# Human-Subject Research Strategies on Social Media Misinformation

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## **Misinformation:** Science/System Perspective

What  $\rightarrow$  Online misinformation is *not* the information we want *ergo* has to go (mistaken information, fake, factoids, out-of-context facts?) [13, 14]

Why  $\rightarrow$  Misinformation is "sticky" (a thousand times repeated a lie...) and impersonates the truth (is this an absolute concept?) [3, 4]

Where  $\rightarrow$  Mainstream social media, alt-platforms and fringe communities, boards, chatrooms, discords, \*chans... [7, 12]

When  $\rightarrow$  All the time, only for big topics, never (what if it's Onion news?)

Who  $\rightarrow$  Nation-states, political parties, biased media, corporations, people,... (language models, ChatGPT?)

**How** → Prebunking, debunking, moderating, removing (censoring?) [10]



# **Misinformation:** User Perspective

What  $\rightarrow$  How do I know what is misinformation in a first place? [9]

Why  $\rightarrow$  Is this a "plandemic" or someone is "stealing the vote?" [2, 1]

**Where** → Used to be Facebook, Twitter, Instagram, YouTube... is it now on TikTok, Discord, and Eve Online? [6]

When  $\rightarrow$  Every time there are elections, a pandemic, a Supreme Court decision, a strange baloon in the sky...? [8]

**Who**  $\rightarrow$  Russians for sure, but... also people from the *other side* [9]

 $How \rightarrow Troll$  farms, think tanks, political figureheads, Alexa/Siri/Cortana, now chatbots too [11, 5]



# Misinformation: User Perspective



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# **Dimension**: Research Settings

#### **Platform Dimension**

**Platform Perception Matters**  $\rightarrow$  Users are attuned to platform's misinformation image

**Favoritism** → Objectivity in perception of misinformation handling

#### **Misinformation Dimension**

 $Concepts \rightarrow Multiple competing$  folk models of misinformation exist

 $\textcolor{red}{\textbf{Self-Image}} \rightarrow \textbf{Misinformation is part of users'} \textit{ identity } \textbf{on social media}$ 

#### **Participation Dimension**

 $ext{Engagement} o ext{Users subjectively } \textit{engage/disengage} ext{ with }$ misinformation per topic per platform of choice



 $\textbf{Assessment} \rightarrow \textbf{Misinformation is both } \textit{analytically} \text{ and } \textit{heuristically} \\ \textbf{assessed}$ 

# **Economics Dimension**: Research Settings



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## Misinformation: Assumptions, Limitations, Delimitations

#### **Assumptions**

**Literacy** → Information literacy, social media literacy

**Exposure** → Subjective designation of content as "fake news"

**Interaction** → Lived experiences interacting with "fake news"

#### Limitations

**Expiry Date**  $\rightarrow$  falsehoods/myths/rumors proven true and factual

**Production Date**  $\rightarrow$  facts proven falsehoods

**Delimitations**  $\rightarrow$  low hanging fruit (e.g. COVID-19, elections, QAnon...)



### **Misinformation:** Instruments and Data Collection

#### **Surveys**

**Self-presentation**  $\rightarrow$  Misinformation is internalized and people fear of being portrait in pro/con lights

**Open-Ended Questions**  $\rightarrow$  People are *opinionated* on misinformation

**Debriefing**  $\rightarrow$  Misinformation constitutes "deception" in the view of IRB (err on the side of caution)

#### **Interviews**

**Agnostic posture**  $\rightarrow$  People are *not keen* on researchers

**Anonymity**  $\rightarrow$  Allow for dropping our and removing answers at any time of the study even after you send them your draft paper

**Trust and Credibility** → Critically important for longitudinal studies

**Focus Groups**  $\rightarrow$  topic, party, platform, clique



## **Misinformation:** Data Analysis and Interpretation

#### **Analysis**

Themes  $\rightarrow$  People use analogies, vernacular, offensive language

 $Tools \rightarrow Tools$  help (e.g. nvivo, RQDA, MAXRQDA), but inter-coding and manual inference helps a lot

#### **Interpretation**

**Context**  $\rightarrow$  Do we do this for psychology, cybersecurity (misinformation as attack on *integrity?*), policy, law, economics...?

 ${f Contradictions} o {f Many}$  misinformation effects are brief, strange, and contradictory evidence abound all the time

**Implications**  $\rightarrow$  How the human input from the study changes the future shape of *misinformation* or platform's (lack of) handling it?



## **Misinformation:** Experimental Lessons Learned

 $Animosity \rightarrow Non-negligible$  number of people harbor quite an animosity surrounding misinformation

**Threatening**  $\rightarrow$  It's not entirely foreign for researchers to get real threats to their well beings and families

**Volatility**  $\rightarrow$  Misinformation evolves and rapidly reshapes even during the short period of study data collation and analysis

**Ephemeral Solutions**  $\rightarrow$  Results and solutions for one form of misinformation might not work for another (text, mime, trolling, deepfakes, ChatGPT outputs)



### **Discussion**

# Discussion





## **Discussion** Talking Points

Did you use experimentation artifacts borrowed from the community?

Did you attempt to replicate or reproduce results of earlier research as part of your work?

What can be learned from your methodology and your experience using it?

What did you try that did not succeed before getting to the results you presented?

Did you produce any intermediate results including possible unsuccessful tests or experiments?

Did you share experimentation artifacts with the community?



## **Discussion** Next Steps

**Next steps** 

Plans for post-workshop paper





### Thank you!

Questions, Comments, Concerns



Twitter: @ACALaboratory

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