

The Misunderstanding Model of Misinformation Infection

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Outline

1. Terminology
2. Features of Misinformation
3. Two Psychological Mechanisms of misinformation
4. The Belief Model of Misinformation
5. The Misunderstanding Model of Misinformation infection

Terminology

- Misinformation
- Disinformation
- Fake News

Features of Misinformation

Feature 1: Misinformation is widely spread and rapidly transmissible.

(‘supersharers’ and ‘superconsumers’)

Feature 2: Information Overloaded

Feature 3: Misinformation is deeply believed and resistant to correction.

Features of Misinformation

Feature 4: Misinformation leads to a trust shift

- Trust shifts from medical professions and trustworthy media to social media 'influencer' and personal experiences (Kent, 2024, Bearman 2009)
- Opinions and personal experience are valued beyond scientifically proven facts and verified news

Feature 5: Group Susceptibility.

Two psychological mechanisms

- The inattention model

Too many true or false contents, no time to think more...

People who deliberate more, who have greater numeracy skills, and who have higher knowledge and education are consistently better able to discern between true and false news

- The motivated reasoning model.

Starts one's reasoning process with a pre-determined goal.

People who deliberate more, who have greater numeracy skills, and who have higher knowledge and education are more committed to misinformation

Two psychological mechanisms

The inattention account and the motivated reasoning account should be integrated to better explain the psychological mechanisms of misinformation

- Different domains (e.g. Health VS Politics)
- Accuracy and motivational goals are also frequently in conflict. We need to understand the interplay between accuracy and socio-political goals.

The Belief Model of Misinformation

Floridi (2011): Misinformation as false content

Fallis (2015): Disinformation as misleading content that “is likely to create false beliefs”.

Two accounts of successful misinformation/disinformation campaigns.

Simion (2024): misinformation is content that “generates ignorance”.

Littlejohn (2025): Disinformation is the content that degrades the value of information.

The Belief Model of Misinformation

Simion (2024): knowledge-first account of misinformation

Disinformation is content that “generates ignorance”.

A signal r carries misinformation for an audience A with respect to p iff A 's evidential probability that p conditional on r is less than A 's unconditional evidential probability that p , and p is true.

Generating/increasing ignorance:

- generating false beliefs,
- knowledge loss
- generating a decrease in warranted confidence

The Belief Model of Misinformation

Littlejohn (2025): a pragmatic view

Flood the Zone

Amplify Both Sides

Firehose of Falsehood

The evidential resources are corrupted

The epistemic capacity is overwhelmed

The inquiry is redirected

→ leaving the audience confused or without grounds for hope for epistemic improvement.

The Belief Model of Misinformation

Littlejohn (2025): a pragmatic view of the Disinformation campaign

Disinformation can be misleading evidence, but it can be the form of content that makes it evident that the evidential resources the agent needs to advance inquiry have been corrupted.

Disinformation as Degradation: In any successful disinformation campaign, a disinformant uses content to reduce the value of the information contained in the content available to an audience and **minimise the probability** that the inquisitive agent **successfully draws conclusions that threaten the disinformant's interests.**

Belief VS Understanding

Simion and Littlejohn explain to us the successful conditions of a misinformation/disinformation campaign.

On the audience side, three situations might happen after being exposed to a successful disinformation campaign:

- S believes in the false proposition
- S suspends her belief, gives up her inquiry
- S holds the same belief (but her evidential resources are worse)

A campaign is successful if the evidential resources are worse

Belief VS Understanding

Two levels of success

➤ Short-term success

A Misinformation campaign is successful if the evidential resources are worse

➤ Long-term success

A Misinformation campaign is successful if the audience is widely infected, increasing 'Supersharers' and 'Superconsumers'.

Recall the two psychological models of misinformation

The information environment is moving from the inattention model or the motivated reasoning model

I want to discuss the underlying mechanism of misinformation Infection

The Misunderstanding Model of Misinformation Infection

Understanding and Misunderstanding

I will call the non-factive counterpart of understanding
comprehension

Understanding VS Knowledge

Comprehension VS Belief

Understanding goes beyond some cases of knowledge

Comprehension goes beyond some cases of belief

The Misunderstanding Model of Misinformation Infection

Comprehension:

The Pattern-fitting condition

The Competence condition

Comprehension requires pattern-fitting

A higher level of comprehension requires competence in using the pattern to solve relevant problems.

The Misunderstanding Model of Misinformation Infection

What is the content of Misinformation?

Misinformation usually involves two layers: first, a key piece of false or misleading content; and second, a set of prima facie plausible mechanisms and/or narratives that appear to support that key content.

The current literature uses what I call a belief model of misinformation. Those prima facie plausible mechanisms and/or narratives are either (1) evidence on the basis of which individuals come to believe the key false content; (2) playing a role in blocking counterarguments against the key false content; (3) degraded values of their evidential resources.

The Misunderstanding Model of Misinformation Infection

If we understand misinformation infection in terms of understanding/comprehension:

Misinformation includes a piece of false or misleading content and its underlying conceptual and reasoning patterns widely accepted by the target group.

- Misinformation fits into the target group's conceptual and reasoning patterns.
- It may further distort the target group's conceptual and reasoning patterns to be even more inaccurate and misleading, making the target group believe in more misinformation.

The Misunderstanding Model of Misinformation Infection

What is the content of misinformation?

If we understand it in terms of understanding/comprehension:

Misinformation includes a piece of false or misleading content and its underlying conceptual and reasoning patterns widely accepted by the target group.

Superconsumers believe in the false or misleading content, accept its underlying patterns and believe in the false or misleading content because it fits into the patterns.

- Mere evidence against one false proposition cannot change Superconsumers' misunderstanding.
- Superconsumers are capable of using their misunderstanding to further create more misinformation

The Misunderstanding Model of Misinformation Infection

The misunderstanding model shows

- why some groups of people are especially susceptible to a certain type of misinformation
- **why individuals are strongly committed to misinformation and resistant to change**
- **why people become supersharers and superconsumers**
- **why the inattention model is transforming to the motivated reasoning model**

Thank you!!