

## Three Under-recognized Hazards of Digital Recording

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# Three Under-recognized Hazards of Digital Recording

By Elizabeth O'Neill (Eindhoven University of Technology)

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## Introduction

Few people are sufficiently wary of digital recording—audio, video, and even photography. I want to discuss three massively under-appreciated hazards of modern-day recording: (1) unending, unbounded moral judgment; (2) tarnished reputational connotations; and (3) tarnished self-perception. These hazards are so significant that in our present technological milieu, almost every person has reason to avoid subjection to digital recording whenever possible.

The problems arise from the confluence of several features of modern recordings: their durability—they do not fade away or degrade as memory does; their duplicability—anyone that possesses or observes them can easily duplicate them; their easy, high-fidelity transmissibility to vast numbers of people around the globe; and now, due to machine learning, their vulnerability to fast analysis, including facial recognition and voiceprint identification, and their vulnerability to believable modification (e.g. deep fakes). The development of analysis technologies means that it will soon be easy to compile from around the internet a dossier of the recordings of a given individual. The availability of technologies to create deep fakes, in combination with large quantities of recorded material, confers the capacity to manipulate the person's image and reputation. The last crucial, incipient factor to mention is the immediate accessibility of digital recordings: augmented reality technology introduces the prospect that anyone walking down the street will be able to immediately pull up an organized dossier of recordings for each person they encounter.

## Problem 1. The global moral inquisition: unending, unbounded moral judgment

No one seems to be expecting the global moral inquisition. But when one considers the combination of human moral psychology with the technological changes of the last decades, what else should one expect? Humans continuously evaluate each other. In person, we convey information about behaviors we disapprove via verbal criticism, facial expressions, body language, gossip, and so on. We encourage others to follow the moral norms we endorse; if someone violates an important moral norm, we may feel not only that we are justified in reprimanding them but even that we are obliged to do so.

Moral judgment poses special dangers that aesthetic and other non-moral judgments do not. When people view a norm as moral—rather than aesthetic or a matter of personal preference—they are more likely to believe that everyone ought to comply with the norm. When people believe someone has violated a moral norm, they are more likely to view the norm violation as serious. Furthermore, a host of powerful emotions may come with viewing a norm violation as a moral violation, including righteous anger and indignation, moral disgust, or the feeling that someone has been wronged and something should be done. People are less tolerant of those with whom they disagree on moral matters—someone who believes your moral views are very different from theirs may believe, for instance, that they ought not cultivate a friendship with you, work with you, let you move in to their neighborhood, or let you marry into their family. As Rai and Fiske (2014) have argued, many people who commit heinous violence act for what they believe to be moral reasons. For instance, if someone comes to believe that you have acted unjustly or inhumanely, that you have committed mortal sins, that you have been rewarded in some way that you do not deserve or you have disrespected someone, they may not just have a self-interested *desire* to cause you harm, but they may also believe that they would be morally justified in doing so—to teach you a lesson, to give you your just deserts, or simply to defend the moral order. The belief that one is acting rightly, that morality is on one’s side, is a powerful motivator.

In the past, human memories, emotions, and norms imposed limits on how long perceived indiscretions and wrongdoings were punished. Now the statute of limitations on moral judgment and punishment has no terminus. Reams of recordings are accumulating for each individual from birth to death—their first steps, their inquiries, their offhand comments, their angry rants; etc.<sup>1</sup> These durable representations of the individual’s actions supply material on which they may be judged at any point going forward. For every digitally recorded action that an individual takes, the moral trial never adjourns.

Furthermore, the throng that may eventually judge one’s actions has expanded and diversified. Prior to the internet, for most individuals, one’s social network was relatively small; the set of persons whose moral judgments mattered for one’s life was also small. Now, we find ourselves in a *global* village, to use McLuhan’s phrase (1962).<sup>2</sup> The variety of moral standards by which each individual can potentially be judged is staggering. Of course, some people’s moral

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<sup>1</sup> Fortunately, for many people much of this material is still scattered—perhaps some is on friends’ phones, some is on social media websites, some is stored on the servers of the companies that offer digital assistants. The ease with which digital recordings may be placed on the internet, and the risk of hacks, means that any of it could spill onto the open internet at any time. It then joins the pool of recordings that can be copied, stored, and associated with an individual (using facial recognition or other biometric tools) indefinitely into the future.

<sup>2</sup> See Weissman (2021, 2019) for discussion on the implications of peer-to-peer surveillance in the global village.

worldviews are deeply wrong. Nonetheless, under the right conditions their moral condemnation produces terrible problems for those subjected to it.

Some people like to tell themselves that they have nothing to fear from recordings, because they do nothing wrong. But it is simply impossible to be so morally pure that one gets through a global moral gauntlet unscathed. For one thing, everyone's done *something* wrong. For another thing, because there is so much moral disagreement and because prevailing moral views will change over the course of one's lifetime, one is sure to eventually be subjected to a moral standard according to which one has acted in a morally abhorrent way. Are you pro-pitbulls or anti-pitbulls? Do you support comment moderation (and thus, some think, want to obliterate free speech)? Do you consider yourself a feminist? Are you for or against mandatory vaccines for children? People who stepped on the wrong side of these issues online have faced doxing, swatting, orchestrated efforts to make them unhireable, harassing phone calls, nonconsensual and debasing use of personal images, or death threats. And the material for these harassment campaigns has come largely just from written material, like message boards and social media conversations. There will be vastly more potential for moral judgment when it becomes possible to efficiently analyze all the online recordings from an individual's life. Imagine the prospects for both coordinated and lone-wolf moral vigilantism: people inspecting the language one has used over the entirety of one's recorded past for infelicities and hurtful wordings; people collecting the moments in which you were the most flip, dismissive, curt, or discourteous, when you lost your temper, looked condescending, or had a public argument. Perhaps you'll be pilloried—repeatedly, for the rest of your life—for a video of you feeding bread to ducks, glancing at your phone while driving, letting your toddler out of arm's reach, failing to clean up after your dog, sporting a leather jacket, rolling your eyes during a speech, wearing immodest clothing, drinking milk, purchasing an expensive luxury item, or any number of other actions with the potential to inspire moral condemnation.

Any recorded action you take can and will be used against you in the court of public opinion. And the court is really more like a multi-headed hydra. Some parts of the public are going to find you guilty.

## **Problem 2. Tarnished reputational connotations**

What do people think of when they think of you?

One of the possible outcomes of our current trajectory is the return of permanent—lifelong—stigmatization. Imagine people turning away from you in disgust or stifling a laugh when they see you approaching. Why? What they think of when they see you—or what comes up

automatically in their augmented reality—are your top three most embarrassing moments, a meme based on your strangest facial expression, or a montage of your wardrobe malfunctions. In such a world, you are haunted by your past recorded actions—they trail you wherever you go; they influence how anyone interacts with you.

In some sense, if it is recorded, each action you take never ends. In a world dogged by recordings, you cannot carelessly dash outside in pajamas to get your mail, attempt a cartwheel in the park, blow your nose, gripe to a friend at a cafe, or fix your makeup while on the commuter train. Recorded actions are not ‘one and done,’ observed solely by the individuals around you and then forgotten. They are actions you will potentially perform over and over, as people rewatch the video. A recording as it occurs is only the beginning of the action one has taken. One cannot say at the end of a recording, “Ah, that’s over now.” Recordings are forever.

Think of the great variety of pejorative categories one can be reduced to, based on curated snippets of one’s life: laughingstock; object of pity; snob; bungler; airhead; reprobate; pariah. One of the hazards of life in a village is a reputation one can escape only by moving away. What’s worse about the global village and digital reputation is that there is nowhere one can go to escape. In the new, recorded world, there are no fresh starts. People cannot give you the benefit of the doubt when they meet you—something many of our most banal social interactions rely on—because they already know too much about what you’ve done. Depending on what recordings of you are available, it could be that they cannot take you seriously, or they think of you as a child, or they demand that you account for your incredible rudeness in the 20-year old incident they just watched, or perhaps they simply conclude that you are not someone that they want to be seen or associated with.

Problems 1 and 2 are substantially worsened by the arrival of deep fakes.<sup>3</sup> You can face problems with moral judgment and reputational connotations because of what you did, or because of what you appear to have done. The more recordings of you that exist, the more vulnerable you are to an effective deep fake attack.

### **Problem 3. Tarnished self-perception**

How people react to you day in and day out affects how you view yourself. The hazard here is humiliation, embarrassment, shame, alterations to one’s sense of identity, and loss of self-respect. No one is so tough that they are invulnerable to this hazard.<sup>4</sup> If people whose opinions one

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<sup>3</sup> For some discussion of the potential for deep fakes to cause harm by influencing psychological associations, see Harris (2021).

<sup>4</sup> For recountings of some of the stories of people who have grappled with public shaming, see Weissman (2021), Scheff and Schorr (2017), Ronson (2015), Citron (2014).

respects judge that one has done something morally wrong, this can give one reason to wonder whether one has indeed acted wrongly. When a huge number of people appear to believe that one has acted badly, it is tempting to consider whether they are right. When friends stop calling and no one will make eye contact, one is forced to reassess one's social standing. One will adjust how one behaves, in anticipation of the negative reception one is likely to receive.

Furthermore, what one sees affects what one thinks about and how one feels. Depictions of oneself influence how one thinks of oneself. It is torturous enough for social media content moderators to view and flag depictions of beheadings, sexual abuse, and other horrifying harms done to people they do not know personally. When an individual is targeted for harassment, and deep fakes are used to depict that person as perpetrator or victim of degrading, humiliating, or brutally violent actions, whose sense of self will emerge from the onslaught untouched?

### **The usual objections**

We are in unprecedented circumstances, yet people tend to think that what protected them in the past will still protect them in the future. Here are some common ideas that cause people to underestimate the hazards of digital recording.

- *I'm just a regular person—no one pays attention to what I do.*

Anyone you interact with pays attention to you—employers, family members, neighbors, store clerks. If your past is trailing you in augmented reality like a ghost, people need not exert themselves to find the parts of your past you'd rather forget—it will be harder for people to ignore the information than to pay attention to it.

With regard to whether the rest of the world will take an interest in you, there is profit in videos of shocking actions, weird behavior, “fails,” and so on. There are already individuals and companies on the lookout for anyone caught on film doing something that might go viral.<sup>5</sup> Advances in machine learning will increase the efficiency with which “fail”-mongering profiteers can locate such recordings.

- *Even if I go viral, things will blow over eventually.*

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<sup>5</sup> Websites like People of Walmart and Worldstarhiphop were only the beginning of this phenomenon. Another example is the YouTube channel FailArmy, which has over 15 million subscribers; among the videos they distribute appear to be videos filmed by bystanders and from doorbell surveillance cameras. Weissman (2001, p. 85-88) discusses a number of other recording aggregator sites.

Certainly, the attention of communities on the internet nowadays flits quickly from topic to topic. Again, one problem is that if someone is interacting with you, their attention is on you, and your recordings are trailing you—your face, your name, and your physical self as you navigate an augmented reality world. Another problem is that the topic can recapture broad attention at any time, and you never know when that may occur.

- *Social norms will adapt—people will become nicer, more understanding, more forgiving, etc.*

If this is what you're banking on, you're making a massive gamble.<sup>6</sup> Yes, we should all work to make this happen. And if we were talking about shaming on the scale of a high school, perhaps one could be optimistic about facilitating a cultural change. But it is unwise to count on this happening across the globe, within your lifetime. Digital vigilantes and “fail”-mongers have no borders.

- *I don't care about what others think.*

The beliefs and perceptions of others will guide their treatment of you in ways that restrict your opportunities and ability to act in the world. Even if you are certain you have done nothing wrong, and even if you have never felt embarrassment, other people will make decisions about whether to hire you, rent to you, allow their kids to be friends with your kids, etc. on the basis of what they know about you. Keep in mind that others also have a stake in how you are depicted.

## **Conclusion**

We're not in the '90s anymore. Recording no longer means VHS tapes and snapshots destined for a dusty photo album. We became habituated to the phenomenon of recording under one set of conditions—when recordings were durable but not as easily duplicable, transmissible, analyzable, modifiable, and accessible across contexts as they are now. Most people seem to have not yet registered how radically different the new world of digital recording is. There are, of course, many attractive things about making and sharing recordings. But the combination of digital recording with the internet and AI capabilities has brought into existence a spectacular set of new threats.

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<sup>6</sup> Weissman (2021, p. 134) also makes this point.



What, then, should the ordinary person do?

One can do one's best to gird one's mind against moral condemnation and loss of reputation, by reading the Stoics,<sup>7</sup> Plato on Socrates' final days,<sup>8</sup> or, if one is religiously so inclined, the Book of Job. Certainly anyone who is coercively subjected to recording, and anyone with recordings of themselves on the internet that they cannot retract, should do this.

But above all, one should act to protect oneself and one's loved ones by reducing one's attack surface: deleting recordings that one has placed on social media sites or elsewhere online; declining to introduce internet-connected digital recording devices, including voice-activated devices, into one's home, neighborhood, car, workplace, classroom, etc.; and avoiding subjection to digital recording by others whenever possible.

## Citations

Citron, Danielle Keats. 2014. *Hate Crimes in Cyberspace*. Harvard University Press.

Fiske, Alan Page and Taze Shakti Rai. 2014. *Virtuous Violence: Hurting and Killing to Create, Sustain, End, and Honor Social Relationships*. Cambridge University Press.

Harris, K.R., 2021. Video on demand: what deepfakes do and how they harm. *Synthese*, pp.1-19.

McLuhan, Marshall. 1962. *The Gutenberg Galaxy*. University of Toronto Press.

Ronson, Jon. 2015. *So you've been publicly shamed*. MacMillan.

Scheff, Sue, and Melissa Schorr. 2017. *Shame Nation: The Global Epidemic of Online Hate*.

Sourcebooks.

Weissman, J., 2019. P2P surveillance in the global village. *Ethics and Information Technology*, 21(1), pp.29-47.

Weissman, J., 2021. *The Crowdsourced Panopticon: Conformity and Control on Social Media*.

Rowman & Littlefield Publishers.



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<sup>7</sup> e.g., Epictetus, *Discourses, Fragments, Handbook* (Robin Hard (transl.), Oxford University Press, 2014); Seneca, *Dialogues and Essays* (John Davie and Tobias Reinhardt (eds), Oxford University Press, 2007); Marcus Aurelius, *Meditations* (Robin Hard (transl.), Oxford University Press, 2011).

<sup>8</sup> e.g., Euthyphro, Apology, and Crito. (*Defence of Socrates, Euthyphro, Crito*. David Gallop, transl. Oxford University Press, 1999).