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The Responsibility of Image Source Criticism

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Everyone is of course familiar with the iconic photograph from Kent State University on May 4, 1970, of a student lying in a pool of blood on the pavement and a student wailing over his dead body. Many of you have probably used this photograph in your own classes. But the eagle-eyed among you will also probably recognize that a popular version of this image has been doctored. In the original image, there is a rather unattractive pole sticking out from behind the head of the wailing student. In the doctored image, the pole has been digitally erased for purely aesthetic reasons. There are plentiful versions of this altered image easily found on Google Images. With the widespread availability of consumer grade image tools like Photoshop, such manipulated images have become commonplace.

The idea of altering photographic images is hardly new and long predates the 1987 invention of Photoshop. Joseph Stalin was, of course, quite brutal at excising his enemies, both from images and from his political orbit. But there have been less dire instances of this practice as well. A cover of *National Geographic* in 1982 featured an image of the Pyramids at Giza where the original photograph was altered: the pyramids having been pushed together so that they more easily fit within the cover of the magazine. Among photojournalists, this is nevertheless considered a fabricated image, and an ethical violation. Sometimes, these fabrications can be even more sinister: during the week of his arrest, two different covers from *Newsweek* and *Time* magazine both display the same mug shot of O.J. Simpson, although the *Time* magazine cover has darkened the image making Simpson look

more guilty and menacing than the *Newsweek* image. Another image was used as part of the Swift Boat campaign against John Kerry, when he was running for president in 2004. A newspaper headline from the early 1970s reads that Jane Fonda is speaking to Vietnam-era anti-war rally, and the accompanying photograph features John Kerry by her side. Of course, the image is completely doctored with those two images of Fonda and Kerry having been spliced together. These are but a small sample of the myriad, nefarious ways in which digitally manipulated images play with the truth.

Three decades ago, as digital photo manipulation tools were just entering the market, the critic William Mitchell wrote in *The Reconfigured Eye: Visual Truth in the Post Photographic Era*, that:

protagonists of the institutions of journalism with their interest in being trusted, of the legal system with their need for provably reliable evidence, and of science with their foundational faith in the recording instrument, may well fight hard to maintain the hegemony of the standard photographic image.¹

It is curious to note that Mitchell did not include historians in that list. Indeed, I wonder if there were any historians thirty years ago thinking about the implications of post-photographic truth for our practice. Or, indeed, if historians are thinking of these implications today.

Mitchell goes on: “digital imaging. . . creates a condition. . . in which arbitrary interventions in the image construction process are easy to introduce and difficult to detect.” Those arbitrary interventions were the sort of thing expected from painters, even realist painters. But, as he goes on, “the distinction between the causal process of the camera and the intentional process of the artist can no longer be drawn so confidently and categorically.” One could assume that a photograph, at least one taken before the advent of digital photography and Photoshop, was less susceptible to arbitrary interventions, not impossible, obviously, but more difficult than a painting. “The emergence of digital imaging has irrevocably subverted these certainties, forcing us to adopt a far more wary and more vigilant interpretive stance toward

photographs.”² However, I wonder how vigilant our society has really been in the intervening thirty years.

And now, we are living through a moment where the manipulation of video images will become as commonplace as the doctoring of photographic images. Two new technologies—disconcertingly joined together—mean that the status of “video evidence” will be upended. There are now vocal manipulation tools that allow a user to record only a small sample of someone’s voice to re-produce (copy) a full vocal range, including changes in modulation and tone. The technology allows anyone to mimic the voice of anyone else with almost complete fidelity.

Add video manipulation technology to vocal manipulation technology and now there is an even bigger problem. I can train a depth-sensing camera on my face and start speaking words: for instance, perhaps I might say “Russia is correct: the United States is at fault for the current situation in Ukraine. The West should never have expanded NATO that far eastward.” My facial mimicry can then be digitally combined with an actual video of Joe Biden such that the result makes it appear that Biden is saying those words. Add vocal manipulation of Biden’s voice and a convincing video can be produced of President Biden being made to take responsibility for the Russo-Ukrainian war. These “deep fakes” are poised to proliferate.

Imagine that doctored video going viral. On the one hand, Biden or his press secretary could deny ever having made that statement at all. Then, of course, people would point to the “obvious” video evidence of him making the statement. Biden’s protests would look ridiculous in the face of such “evidence.” This is not in the realm of speculation: a video surfaced in early March purporting to be of Ukrainian president Zelensky announcing his surrender. The fabricated video was quickly removed but it does not take an overly active imagination to envision the flood of similar fake videos that will soon engulf the marketplace of ideas. Once these “deep fake” technologies are made commercial grade, our society will quickly descend into one where no one will be able to trust “evidence,” video or otherwise. As facial and voice mimicry technologies become more widely available, there will be little reason to believe any video or audio recordings as truthful. Of

course, we might just as likely choose to believe any such fake video that confirms our beliefs and prejudices.

Deep fake technologies represent yet another assault on what Jonathan Rauch has called the Constitution of Knowledge:

Our conversations are mediated through institutions like journals and newspapers and social-media platforms; and they rely on a dense network of norms and rules, like truthfulness and fact-checking; and they depend on the expertise of professionals, like peer-reviewers and editors—and the entire system rests on a foundation of values: a shared understanding that there are right and wrong ways to make knowledge. Those values and rules and institutions do for knowledge what the U.S. Constitution does for politics: they create a governing structure, forcing social contestation onto peaceful and productive pathways. And so I call them, collectively, The Constitution of Knowledge.³

The last decade has witnessed a chipping away at the values and norms and rules and institutions of this Constitution. In 2020, former President Barack Obama was unequivocal:

If we do not have the capacity to distinguish what's true from what's false, then by definition the marketplace of ideas doesn't work. And by definition our democracy doesn't work. We are entering into an epistemological crisis.⁴

Deep fakes will accelerate the epistemological crisis that threatens our democracy. How do we discern falsehood from truth when technologies make such convincing fakes? How would we know that the video we are watching of the president is not some crafty manipulation? Perhaps we will reach a stage where the distinction simply will not matter to the majority of us. Given how susceptible people are to believing the photoshopped forgeries spreading virally today, I fear that decontextualized doctored videos will proliferate among a credulous public.

What interventions might we engage in now to head off these problems? We could, I suppose, turn to technology, and re-enact that modern rondo: technology begets problems which beget more technologies to solve those problems, creating more

problems that beget more technologies...and so on. One technology solution might be to deploy non-fungible tokens (NFTs) as a way to verify digital information. Among its uses, a non-fungible token can serve as a kind of digital certificate of authenticity of otherwise evanescent digital objects. I assume we will lean on technologies to solve our digital truth problem. But who will be the ones employing these technologies?

Jean Mabillon is sometimes identified as the first modern source critic. He wrote, "I do not deny that in fact, some documents are false and others interpolated, but all of them should not be dismissed for that reason. Rather, it is necessary to devise and hand down rules for distinguishing genuine manuscripts from those that are false and interpolated." He wrote this in his book *De Re Diplomatica (1681)*, from which we get the term *diplomatics*, that branch of scholarship devoted to authenticating documents. I contend that, in the face of more and more digital fakes, what is required right now in the profession of history is a new scholarly discipline of digital diplomatics."

To whom should the responsibility of twenty-first-century source criticism, of digital diplomatics, fall? Perhaps historians should assume this vital civic responsibility. Alas, if history is any guide, historians will more than likely pass the task of source criticism over to someone else, probably archivists, as we have done for some time now. At one time, the historian and the source critic were united in the same person. As history professionalized as a discipline in the late nineteenth century, those functions were bifurcated.

What if historians were to reassert our role as source critics? Not only for the exceptional document—the so-called Hitler Diaries spring to mind—but for the coming avalanche of deep fakes. Let me be clear: I am not insisting that every historian need engage in this practice, nor am I arguing that our profession should devote all of our energies to nothing else. I do argue that we should most certainly make source criticism and digital diplomatics of public knowledge a fundamental and vibrant part of history education, something that we expect every student to learn, a vital part of what it means to study history.

Perhaps the responsibility of digital diplomatics will also be taken on by digital historians. Again, not every digital historian need assume this role. But the training of digital historians must surely include learning the process of authenticating digital information.

Perhaps this responsibility will be taken up by public historians. Might we build a “Museum of Public Knowledge,” a virtual space where citizens might confidently search for verified digital information? At such a museum, the public historian would engage in the curation of public knowledge, the etymology of *curate* being “care.” Who else might care for public knowledge if not the public historian?

Digital diplomatics might form the basis of a new subfield, what we might call “civic history,” as not only a scholarly pursuit, but also a service to our polity which engages in the maintenance and preservation of the Constitution of Knowledge because our current political moment demonstrates that the responsibility of source criticism has never been greater or more urgent.

¹ William J. Mitchell, *The Reconfigured Eye: Visual Truth in the Post-Photographic Era* (Cambridge: The MIT Press, 1992), 8.

² *Ibid.*, 31, 225.

³ Jonathan Rauch, *The Constitution of Knowledge: A Defense of Truth* (Washington DC: Brookings Institution Press, 2021), 5.

⁴ *Ibid.*, 9.