# The Future of Truth

What is true? And how do we know it's true?

Today, an increasingly complex and fragmented information environment, rising partisanship, and anti-establish sentiment have intersected, causing an existential crisis of truth in American society.

And yet truth is the very foundation of our reality. It's existence is pivotal to the health of our society and the functioning of our government.  Without it, chaos reigns and conflict rises, as opinions, speculation, and wild accusation go unchecked.

Nothing is more critical, nothing more essential than protecting truth. Join me as we glance ahead.

— Heather D. Benoit Kampa

# table of contents


**INTRODUCTION** — **no. 2**
- why truth
- method
- summary

**FRAMING** — **no. 5**
- domain description
- domain map
- stakeholders

**SCANNING** — **no. 8**
- history
- current assessment
- scan hits
- interviews

**FUTURING** — **no. 12**
- inputs
- drivers & cross-impact
- scenarios

**VISIONING** — **no. 17**
- cascade wheels
- implications

**DESIGNING** — **no. 19**
- strategies
- conclusion

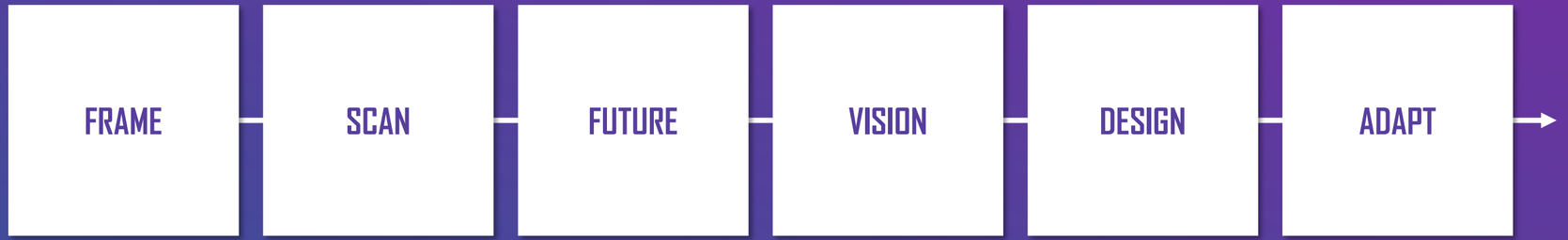
This body of work was conducted as part of coursework for the Fall 2020 Futures Research course at the University of Houston.

The purpose of this project was to investigate the future of truth using the Framework Foresight approach to guide activities throughout the project and ensure critical and methodical analysis of information.

The overarching goal of this research is to investigate the esoteric nature of truth and its very real impact on our lives. Understanding how such a fundamental, and often taken-for-granted, issue is evolving is essential to formulating viable strategies to protect its future.

## methodology

This project utilized the APF's core competency model to scope the project, search for signals of change, identify potential futures, and explore possible implications in the formation of strategic options to inform national policy regarding information and truth.



# summary

Now, more than any time in living memory, truth is predominantly derived from our immediate social groups. Social media and the internet have made it easy to seek out narratives that conform to our own views at the very moment tribalism is increasing. Currently siloed, infiltrated by corrupt and patently false information, and battered by a torrential onslaught of content, navigating the ecosystem of social media has become a matter of national security and social stability.

Simultaneously, the news media is struggling with a loss of control of narrative. Today, there are more narratives, more diversity, more sources, and more opinions. The truth looks to be on increasingly shaky ground, as basic facts become open for discussion and up for interpretation. Furthermore, an influx of contradictory information from authorities has become a destabilizing force, eroding trust in national institutions and fueling belief that the Free Press is fake news.

And the challenges to truth are becoming more daunting as dark-money groups, bad actors, and the growing threat of deep fake technology enter the fray. The rampant spread of misinformation has pushed conspiracy theories into the mainstream, and establishing the truth has devolved into a ceaseless cat-and-mouse game between curators of misinformation and dedicated fact-checkers.

But, there are pockets of hope.

The truth is far too complex and too human for any one single solution, though new paradigms are on the horizon. The path forward will likely be a mix of technological advancement, evolving relationships with the internet, rising digital literacy, government regulation, and pressure from the public forcing social media companies to self-regulate. But the ultimate question remains – will we willingly trade some amount of freedom for increased stability of our information?

# domain description

**time horizon**

2020 - 2030

**key question**

How will truth be threatened in the future, and what measures should be taken to protect it?

**geographic scope**

United States of America

**goal**

To develop a broad understanding of the long-term future of truth and how truth is measured in society in order to inform the development of new tools, policies, and regulations.

Commissioned by the fictional US Senate – Special Committee for Information Security, this body of work seeks to explore the evolution of truth in American society and related future threats, for the purpose of informing development of new technologies or policies to manage and regulate information.

Research included how citizens' concept of truth may shift, how sources of truth will develop, and how citizens will determine the veracity of information. Special attention was given to the influence of misinformation on the stability of truth as a concept and how the threat of misinformation may grow and be managed. Contributions by companies trading in the creation or sharing of information and user-generated content were also assessed.

The domain also includes the effect of rampant misinformation in the development of political and social movements.

- How will the average citizen determine truthiness?
- How will misinformation evolve?
- How will new technologies augment the creation and spread of misinformation?
- What counter-technologies will be created to combat misinformation?
- What role will governments play in regulating information?
- How will traditionally trusted establishments seek to maintain credibility and relevance?

# domain map

Truth is a nuanced and complex concept. It is a fabric of objective fact and hard evidence interwoven with emotionality, bias, faith, and instinct.

This domain focuses on new technologies, media, and the most influential social and psychological factors contributing to the break-down of belief in fact and trust in institutions.

# stakeholders

**CITIZENS**

American citizens are simultaneously the targets of misinformation, participants in its spread, and key voices in calling for its regulation. Any national policy changes in regulating information will need support of the majority and must not infringe on constitutional rights (i.e., the freedom of speech).

**PULIC FIGURES**

Those in the public spotlight, whose images abound in media, are at greater risk of being victimized in a deep fake or disinformation attack. Without regulation, their images can be manipulated and released onto the internet in a matter of seconds, allowing manipulators to spread falsehoods through trusted faces and voices. This could lead to questions concerning copyright protection for images used, lawsuits for damages, and further the breakdown of trust.

**NEWS MEDIA**

To avoid libel cases, published stories are vetted for truth and backed up with sources and evidence – often an intensive and expensive endeavor. “News” disseminated through social media channels is not scrutinized under the same rigorous lens and can be produced quickly and inexpensively. This challenges both the viability of the traditional News Media business model and public opinion of its credibility – a key component to success. Changes in how the public determines truth and trustworthiness will directly impact their business.

**JOURNALISTS**

Journalists have historically held an essential role in free society, bringing truth to the public as part of the Free Press. Attacks on journalists have risen around the world, including in the United States where journalists have been assaulted during coverage of domestic protests and riots. If the press continues to be demonized, journalists will be disincentivized to report the truth and challenge injustice as they increasingly run the risk of suppression and violence.

**SOCIAL MEDIA**

Large social media companies like Facebook and Twitter are increasingly coming under fire for not regulating the spread of fake news on their platforms. They’ve taken some steps to label controversial posts, but have failed to eradicate the problem. Calls to increase regulation or break the companies up are mounting and threaten their long-term business strategies.

**AI DEVELOPERS**

AI has been at the forefront of misinformation and the obscuring of truth for years. AI chat bots spread fake news stories, natural language AIs can write entire articles without intervention, and the algorithms enable deep fakes. However, now they are also being trained to detect fake news and videos. Developers are having to play catch up in a never-ending game where those on the offensive are always one step ahead.

# history

**Late 1990s – 2010s:** Increasing political partisanship

**2000s:** Decline of traditional newspapers

**2004:** Facebook launches and social media starts rapid growth

**2008:** Obama Birther conspiracy theory proliferates despite release of short-form birth certificate

**2014:** Russia spreads misinformation regarding Ukraine through Facebook

**2015 - 2016:** Russia uses bots to spread misinformation in US Presidential Election

**2016:** "Pizzagate" conspiracy theory leads gunman to raid DC pizza shop

**2016:** "Post-truth" selected as word of the year

**2017:** Germany passes Network Enforcement Act to combat fake news

**2018:** Formation of the International Grand Committee to collaborate on regulation of social media, misinformation, fake news, and privacy

**2018:** Anti-Fake News Act passed in Malaysia

**2019:** Doctored videos of US Speaker of the House Nancy Pelosi go viral

**2019:** Fake News laws go in effect in Singapore

1990 2000 2010 2020

# current conditions

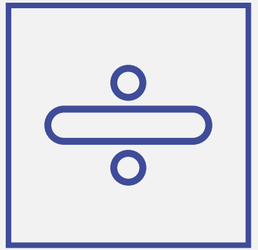
### intentional misinformation

Information manipulation by enemy states (i.e., Russia), lobbyists, and extremists on both sides of the political aisle threatens to undermine social and political norms. Well-intentioned citizens are unwittingly participating in spreading misinformation online, further compounding the problem.

### wide-spread skepticism

Skepticism and anti-establishmentism are growing. The rise of the Anti-Science Movement has led members of the public to refute established facts (i.e., flat-earthers, anti-vaxxers). Meanwhile, the popularity of conspiracy theories has increased as anxiety and uncertainty stemming from the pandemic, social turbulence, and election year politics rises.

### social division



Division has increased in the United States, with opposing sides moving further apart. The propagation of social echo chambers has helped to increase polarity, while simultaneously, a shrinking pool of common knowledge is making it easier to dismiss facts and question what's true.

### investment in solutions

There's been a rise in the formation of groups like the News Literacy Project, aimed at improving information and digital literacy. They publish free educational content aimed at adults, as well as games aimed at children. Simultaneously, developers are looking into automated identification of fake news and manipulated media.

### decline of news media

Online and cable news have devastated the newspaper industry. Paper closures and frequent staff lay-offs have contributed to a reduction in high quality journalism, making reputable content harder to source. Adding insult to injury, recent labeling of the Free Press as "Fake News" has undermined the authority and legitimacy of remaining news organizations.

### user-generated content

The democratization of news and rise of user-generated content, as more people engage with creating, promoting, and spreading the content they find helpful and true, has created a torrential influx of (often contradictory) information.

# scanning hits

From a library of over 400 scanning hits, this selection demonstrates the complexity of truth – market forces, technological development, the human experience, and the power of bias.

As the truth becomes less certain, efforts to figure it out are intensifying – often in contradictory ways.

## BLOCKCHAIN 2030: PREPARE FOR THE DEEP TRUTH

This article speculates the demise of truth as deep fakes and other technologies proliferate and become indistinguishable from reality. It suggests a period of wide-spread counterfeiting followed by the adaptation of blockchain technology for use in establishing traceability and certifiable truth. For most of human history, truth has been derived from what we could touch, hear, and see. Deep fakes challenge this notion. Once they pass the threshold of being indistinguishable from reality, audio and video are likely to permanently lose their prominence in documenting facts. The author suggests that blockchain technology can fill this need, suggesting that traceability is important and that the issue could have a technologically-based solution. Credibility certifications could see significant growth, starting with institutions that are traditionally viewed as centers for truth (i.e., the news) and then spreading out to other media and products. An ecosystem of supporting products (i.e., blockchain enabled cameras) may develop, making traceability an integrated and automated part of daily life.

## MORE THAN 500 WEBSITES IMPROVE THEIR JOURNALISM TRUST PRACTICES THROUGH NEWSGUARD'S RATING PROCESS

Press release reporting that NewsGuard, a website credibility rating browser extension, has been successful in encouraging news media companies to improve their practices. NewsGuard claims to have influenced over 500 companies for the better, specifically in their adopting clearer standards, being transparent about leadership and staff, labeling sponsorship, and disclosing ownership and financing. NewsGuard was founded in 2018, and within roughly a year has gained enough traction that the significance of receiving a "red" rating is enough to motivate some news media sites to be more transparent and make adjustments to their reporting. If credibility ratings can be converted to dollars, then it's likely that media sources (traditional and non-traditional) will elevate the importance of transparent and truthful reporting. It is, however, unlikely to shut down fake news and misinformation completely. Online reviews of the product show that reception is split between those that find the tool helpful and those that believe the tool is biased or fake.

## MICROSOFT'S NEW STEPS TO COMBAT DISINFORMATION

This article describes Microsoft's release of two new tools aimed at the detection and tracking of misinformation online. First, to combat deep fakes Microsoft has created an AI-enabled video authentication program that can detect manipulation of video and image files in real-time. Second, Microsoft is also releasing a certification and ledger (blockchain) system for digital files. This provides users with a certification of authenticity and details about the file's origin. Microsoft announced their intentions to partner with other organizations to bolster support for media and digital literacy, roll-out and verify their authentication tools with news media and campaigns, and sponsor a PSA campaign for critical thinking. Microsoft has the technological know-how, financing, and connections to be able to roll out anti-misinformation tools on a large and impactful scale, potentially earning Microsoft the position of market leader in truth-defense services. If a major tech company, like Microsoft, becomes undisputed leader of the field, it's feasible that a for-profit corporation could become the singular arbiter of truth and wield an immense amount of influence over information.

## AI RESEARCHERS USE HEART BEAT DETECTION TO IDENTIFY DEEP FAKE VIDEOS

This article describes the application of new AI research in the detection of deep fake videos. Researchers discovered "deep fake heartbeats" embedded in the videos using a technique called PPG. The "heartbeats" are digital noise found in visual biological signals left behind by the generative algorithm that altered the video content. The researchers were able to detect deep fakes with a 97% accuracy rating, proving that detection is a viable tool. More importantly, the researchers were able to uncover identifiable elements in the noise that can be used to determine (for the first time) the source model of the deep fake. These algorithms could support law enforcement operatives in tracking bad actors and possibly be used as evidence in legal cases regarding copyright or defamation. It is even possible that these algorithms could be used to monitor biological signals in real videos to confirm the veracity of a subject's speech – a visual lie-detector test that could be applied to any video.

## THE PROPHECIES OF Q

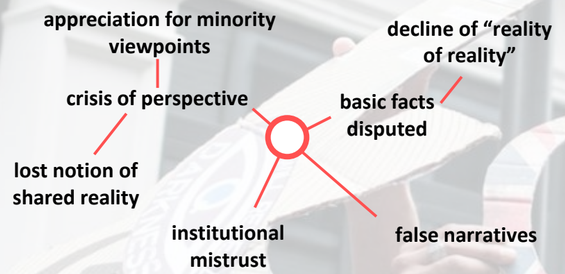
This article describes the foundation, growth, and actions of the QAnon community and the conspiracy theories & prophecies central to the formation of the group. Members are encouraged to be skeptical and do their own research, while simultaneously being warned not to trust established institutions (especially the press). Contradictions that do not fit the preferred narrative are quickly dismissed and members are told they "are the news." For these groups, truth is subjective and socially-derived and, increasingly, members describe their participation in terms of belief and feeling. The article goes so far as to suggest that QAnon has taken on an almost religion-like status. Years of partisanship, unresolved social unrest, and a general lack of community have come together to create an environment ripe for such fervent belief. These groups are actively crowdsourcing their own versions of "truth" and denying any evidence or source that comes conflict with it. In the future, these conspiracy cults may continue to gain strength and numbers. In the short-term this is very likely to bolster the trend of tribalism in the US, increase extremism, and add to the creation and propagation of misinformation online. In the longer term, anti-establishment conspiracy cults may start to drive social and political change. QAnon has already amassed millions of followers and spread globally. In the coming years, it is conceivable that they could gain enough votes to fracture the traditional American two-party political system and elect leaders to implement their own extreme and misguided policy agendas.

# interviews

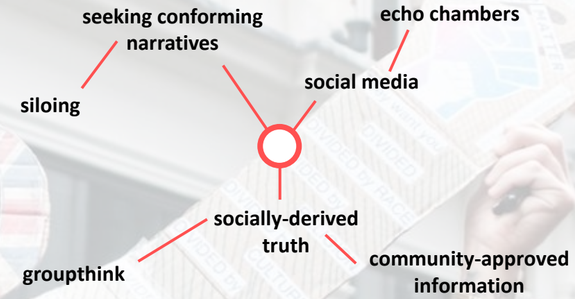
**WNYC's Radio Lab**
Audio producer and reporter focusing on the intersection of technology and authenticity.

**Snopes**
Investigative journalist and science writer covering misinformation in health, science, politics, and climate change.

## What is the state of truth?

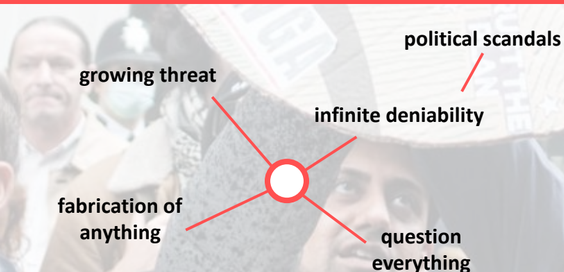



## Where is truth derived?



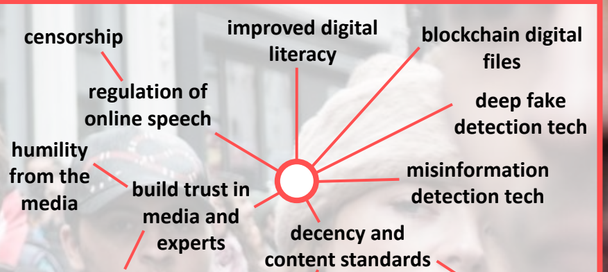

## What trends are shaping the future?

## How significant are deep fakes?




## What are the obstacles?

## What are the solutions?



# inputs

Major themes and trends synthesized from scanning and interviews.

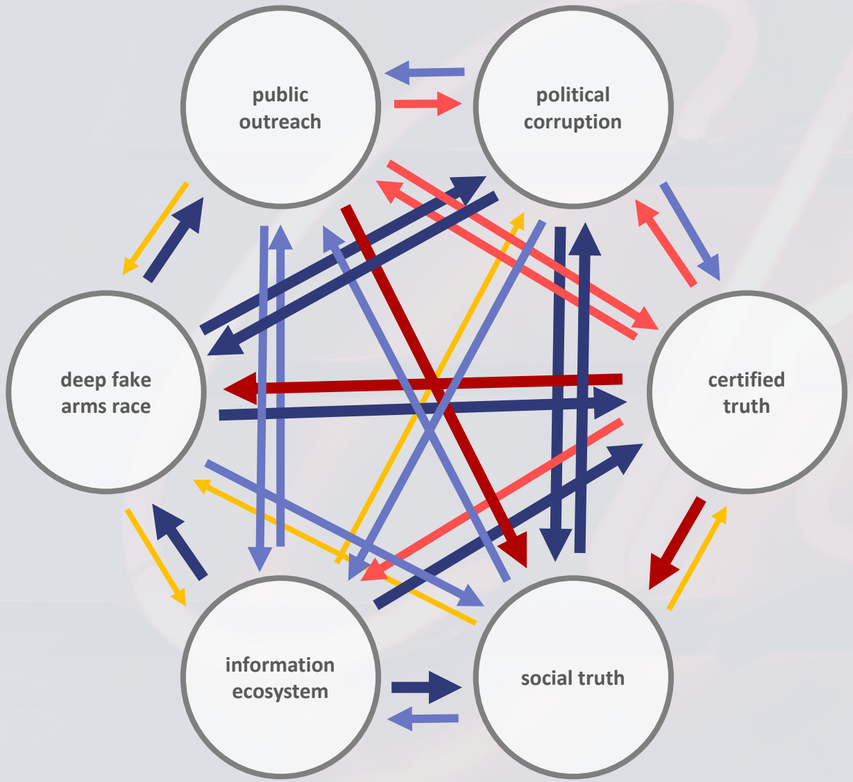
- news sources have moved from 3 networks to a fractured and user-generated ecosystem, with social media gaining traction as a legitimate source of news
- news media is in turmoil due to automation, job losses, and general distrust
- misinformation, intentional disinformation campaigns, trolls, and conspiracy cults are growing threats
- deep fakes are moving towards democratization
- fact-checking and bias rating efforts are increasing
- greater awareness of and acceptance of minorities gives rise to many narratives, further compounding the idea of truth

# inputs

Major issues, plans, and projections synthesized from scanning and interviews.

- claims of censorship mount as social media struggles with misinformation
- deep fakes create plausible deniability, can be generated by anyone, and break the idea of irrefutable evidence
- political corruption and dark money ads polarize rhetoric without consequence
- lack of libel laws for social media and recent dismissal of defamation cases for news categorized as satire or opinion leaves few options for accountability
- ramping efforts to thwart deception from multiple angles: blockchaining digital assets, bias ratings, digital literacy programs, misinformation detection, and post flagging

# cross impact analysis




++ + = – – –

# drivers of change

Efforts to educate the public on digital literacy are ramping up. Several companies are forming and are making resources available for free. Meanwhile, publishers are pushing articles on communication tactics and critical thinking skills, and corporations are funding PSAs. #knowledge-agreement #restoring-trust #media-literacy #digital-literacy #national-security #misinformation

**PUBLIC OUTREACH**

**POLITICAL CORRUPTION**

Reports of deep fakes and misinformation being used in political ads have already surfaced. Being able to widely disseminate a false or faked recording has the potential to sway elections, spark protests, and incite conflict. Unscrupulous politicians making power grabs and dark-money groups have a new tool at their disposal. #misinformation #disinformation #national-security #partisanship #censorship #regulation #free-speech

Deep fake technology has improved radically over the last few years and is quickly approaching the point where it is indistinguishable from reality. Concurrently, the cost and time associated with creating deep fakes has dropped dramatically. Researchers are fighting back with more sophisticated sourcing and detection algorithms, and social media firms are dumping $100Ms into research. #detection-research #traceability-research #deepfake-tech #vocal-synthesis #AI-authorship

**DEEP FAKE ARMS RACE**

**CERTIFIED TRUTH**

AI development has enabled companies to begin processing massive amounts of online information and begin sorting, verifying, and ranking it. Research into using blockchain to establish sourcing for media is underway. And a growing network of IoT devices provides an endless stream of indexable data. #AI-verification #credibility #bias-ranking #blockchain #wearables

Traditional news sources have struggled to adapt to the online world, with pay-walls and gated-content restricting audience growth. However, the shifting information landscape places more emphasis on free content, information snacking, trusted influencers, and extreme personalization. #social-news-consumption #paid-ads #subscriptions #user-generated-content #digital-nativism #content-suggestions

**INFORMATION ECOSYSTEM**

**SOCIAL TRUTH**

Objective truths and facts are being disregarded by certain social groups. The notion of truth is instead informed by the group's identity and belief. These beliefs are reinforced by social media echo chambers and search algorithms which provide increasingly extreme and biased content. #content-suggestions #social-echo-chambers #alienation #disengagement #partisanship #anti-science #search-engines

# The New Port Times

Established 1887 | Vermont

Friday, April 11, 2030
Volume 160 | Number 47
¥2.00 | $3.57

WEATHER

**High 92℉**
**Low 81℉**

SPOTLIGHT

## Four unfolding futures archetypes

Baseline: Lost in Translation
Collapse: Digital Dark Ages
New Equilibrium: State-Sponsored
Transformation: Quantified Truth

BASELINE

## Lost in Translation

**Misinformation, technological advances, and social unrest driving the deterioration of truth in American society.**

CORRESPONDENT | Associated Futures

AUSTIN - Disparate news and information sources have made the spread of misinformation difficult to control. User-generated content only adds to the volume. Bad actors looking to wage a silent war with the US have released convincing deep fakes. Domestic extremist groups and unethical politicians have followed suit. Political instability has grown along with mounting social unrest. The increased turmoil has isolated record numbers of people, expanding the allure of digital social groups. Within these social echo chambers, truth has become increasingly subjective and cult-like followings are emerging. New religions have been founded, as well as new political movements. Truth advocacy groups are on the rise, and have increased public education and funding for research into certified truth (blockchain, credibility rankings). Digital literacy is a required class in public schools, but there's endless controversy.

Photo by Danya Gutan from Pexels

**BASELINE, PAGE 12**

COLLAPSE

## Digital Dark Ages

**Truth is weaponized and disagreements about the nature of reality tear at the fabric of society.**

CORRESPONDENT | Associated Futures

AUSTIN – The demand for free content has killed traditional news media and journalism, leading most to insolvency. Social media has become the dominant news source and its user-generated content exists outside libel laws and journalistic standards. Credibility and bias rankings have become weaponized as groups create their own measurements of "credibility," allowing groups to filter out differing perspectives and increase the echo-chamber effect. Deep fake technology has advanced far beyond countermeasures and cannot be detected. In the absence of evidence, truth is entirely defined by social context, groupthink, and personal experience.

Photo by Alex McCarthy on Unsplash

To make matters worse, enemy states and anarchists are seeding the web with believable lies to pit groups against one another. Corruption prevails as public figures reiterate talking points and false stories are published in exchange for money. Courts throw out all libel cases on the basis of freedom and expression.

**COLLAPSE, PAGE 4**

## scenarios

Potential alternative future scenarios were developed using the 4 archetypes model.

**The baseline scenario wherein…**

- There is more of the same – a deterioration of conditions with small, disjointed efforts to stop misinformation continuing without much success.
- Rampant misinformation is the norm – created and promoted by both foreign and domestic groups.
- Use of deep fakes, which are unregulated, grows and remains unaddressed.
- Political instability grows and leads to more extremism and more corruption.
- Pace of publishing overwhelms the system – leaving fact-checkers constantly playing "whack-a-mole" with falsified news.
- Social isolation creates stronger echo chambers in a self-sustaining cycle.
- Truth becomes a subjective gut-feeling, based only on evidence people can see for themselves.

**The collapse scenario wherein…**

- Information is in a state of chaos – credibility is a long-forgotten notion that holds little water.
- Pay-to-play fuels the fire of misinformation, as inequality and corruption grow hand-in-hand.
- A silent war of misinformation and propaganda run by enemy states rages online and takes its toll on civil society in America.

# The New Port Times

Established 1887 | Vermont

Friday, April 11, 2030
Volume 160 | Number 47
¥2.00 | $3.57


WEATHER

**High 92℉**
**Low 81℉**

SPOTLIGHT

## Four unfolding futures archetypes


Baseline: Lost in Translation
Collapse: Digital Dark Ages
New Equilibrium: State-Sponsored
Transformation: Quantified Truth


NEW EQ

## State-Sponsored

**Governments are stewards of truth. Censorship balances the reckless creation and propagation of misinformation. But free speech is less free.**

CORRESPONDENT | Associated Futures

AUSTIN – News media and social media have merged. Popular news "influencers" replaced news anchors and their curated feeds stand-in for traditional talking heads news shows. The government has passed anti-fake news legislation and stricter laws regulating libel and transparency. The government has also sponsored pubic, apolitical truth programs and has opened a department of Information Security responsible for verifying posted information. In a rare bit of collaboration, social media sites are cracking down on misinformation as government cybercrime units actively remove misinformation form forums and the dark web. Traceability for digital assets has become standardized, as blockchain is implemented into all digital creation applications. A few "off-the-grid" truth collectives form new socio-political groups and they earn some rights, though they're mostly considered to be harmless and fringe.

Photo by Julius Drost on Unsplash

**EQUILIBRIUM, PAGE 17**

TRANSFORM

## Quantified Truth

**A network of technological advances creates a decentralized, quantifiable (and objective) truth.**

CORRESPONDENT | Associated Futures

AUSTIN - News reporting is 100% crowdsourced. Users upload information and AI algorithms filter the data and write personalized narratives. Nearly everything is recorded – all conversations, all interactions, all biometrics and uploaded to the web. All content and spoken statements are filtered through certification algorithms, evaluated, and ranked. Technological advances have eliminated the threat of deep fakes and are able to undo malicious editing in real-time. National AI is policing the web and evaluating information as it is posted in real-time. Anything deemed to be false or misleading is quarantined, rewritten, or removed automatically. AI-enabled tech filters spoken word the same way. Educational programs have been fundamental in shifting digital behaviors to a more transparent and responsible nature, ushering in a new era of web civility. Subjectivity and skepticism have faded from human memory.

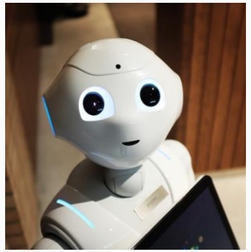


Photo by Alex Knight from Pexels

**TRANSFORMATION, PAGE 9**

## scenarios

**The new equilibrium scenario wherein…**

- Free speech becomes balanced speech – citizens give up some freedom of expression in exchange for a regulated information landscape.
- The government is the only entity with enough reach and might to surveil and monitor truth.
- An uneasy relationship forms between the public and government, as the risk of government propaganda and suppression grows.
- Independent, apolitical reviewership is held in high regard.

**The transformative scenario wherein…**

- Truth and information have evolved beyond the current system – a strange new future promoting honesty through technology.
- News is generated from a constant stream of user uploads and is curated and personalized by AIs.
- The internet is autonomously monitored and regulated – AI algorithms flag disinformation and take care of it.
- Everything is recorded all the time – IoT and big data become the backbone of the new information architecture.
- Speech and biometrics are analyzed for deception in real-time – encouraging more honest communication.

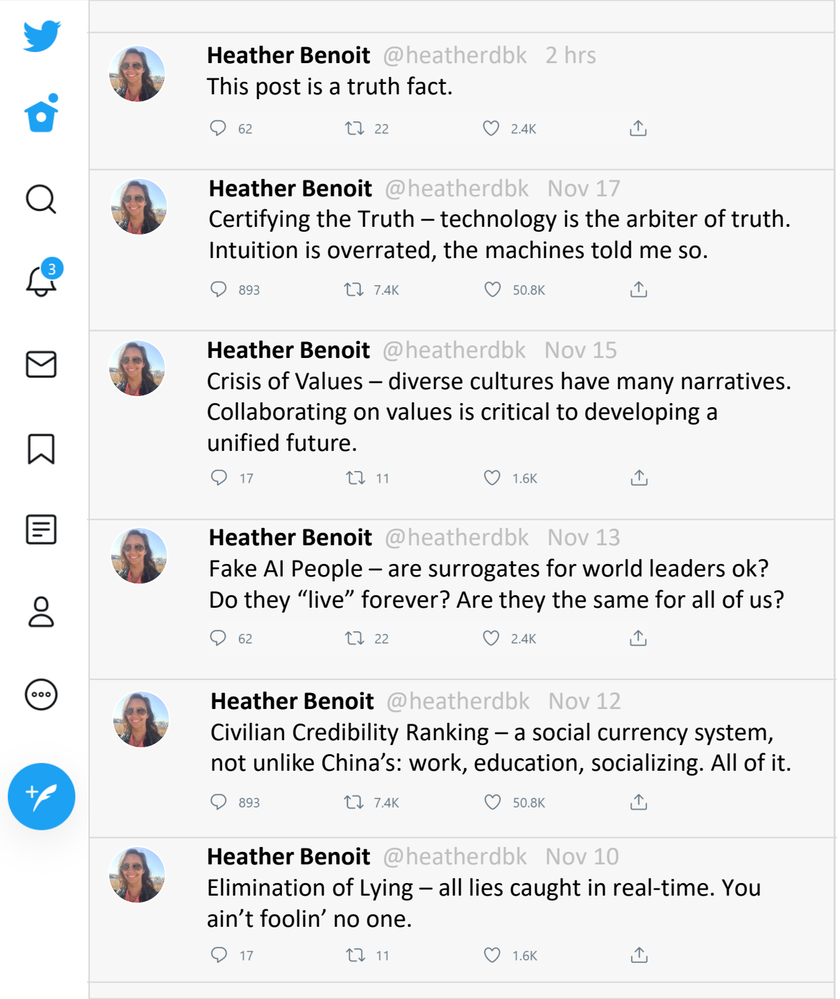
# implication cascade

Implications for significant issues and impactful drivers of change were explored, including the implications of the intensification of echo chambers and more investment in digital literacy programs.

Implications of the increasingly realistic and commonplace usage of deep fake technology (shown here) proved to be particularly interesting. Assuming their creation becomes democratized and simple, deep fakes have potential ripple effects spanning the gamut from riots and protests to the elimination of lying.

# key implications

Implications for the future of truth are broad and nuanced. Questions span the spectrum from civilian rights and privacy laws to values and the fuzzy grey-areas of ethical dilemmas.




Should we track everything? Are vitals private information? – Deep fake detection algorithms use heart beats to authenticate videos.

Should AI determine truthiness? Can unbiased AIs be written? Human intuition vs. blackbox programs with little transparency.

How do multi-cultural societies settle on a common, unified narrative? The melting pot needs some direction and attention before it boils over.

Deep fakes mean creating fake people that look real – what happens if they are used in government? How far is too far? Will they have followings like real people?

Civilian social ranking is already happening in China. In many ways it's happening in the US too, but in private companies rather than the government. How much surveillance is too much?

Lying – if we can detect all lies, should we? Are some lies, like lies to protect someone, ethical? Is this a national security risk?

# recommendations

**Free Speech |** Censorship is a dangerous path to tread. But, how do we protect ourselves from manipulated media without it? Facebook, Twitter, and the like are losing users to Parler due to content flagging and account suspensions – which is clearly not in their financial best interest. National standards that level the playing field are a reasonable solution. Forcing more responsibility onto users by increasing their liability will encourage people to think twice before making wild accusations.

**Truth Certification |** How do you manage deep fakes and misinformation at scale? Many technologies and industries are regulated and require certification before release to the public – FCC, FTC, FDA, etc. Government should step in to create a standard for digital assets that is difficult to counterfeit. It should also treat misinformation as a national security threat and create a toolkit and database to track offenders... Like the FBI, but for data.

## Re: How do we censor misinformation without infringing on the right to free speech?

**>> Enact "Burden of Proof" Standards**

The line between censoring false information or removing propaganda and suppressing free speech is a fine one. Social media sites provide the perfect platform for the unfettered spread of misinformation. The sheer volume of posts makes fact-checking nearly impossible. It is crucial to minimize the impact of misinformation with as little censorship as possible. Freedom of speech is a fundamental right in the US and it is essential that the ability to express ideas, sentiment, and approval is maintained.

## Fw: How is certified truth implemented at scale?

**>> Update the Software**

The existence of deep fakes and manipulated media threatens the nature of truth. We've come to rely on photographic and auditory recordings as proof that an event actually transpired and that the recordings are a faithful representation of reality. Deep fakes undermine those assumptions, providing a platform where anything can be created and anything can be denied. Given the current state of online media, deep fakes can spread virally and can influence real events long before they are discredited.

POSTS REQUIRE VERIFIED EVIDENCE

NON-VERIFIED POSTS TAGGED AS OPINION

USERS LIABLE FOR DAMAGES OF VERIFIED POSTS

INCENTIVE PROGRAM FOR FACT-CHECKING

ENFORCE DEEP FAKE DISCLAIMERS

PUBLIC DEEP FAKE DETECTION SOFTWARE AND DATABASE

MEDIA & SEARCH ENGINE ANTI-DEEP FAKE REGULATION

TRACEABILTIY STANDARD FOR DIGITAL ASSETS

# conclusion

Truth matters.

It defines our reality. Shared facts create a basis of mutual understating of values, issues, solutions, and goals. They are what allow us to work together to solve problems and create progress. Without truth, without shared knowledge, we spend all our resources arguing over the nature of a problem and getting nowhere. In the face of both global and national crises, agreeing on what is true is critical to our survival.

Yet, the complexity of truth, both as an ideal and a fundamental element of reality, make simple answers to today's challenge impossible. Solutions that seem to solve one small part of the problem can often have unintended consequences that further isolate people and further entrench them. It is only through open, empathetic communication and increased accountability that truth and trust can be restored. The mechanisms for encouraging these behaviors have been explored, but are only the first step.

Throughout this process,  it has become clear that having a widely-accepted version of truth is a delicate balance and eternal struggle. Trust is much easier to break than to maintain, and our institutions must take greater care of the charge they've been given. Nearly everyone has a stake in pushing their own narrative to center-stage, so dedication to the truth must never waiver.

It is only through constant strategic exploration, creative problem solving, and imaginative policy formation that we can wrestle the threat of deception and misinformation into submission for good.

**When truth is threatened, everything is.**

**We must fight for it.**

**We must protect it.**