

This article was downloaded by: [78.45.120.158]

On: 08 August 2015, At: 05:41

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: 5 Howick Place, London, SW1P 1WG



Visual Communication Quarterly

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/hvcq20>

Back to the 1990s? Comparing the Discourses of 20th- and 21st-Century Digital Image Ethics Debates

Susan Keith^a

^a Department of Journalism and Media Studies in the School of Communication and Information at Rutgers University

Published online: 22 Jul 2014.



CrossMark

[Click for updates](#)

To cite this article: Susan Keith (2014) Back to the 1990s? Comparing the Discourses of 20th- and 21st-Century Digital Image Ethics Debates, Visual Communication Quarterly, 21:2, 61-71, DOI: [10.1080/15551393.2014.928144](https://doi.org/10.1080/15551393.2014.928144)

To link to this article: <http://dx.doi.org/10.1080/15551393.2014.928144>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms &

Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>



This image of musician and logger Michael Placella, made with Hipstamatic by Peter Crabtree, appeared on the front page of the April 27-28, 2013, *Bennington* (Vermont) *Banner*. The image, identified in the credit as a "Hipstamatic Photo," won second place in the Feature Photo category in the 2012-13 Vermont Press Association contest.

Back to the 1990s? Comparing the Discourses of 20th- and 21st-Century Digital Image Ethics Debates

Susan Keith

In 2010, New York Times photographer Damon Winter sparked controversy when he used an iPhone equipped with the Hipstamatic application to produce heavily filtered, Polaroid-style front-page photographs of U.S. troops in Afghanistan.

The debate over whether such images were photojournalism, or merely photographs, was reignited the next year as some of his images were honored in one of the country's most prestigious photojournalism competitions, and the practice of using filter-friendly apps for journalism spread. This article compares professional discourses around such journalistic use of smartphone apps with discourses that developed earlier in the digital era around digital image manipulation in Photoshop, with the goal of proposing ways to interrogate imaging technology controversies yet to come.

The End of Photojournalism?

The 12 images in the photo essay “A Grunt’s Life” (Winter, 2010) seem almost too ordinary to have caused a hubbub. They show U.S. soldiers in Afghanistan patrolling, resting, sleeping, and preparing to eat, engaging in “the dirty, sweaty, unglamorous and frequently tedious work of being infantrymen” (Dao, 2010, para. 6). Yet the photographs both helped *New York Times* staff photographer Damon Winter win two awards in the 68th Picture of the Year International—third place in the Newspaper Feature Picture Story category and first in Photographer of the Year—and sparked a controversy over the journalistic use of smartphone image applications. Winter made the images, part of the *Times*’ project “A Year at War” (Dao et al., 2010–2011), using an iPhone equipped with Synthetic Corp.’s Hipstamatic application. That \$1.99 app, released in 2009, has been described as “an homage to the old analog cameras of the 70’s and 80’s” [sic] (Dotson, 2010, para. 1) with “cheap lenses and wonky casing that often create light leaks, vignetting and distortions in the image” (iphoneart, n.d., para. 1–2). So perhaps it should have been no surprise that controversy followed Winter’s photographs, made with the Polaroid-like filter “Ina’s 1969 film stock” (Mau, 2012), which made the images look “tinted, tilt-shifted and vignetted” (Buchanan, 2011, para. 2) with “a blue-green cast” (Mau, 2012, p. 16). If they were to be considered photojournalism, rather than just photography, one critic wrote, “then what we knew as photojournalism ... is over and POYi just killed it” (Litherland, 2011, para. 2).

Such controversy has not been limited to journalistic use of Hipstamatic but also has followed photojournalists who make filtered smartphone images with Instagram, a free photo-sharing application that launched in 2010, drew 150 million uploads in its first year—even before developing an Android version (McCarra, 2011)—and was purchased by Facebook in 2012. Instagram, unlike Hipstamatic, does not require users to apply filters, and some users append the hashtag #nofilters to their images to assert that they have not used them (Marzonie, 2013). Nevertheless, filters are integral to how cofounders Kevin Systrom and Mike Krieger position Instagram. In early 2014, the app’s home page encouraged users to “Take a picture or video, choose a filter to transform its look and feel, then post to Instagram” (Instagram, 2013), and its FAQ promised that “our awesome looking filters transform your photos into professional-looking snapshots” (Instagram, n.d., para. 5).

Some have found this filtering ethos problematic. In 2012, the National Collegiate Athletic Association initially included Instagram among those apps that schools should not use to enhance images sent to potential athletic recruits (Greenberg, 2012). Though the organization later said Instagram filters did not alter photos in ways that would violate its rules, the initial flagging of the app as one to avoid demonstrates the polarizing nature of filtered mobile photography. Many news outlets have embraced filtered images made with mobile apps. *The New York Times* put an Instagram of New York Yankees third baseman Alex Rodriguez on the front page (Gupta, 2013), *Sports Illustrated* featured a Snapseed/Instagram photo essay over several of its prominent “Leading Off” pages (Mangin, 2012), *Foreign Policy* published a Hipstamatic photo essay on war in Afghanistan (Gardi, 2011), and *Time* made an Instagram image its cover photo for coverage of “super storm” Sandy (Bercovici, 2012). Some journalists and news organizations, however, restrict the use of filters (Sheffield, 2012) or see the use of Instagram filters as a form of unethical digital photo manipulation, though few formal policies exist.

In some ways, controversy about the use of this relatively new photo technology is reminiscent of the debate that followed the introduction of Adobe Photoshop in 1989. Although images had been altered since the beginning of photography (Bersak, 2006; Fineman, 2012), Photoshop made manipulation easier, forcing photojournalists and journalism organizations to reconsider what constituted ethical photography in much the same way that the filtering capabilities of mobile photography applications are forcing today’s image makers and image users to reconsider how photographs are made. This article takes this reconsideration as its starting point. It compares professional discourses about the problems of digital image manipulation from the 1990s and early 2000s with professional discourses about mobile photo filtering since 2010, with the goal of proposing questions that might be used to interrogate the controversies that will inevitably arise around imaging technologies yet to be invented.

Background

This work is important not only because it draws on a contemporary controversy but also because so little scholarly work has yet been done on ethics-related issues surrounding mobile image technologies. This paucity is not surprising, given the relative newness of apps such as

Instagram and Hipstamatic. It does, however, contrast sharply with the large amount of scholarship on Photoshop image alteration in media (e.g., Martin, 1991; Parker, 1988; Reaves, 1987, 1991) and science (e.g., M. L. Richardson, Frank, & Stern, 1995; Rossner & Yamada, 2004; Pinco, Goulart, Otis, Garb, & Pantanowitz, 2009). Some of this literature on digital image manipulation has been descriptive, articulating what alterations are viewed as unethical by media practitioners (Coleman, 2008; Fahmy, Fosdick, & Johnson, 2005; Lowrey, 2003; Reaves, 1992/1992) or audiences (Yao, Lui, & Perlmutter, 2011) and how digital image alternation can be detected (e.g., Farid, 2009; Kee, O'Brien, & Farid, 2013). Other literature has been normative, suggesting which digital imaging behaviors should be practiced or avoided by journalists (Elliott & Elliott, 2003a, 2003b) or scientists (Cromey, 2010). For example, Pavlik (2000) wrote:

First, journalists should always be careful to avoid making any manipulations that might somehow distort the meaning of the news. Second, any changes should always be clearly labeled so the viewer knows what has happened. Third, journalists should be cautious in using digital imaging technology where it poses threats to privacy. Finally, in the context of these first three principles, the new storytelling techniques made possible by digital technology should be developed fully by journalists (p. 43)

In contrast, by early 2014, literature on mobile imaging applications had not developed far beyond what might be called the “gee whiz” stage, concerned with what the technologies could do for public relations and marketing (Bergström & Bäckman, 2013; Hanan & Putit, 2014; 't Goor, 2012; A. Richardson, Ganz, & Vallone, 2014), collaborations across networks (Sturkenboom, Baha, Lu, & Tempesta, 2013), and efforts to track aggregated users' movements (Silva, Vaz de Melo, Almeida, Salles, & Loureiro, 2013). Only a couple of scholarly studies have critically engaged with mobile apps as journalistic tools. In a discourse analysis of print and online discussions about Winter's Hipstamatic photos from Afghanistan, Mau (2012) noted that discourses about the images focused on their snapshot-like nature, which did not bother most contributors, and the Hipstamatic Polaroid effect, which commenters viewed as either “welcome and beautiful” or “an unsuitable pop culture effect that should not be acceptable in news photography” (p. 21). Some discourses, Mau wrote, suggested that the use of

a filter that made Winter's Afghanistan images look as if they were made with a 1960s case “seem to play off of history by both reinserting themselves in an aesthetic of the past while simultaneously making use of the nostalgia associated with physical snapshot and Polaroid technologies. Their relationship is one more aligned with personal, amateur and fine art photography instead of documentary and news” (p. 25).

Alper (2013) took this criticism further, arguing that the focus on filters in mobile war photography obscures a different issue: embedded photographers' decisions to replicate soldiers' mobile-phone image-making practices (Andén-Papadopoulos, 2009; L. Kennedy, 2009; Silvestri, 2013). When photographers have as the goal of a project, as Winter (2011) says he did, “to have a set of photos that could almost look like the snapshots that the men take of each other but with a professional eye” (para. 10), Alper argues that they fall into “an anthropological trap” (p. 10):

The professional embedded photojournalist using Hipstamatic performs a sort of imagined autoethnography of soldiers' own media-making practices. This performance is based on individual photographers' highly time-bound conception of the kind of photos these soldiers would take if imbued with professional skills and competencies, as if that were the only distinction between the lived experiences of soldiers and embedded photojournalists. (pp. 10–11)

Furthermore, Alper writes, because professional photographers using smartphones to cover conflict lack the high-powered zoom lenses they would use with single-lens reflex cameras, they have to get close to show fine detail, resulting in what may be only an imagined intimacy between journalist and soldier and a focus on the everyday, mundane objects that can have a tendency to make war “more comfortable and familiar for mass consumption” (2013, p. 11).

As important as this work is, it does not connect concerns about journalistic images made with filter-friendly mobile apps to worries about image alteration that arose earlier in the digital era or place today's conundrums in a context that might prove useful when evaluating as-yet-to-be-invented ways of reproducing visuals. This article aims to fill that gap by addressing two questions:

- How are professional discourses around

mobile image filtering applications similar to or different from discourses around digital photo manipulation that arose after the popularization of Photoshop in the 1990s?

- What can we learn from both sets of discourses about how we should interrogate—or be wary of interrogating—future image technologies?

This article addresses these questions using interpretive analysis of journalistic discourses about digital photo manipulation from 1990 to 2013 and debate from 2010 to 2014 in articles and online posts about journalistic use of apps such as Hipstamatic and Instagram. Journalistic discourses about photo manipulation were found by mining publications targeted at journalists—such as *American Journalism Review* (AJR), *Columbia Journalism Review* (CJR), and *News Photographer* magazine—as well as discussions of digital image manipulation journalists had written in general-interest publications. The latter were located through searches for “digital photo manipulation,” “Photoshopped,” and similar terms in the archives of *AJR* and *CJR* and the online library databases *Articles+* and *Communication and Mass Media Complete*. Discourses about journalistic use of smartphone apps were located through the same sources, using the search terms “Instagram” or “Hipstamatic” and “journalism” as well as, following Mau (2012), through online searches for photographers’ blogs.

Back to the 1990s: Digital Photo Manipulation

Although some of the most infamous instances of photo alteration occurred before Photoshop was invented (Salisbury, 1989), including *National Geographic* moving Egyptian pyramids to make a horizontal image fit a vertical 1982 cover (Lester, 1988), the widespread availability of inexpensive, consumer-level image-altering technology raised new concerns (Richin, 1990). Although there were efforts in the early 1990s to create standards for identifying altered images (Boyle, 1992), within just a few years of Photoshop’s 1989 release, slaying suspect O. J. Simpson’s face had been digitally darkened in a mugshot on the cover of *Time* magazine (Eisinger, 2013), Olympic ice skaters Tonya Harding and Nancy Kerrigan were appearing to skate together in a merged image on the cover of *New York Newsday* (Stephens, 1998), and a newspaper name had been digitally removed from a photograph by its rival (Jones, 1997). These digital manipulations—and many others (Eisinger, 2013)—sparked criticism and analysis in which three discourses were markedly visible: that there is a tension between reality and deceit; that technology is (at least partly) culpable; and

that image alteration was, if not normal, certainly prevalent. This section discusses each of those discourses in order.

Reality vs. Deceit

Some discussions of image alteration in the articles examined acknowledged that photographs had always been something less than depictions of reality. A far more common discourse, however, was that photographs that had not been digitally altered were faithful depictions of reality. After the digitally darkened image of Simpson was published by *Time* in 1994, an editorial in North Carolina’s *Greensboro News & Record* referred to Photoshop making it possible to “turn what looks like a photographic document into a fiction” (“*Time’s* Cover Blunder,” 1994), implying that unaltered photographic images were always nonfiction. In 1997, Pete Hamill, then editor of the *New York Daily News*, went so far as to declare that “a photo is a fact,” after the rival *New York Post* digitally removed the *News’s* name from an Associated Press picture of the Scripps-Howard National Spelling Bee winner, whose nametag showed she was sponsored by the *News* (Jones, 1997). Similarly, after *Los Angeles Times* photographer Brian Walski was fired for digitally merging two photos made during the 2003 U.S.-led invasion of Iraq, Joe Elbert, the *Washington Post’s* assistant managing editor for photography, criticized Walski’s action by saying “you never change reality” (Johnston, 2003, para. 11), underlining the assumption that photos depict reality, when they actually “record just one point of view in a world with infinite views” and cannot “capture the other elements of a scene: sounds, smells, what the people present were thinking” (Burgess, 1993).

If nonaltered images depicted reality, then altered images engaged in deceit. This conception set up a binary: Images were either “a truthful representation of whatever happened in front of the camera during exposure,” as rules for the White House News Photographers Association competition put it (Winslow, 2013, para. 10), or they were altered and deceitful. Images were accurate or they were, as an *American Journalism Review* article title put it, “Digital deception” (Johnston, 2003). Evident in this binary discourse is something of the black-and-white nature of mainstream U.S. journalism’s embrace of the 20th century ideal of objectivity. Just as journalism is sometimes referred to as “biased” or “unbiased”—rather than as a series of accounts that might be presented from multiple viewpoints, digital photo manipulation rarely was shown as

something arrayed along a continuum of practices.

Technology as Partly Culpable

Although writers covering image alteration made possible by Photoshop generally did not suggest that the technology was solely responsible for the ethics-related problems that arose after its invention, they sometimes used language that implied it held some of the blame. For example, one *News Photographer* article referred to Photoshop as an “ingenious, powerful, and insidiously seductive tool, offering total control of a photo to the subatomic level of pixels” (Trippett, 2005). A *Washington Post* article about an exhibition of digitally manipulated art photography noted that “Before the Digital Age, photographs never lied, at least not very convincingly” (Potts, 1995), suggesting that it was photographers, not their makers, that were engaging in deceit.

Normalizing Discourse

Another discourse suggested that digital image manipulation was ubiquitous—especially in entertainment and fashion visuals—and one version suggested that audiences had come to expect it. The “everybody’s-doing-it” version of this normalizing discourse was evident in a 1997 Associated Press story (M. Kennedy, 1997) that quoted the design director for *Details* magazine as saying “There’s a lot more retouching now than there used to be... . You even have the situation now where people’s heads are grafted onto different bodies. That happens all the time.” The implication was that image consumers are incapable of escaping altered images and that professionals are powerless to stop the practice.

That article also contained one manifestation of an audience-expectation version of the discourse. Speaking only seven years into the Photoshop era, the design director, Robert Newman, said, “People are so used to seeing images manipulated that the lines of what’s acceptable have really blurred” (M. Kennedy, 1997). This expectation would seem to be compounded by findings by Dartmouth University computer scientist Hany Farid, an expert on detection of image alteration, that while information consumers can easily detect technically poor digital image manipulation, they have trouble spotting good fakes and often think very good pictures have been digitally altered when they have not. “You do see this effect now in photojournalism, where everybody now sees a remarkable photograph and says ‘No, that can’t be real,’” Farid told *Columbia*

Journalism Review. “Now there’s almost a knee-jerk reaction in the opposite direction” (Kirchner, 2011, para. 5).

Mobile App Photojournalism

Somewhat different discourses were evident in discussions of filtered smartphone images. That appeared to be partly the result of the fact that a debate existed—in contrast to discussions of digital image manipulation during the roughly two decades before Hipstamatic and Instagram were invented, when there were few, if any, advocates for wholesale alteration of journalistic photographs. Discourses about filtered mobile images also tended to be bimodal, focusing on concerns about professional versus amateur roles, photographic context and, like the digital manipulation discussions, the role of reality in photography.

Amateur vs. Professional Roles

Photojournalists who used Instagram or Hipstamatic often mentioned the liberation they felt using the “dead simple” interface of smartphone apps (O’Brien, 2011) rather than being weighed down by SLR camera bodies and lenses (e.g., Hood, n.d.; Lowy, n.d.). Using less-visible equipment and posting immediately to Instagram’s social network also allowed some photojournalists working in sensitive areas to avoid attracting undue attention or censorship (Hood, n.d.; Carson, 2013).

Some apps enthusiasts went further and rejected the notion that smartphone photography was technically amateur, writing that the platform’s constraints created challenging technical issues to overcome. Tim Lampe, manager of CNN’s Instagram account, who covered super storm Sandy in 2012, put it this way: “With Instagram, when you’re going to take portraits, you want to get close. With the square format, what is in the center is the focus, so you center the person’s eyes and face in the photo. There’s no ability to zoom in and out on a photo, so you’re presenting what you can in the space given to you” (Zdanowicz, 2013). Similarly, Estrin (2010) noted that when Winter was shooting a firefight in Afghanistan with a Hipstamatic-equipped cell phone, “the app forced him to wait about 10 seconds between photos, so each one had to count” (para. 5). Succeeding under such constraints was seen as a mark of achievement.

Among those who found journalistic uses of filtered Instagram images and Hipstamatic problematic, a frequent criticism was that using the apps threatened the role of the professional

photographer. If news photographers relied on filters that had been created to help amateurs improve their snapshots, the argument went, how could photojournalists make a case for their professional existence? Los Angeles photographer Nick Stern (2012) articulated this discourse in an essay for CNN.com:

The app photographer hasn't spent years learning his or her trade, imagining the scene, waiting for the light to fall just right, swapping lenses and switching angles. They haven't spent hours in the dark room, leaning over trays of noxious chemicals until the early hours of the morning. Nor did they have to spend a huge chunk of their income on the latest digital equipment (\$5,999 of my hard-earned cash just went on ordering a new Nikon D4) to ensure they stay on top of their game. The app photographer merely has to click a software button and 10 seconds later is rewarded with a masterpiece. (para. 4–6)

This discourse developed at a time when professional photojournalism jobs were, indeed, under threat. Less than a year after Stern wrote, the *Chicago Sun-Times* laid off its photo staff, including a Pulitzer Prize-winner, and began having reporters shoot images with iPhones (Schiller, 2013). Shortly thereafter, figures from the American Society of News Editors' annual newsroom jobs census indicated that the number of photographers, artists, and videographers at U.S. newspaper companies had fallen by nearly half in 12 years, from 6,171 in 2000 to 3,493 in 2012 (Anderson, 2013).

Community and Context

One counterdiscourse to the argument that photojournalists embracing apps were hurting their own futures was that Instagram, at least, offered journalistic organizations a chance to build new communities of mobile-phone followers (O'Brien, 2011), people who might not consume a medium in either its legacy or online formats but were interested in photography. Newsrooms have used themed Instagram photo-creation challenges to attract amateur photographers and sought out amateur coverage of hash-tagged events to aid in reporting (Thiruvengadam, 2013). Slate photo editor Heather Murphy (2012) put it this way in a response to Stern:

Instagram is not a threat to photojournalism. The real threat is that photojournalism professionals are refusing

to engage with the platform. If they spent a bit more time with it, they'd see that Instagram is about much more than these faux-vintage-filters. It's a community of millions of photo addicts, eager to embrace their work, journalistic standards and all. (para. 3)

Yet some observers were not sure that all types of journalistic photography worked equally well on Instagram. In her scholarly work on mobile apps in war coverage, Alper (2013) asked how Nick Utt's photo of a naked Vietnamese girl running from a Napalm attack or images of Abu Ghraib atrocities would have read if they had been "simulated on digital Polaroid paper in between photos of cocktails and kittens on an Instagram feed" (p. 7). That discourse was evident in some journalistic discussion as well. Colberg (2012b), for example, argued that placing news photography in Instagram might allow it to reach more or different people, but ultimately would trivialize it:

Most people will not be able to make the mental leap from seeing a nostalgic-looking image of your breakfast, say, and seeing a nostalgic-looking image of some guy in Libya with a bullhorn.... [Y]our images are then being treated and discussed not like photojournalistic images, but just like everybody else's InstaHip photographs. (para. 13)

Depictions of Reality

Most prominent in arguments against use of filtered smartphone photography for journalism—largely written in reaction to Winter's Afghanistan images—was a discourse that linked back to narratives of the early Photoshop era, suggesting that Instagram filters and Hipstamatic unethically altered reality. As Mau (2012) noted, Winter's choice to shoot with a phone rather than a camera was seen as unproblematic. His use of Hipstamatic, however, was viewed as mattering greatly. "What is relevant is the fact it was processed through an app that changes what was there when he shot them" Litherland wrote (2011, para. 3).

Some critics argued, more specifically, that mobile phone image filtering violated policies designed to combat digital image manipulation with Photoshop. Buchanan (2011), for instance, noted that *New York Times* image policy says,

Images in our pages, in the paper or on the Web, that purport to depict reality must be genuine in every way. No people or objects

may be added, rearranged, reversed, distorted or removed from a scene (except for the recognized practice of cropping to omit extraneous outer portions).

This standard was reemphasized in a memo to freelancers the year before Winter's photos were made (Blaustein, 2009), after a *New York Times* Magazine photo-essay was found to "include digital alterations" (Dunlap, 2009, para. 1). Winter's visual coverage of troops from the First Battallion, 87th Infantry, 10th Mountain Division, Buchanan argued, violated that policy because "Hipstamatic generates an atmosphere, an aesthetic that ostensibly doesn't exist in reality" (para. 9). Similarly, Colberg (2012a) wrote:

I'd still love to hear from the *New York Times* why using the Hipstamatic app does not violate their strict rules concerning photo manipulations. You can't slap a "photo illustration" label on so many images—and then pretend there's no problem whatsoever with the Hipstamatic app. iPhones are able to produce very high-quality images (so by all means, photojournalists, use it). But the moment you produce those mock-vintage images by using the Hipstamatic app, you're engaged in some pretty serious image manipulation. (para. 8)

Yet, there was a counterdiscourse that suggested, in contrast to the dominant theme in the Photoshop manipulation era, that photographs were incapable of depicting reality. Colberg (2012b) and O'Hagan (2014), for example, argued that it's misleading to think of either photographs or social media as capable of uncomplicated depictions of reality, and the best a producer can do is minimize fiction within a particular context.

Interrogating Imaging Technologies to Come

The purpose of this comparison of discourses around the employment of digital imaging technologies in two eras separated by more than 20 years was not to form a basis for arguing that one perspective on journalistic use of smartphone apps was right and another wrong. Instead, it aimed to elucidate what it is that journalists are concerned about when they or their occupational colleagues "do things" digitally to photographs that have a journalistic purpose. The analysis suggests that photojournalists are concerned about truth-telling but do not always share the same assumptions about whether it is possible for

photographs to depict reality. In addition, the discourses examined revealed an interest in technology but the potential for framing it as seductive or controlling, rather than something about which a journalist makes choices, including choices that consider the type of images being produced and the context of their dissemination. Finally, the analysis showed that photojournalists have an understandable concern about the future of their craft as a professionalized occupation.

Where does this leave us? At the very least, it suggests some ways we might prepare to think about imaging technologies that have not yet been invented but will undoubtedly challenge journalistic practice in the future. First, as we encounter those technologies, we need to ask ourselves what assumptions we are making about our ability to reproduce reality. Does our concern about whatever change we perceive is being made to an image stem from a belief that images are somehow objective depictions of the world around us? If so, is there evidence that is true? Second, is the behavior we consider problematic the result of some new technology or the way people are employing it? Do we have a problem of process, content, context, or some combination of the three? Third, are we idealizing some past era's practices? If so, why? Are there larger societal or historical forces at work that make that seem like a good idea? Finally, are all uses of the technology suspect? Or are there some—outside of journalism, perhaps—that are not problematic? Is some legitimate concern, such as worry over amateur/professional boundary issues, causing us to tar an entire technology? If, in the future, we can answer these questions or help journalists answer them, we will be able to say we have learned something from the discourses of our digital imaging pasts.

Notes

¹ The latter perspective, Mau (2012) theorized, might have been influenced by the exposure as a marketing gimmick (LaFrambois, 2010–2011) of the story of Hipstamatic's origins as an homage to a cheap camera made in the 1980s by Wisconsin brothers killed by a drunken driver (Yawnick, 2010).

References

Alper, M. (2013). War on Instagram: Framing conflict journalism with mobile photography apps. *New Media & Society*. Advance online publication. doi:10.1177/1461444813504265.

- Andén-Papadopoulos, K. (2009). U.S. soldiers imaging the Iraq war on YouTube. *Popular Communication*, 7(1), 17–27.
- Anderson, M. (2013, November 11). At newspapers, photographers feel the brunt of job cuts. *Facttank: News in the Numbers*. Retrieved from <http://www.pewresearch.org/fact-tank/2013/11/11/at-newspapers-photographers-feel-the-brunt-of-job-cuts/>
- Bercovici, J. (2012, November 1). Why *Time* magazine used Instagram to cover Hurricane Sandy. *Forbes.com*. Retrieved from <http://www.forbes.com/sites/jeffbercovici/2012/11/01/why-time-magazine-used-instagram-to-cover-hurricane-sandy/>
- Bergström, T., & Bäckman, L. (2013). *Marketing and PR in social media: How the utilization of Instagram builds and maintains customer relationships* (Unpublished bachelor's thesis). Stockholm University, Stockholm, Sweden. Retrieved from <http://su.diva-portal.org/smash/record.jsf?pid=diva2:625012>
- Bersak, D. (2006). Ethics in photojournalism: Past, present, and future (Unpublished master's thesis). Massachusetts Institute of Technology, Cambridge, MA. Retrieved from <http://web.mit.edu/drj/Public/PhotoThesis/>
- Blaustein, J. (2009, September 2). NYTimes reminds freelance photographers “No unauthorized alteration of photos.” *aPhotoEditor.com*. Retrieved from <http://www.aphotoeditor.com/2009/09/02/nytimes-reminds-freelance-photographers-no-unauthorized-alteration-of-photos/>
- Boyle, P. (1992, November). Standards for photography's cutting edge. *American Journalism Review*. Retrieved from <http://ajrarchive.org/article.asp?id=1984>
- Buchanan, M. (2011, February 10). Hipstamatic and the death of photojournalism. *Gizmodo.com*. Retrieved from <http://gizmodo.com/5756703/is-hipstamatic-killing-photojournalism>
- Burgess, J. (1993, November 8). Is it real or is it Photoshop? Photo technology raises ethical issues. *The Washington Post*, p. F21.
- Carson, B. (2013, November 4). Uncensored Instagrams from North Korea buck brutal trend of secrecy. *Wired*. Retrieved from <http://www.wired.com/rawfile/2013/11/nksocialmedia/>
- Colberg, J. (2012a). On the Hipstamatic journalist. *Conscientious*. Retrieved from http://jmcolberg.com/weblog/2012/05/on_the_hipstamatic_journalist/
- Colberg, J. (2012b). One size does not fit all. Context matters greatly. *Conscientious*. Retrieved from http://jmcolberg.com/weblog/extended/archives/one_size_does_not_fit_all_context_matters_greatly/
- Coleman, S. E. (2008). Digital photo manipulation: A descriptive analysis of codes of ethics and ethical decisions of photo editors (Unpublished doctoral dissertation). University of Southern Mississippi, Hattiesburg, MS.
- Cromey, D. W. (2010). Avoiding twisted pixels: Ethical guidelines for the appropriate use and manipulation of scientific digital images. *Science & Engineering Ethics*, 16(4), 639–667.
- Dao, J. (2010, November 21). Between firefights, jokes and sweat, tales and tedium. *The New York Times*. Retrieved from http://www.nytimes.com/2010/11/22/us/22grunts.html?pagewanted=all&_r=0
- Dao, J., Winter, D., Yam, M., Harris, R., Dance, G., Donaldson, N., Looram, M. (2010–2011). A year at war. *nytimes.com*. Retrieved from <http://www.nytimes.com/interactive/world/battalion.html#/NYT/26>
- Dotson, C. (2010, July 17). Hipstamatic review. *148apps.com*. Retrieved from <http://www.148apps.com/reviews/hipstamatic-review/>
- Dunlap, D. W. (2009, July 31). Behind the scenes: Edgar Martins speaks. *The New York Times Lens* [Web log post]. Retrieved from http://lens.blogs.nytimes.com/2009/07/31/behind-10/?_php=true&_type=blogs&_r=0
- Eisenger, D. (2013). The 15 biggest Photoshop scandals of all time. Retrieved from <http://www.complex.com/art-design/2013/07/the-biggest-photoshop-scandals/>
- Elliott, D., & Elliott, P. M. (2003a). Manipulation: The word we love to hate. (Part 2). *News Photographer*, 58(9), 12–13.
- Elliott, D., & Elliott, P. M. (2003b). Manipulation: Surrogate eyes can't lie. *News Photographer*, 58(10), 12–13.
- Estrin, J. (2010, November 21). Finding the right tool to tell a war story. *The New York Times Lens* [Web log post]. Retrieved from http://lens.blogs.nytimes.com/2010/11/21/finding-the-right-tool-to-tell-a-war-story/?_php=true&_type=blogs&_r=0
- Fahmy, S., Fosdick, S., & Johnson, T. (2005). Is seeing believing? A survey of magazine professionals' practices and attitudes towards ethical standards for photographs. *Journal of Magazine & New Media Research*, 7(1), 1–18.
- Farid, H. (2009). A survey of image forgery detection. *IEEE Signal Processing Magazine*, 26(2), 16–25.
- Fineman, M. (2012). *Faking it: Manipulated photography before Photoshop*. New York, NY: Metropolitan Museum of Art.
- Gardi, B. (2011, July 25). The war in Hipstamatic. *ForeignPolicy.com*. Retrieved from http://www.foreignpolicy.com/articles/2011/07/25/the_war_in_hipstamatic

- Greenberg, M. (2012, October 12). Media frenzy over NCAA's alleged ban of Instagram filters results in controversy. *InTheCapital.com*. Retrieved from <http://inthecapital.streetwise.co/2012/10/12/media-frenzy-over-ncaas-alleged-ban-of-instagram-filters-results-in-controversy/>
- Gupta, P. (2013, March 31). Instagram photo lands on front page of the *New York Times*. *Salon.com*. Retrieved from http://www.salon.com/2013/03/31/instagram_photo_lands_on_front_page_of_the_new_york_times/
- Hanan, H., & Putit, N. (2014). Express marketing of tourist destinations using Instagram in social media networking. In N. Sumarjan, M. S. M. Zahari, S. M. Radzi, Z. Mahi, M. H. M. Hanafiah, M. F. S. Bakhtiar, & A. Zainal (Eds.), *Hospitality and tourism: Synergizing creativity and innovation in research* (pp. 474–474). London, UK: Taylor & Francis.
- Hood, M. (n.d.). Hipstamatic: Too hip for photojournalism? *AFP Correspondent*. Retrieved from <http://blogs.afp.com/correspondent/?post/Hipstamatic%3A-too-hip-for-photojournalism>
- Instagram. (2013). Capture and share the world's moments. Retrieved from <http://instagram.com/#>
- Instagram. (n.d.). FAQ. *Instagram.com*. Retrieved from <http://instagram.com/about/faq/#>
- iphoneart. (n.d.). Critiques: Hipstamatic app description. Retrieved from <http://www.iphoneart.com/critiques/24>
- Johnston, C. (2003, May). Digital deception. *American Journalism Review*. Retrieved from <http://ajrarchive.org/article.asp?id=2975>.
- Jones, S. (1997, June 14). Altered photo faux pas. *Editor & Publisher*. Retrieved from <http://www.editorandpublisher.com/PrintArticle/Altered-Photo-Faux-Pas-p-11>
- Kee, E., O'Brien, J., & Farid, H. (2013). Exposing photo manipulation with inconsistent shadows. *ACM Transactions on Graphics*, 32(4). Retrieved from <http://www.cs.dartmouth.edu/farid/downloads/publications/tog13/tog13.pdf>
- Kennedy, L. (2009). Soldier photography: Visualising the war in Iraq. *Review of International Studies*, 35, 817–833.
- Kennedy, M. (1997, August 8). Digital makeovers make stars shine, but is it right? *Palm Beach Post*, p. 1E.
- Kirchner, L. (2011, March 23). Detecting fake photos with digital forensics. *Columbia Journalism Review*. Retrieved from http://www.cjr.org/the_news_frontier/detecting_fake_photos_with_dig.php?utm_source=twitterfeed&utm_medium=twitter
- LaFrambois, R. (2010–2011). The little hipster who could: Wausau native strikes gold with hot iPhone app. *City Pages*. Retrieved from http://lifeinlofi.com/wp-content/uploads/the-little-hipsta_city-pages_1210.pdf
- Lester, P. M. (1988). Faking images in photojournalism. *Media Development*, 1, 41–42. Retrieved from <http://commfaculty.fullerton.edu/lester/writings/faking.html>
- Litherland, C. (2011, February 9). There's an app for photojournalism. *Chiplitherland.com*. Retrieved from <http://www.chiplitherland.com/blog/2011/02/09/theres-an-app-for-photojournalism/>
- Lowrey, W. (2003). Normative conflict in the newsroom: The case of digital photomanipulation. *Journal of Mass Media Ethics*, 18(2), 123–142.
- Lowy, B. (n.d.). Benjamin Lowy. Retrieved from <http://benlowy.tumblr.com>
- Mangin, B. (2012, July 18). How I made Instagram images that were good enough for *Sports Illustrated*. *Manginphotography.net*. Retrieved from <http://manginphotography.net/2012/07/how-i-made-instagram-images-that-were-good-enough-for-sports-illustrated/>
- Martin, E. (1991). On photographic manipulation. *Journal of Mass Media Ethics*, 6, 156–163.
- Marzonie, K. (2013, June 6). How brands can leverage Instagram hashtags. *Ignitesocialmedia.com*. Retrieved from <http://www.ignitesocialmedia.com/social-media-strategy/leveraging-instagram-hashtags-for-brands/>
- Mau, H. (2012, August). *Technostalgic photography and Damon Winter's "A Grunt's Life."* Paper presented at the Association for Education in Journalism and Mass Communication meeting, Chicago, IL.
- McCarra, D. (2011, August 3). Instagram hits 150 million uploads in less than one year. *The Sociable*. Retrieved from <http://sociable.co/mobile/instagram-hits-150-million-uploads-in-less-than-one-year/>
- Murphy, H. (2012, March 5). In defense of Instagram: Why news photography goes well with vintage-filtered cat pics. *Slate*. Retrieved from http://www.slate.com/blogs/browbeat/2012/03/05/in_defense_of_instagram_news_photography_goes_well_with_vintage_cats.html
- O'Brien, C. (2011, May 30). Snapshot: Popular app stylizes images and posts them to a mobile-based social network. *San Jose Mercury News*, p. 1C.
- O'Hagan, E. M. (2014, March 10). Does social media really bring us closer to the reality of conflict? *TheGuardian*. Retrieved from <http://www.theguardian.com/commentisfree/2014/mar/10/social-media-bring-us-closer-reality-conflict-exploited>
- Parker, D. (1988). Ethical implications of electronic still cameras and computer digital imaging in print media. *Journal of Mass Media Ethics*, 3, 47–59.

- Pavlik, J. V. (2000). Digital technology and journalism ethics. *Television Quarterly*, 31(2/3), 36–43.
- Pinco, J., Goulart, R. A., Otis, C. N., Garb, J., & Pantanowitz, L. (2009). Impact of digital image manipulation in cytology. *Archives of Pathology & Laboratory Medicine*, 133(1), 57–61.
- Potts, M. (1995, March 27). Regarding digitally altered photos. *The Washington Post*, p. F13.
- Reaves, S. (1987). Digital retouching: Is there a place for it in newspaper photography? *Journal of Mass Media Ethics*, 2, 40–48.
- Reaves, S. (1991). Digital alternation of photographs in consumer magazines. *Journal of Mass Media Ethics*, 6, 175–181.
- Reaves, S. (1992/1993). What's wrong with this picture? Daily newspaper photo editors' attitudes and their tolerance toward digital manipulation. *Newspaper Research Journal*, 13 & 14(4 & 1), 131–155.
- Richardson, A., Ganz, O., & Vallone, D. (2014). The cigar ambassador: How Snoop Dogg uses Instagram to promote tobacco use. *Tobacco Control*, 23(1), 79–80. doi:10.1136/tobaccocontrol-2013-051037.
- Richardson, M. L., Frank, M. S., & Stern, E. J. (1995). Digital image manipulation: What constitutes acceptable alteration of a radiologic image? *American Journal of Roentgenology*, 164(1), 228–229.
- Richin, F. (1990). *In our own image: The coming revolution in photography: How computer technology is changing our view of the world*. New York, NY: Aperture.
- Rossner, M., & Yamada, K. M. (2004). What's in a picture? The temptation of image manipulation. *Journal of Cell Biology*, 166(1), 11–15.
- Salisbury, S. (1989, November 27). Making photos perfectly false; now computers can call the shots. *Philly.com*. Retrieved from http://articles.philly.com/1989-11-27/news/26140632_1_scitex-news-photographs-image
- Schiller, J. (2013, July 16). Here's what it looks like when you replace photographers with iPhone-wielding reporters. *Wired*. Retrieved from <http://www.wired.com/rawfile/2013/07/replacing-photographers-with-iphone-wielding-reporters-yields-mixed-results/>
- Sheffield, H. (2012, September 4). Instagram on the trail. *Columbia Journalism Review*. Retrieved from http://www.cjr.org/campaign_desk/instagram_on_the_trail.php?page=all
- Silva, T. H., Vaz de Melo, P. O. S., Almeida, J. M., Salles, J., & Loureiro, A. A. F. (2013, August). *A comparison of Foursquare and Instagram to the study of city dynamics and urban social behavior*. Paper presented to the 2nd ACM SIGKDD International Workshop on Urban Computing, Chicago, IL.
- Silvestri, L. (2013, November). *Shiny happy people holding guns: 21st century images of war*. Paper presented to the National Communication Association, Washington, DC.
- Stephens, M. (1998). Expanding the language of photographs. In N. J. Woodhall & R. Synder (Eds.), *Defining moments in journalism* (pp. 105–108). New Brunswick, NJ: Transaction.
- Stern, N. (2012, February 22). Opinion: Why Instagram photos cheat the viewer. *CNN Opinion*. Retrieved from <http://www.cnn.com/2012/02/22/opinion/phones-instagram-apps-stern/index.html>
- Sturkenboom, N., Baha, E., Lu, Y., & Tempesta, G. (2013, May). *Using social media for asynchronous collaboration within collaborative networks*. Paper presented to the Participatory Innovation Conference, Lahti, Finland.
- Thiruvengadam, M. (2013, May 27). Instagram for newsrooms: A community tool, a reporting tool, a source of Web content. *Poynter*. Retrieved from <http://www.poynter.org/how-tos/digital-strategies/214435/instagram-for-newsrooms-a-community-tool-a-reporting-tool-a-source-of-web-content/>
- Time's* cover blunder hurts all publications. (1994, June 28). *Greensboro News & Record*, p. A6.
- 't Goor, M. (2012). "Instamarketing": A content analysis into marketing on Instagram (Unpublished master's thesis). University of Amsterdam, The Netherlands.
- Trippett, R. (2005, April 16–17). The vision thing: Navigating the slippery slope of digital manipulation with eyes wide shut. *News Photographer*. Retrieved from <http://bazilphotoessay.blogspot.com/2011/06/vision-thing-navigating-slippery-slope.html>
- Winslow, D. R. (2013, February 25). WHNPA disqualifies altered Tracy Woodward contest photo, award rescinded. *NPPA*. Retrieved from <https://nppa.org/node/38306>
- Winter, D. (2010). A grunt's life. *Pictures of the Year International*. http://www.poyi.org/68/17/third_01.php
- Winter, D. (2011, February 11). No title. In S. Myers (Ed.), Damon Winter explains process, philosophy behind award-winning Hipstamatic photos. *Poynter*. Retrieved from <http://www.poynter.org/latest-news/top-stories/119117/damon-winter-explains-process-philosophy-behind-award-winning-hipstamatic-photos>
- Yao, Q. Q. J., Lui, Z., & Perlmutter, D. (2011, May). *How can we tell if it is ethical? An examination of public acceptance as the standard of photo alteration*. Paper presented to the International Communication Association, Boston, MA.

Yawnick, M. (2010, January 7). Q&A: Hipstamatic: The story behind the plastic app with the golden shutter: How two brothers from Wisconsin changed iPhoneography. *Lifeinlofi iponeography*. Retrieved from <http://lifeinlofi.com/2010/01/07/qa-hipstamatic-the-story-behind-the-plastic-app-with-the-golden-shutter/>

Zdanowicz, C. (2013, October 30). How to cover a big storm on a little screen. *CNN Tech*. Retrieved from <http://www.cnn.com/2013/10/30/tech/sandy-anniversary-instagram-storytelling/>

**Susan Keith is an associate professor in the Department of Journalism and Media Studies in the School of Communication and Information at Rutgers University, where she teaches courses on editing and design, digital media law and policy, and other topics in the undergraduate and graduate programs. She does research on visual journalism, the evolution of journalistic practice, media history, and media ethics and law.
E-mail: susank@rutgers.edu**