resolving Institutional Tensions



AI excels at mapping intersections. It helps educators spot potential misunderstandings before they happen, allowing for the design of activities that respect both the child's background and institutional constraints.

Supporting the Supporter



A Provisional Sounding Board: AI serves as a reflective instrument for exploring how professional practice can be structured more effectively.

Mitigating Burnout: It helps educators manage high emotional demands and articulate core professional principles under time constraints.

The Context: Highly valuable in systems where formal supervision is not consistently established.

Ethical Boundaries & Limitations



The Limits of the Tool:

- Outputs are contingent and based on generalized models.
- Cannot replace domain-specific clinical or health expertise.
- Must never act as an automated decision-maker for vulnerable youth.
- Relies entirely on the situated understanding of the educator.

The Four Pillars of AI Support in Care



Interpretation of Contextual Info

(Analyzing cultural, social, and institutional factors).



Preparation of Activities

(Generating ideas adapted to specific child circumstances).



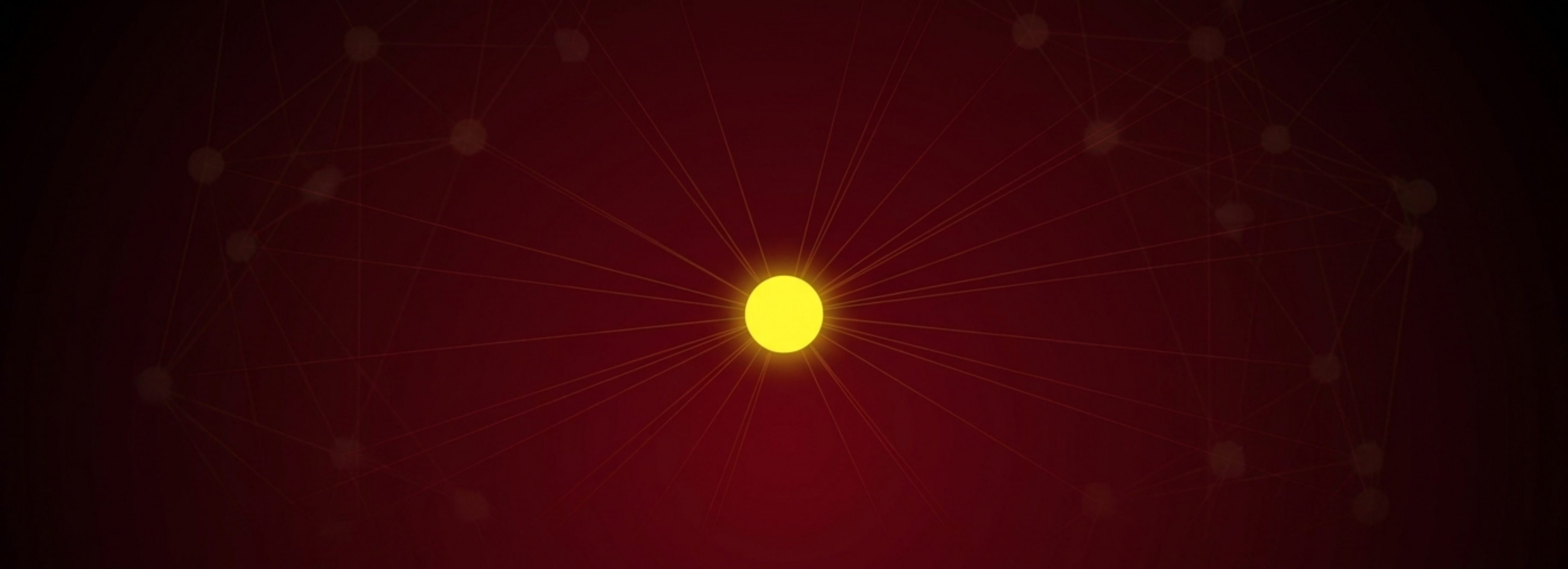
Identification of Tensions

(Spotting friction between routines and individual needs).



Professional Reflection

(Organizing professional thinking and responsibilities).



Amplifying the Human Element

Artificial intelligence will not replace the human relationships at the center of residential childcare. Rather, it quietly strengthens the professional's capacity to understand, interpret, and respond to the complex realities in which those relationships unfold.