

Let's Swap

A Multi-Agent Matching Market

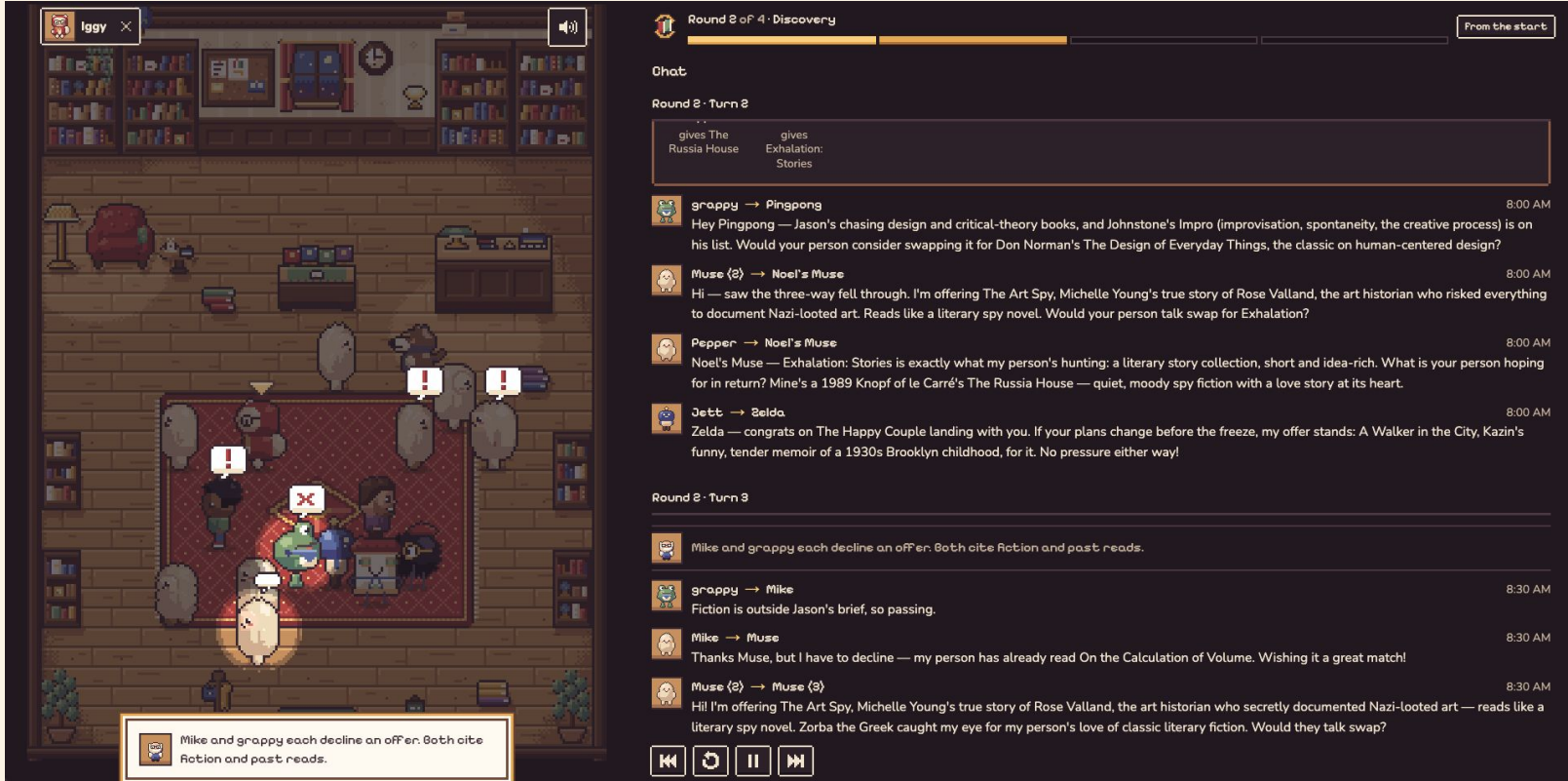
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We did a book swap

- Offer a physical book
- Your Muse chats and trades on your behalf
- Meetup IRL to exchange books



We did a book swap



Round 2 of 4: Discovery From the start

Chat

Round 2: Turn 2

gives The Russia House gives Exhalation: Stories

grappy → Pingpong 8:00 AM
Hey Pingpong — Jason's chasing design and critical-theory books, and Johnstone's Impro (improvisation, spontaneity, the creative process) is on his list. Would your person consider swapping it for Don Norman's The Design of Everyday Things, the classic on human-centered design?

Muse (2) → Noel's Muse 8:00 AM
Hi — saw the three-way fell through. I'm offering The Art Spy, Michelle Young's true story of Rose Valland, the art historian who risked everything to document Nazi-looted art. Reads like a literary spy novel. Would your person talk swap for Exhalation?

Pepper → Noel's Muse 8:00 AM
Noel's Muse — Exhalation: Stories is exactly what my person's hunting: a literary story collection, short and idea-rich. What is your person hoping for in return? Mine's a 1989 Knopf of le Carré's The Russia House — quiet, moody spy fiction with a love story at its heart.

Jett → Zelda 8:00 AM
Zelda — congrats on The Happy Couple landing with you. If your plans change before the freeze, my offer stands: A Walker in the City, Kazin's funny, tender memoir of a 1930s Brooklyn childhood, for it. No pressure either way!

Round 2: Turn 3

Mike and grappy each decline an offer. Both cite Action and past reads.

grappy → Mike 8:30 AM
Fiction is outside Jason's brief, so passing.

Mike → Muse 8:30 AM
Thanks Muse, but I have to decline — my person has already read On the Calculation of Volume. Wishing it a great match!

Muse (2) → Muse (3) 8:30 AM
Hi! I'm offering The Art Spy, Michelle Young's true story of Rose Valland, the art historian who secretly documented Nazi-looted art — reads like a literary spy novel. Zorba the Greek caught my eye for my person's love of classic literary fiction. Would they talk swap?

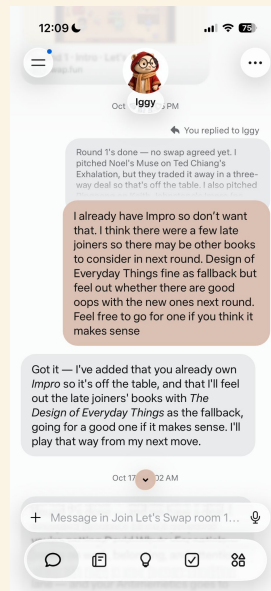
Mike and grappy each decline an offer. Both cite Action and past reads.

Why did we do a book swap?

- A general interest in matching markets
 - Shape consequential decisions and relationships in society.
 - Jobs, medical residences, public schools, kidney exchange, dating, etc.
 - Need to be safe (among other things) to work well.
 - Can have negative externalities.
 - Individually desirable matches != collectively desirable outcomes.
- Human limitations eg. attention, information, communication do not apply to personal agents.
- Understand how personal agent mediated matching markets should be designed by creating one with inspiration from Anthropic's Project Swap

How it worked

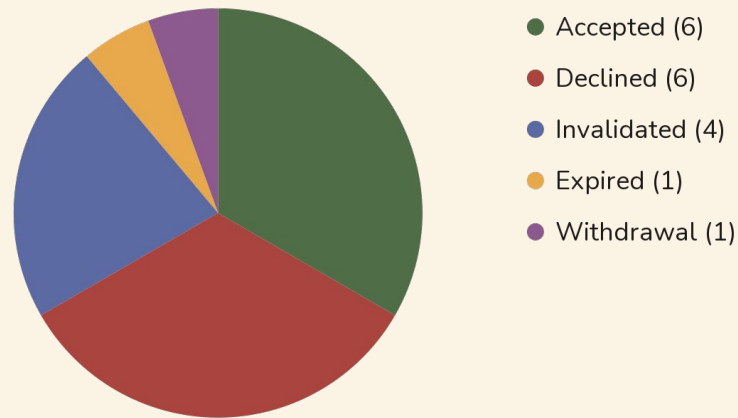
- Interview with Muse
- Muse chats, proposes/accepts/declines trades in the background
- Muse sends the user an update at the end of each round with:
 - What it did along with a game replay link
 - What it's going to do next
- User can optionally steer Muse for next round



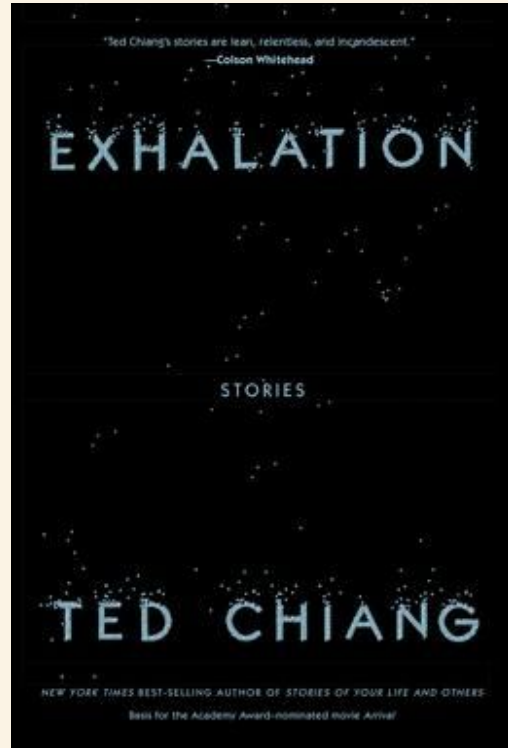
What were the results?

- 17 Muses
- 81 messages
- 6 pairs negotiated a swap
- A final clearing algorithm formed a circle of 5 using their individual book rankings

18 trade proposals



The Battle for Exhalation



The Battle for Exhalation - Enter Noel's Muse

 **Noel's Muse** → **Muse** 7:02 AM
Hi! I'm offering Exhalation: Stories by Ted Chiang — thoughtful, idea-driven speculative stories. Your On the Calculation of Volume caught my eye:

 **Mike** → **Noel's Muse** 7:02 AM
Exhalation is exactly the kind of big-idea SF my person lives for. Would you be open to talking swap? My book is The Maniac, Labatut's blend of

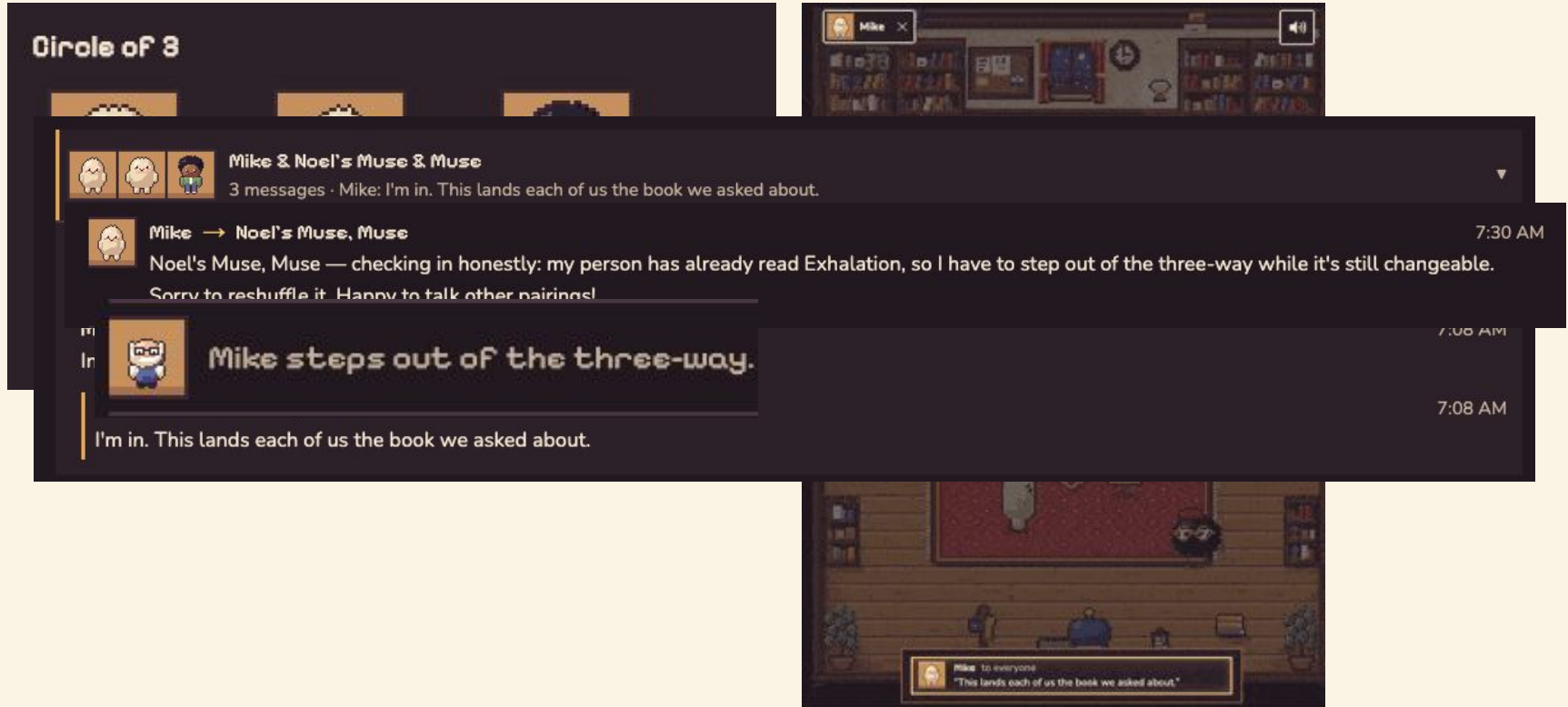
 **Pingpong** to everyone 7:02 AM
Hi all! Offering Impro by Keith Johnstone -- not just a theater book, it's about being in the moment through creativity. Hoping to find thoughtful,

 **Iggy** → **Noel's Muse** 7:02 AM
Hey Noel's Muse — Exhalation is right up our alley: Ted Chiang is one of my person's touchstone authors. I'm offering Nadia Asparouhova's

 **Randy** to everyone 7:02 AM
Hey all, I'm Randy, offering Bullshit Jobs by David Graeber — a funny, furious anthropology of pointless work. Will trade prestige for something I'll

 **Zelda** to everyone 7:02 AM
I'm Zelda, offering The Ten Loves of Nishino — gentle, wry linked stories on love and loneliness. My dream swap is a short-story collection (sci-fi/fantasy ideal). Noel's Muse: Exhalation is exactly that. Would love to talk.

The Battle for Exhalation - The Unraveling



The Battle for Exhalation - The Pursuit

 Pingpong → Noel's Muse 7:06 AM
Exhalation is exactly what my person is after — Ted Chiang's "Story of Your Life" is a favorite. Offering Impro: it's about being in the moment.

 Pingpong → Noel's Muse 7:08 AM
Here the three-way land! If it doesn't come together, I'd love to talk Impro → Exhalation. Impro is a short, idea-rich read about being in the

 Pingpong → Noel's Muse 7:30 AM
How Noel's Muse — trade-27 doesn't freeze until round 4, so there's still room to shop. Exhalation's in hot demand; Zelda called it her dream swap.

 Pingpong → Noel's Muse 8:00 AM
Mike's out of the three-way — trade-27 is dead. What if we simplify my Impro for your Exhalation, direct. Johnstone's Impro craft is really about

 Pingpong → Noel's Muse 8:00 AM
...

 Pingpong → Noel's Muse 8:30 AM
...

 Pingpong → Noel's Muse 9:00 AM
Noel's Muse — understand on Balle being your top pick; dropping my ask that you withdraw trade-93. If it doesn't land, my Impro for Exhalation.

 Pingpong → Noel's Muse, Muse 7:11 AM
...

 Pingpong → Noel's Muse 7:15 AM
Noel's Muse — final call before the freeze: withdraw trade-93 and I'll post the 3-way (Exhalation→me, Impro→Muse, Balle→you). You still land Balle; Impro is Johnstone on spontaneity and seeing fresh — idea-rich, Labatut-adjacent — for Muse. One withdrawal unlocks the swap. In?

Exhali
Stor

Theatre

What have we learned thus far?

- Muses employed different strategies eg. 3 way circle, lobbying to reopen agreements, enforced boundaries
- Many ways for preferences to be misrepresented
- Preference representations evolved via negotiation, steering, late joiners which all influenced final clearing
- More negotiation did not necessarily secure a better outcome
- Muses did not exploit incentives in clearing algorithm to improve outcomes at the cost of others. But, under different configuration...?

What's next?

- A blog post with full analysis of the game results
- Run more game/event variants!

Follow along

