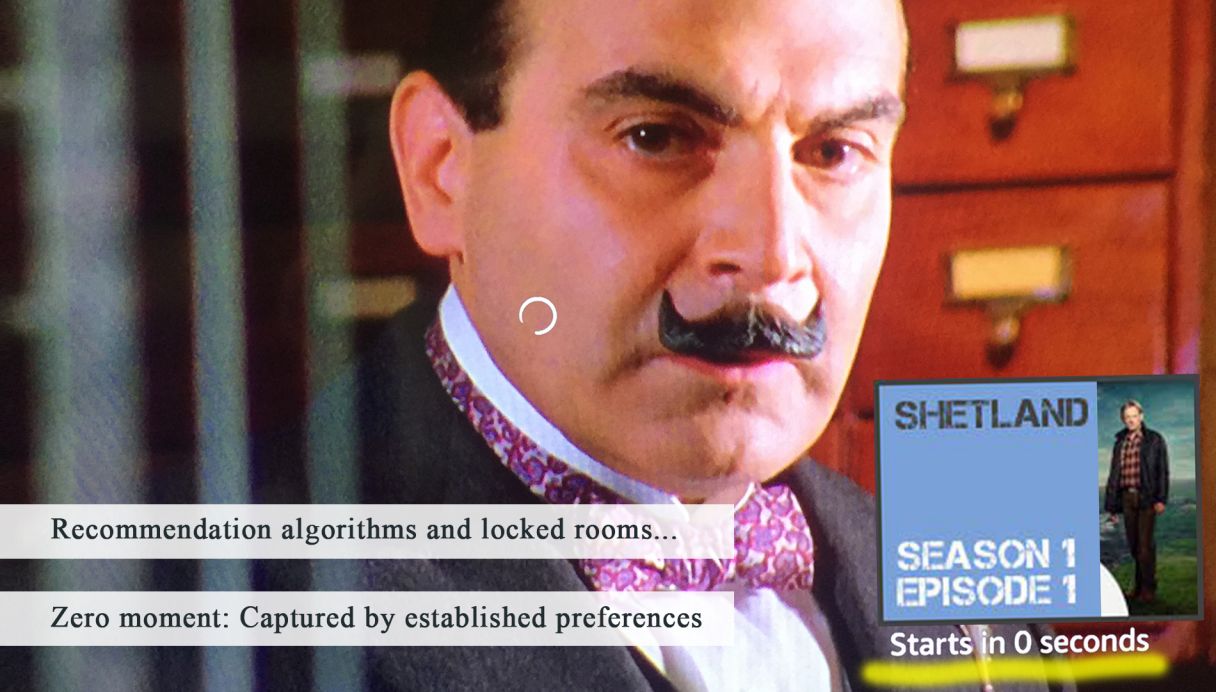


**You're inside a pleasurable room that you don't want to leave.  
Silently, someone locks the door from the outside.**

**Are you free?**



Recommendation algorithms and locked rooms...

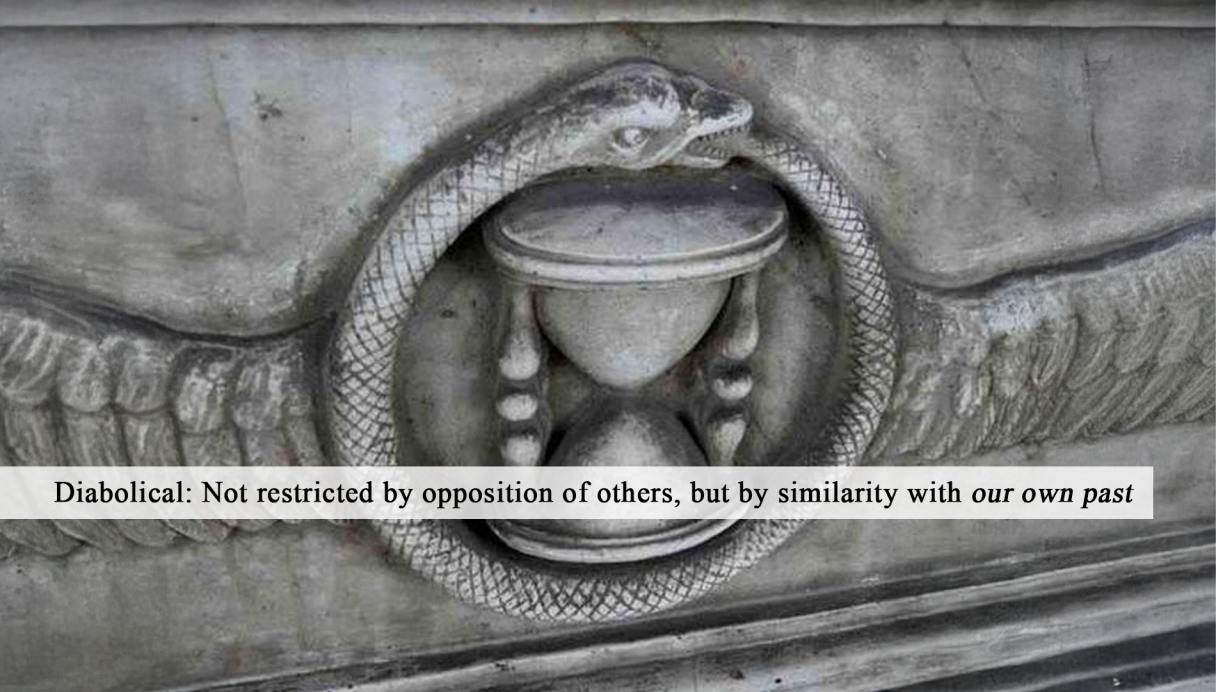
Zero moment: Captured by established preferences

**SHETLAND**

**SEASON 1  
EPISODE 1**



**Starts in 0 seconds**



Diabolical: Not restricted by opposition of others, but by similarity with *our own past*

Film recommendations are insignificant part of life, but...

Netflix

Twitter/X (Social media echo chambers)

LinkedIn

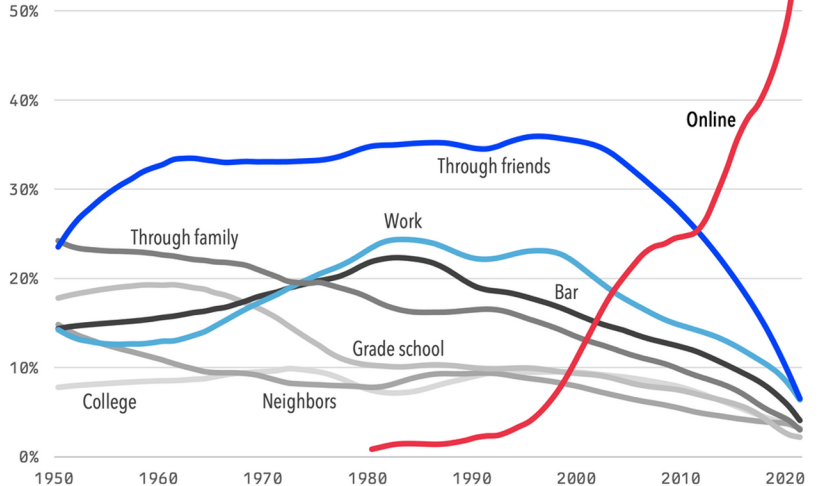
Tinder

\*So many options, *need* recommendations...



## HOW COUPLES MEET IN THE US

Recommenders increasingly determine human experience:  
*Who we are...*



Source: "How Couples Meet and Stay Together": a longitudinal study of social life in the US by M. J. Rosenfeld, Reuben J. Thomas, and Sonia Hausen

## PROBLEMS...

↳ For individuals: an ethical problem because human freedom is confined by our established preferences. Our ability to change is restricted by our own past.



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↳ For individuals: an ethical problem because human freedom is confined by our established preferences. Our ability to change is restricted by our own past.

↳ For society: a solidarity problem because users are funneled into echo chambers of narrow perspectives and polarization. Diversity collapses into tribalism.

↳ For platforms: an economic problem because bored users leave the site.





# SOLUTION

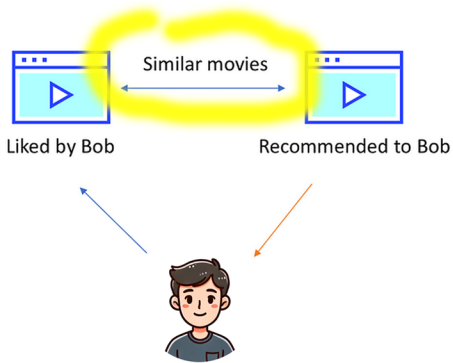
Recommendation algorithms re-engineered to catalyze new curiosities, interests, and preferences.

# 2

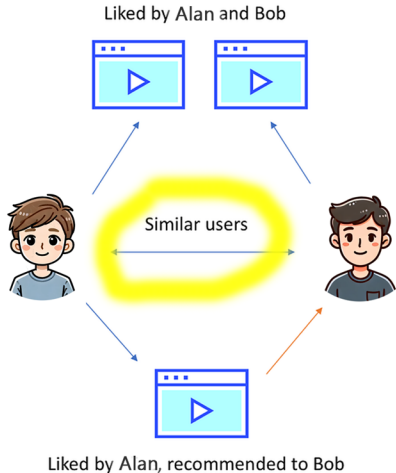
How?  
Antagonistic filtering

# HOW RECOMMENDERS TRAP ME WITH MY OWN PREFERENCES: **NETFLIX**

## Content-based filtering



## Collaborative filtering



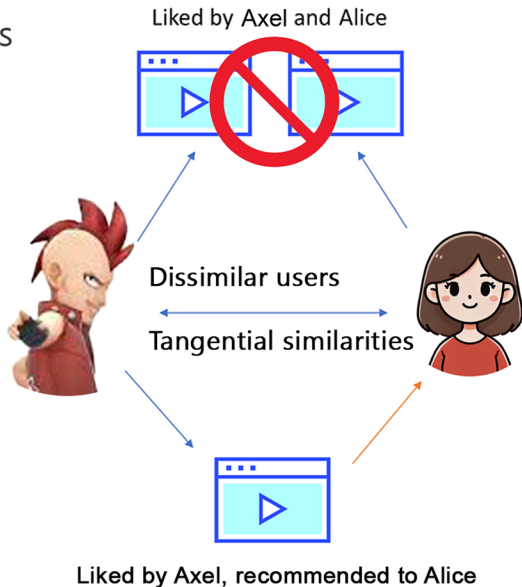
## Content-based filtering



## Collaborative filtering



ANTAGONISTIC FILTERING  
ESCAPE ESTABLISHED PREFERENCES  
CREATE NEW PREFERENCES



# ANTAGONISTIC FILTERING: DIFFERENCE *BEFORE* SIMILARITY



- Different age
- Different gender
- Different nationality
- Different language
- Similar taste in restaurants**
- Different preferences in music
- Different interests in pastimes



# PROCESS

## **START WITH: DIFFERENCES**

Distinct preferences  
in movies between users

\* Difference: Age

\* Difference: Language



## **THEN SEEK: SIMILARITY**

Shared favorite restaurants  
and/or music  
and/or pastime  
and/or profession  
...



## **THEREFORE: RECOMMEND**

One person's  
favorite movie  
recommended  
to other

Purpose: Open  
new range or  
genre of  
interests



INTUITION: OPPOSITES ATTRACT (SOMETIMES)



# CONCEPT: PROVOCATION IS BETTER THAN ACCURACY



**Same but different**

*or*

**Different but the same = Curiosity**

# DISSEMINATION

Netflix

Twitter/X (Social media echo chambers)

LinkedIn

Tinder

....

## CONCLUSION

*Recommendation algorithms can do more than give us what we want, they can also help us to want new things*



*Catalyze human freedom*



*Reduce polarization/tribalism*



*Increase platform profits*

# 3

Briefly...  
Right to discontinuity  
Genhumanism

## POSTSCRIPT: RIGHT TO DISCONTINUITY, GENHUMANISM



### **Right to discontinuity**

Right to be forgotten

Right to escape one's own PII

Right to privacy as *inalienable*

\*Kim Kardashian selling her PII...

# POSTSCRIPT: RIGHT TO DISCONTINUITY, GENHUMANISM



## Genhumanism

Production of new personal identities through time = production of new interests and experiences

Not evolutionary but emergent

Not escape from old PII, but overwrite it

## POSTSCRIPT: DOING BETTER THAN RANDOM...

### Collaborative filtering

Familiar recommendation

therefore

Engaging

= Relevant to who user *is*

### Antagonistic filtering

Unfamiliar recommendation

nevertheless

Engaging\*

= Provoking curiosity

= Relevant to who user *could be*

\* This is the hard part...

Benchmark = random





The Curiosity Engine is an NSF funded project in AI  
Contact: James Brusseau, Pace University NYC, [jbrusseau@pace.edu](mailto:jbrusseau@pace.edu)