Truth Decay as a system

**Drivers**
- Cognitive processing and cognitive biases
- Changes in the information system
- Competing demands on the educational system
- Polarization

**Agents of Truth Decay**

**Truth Decay’s Four Trends**
- Increasing disagreement about facts and data
- A blurring of the line between opinion and fact
- The increasing relative volume and resulting influence of opinion over fact
- Declining trust in formerly respected sources of factual information

**Consequences**
- Erosion of civil discourse
- Political paralysis
- Alienation and disengagement
- Uncertainty
TRUE DECAY’S FOUR TRENDS

- Increasing disagreement about facts and data
- A blurring of the line between opinion and fact
- The increasing relative volume and resulting influence of opinion over fact
- Declining trust in formerly respected sources of factual information
Is Truth Decay new?

- Increasing disagreement over basic facts and data
  - 1880s–1990s: No evidence
  - 1920s–1930s: No evidence
  - 1960s–1970s: No evidence
  - The Present: Yes

- Blurring of the line between fact and opinion
  - Yes

- Expanding relative volume of opinion compared to fact
  - Yes

- Declining trust in formerly respected sources of factual information
  - 1880s–1990s: No evidence
  - 1920s–1930s: Yes
  - 1960s–1970s: Yes
  - The Present: Yes
DRIVERS
- Cognitive processing and cognitive biases
- Changes in the information system
- Competing demands on the educational system
- Polarization

AGENTS OF TRUTH DECAY

TRUTH DECAY’S FOUR TRENDS
DRIVERS

Cognitive processing and cognitive biases
Changes in the information system
Competing demands on the educational system
Polarization

AGENTS OF TRUTH DECAY

TRUTH DECAY’S FOUR TRENDS
We compared media content, past and present

Existing research  Selected media  Content analysis  RAND-Lex comparisons
We explored a diverse set of news sources

New York Times
Washington Post
St Louis Post-Dispatch

Broadcast and cable

Breitbart News Network
BuzzFeed Politics
The Daily Caller
HuffPost Politics
TheBlaze
Politico
Comparing Newspapers Before and After 2000

Newspaper language and tone is about the same over time, but more storytelling and emotion are involved after 2000.

Effect sizes are small
Comparing Cable and Broadcast Television

Cable news includes more personal perspective, dialogue, interactions, and argumentation than broadcast news.

Effect sizes are moderate.
Online sources are more **subjective and personal**, with more evidence of interpersonal interaction, relationships, and advocacy than print.
CONSEQUENCES
at the personal, community, national, and international levels

- Erosion of civil discourse
- Political paralysis
- Alienation and disengagement
- Uncertainty
How Do We Counter Truth Decay?

1. Historical and international analogues
2. Data and trends
3. Mechanisms and processes
4. Responses and solutions
A Framework for Evaluating Media Literacy Programs

Identifying Tools to Counter Online Disinformation

Expanded Historical Analysis of Truth Decay

New partnerships and opportunities

Information Consumption and Reliability

Understanding Public Trust in Institutions

More . . .
Identifying Tools to Counter Online Disinformation
Fighting Disinformation Online: A Database of Web Tools

Project has Three Main Objectives:

1. Identify and collect in one place a set of resources that can help users combat the challenge of disinformation and gain greater awareness of the media ecosystem.

2. Inform funders and developers about the set of tools currently under development, tools in need of funding, and areas where additional development would be beneficial.

3. Provide a map of ongoing projects and developed tools that could serve as an input to efforts to build a field around the study of disinformation and its remedies.

Search for tools that fight disinformation by name, type, or keyword:

examples: Snopes, bot detection, fact-checking
Tools to Counter Online Disinformation

• Identified and characterized online tools developed by nonprofits and civil society orgs that target online disinformation

• Includes tools aimed at consumers, researchers, journalists, teachers

• Grouped tools into categories (verification, bot detection, credibility scoring, disinformation tracking, whitelisting)

• Classified by methodology (machine learning, crowdsourcing, blockchain)

• For each tool we also capture information on: maturity (level of development), cost, theory of change, degree of automation, funders, tool focus (content or process)

Iffy Quotient

Website: Iffy Quotient Ⓒ
Founded in 2016

The Iffy Quotient is a web-based tool that uses NewsWhip to query Facebook and Twitter and identify URLs that are known to be biased or to be frequent reporters of false information. The tool then calculates the percentage of URLs on each site that are “iffy,” or known for reporting false or misleading information.

Tool type: Disinformation tracking
Status: Fully operational
Intended users: General public, Researchers
Cost: Free
Tool focus: This tool is content-focused. It directly evaluates information, such as the authenticity of a photo.
Method or technology: Machine learning and AI
Is the tool automated? Yes
Founding organization: University of Michigan
Founder/primary contact: Paul Resnick

How is this tool working to address disinformation?

The tool aims to fight disinformation by alerting users and social media platforms to the prevalence of false or misleading information on these channels. By making this public, developers of the tool hope that it will both make users more savvy and hold social media executives accountable.
Media Literacy as a Counter to Truth Decay
• The term media literacy can refer to many different fields and competencies
  • Information literacy, news literacy, digital literacy, science literacy, visual literacy, and others
  • Includes a range of competencies, e.g., the ability to access, analyze, evaluate, and communicate media messages

• ML can influence information consumption and creation behaviors, but causal research is lacking
  • Past research has identified some evidence that ML increases participant resiliency to disinformation and is able to change the way participants consume, create, and share information

• More research needed to identify measures that best assess complex ML competencies and how, when, and what types of ML education are most effective