How Do People Decide Whether to Trust a Photo on Social Media?

We asked 34 readers how they judge credibility of news photos.



Illustration by Keith Negley

This is part one of a behind-the-scenes look into the research, design and prototyping behind <u>The News</u> <u>Provenance Project's</u> proof of concept that shows how publishers can use blockchain to surface source information about news photography. <u>Read part two here</u>.

With every hurricane that hits American shores, the shark photo makes a comeback. It appears to be taken from the driver's seat window of a car, showing a flooded highway and, surprisingly, a shark swimming down the middle lane. The image was photoshopped and has been debunked, but that hasn't stopped it from ping-ponging around social media every time a major disaster hits.

Even without photoshop, visuals with misleading content, missing context and false information are common on the internet, and with the help of social platforms, they can be spread far and wide in a matter of minutes.

Posts with visuals are shared more widely and rapidly than text-only posts and are central to the spread of misinformation. Within this polluted information ecosystem, it's difficult to discern which visuals are credible. According to The Pew Research Center, almost half of American adults say it's hard for them to recognize when visuals have been made up or altered. The result is a muddled discourse about what's true: a majority of American adults say that made-up or altered visuals can create confusion about the facts of current events.

If anything can be faked, how can people trust that credibly sourced visuals are accurate? Do people still believe what they see in photojournalism? Spurred by questions like these, the New York Times R&D team created The News Provenance Project to explore solutions to issues of misinformation around visual journalism. During the summer and fall of 2019, we conducted 34 total interviews over one round of user research and two rounds of prototype testing to investigate ways of attaching provenance information to news photography. What we found was that despite concern otherwise, Americans do not operate from a "post-truth" psychology. Even in today's polarized climate, people with wildly different political views still appreciate the original context of a news photograph.

Yet, as we tested different designs that displayed context, a new question arose: will people even notice accurate source information in the first place?

How can publishers help readers discern what's credible?

At The News Provenance Project, we wanted to find out how publishers can help readers make more informed, confident judgements about the credibility of news photography. To do this, we focused on how we might surface the metadata — such as descriptive captions, time and location information — that journalists embed in photography files. At the same time, we wanted to see if we could leverage the history-tracking capabilities of blockchain technology to ensure that that metadata stays embedded with news photography as it travels around the internet. We worked with IBM Garage, which built a prototype using the open-source Hyperledger Fabric platform (more on the prototype later).

However, even if we could use blockchain to effectively display the history of a news photo, we still needed to understand what gives people the confidence to make informed judgements about the credibility of news photography when it matters most.

How do people decide whether to trust a photo?

The work started in May, 2019, when a group of people from the Associated Press, Hearst, The New York Times and the Wall Street Journal met with IBM Garage to look at better ways to communicate the provenance of photojournalism to readers when photos appear off platform. The group developed an assumption: that it is difficult for news consumers to trust the authenticity of images they see online, and a blockchain-based signal of trust could help them judge what visuals are credible.

Building off the work of this group, The News Provenance Project began by trying to see how their assumption lined up with real user problems. We first conducted indepth interviews with 15 daily users of social media from different backgrounds, geographic locations and with news preferences for both left-leaning and right-leaning news. We wanted to learn how people decide whether to trust a photo on social media, and what kinds of information would help them feel confident in judging what's credible.

To do this, we asked participants to walk us through how they view news photos in their social media feeds. We also had the participants scroll through several example posts and asked them to think aloud about what they noticed and how credible the posts seemed. The examples varied widely in source type (individual, local, national), language style (words like "shocking" or evidence of reporting, like citing city officials) and post type (attached to an article or a stand-alone photo).

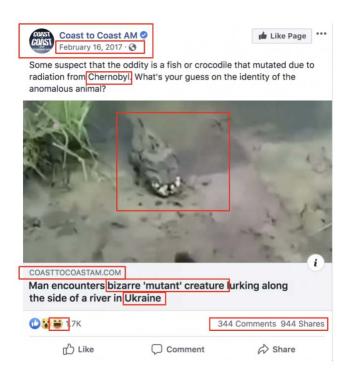


Three real social media posts from Facebook and Twitter that were used in user research to elicit reactions to factors like source type, language style, post type, photograph style and amount of social engagement. The middle post was miscaptioned and depicts garbage on a beach in Mumbai, India.

Through these conversations, we gained insight into how people view news photography on social media, and how they think about the quality of information they see. What these conversations revealed was that overall, the people we spoke to are capable of being discerning, yet rather than asking themselves whether a post is true or not, they are motivated by whether they find a post interesting.

Awareness of elements that provide contextual information

A few distinct patterns emerged around the level of attention people pay to a post's context and their trust of mainstream media institutions.



Elements that people payed attention to while assessing the post for credibility included the source, the number of comments and shares, and the photo itself.

More aware of contextual elements

Some people were more likely than others to factor in contextual cues like source, date and reactions about a post as cues of credibility. For example, when asked to consider the credibility of a Facebook post depicting a "mutant creature" from Chernobyl, some people paused to consider whether the source was credible or noted the laughing reactions as an indication that this post was intended for entertainment. They were confident in using these details to investigate whether or not they thought a post was credible.

Less aware of contextual elements, more visual-centric

Other people were more emotionally reactive to the visual in the post, interpreting it at face value. They read just enough of the headline and description to get an understanding of what was in the picture, then focused solely on the visual, using their personal experiences for insight into the post's credibility. Even when probed to talk through how they would fact-check whether or not the post was accurate, they sometimes ignored details like source completely.

Though we observed meaningfully different baselines of analytical thinking and digital literacy, we sensed some fluidity between these categories depending on the context. If an issue was interesting and surprising enough, someone might shift into a more critical assessment than they would for a post that they didn't care about.

What kinds of media do people trust?

We observed a division between people who want to strengthen and preserve traditional mainstream media institutions, and people who might abandon them entirely in favor of alternative media providers.

More trusting of mainstream media institutions

Some people were more likely to trust what they perceive as fact-based reporting by news outlets they were familiar with, such as CNN and The New York Times. They were wary of sensational, outrage-based posts from individuals and lesser-known, hyper-partisan news outlets. Posts with words like "shocking" immediately triggered skepticism, compared to a matter-of-fact "newsy" stylistic tone, which they perceived as more objective.

Less trusting of mainstream media institutions

Other people we spoke to were skeptical about the credibility of all news outlets that report on political issues. They believe all outlets are biased and cherry-pick content toward agendas under the guise of objectivity. This distrust was often applied across political lines, with outlets as different as Fox News and The New York Times being regarded with skepticism. This anti-media sentiment has been noted by previous research, such as the 2019 Poynter Media Trust Survey, which reported 53 percent of respondents as having a negative or very negative view of mainstream media institutions.

People with less trust in mainstream media institutions either said they follow a variety of news outlets to balance out any perceived bias, or they were so jaded by these news outlets that they depended on their own local communication channels and alternative media streams. They were more likely to trust sensational language and vivid imagery as cues that a post was local and authentic.

Bringing it together: types of news consumption on social media

Importantly, we saw that these two factors — the behavioral tendency to be more or less aware of photo context on social media, and degrees of trust in news outlets — could interact, creating unique sets of needs that we separated into four categories:

Distrustful news skeptic (low trust, high awareness): Seeking to call out bias in mainstream media, a person in this category may use motivated reasoning to find any evidence to confirm their belief that the media is pushing a particular agenda. Building trust in specific news outlets is difficult in these cases: it may be part of a person's identity to be skeptical of mainstream media and hyper-alert to perceived cues of bias. Importantly though, this skepticism applied more to the editorial framing of a story than a complete denial of facts, such as when and where a picture was taken.

Confident digital news subscriber (high trust, high awareness): A person in this category is digitally savvy and is comfortable distinguishing between true and false news when provided information from news outlets they trust. They want to avoid appearing uninformed or misinformed about news issues.

Media-jaded localist (low trust, low awareness): This person may feel marginalized by mainstream media and uncritically accept hot takes from unofficial accounts as truths. They want news that feels local and authentic, but they don't want to be misled by false information intended to deceive. Additionally, they need clearer cues to identify false and misleading content from unofficial accounts that they trust in good faith.

Late-adopter media traditionalist (high trust, low awareness): A person in this category may be more comfortable learning about news through older mediums such as television or newspapers, but less comfortable making sense of news online within the noise of social media. On this front, people need more education on misinformation and disinformation tactics, as well clear cues to more readily distinguish credible content from media sources they already trust.

[Read more about the work The News Provenance Project is doing.]

From this preliminary framework, we identified at least two clear classes of news consumers that would benefit from provenance information for news photography: those who trust the media, but lack the baseline digital literacy to reliably assess the credibility of posts, and those who are already confident in their abilities to distinguish credible news photography, but would benefit from even more context to factor into their understanding.

For those with less trust in the mainstream media institutions, the challenge might be greater. Yet even in these cases, news outlets have an opportunity to provide clear cues about the origins of news photography and show their journalistic process as inroads to trust.

People need more context and clearer cues

Revisiting the initial assumption from the IBM Garage design thinking workshop — that news consumers find it difficult to trust the authenticity of images they see online — we learned that the real issue is that news consumers most often fail to critically assess a visual because their relationship to social media is one of entertainment and connection-building, rather than fact-checking. This can lead to error-prone leaps in judgment within a context of information overload.

In the case where people distrust a post on a contentious topic, such as immigration or politics, that doubt can come from a perception of editorial slant in the framing of the story, rather than a fundamental rejection of primary details of the post.

These findings point to more nuanced ways to think about how to surface provenance information for visuals that intervene with the spread of misinformation.

People *do* care about what's true, however they arrive at an understanding of truth in different ways. Some people place more weight on mainstream media institutions, while others turn more to voices that feel personal and speak to their direct experiences.

Earning trust from people who have become disillusioned by mainstream media is a hard, long path, but there are simple steps at hand to help: Publishers have an opportunity to build trust photo by photo by providing more clear, prominent cues about what their photojournalism represents. In this way, publishers can provide clarity to readers in the moment by providing transparency into what they know and how they know it.

To learn how we used this research to develop a blockchain-based proof of concept for displaying source information about photojournalism on social media, <u>read Part Two.</u>

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