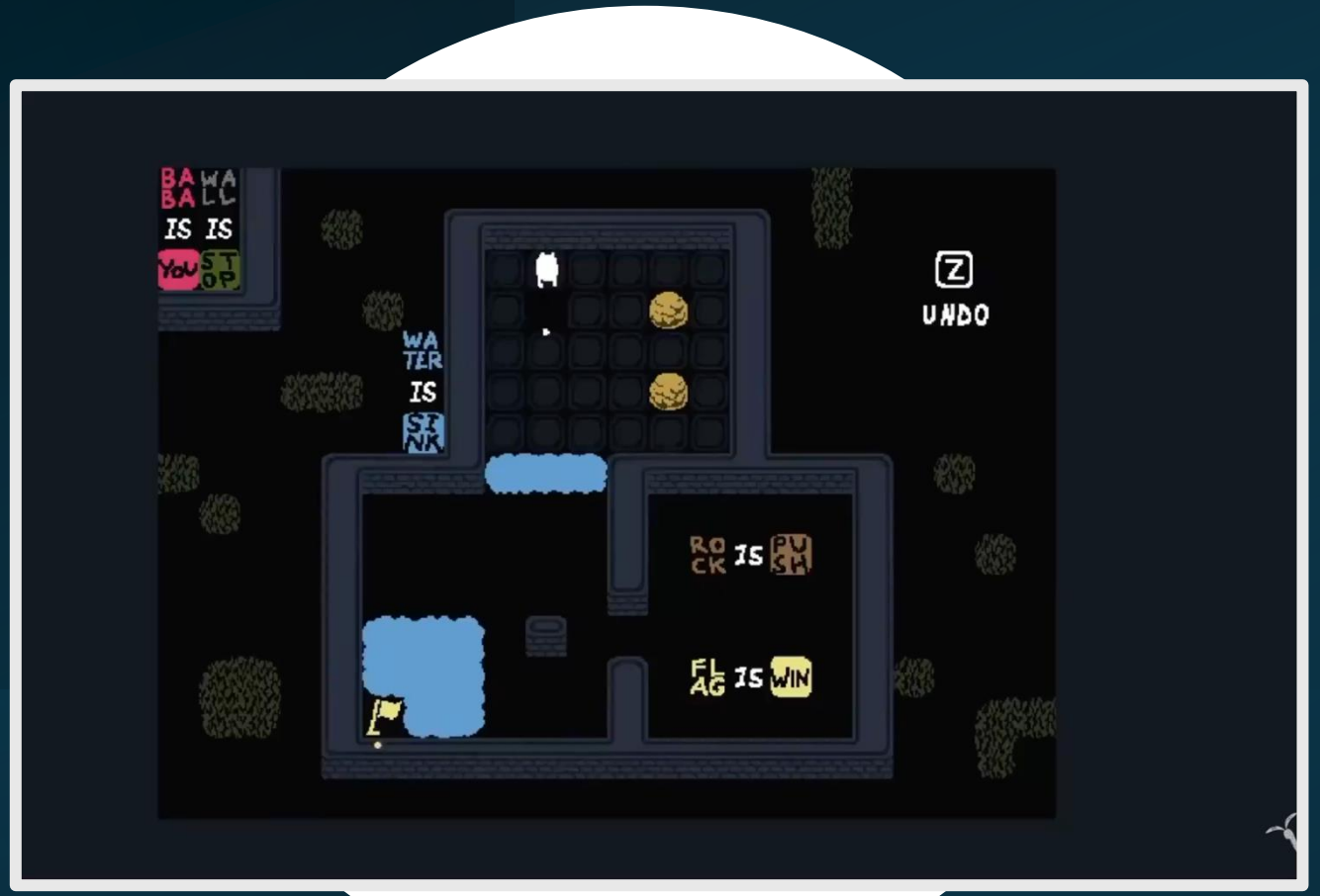
Baba Is Teacher: Game-Based Textual Immersion in the AI Age



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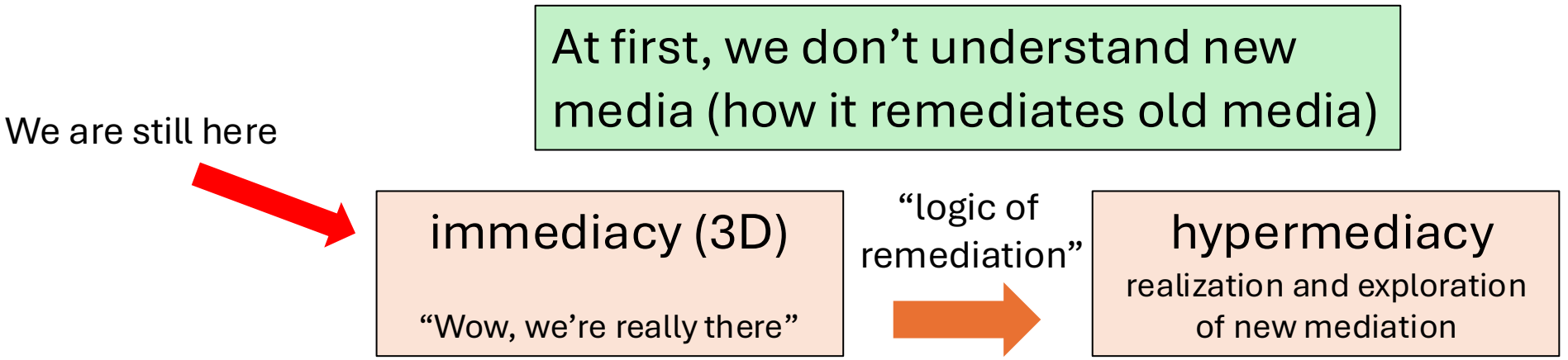
misguided assumption: visual “immersion” is immersive

Remediating Literature in VR

The problem with *illustrative* VR remediations of literature

1. illustrative (1-to-1) space vs. full complexity of **cognitive immersion**
2. ignore **text** as a **game** (fluid word is reduced to a singular object/space)
3. use hierarchical, fixed, sacred notions of reading, writing, and creativity



(Bolter and Grusin, *Remediation*, 1999)

Baba as model of digital-lit immersion

1. **Theory:** *Baba* expands understanding of ***digital textual immersion***
    - VR remediation ignores **cognitive** complexity of textual immersion

2. **Design:** 2D puzzle game (*Baba*) interrogates **creativity** vs. **game** problem

    - **The problem:** balance tension in **creative-writing** game design between
        - creativity (**open-world**)
        - gameplay (**goal/solution-based**)

➢Method: comparison of digital approaches to textual immersion

- *Walden, a game* (Fullerton, 2017): **3D space** as immersion
- *Baba is You* (Teikari, 2019): immersion as **cognitive** and **textual**

Silver Lining?

Challenge is also answer?

- creativity (**open-world**)
- game (**goal/solution-based**)

Creativity *increases* in closed spaces (to a limit)!

- *Baba is You:* potential model for closing/gamifying creative space
  - *Baba* can mathematically be both
    - **puzzle**: closed solution
    - **recombinatory:** infinite computational (writing) space (open-world) (Geller, 2023)

Basic Argument

value: textual potential

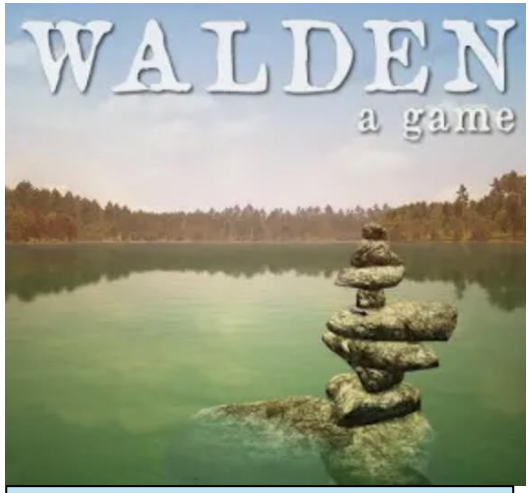
A Reframing: VR to VT (virtual textuality)

1. Recombinatory writing games (RWGs)
2. explore immersive categories more fully
3. than simulated space in VR
4. through digital *textual* immersion

proposal: a course correction

Baba is You (Teikari, 2019)

*Alice in VR (*Egnér et al. 2018)



Walden, a game (Fullerton, 2017)

In other words…

Immersion is a cognitive act (Ryan, 2015)

Problem: VR textual/lit immersion focuses on **3D spaces**

"The limits of my language mean the limits of my world" (Wittgenstein)

The singularity of a visual image:
- the intrinsic doubling of a signifyng system

Ryan's Immersive Categories (for "interactive narratives")

(Ryan, 2009)

All of these are cognitive!

1. Spatial: sense of place/space (not necessarily visual)
   - *Walden, a game* (and other lit VR) stuck in visual, decorative space
2. Epistemic: wanting knowledge, solving
   - narrative and puzzles do this (literature often not narrative)
3. Temporal: curiosity, suspense, to singular surprise
   - game progress or narrative (visual/spatial is weak temporal immerser)
4. Emotional: connection to characters/world/self
   - Self-directed emotions: game progress/winning feels good
   - Outward-directed emotions: narrative/character/spatial empathy

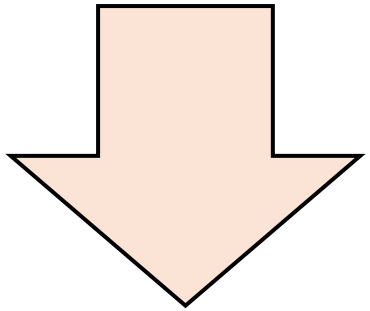
My argument:
- *Walden, a game* emphasizes **3d space** BUT the aim is textual (**cognitive**) immersion
- *BIY* uses **digital text** to develop multiple categories of (**cognitive**) immersion

The key to Baba is that it is an RWG (recombinatory writing game)

RWGs might be the educational Holy Grail

So, what is an RWG?

RWG: A Basic Definition

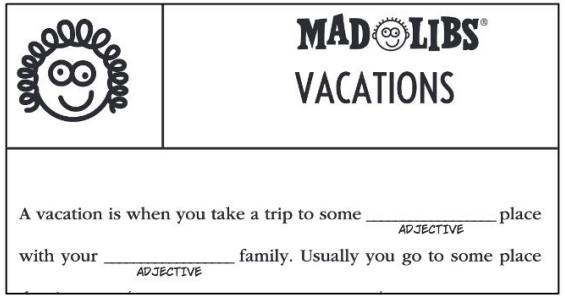


A “quick” definition: combinatory game types

Writing Games vs. Combinatory Games

Creative writing games

Rory’s story cubes



Goal: produce *original* work

(umbrella category)

Creative writing games for reading (CWGR)

Replacement Poem

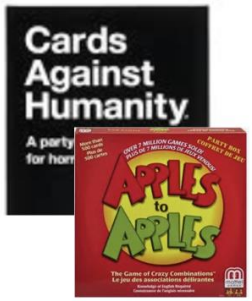
___ I compare ___ to a _____ _____

___ ___ more ___ and _____

Goal: use CW for *reading*

(but still for creative writers)

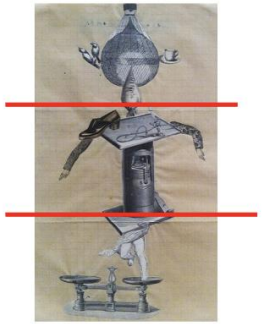
Combinatory writing games



presidents +

I drink to forget

blaming Taylor Swift



___ ___ ___ Player 1

+

___ ___ ___ Player 2

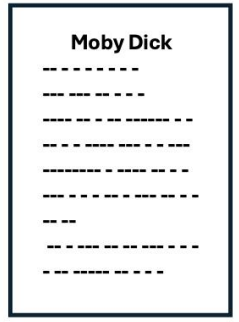
+

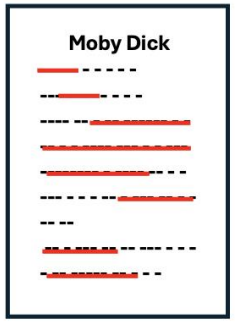
___ ___ ____ Player 3

Goal: creativity + *fun*

Recombinatory writing games (RWG)

Getty





Goal: creativity + *analysis*

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(Jones, 2024)

A “quick” definition: combinatory game types

Recombinatory (Creative) Writing Games (RWG)

Creative writing games for reading (CWGR)

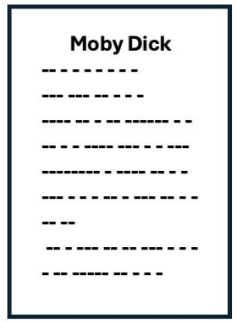
Replacement Poem

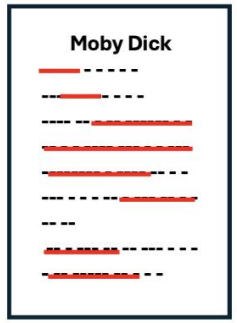
___ I compare ___ to a
_____ ____
___ ___ more ___ and _____

Goal: use CW for *reading*

(but still for creative writers)

Recombinatory writing games (RWG)





Intrinsically creative (combinatorial)

Simply put: writing games where player reorganizes a curricular text

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RWG: An Educational Holy Grail?

RWG: combinatorial, game-based, deformation

creativity | active engagement | critical potential

(McGann, 2000; Ramsay, 2011; Simonton, 2021; Jones, 2024, 2025)

Educational goals:

- **reading + writing + interpretation + creativity + engagement**

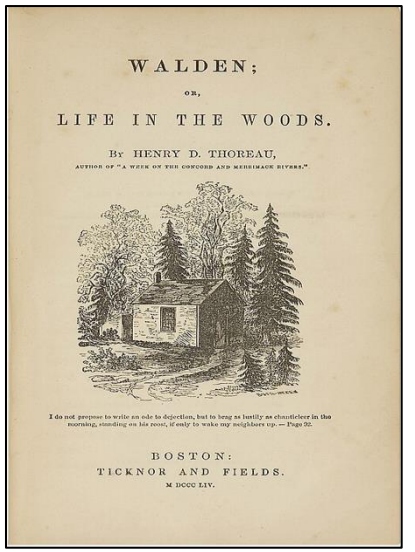
"I went to the woods because I wished to live deliberately" (Thoreau, 65)

Specific comparison: *Walden*

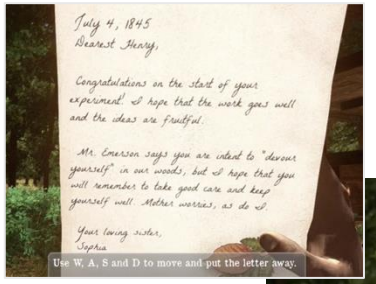
- *Walden, a game* (Fullerton, 2017)
  - **Game goal:** experience the book *Walden* (engagement)
  - **Tasks:** fish, do jobs, build a house, find letters , collect arrowheads
  - **Textual:** audio in background; read *Walden* in pieces at end of day (journal)
- Remediation?
  - 3D = reduction of textual ambiguity
  - reader = receiver, collector (passive)
  - meaning = hierarchical: linear, top-down (author god)
  - narrative = singular (no interpretive variability)
- **Success:** meditative experience matches original! (boring?)
- **Critique:** antiquated notion of reading/text (just adds 3D **illustration**)

Walden is famously "boring"

fear of breaking the "sacred" text



Walden (Thoreau, 1854)



Walden, a game (Fullerton,2017)

"[I went to VR] to suck out all the marow of life" (Me and Thoreau, 69)

A little serious joke

Baba is You: Basics

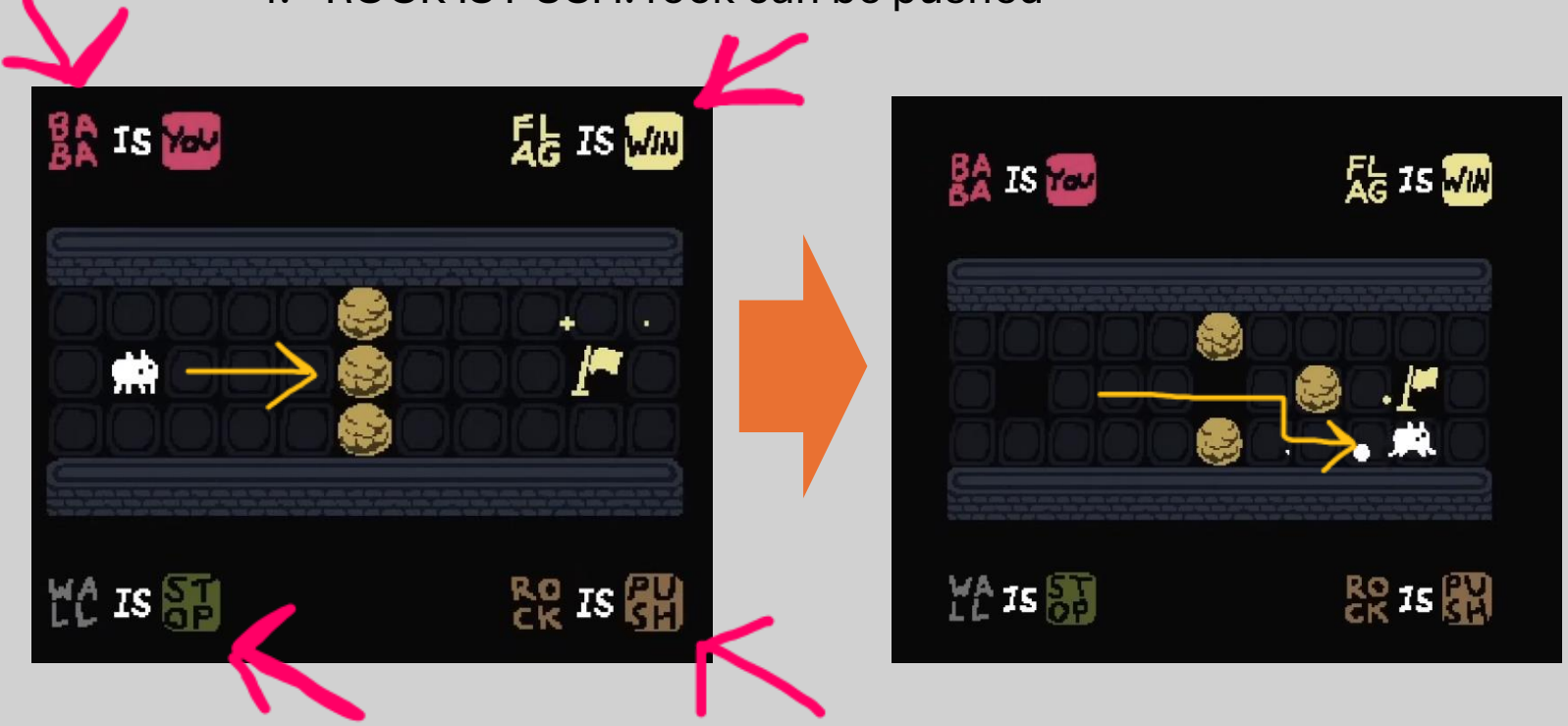
1. You play as Baba
2. Goal: move to touch “flag”
3. Sentences define game rules/world
    1. BABA IS YOU: you play as Baba
    2. FLAG IS WIN: touch flag to win
    3. WALL IS STOP: can’t pass wall
    4. ROCK IS PUSH: rock can be pushed

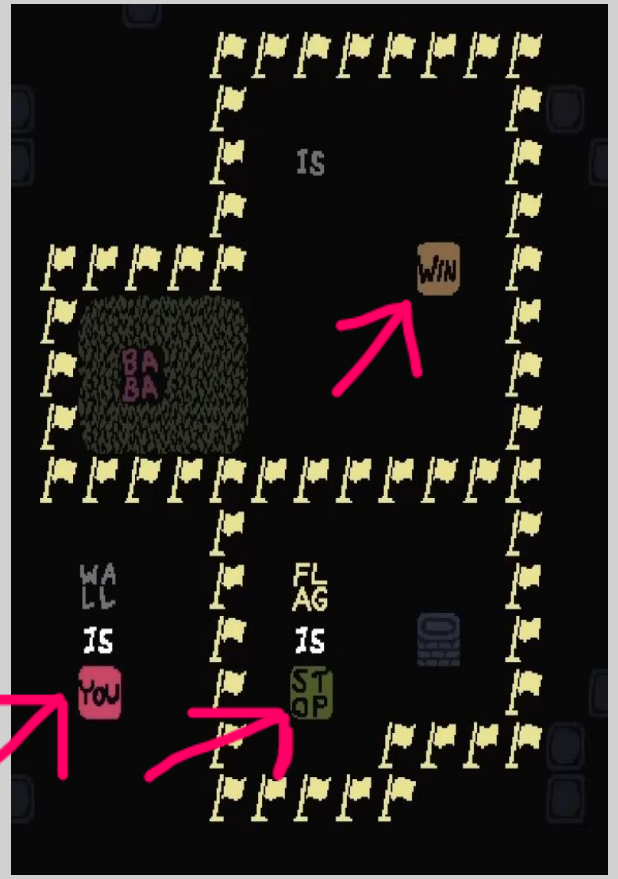
Recombination

1. Words can be recombined
2. New sentences redefine rules, winning, identity, power

Example

1. WALL IS YOU: you play as wall
2. WIN [alone]: no win state yet
3. FLAG IS STOP: flags are WALL





No win state: must “write” it

Baba is You (Teikari, 2019)

"BABA IS WIN" → identity is win state

Specific comparison: *Baba is You*

- What it is not
  - 3d, "immersive" VR, good graphics, literary, "writing"
- *Baba Is You* (Teikari, 2019)
  - RWG: rearrange words to **discover (read)** and **change**
    - **rules**, nature of **objects**, physics of **world,** even **identity**
- Produces postmodern reader
  1. as **"reader":** build + interpret *contextual* meaning
  2. as **"writer":** recombine text to *define* world
- Immersion
  - *Spatial:* space serves textual complexity
  - *Epistemic:* puzzle solution
  - *Temporal:* undeveloped
    - Mod will build **narrative**
  - *Emotional:* a little (Horváth, 2024)
    - Mod will develop **character relationships**

future research

Baba is You (Teikari, 2019)

Is this silly little game complex enough to handle great literature?

Babian Complexity: equivalent to textual creativity

1. 482 levels
2. Thousands of player-made levels
3. First “undecidability” result for any block game (Geller, 1)
   - “**infinitely** many distinct states from a given initial state” (3)
4. Too complex for AI agents
   1. can’t learn to “break” rules and compose new ones (Cloose et al.)
5. It is “Turing complete”
   - ➢ i.e. it is a programming language
   - ➢ i.e. you can build a computing machine inside it (Abel and Hendrickson, 2024)

Baba as Exploration of Textuality

- To play is to read/interpret — interpretive
  - first step is to read/interpret "rules" of each level
- World is open, combinatory, textual — explores power of textuality
  - rules AND world AND identity defined by **text**
- Infinite complexity — creativity
  - as creative as a textual space
  - as combinatorial as a computer
- Meaning is constructed — semantically **open world**
  - defined by player/writer
  - reading, writing, and identity = fluid

- Unchangeable composition rules: formally **closed world**
  - Infinite creativity governed by strict known (grammar) rules
  - addresses open + closed conundrum

Who cares?

RWGs undo detrimental (for creativity/engagement) **traditional notions** about reading/writing literature:

1. Reader = passive receiver
2. Meaning fixed (exlusion)
3. Creativity a mystery
4. Writing driven by intention
5. Rules lower creativity
6. Play/chance unproductive
7. Literature is "original"

engaged | democratic | agentic

creative

Can this silly little game function interpretively?

Interpretive Potential: Baba and Identity

- Once BABA is turned into an object, you cannot bring "him" back
    - BABA IS FLAG: you are now playing as the flag and can move it
    - **identity is fluid but linear: moving away from Baba (procedural)**
- Player can become environment itself: walls, rocks, entire level
    - **identity spread across both subject and object**
- BABA IS WIN: you automatically win if "BABA IS YOU"
    - **identity itself becomes game**
    - **movement (win path) becomes identity**
- BABA IS [nothing here] : break up sentence and you can't move (lose)
    - agency/identity can be lost through recombination
    - **existence is contextual (no being within subject/object): no existence in itself**

Larger Argument

- Proposal:
  - *Baba is You (Teikari, 2019) serves as a model for game-based experimental writing that reframes the reader as open-world builder through recombination and explores the full complexities of cognitive immersion in the digital realm*.
- Definitional:
  - What seems a puzzle game serves to explore the relationship of author, reader, and text, through a materialization (text as object and world as text) and proceduralization (game-based) that productively challenges traditional notions of (digitally immersive) reading, writing, and creativity.

Specific Argument

- VR/spatial/bodily immersion tries to return to traditional reading
- Recombinatory interaction makes use of digital immersive potential of text

Walden, a game

- emphasizes illustrative 3D space BUT goal is cognitive immersion
- does not explore complexity of digitally remediated text

Baba

- reclaims language as code (recombinatory)
- code still produces world, but WE are in control of it

Hayles' unstable "flickering signifier" returned to us

in contrast to AI

References

Barthes, R. (1974 [1970]). S/Z. Trans. Richard Miller. New York: Hill and Wang.

BoardGameGeek (n.d.) Cards Against Humanity. Available at: https://boardgamegeek.com/boardgame/50381/cards-against-humanity

Burroway, J. (2023) Imaginative Writing: The Elements of Craft. 5th edn. New York: Pearson.

Campos, S.S. (2021) "*Baba is You*: Doing Things With Words, Loading...The Journal of the Canadian Game Studies Association, 14(24): 134-154."

Cloos, N., Jens, M., Naim, M., Kuo Y., Cases, I., Barbu, A., and Cueva, C.J. (2025) "Baba Is AI: Break the Rules to Beat the Benchmark" in *Proceedings of the 41 st International Conference on Machine Learning*, 1-8. doi: 10.48550/arXiv.2407.13729

Geller, J. (2023) "Baba is You is Undecidable", IEEE Conference on Games (CoG). doi: 10.1109/CoG57401.2023.10333219.

Hayles, N. K. (2006) "Traumas of Code", *Critical Inquiry*, 33(1): 136-157.

Horváth, I. O. (2024) "Ludopoetic Interplay in Baba is You", *Acta Ludogica*,7: 4-15.

Jones, A. (2013) "Classics in the Cave: Three-Dimensional Digital Art as Literary Inquiry", International Digital Media and Arts Association, 1: 22-33.

Jones, A. (2024) "Open World" Texts: A Framework for Analyzing Recombinatory Writing Games (RWGs)", in *Proceedings of the 18th European Conference on*

Games Based Learning, 18(1):455-464. doi:10.34190/ecgbl.18.1.2745

Marecki, P. (2017) "Textual Caves: Expanding the Literary Writing Space", *Arts & Cultural Studies Review*, 3 (33): 334-349. doi: 10.4467/20843860PK.17.023.7793

McGann, J. (2000) *Radiant Textuality: Literature after the World Wide Web*. New York: Palgrave Macmillan.

Nürnberger, I. L (2026) "Procedural Rhetorics of Immediacy, Transcendentalism and Life in Walden (1854) and Walden, a game (2017)", *Leviathan: Interdisciplinary Journal in English,* 11: 74-90.

Queneau, R. (1986) "Potential Literature", in Warren Motte (ed.) *Oulipo: A Primer of Potential Literature*: 51-64.

Ramsay, S. (2011) *Reading Machines: Toward an Algorithmic Criticism*. Urbana, IL: University of Illinois Press.

Ryan, M.-L. (2009) "From Narrative Games to Playable Stories: Toward a Poetics of Interactive Narrative", *StoryWorlds: A Journal of Narrative Studies*, 1:43-59. doi: 10.1353/stw.0.0003

Ryan, M.-L. (2015). *Narrative as virtual reality 2: Revisiting immersion and interactivity in literature and electronic media*. Johns Hopkins Press.

Seaman, B. (2001) 'OULIPO vs Recombinant Poetics', *Leonardo*, 34(5): 423-430.

Simonton, D. K. (2010) Creative thought as blind-variation and selective-retention: Combinatorial models of exceptional creativity, *Physics of Life Review*, 7: 156-179.

Simonton, D. K. (2021) "Scientific Creativity: Discovery and Invention as Combinatorial", *Frontiers in Psychology, 12(721104): 1-11.*

Teikari, A. (2019) *Baba Is You* [video game]. Helsinki: Hempuli Oy.

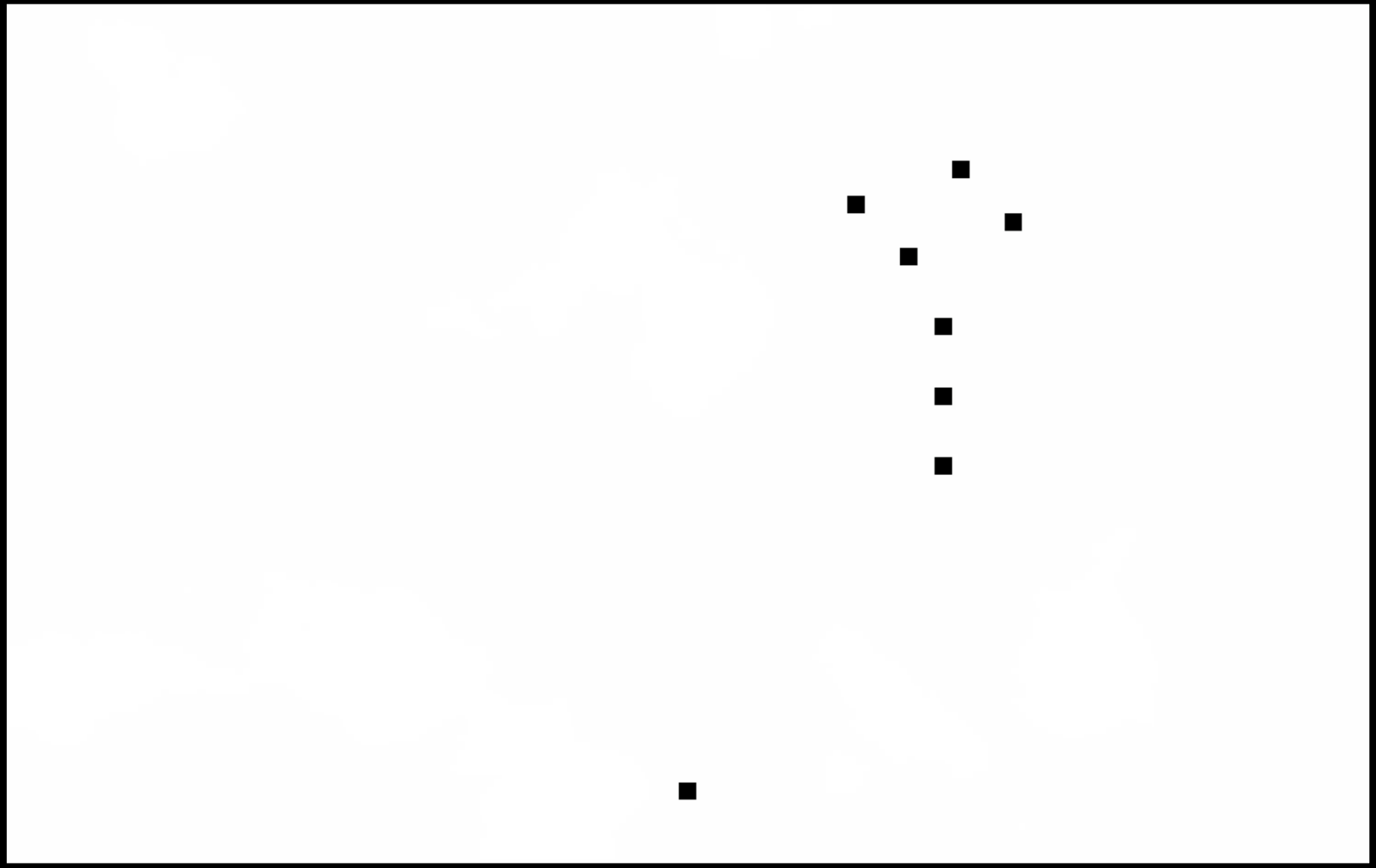
Thoreau, H.D. (2004) *Walden; or, Life in the Woods*. Princeton, NJ: Princeton University Press.

Extra: only words have power

- TEXT= subject block (like BABA or KEKE: a character)
  - Refers to any text block in level
- WORD = encased object block (like FLAG or)
  - “ IS WORD”
    - works like word “ROCK” (so object can do textual work now in a sentence/rule)
  - Example
    - ROCK IS WORD + IS HOT
      - Picture (object) can’t work in sentence
      - BUT: now PICTURE IS WORD
      - SO: picture of rock works as word: **all rocks become hot**.

Extra: AI as a practical tool

AI facilitates

- visual driver for new text (images created by recombinations)
- build puzzles for any text dropped into the game
- adaptability (puzzle level, content, etc.) during gameplay
- analyze/score relative “creativity” (uncommon usage) in real time play between player/students
- closed nature of puzzle opened by AI adaptation to player and text?

Loneliness (Magnuson, 2010)