



Intermediate Consciousness

*Understanding the Emotional–Cognitive Disconnection
in Digital–Physical Transitions*

Hila Shalit

Adam Mickiewicz University in Poznań

hila.shalit2511@gmail.com · ORCID 0009-0006-3301-2085

THEORETICAL PAPER · A CONSTRUCT PROPOSED FOR TESTING

A moment everyone knows, but no one has named

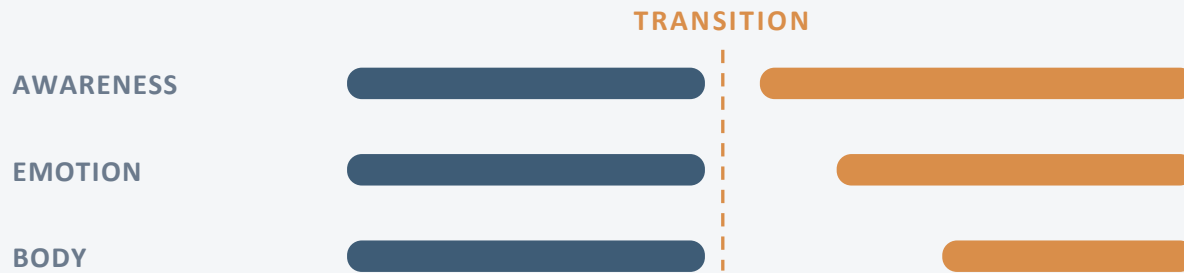
1 **A partner** looks up from a phone and cannot yet meet you in an intimate conversation.

2 **A colleague** walks out of an online meeting into a room, flat for the first few minutes.

3 **A parent** puts down a device and registers a child's bid, without its relational meaning.

*“Present in body,
but not yet in affect.”*

Not a lapse of attention:
a transient reconfiguration.



The three systems do not come back online at the same moment.

What we measure vs. what we miss

What research measures

- Quantity of screen time
- Type of content consumed
- Age of first exposure
- Cumulative exposure over weeks and years

Kabali et al., 2015 · Madigan et al., 2019 · Lissak, 2018

What is left out

The transitional interval itself.

Onset and offset of screen sessions are treated as neutral chronological boundaries. They are unremarkable time points rather than psychological states with their own structure and relational consequences.

THE QUESTION THIS PAPER ANSWERS

Is the crossing between digital and physical environments, *in either direction*, a psychological state in its own right?



The nearest constructs: what they leave out

Attention Residue

Leroy, 2009

ESTABLISHES

Cognitive activity about a prior task persists into the next one.

LEAVES OPEN

The emotional and bodily side of the same switch.

Doorway Effect

Radvansky et al., 2011

ESTABLISHES

Crossing an environmental boundary triggers automatic model updating.

LEAVES OPEN

Whether emotional availability is affected, not only memory.

Technoference

McDaniel, 2019

ESTABLISHES

Device use interrupts ongoing interaction between people.

LEAVES OPEN

What reconfigures inside the person who switched.

Intermediate Consciousness extends and complements these; it does not duplicate them.

Intermediate Consciousness

A transient state of mind emerging during shifts between digital and physical environments, in either direction, across the lifespan, characterised by a **temporary weakening of integration between conscious awareness, emotional experience, and bodily signals.**

Transient	Arises at the border; resolves as presence is re-established.
Specific	A tripartite disintegration, not a general drop in functioning.
Directional	Its character depends on which way the person is moving.

Neither

“being online”

nor

“being offline”

An in-between state in which attention, affect, and bodily awareness are partially decoupled and not yet re-synchronised.

The whole model in one picture



One hinge, two directions. The middle is where the three signals fall out of step.



Three dimensions of disconnection

I

Consciousness – Emotion

The stream of thought stays organised by the logic of the environment just left, while the new one asks for a different emotional stance.

Cognitively “there”, emotionally “not yet there”.

II

Cognition – Emotion

A temporary disruption in the capacity to identify, label, and reflect on one's own emotional state.

Resembles brief, situational alexithymia.

III

Body – Emotion

Interoceptive signals fail to translate into felt emotion or self-regulation impulses.

The body “speaks”, consciousness does not “hear”.



Not just any transition

Closing a novel, meditating, or leaving an argument can look similar. What differs is not one marker.

Recurrence

Digital transitions happen many times a day and are rarely noticed as distinct events. Reading, meditating, or arguing usually are.

Design

Digital platforms run on immediate, variable rewards. Entry is often passive: boredom, or a notification, not a real choice.

Direction

Even intense digital content leaves the body claim and still. A real argument activates it. Directly, through real physical tension that takes effort to settle.

Granularity

Interactive platforms compress emotion into simple, binary reactions. A conversation carries richer nonverbal cues: tone, face, presence.

None of these four is unique alone. Their co-occurrence is what makes the digital exit distinctive.

Immersion and emergence are not mirror images

Physical → Digital

“IMMERSION” *going in*

- Gradual and self-initiated
- Consciousness narrows as content structures focus
- Emotional processing simplifies toward binary patterns
- Designed for by feedback, calibrated challenge, clear goals

Digital → Physical

“EMERGENCE” *coming out*

- Abrupt, usually triggered by an external demand
- A double demand: disengage the task set and re-expand emotionally at once
- Observable signs: a glazed quality, flattened responses, difficulty naming feelings
- Real, transient reductions in interpersonal availability



The relational cost sits on one side

	Immersion (going in)	Emergence (coming out)
Initiation	Voluntary	Involuntary
Effort	Low	High
Subjective quality	Pleasant	Aversive
Direction of complexity	Toward less	Toward more

The people who need emotional availability are present during emergence, not during immersion.

The Asymmetry Principle



Emotionally constricted patterns fostered in digital environments transfer readily into physical life.

Emotionally rich patterns cultivated in physical environments do not reliably transfer to digital contexts, nor endure across the transition.

Why the bias runs one way

Cognitive economy: Under load, the system favours low-effort schemas (Sweller, 1994).

Presence ceiling: Physical environments carry denser sensory and social signalling.

Embodiment limits: Rich physical patterns cannot be compressed into digital form.

Reward conditioning: Boredom thresholds and reward expectations get recalibrated.

Where the argument already has support

59

empirical studies in a meta-analysis of boredom and digital media use

Camerini et al., 2023

↑

boredom proneness rises with digital engagement, rather than being relieved by it

Tam & Inzlicht, 2024a

≠

recalibrated expectations for immediate feedback make ordinary human delays feel intolerable

Hamari et al., 2016

Existing findings on boredom, patience, and reward expectation are exactly what the Asymmetry Principle predicts. The principle organises them into one directional mechanism.



What this paper claims, and what it does not

The paper claims

- The transitional state has an identifiable structure, distinguishable from adjacent constructs
- Transfer between the two environments is directionally asymmetric
- The construct yields predictions that can be measured and falsified
- Not every crossing produces an effect, but the pattern accumulates over time

The paper does not claim

- That the state itself has been directly measured: it has not
- That the proposed mechanisms are established; they are drawn from adjacent literatures
- That the outcomes are inevitable, or equal in magnitude across individuals

A theoretical paper is judged on coherence, differentiation, and falsifiability, not on findings it does not yet have.



What repeated asymmetric transitions look like

1

Reduced patience

Temporal expectations recalibrated by environments where responses are instant.

2

Difficulty staying present

Elevated engagement thresholds during slow, unstructured interaction.

3

Abbreviated emotional vocabulary

The compression of emotional expression that digital channels enforce.

4

Irritability when under-stimulated

Elevated boredom proneness associated with regular digital engagement.

Predictions about directional effects, not inevitable outcomes for every user.

From a private state to a relational one

Self-awareness

Emotional granularity is a skill that depends on regular practice in attending to and naming internal experience. Repeated states in which bodily signals fail to reach felt emotion may erode the reliability of the internal emotional compass.

Interpersonal functioning

Any relationship requiring attunement is affected: partners, colleagues, friends. Critically, the person in the state is usually unaware of the limitation: self-monitoring is itself compromised.

The parent-child dyad

One party is developmentally dependent on the other's consistent availability. The caregiver is physically present but emotionally inaccessible: a signal of availability and unavailability at once.

How the construct can be falsified

Physiological

HRV, skin conductance, pupil dilation and cortisol before, during and after transitions: objective correlates that distinguish the state from attention residue.

Experimental

Gradual versus abrupt transitions, with and without brief re-embodiment cues, to test whether transition structure modulates intensity and recovery.

Longitudinal

Whether transition frequency and quality predict change in emotional granularity, boredom tolerance and patience: a direct test of the Asymmetry Principle.

Dyadic

Attunement, response latency and contingent responsiveness in the minutes following digital engagement.

Moderators throughout: trait interoception, executive function, boredom proneness, attachment style.



Three things to take away

- 1 The transition itself is a psychological state - Intermediate Consciousness - with structure, phenomenology, and consequences.
- 2 It is universal, not developmental or clinical: it belongs to anyone who moves between the digital and physical worlds.
- 3 The transfer between worlds is asymmetric, and that asymmetry is where the long-term effects live.

Thank you. *Questions welcome.*



Key sources

Ashforth, B. E., Kreiner, G. E., & Fugate, M. (2000). All in a day's work: Boundaries and micro role transitions. *Academy of Management Review*, 25(3), 472–491.

Camerini, A.-L., Morlino, S., & Marciano, L. (2023). Boredom and digital media use: A systematic review and meta-analysis. *Computers in Human Behavior Reports*, 11, 100313.

Csikszentmihalyi, M. (1990). Flow: The psychology of optimal experience. *Harper & Row*.

Hamari, J., Shernoff, D. J., Rowe, E., Coller, B., Asbell-Clarke, J., & Edwards, T. (2016). Challenging games help students learn: An empirical study on engagement, flow, and immersion in game-based learning. *Computers in Human Behavior*, 54, 170–179.

Leroy, S. (2009). Why is it so hard to do my work? The challenge of attention residue when switching between work tasks. *Organizational Behavior and Human Decision Processes*, 109(2), 168–181.

Lombard, M., & Ditton, T. (1997). At the heart of it all: The concept of presence. *Journal of Computer-Mediated Communication*, 3(2).

Radvansky, G. A., Krawietz, S. A., & Tamplin, A. K. (2011). Walking through doorways causes forgetting: Further explorations. *Quarterly Journal of Experimental Psychology*, 64(8), 1632–1645.

Tam, K. Y. Y., & Inzlicht, M. (2024). Fast-forward to boredom: How switching behavior on digital media makes people more bored. *Journal of Experimental Psychology: General*, 153(10), 2409–2426.