

Designing for the Better by Taking Users into Account:

*A Qualitative Evaluation of User Control Mechanisms in  
(News) Recommender Systems*

**Dr. Jaron Harambam**

Institute for Information Law – University of Amsterdam

[j.harambam@uva.nl](mailto:j.harambam@uva.nl)

Recommender Systems:

Curse or Blessing?

# Concerns

Filter bubble fears, or reduction of diversity

Lack of transparency

Little user control

# Recommender systems in the news domain

Legacy media corporations and social media platforms

Greater controversy:

Information is crucial to democracy

# Fair News Project

What are the ethical, societal and technical dimensions of the rise of recommender systems in the news domain?



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DE PERSGROEP  
N E D E R L A N D

# Different Subprojects

Ethnographic Research



DE PERSGROEP  
NEDERLAND

Research  
Simulation Model



News Reader



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# News Reader Focus Groups

Why focus on user control?

Empirical argument

Theoretical argument

# Focus Groups User Control Study

Four focus groups, or think-aloud sessions (N=21)

RQ: how do people evaluate different control mechanisms in news RS?

Collectively reviewed a News Recommender Prototype (NRP)

Control mechanisms at *input*, *process* and *output* level



# Focus Groups User Control Study

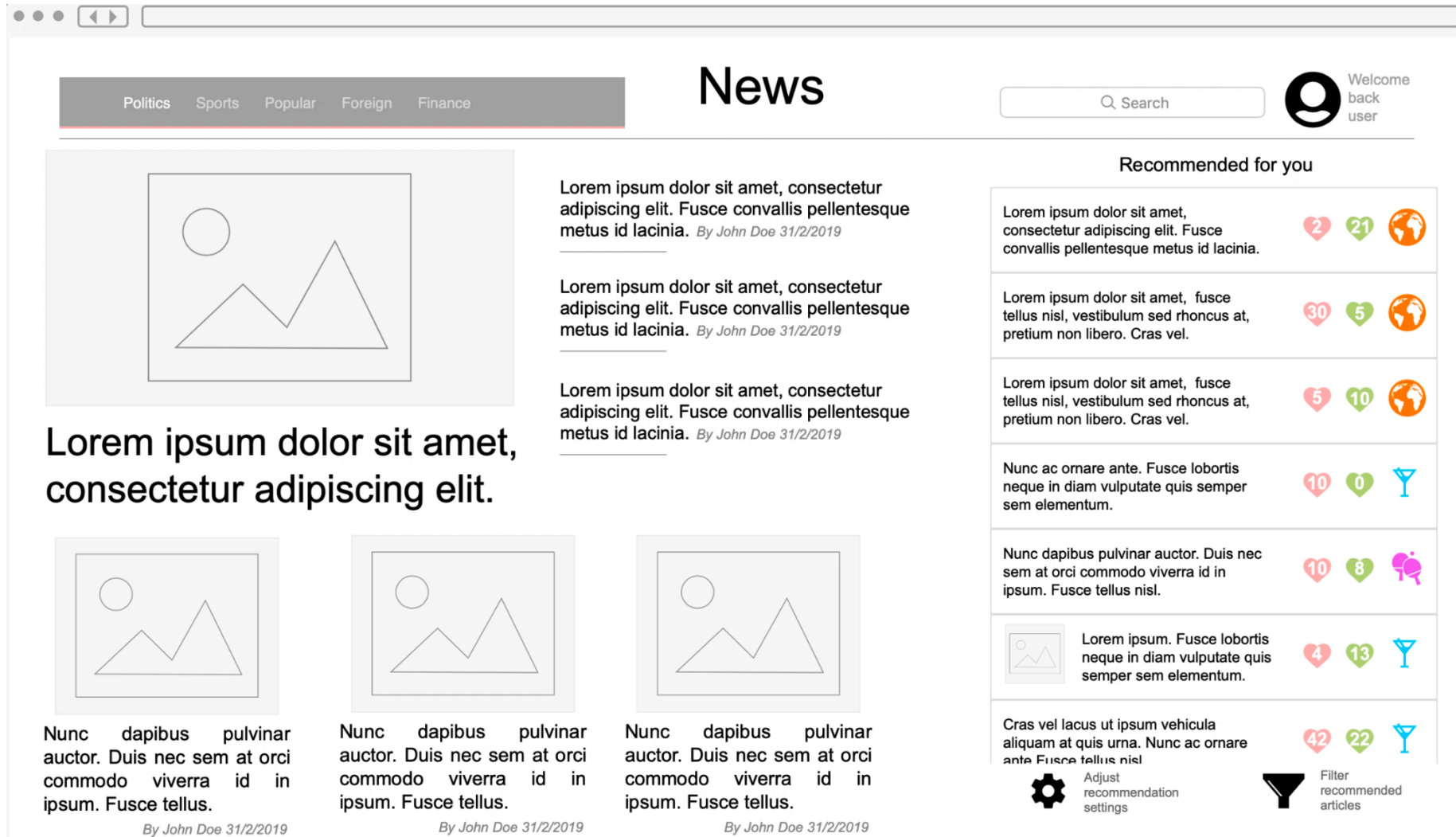
Qualitative research design:

Complexity and nuance in people's own words

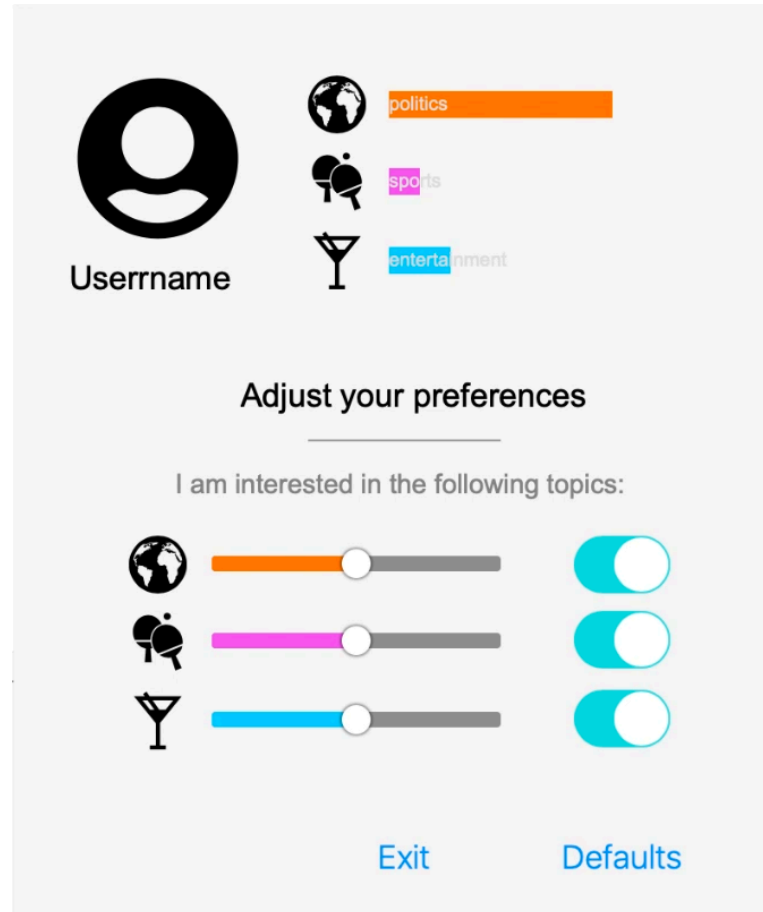
Aimed at highlighting diversity: making distinct positions clear

Quantitative studies can test these across broader populations

# News Recommender Prototype (NRP)



# News Recommender Prototype (NRP)



# Results

General observations:

Distrust: who is being served here?

Usefulness: only with much contents

Intuitive design: inline with recommendations

# Results

## **Input level:**

Dashboard with reading history: self-realization

Content categorization: flexible adjustments

# Results

## **Process level:**

Choosing different recommender algorithms: easy and powerful

Anthropomorphized recommender algorithms: divergence

# Results

## **Output level:**

Ordering content: not really in “control”

Nice extra, but not sufficient

# Conclusion

Strong desire for more control

Aligns with current data protection regulations (GDPR)

Reciprocity: meaningful return of personal data collected

Self-Actualization: activating and achieving personal goals





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Thank you for your attention

RecSys 2019 Paper at ACM Digital Library:  
<https://dl.acm.org/citation.cfm?id=3347014>

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