



# Open Discussion #2

LISBON  
April 2026

## Theme

**Useful Conversational Chatbots or Social Junk Food?**

**DataSys 2026 & ComputationWorld 2026**



# Coordinators

LISBON  
April 2026

## Coordinators

**Prof. Dr.-Ing. Thomas Nitsche, Hochschule  
Niederrhein, Germany**

**Prof. Dr. Petre Dini, IARIA, USA/EU**



# Open Discussion

LISBON  
April 2026

## ▪ „The dark side“

- **Companies:** chatbot follows only standard procedures → no (human) help (in case of exceptions) anymore?
- **(social) media systems are like drugs**
  - Each clip delivers a dopamine hit → you want some more
  - Wasted time ☹️
- **Extreme cases: falling in love with (social) bots**
  - Seems perfect, 24/7 available, acting as “best friend”
  - Deep emotional bonds
- **Research examples**
  - Pluhar, E., Kavanaugh, J. R., Levinson, J. A., & Rich, M. (2019). Problematic interactive media use in teens: comorbidities, assessment, and treatment. *Psychology Research and Behavior Management*, 12, 447–455. <https://doi.org/10.2147/PRBM.S208968>
  - Sharma, B., Lee, S.S., & Johnson, B.K. (2022). The Dark at the End of the Tunnel: Doomscrolling on Social Media Newsfeeds. *Technology, Mind, and Behavior*, 3(1). <https://doi.org/10.1037/tmb0000059>



**Thomas Nitsche**  
**Niederrhein University**  
**Germany**





# Open Discussion

LISBON  
April 2026

- „The bright side“ → useful
  - (virtual) assistance, customer support 24/7 available → so potentially more support than before
  - Helpful tool:
    - (fast) knowledge search, generation of texts, code, ...
    - (Chatbot) Interaction in natural way
  - Example: Current projects: AI/LLM assisted assistance systems
    - for unskilled home care workers
    - for palliative care considering cultural sensitivity



**Thomas Nitsche**  
**Niederrhein University**  
**Germany**



- **Junk or helpful tool?** → Depends on the application & on you

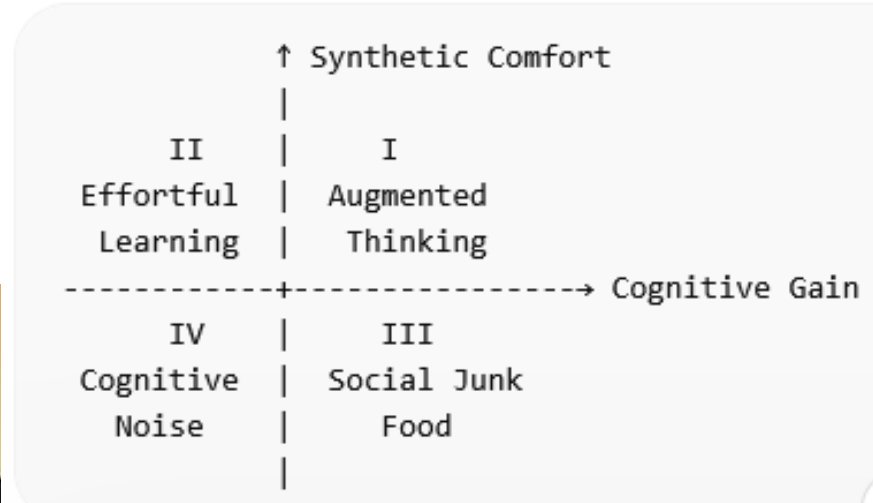


# Open Discussion #2

LISBON  
April 2026



## Visual (conceptual positioning)



**Petre Dini**  
**IARIA**  
**USA/EU**



## Q: NEED?

**Am I leaving this interaction with a model, or just with a feeling?**



**AI-entities tend to please, less argumentative, layers of never-ending advises, always not enough.**

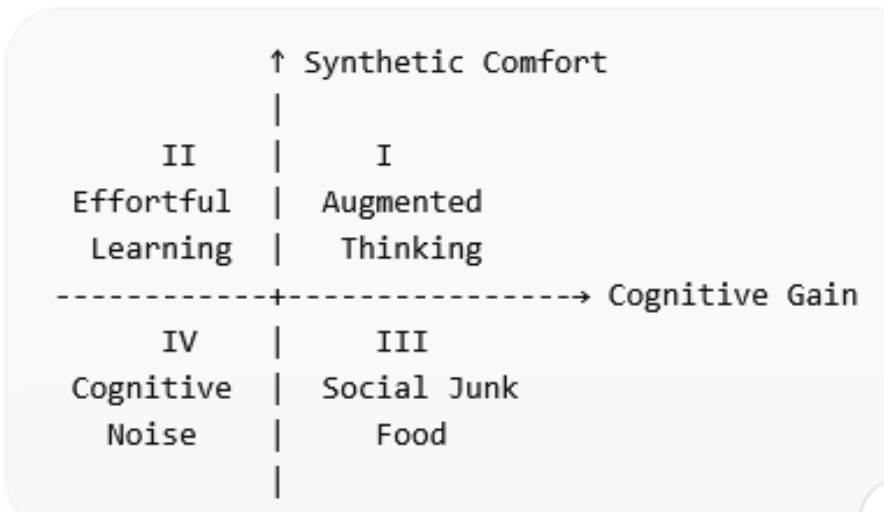


# Open Discussion #2

LISBON  
April 2026

Visual (conceptual positioning)

## Cognitive Gain vs Synthetic Comfort



### Axes Definition

#### • X-axis: Cognitive Gain

Degree to which the interaction produces **transferable understanding**

(models, abstractions, reasoning patterns, retained knowledge)

#### • Y-axis: Synthetic Comfort

Degree of **ease, fluency, emotional satisfaction, and frictionless engagement**

(pleasantness, speed, conversational smoothness, reassurance)



**Petre Dini**  
**IARIA**  
**USA/EU**

### Minimal Reflection Protocol (10 seconds)

After an interaction, place it:

**“Which quadrant was this?”**

Then act:

I → Consolidate

II → Persist

III → Limit

IV → Exit





# Open Discussion #2

LISBON  
April 2026

## II. High Gain / Low Comfort — “Effortful Learning”

**Profile:** Challenging, sometimes frustrating, but cognitively transformative.

**Risk:** User abandonment (too demanding).

### Guideline:

→ Treat discomfort as a **signal of depth**, not failure.

## IV. Low Gain / Low Comfort — “Cognitive Noise”

**Profile:** Confusing, unhelpful, and frustrating.

**Risk:** Wasted time, erosion of trust.

### Guideline:

→ Disengage quickly; refine prompt or switch source.

## I. High Gain / High Comfort — “Augmented Thinking”

**Profile:** Efficient, pleasant, and intellectually productive interaction.

**Risk:** Subtle over-reliance due to *frictionless excellence*.

### Guideline:

→ Periodically *reproduce insights without assistance* to preserve autonomy.

## III. Low Gain / High Comfort — “Social Junk Food”

**Profile:** Pleasant, engaging, but shallow and non-transferable.

**Risk:** Addictive loops, illusion of productivity.

### Guideline:

→ Time-box usage; ask: *What did I actually learn?*



Petre Dini  
IARIA  
USA/EU



# Open Discussion #2

LISBON  
April 2026

## STAGE IS YOURS

**Useful Conversational Chatbots or Social Junk Food?**

**DataSys 2026 & ComputationWorld 2026**