## AMBIENT IMAGES

## Sean Cubitt, Celia Lury, Scott McQuire, Nikos Papastergiadis, Daniel Palmer, Jasmin Pfefferkorn, and Emilie K. Sunde

The digitization of the image has intensified the transformation of the relationship between humans and images. The proliferation of tools for the production of images and acceleration in their distribution has meant that a blasé attitude toward visual saturation, already prominent in the 20th century, has become more widespread. Writing in 1927, Siegfried Kracauer presciently spoke of a "blizzard of photographs."<sup>1</sup> In the first decades of the 21st century this grew into an environmental flood and the multiple streams along which people circulated images, challenged many of the traditional assumptions about the status and function of the image. Then came the pandemic.

Suddenly, the relationship between the personal image and the public image was reconfigured. People hung out on platforms such as Instagram and Tik Tok with increased intensity and hunger. The platforms for virtual communication absorbed and at times aimed to compensate for the loss of events, meetings, face-toface encounters and relationships. Confinement to the domestic sphere produced ever more mundane practices of co-present intimacy across platforms. For instance, while cross-generational practices of food photo sharing have long been a significant genre, photographs of home baking became an Instagram cliché, with "sourdough" becoming Google's top food-related search phrase in 2020.<sup>2</sup> The zoom boom soon became a new malaise—zoom fatigue. This adoption of virtual platforms was a profound incursion. It altered our sense of time and space as sense-making and social performance were increasingly aimed at and organised via camera and screen. Linear biographical narratives were cross-cut and spliced in novel ways. The image was less and less a document of an external reality, but more and more part of the new forms of mediated sociality. The diminution of physical engagements had an impact on how impressions were formed, what constituted the sensory triggers for memory, as well as shifting the markers for processes of understanding and decision-making. In this environment, images do not just multiply. Their increasing number also accentuates how they are stitched together to form new atmospheres, assemblages, iterations-or what we call the production of ambient images.3

In 2020, Techjury estimated 95 million photographs were shared on Instagram every day, and more than 350 million on Facebook; at least equal numbers are likely to be shared on major Chinese and other language-specific platforms.<sup>4</sup> The accelerating proliferation of images—in both total numbers and the speed at which they are being uploaded and downloaded—already pointed towards an almost total coverage of the planet in real time, even before the pandemic hit. No individual human, no research team, could possibly view every image published, let alone the millions of hours of video. Some images, like CCTV, are not destined for human viewers at all but for 'platform seeing.'<sup>5</sup> The closer we come to real time, the more ephemeral our images become, at least from a human point of view. But the swelling archive of largelyforgotten pictures is a goldmine for artificial intelligences.

In an intriguing example of free labour donated to tech corporations, every time we respond to a Captcha request to identify traffic lights and crosswalks, we are helping train AIs to recognise features of the physical world, in these cases to help develop Google Maps and self-driving cars. Machines do not read images in the same way that humans do. Until the pandemic in 2020, it was entirely possible to construct an argument that the purpose of image sharing was, in terms of economic value and cultural development, about 90% devoted to providing data for corporate AIs to find profitable uses for. Real time may be reconfigured as 'the right time,' but largely only to provoke or prompt the production of more images.<sup>6</sup>

The capitalist accumulation of image data has not ceased. But the human use of images has changed, subtly but significantly. Many images were designed either to bolster start-ups and small (often one-person) enterprises like Instagram 'influencers,' or to mediate between one person and another. Now it appears that the affective role of images has become less economically instrumental or interpersonal, and increasingly social. One effect of these trends is that hardline political economy no longer gives a satisfying answer to the question: what are digital images for? Like other forms of popular culture, social media image sharing cannot easily disentangle the commercial from the emotional, an entanglement that has only become more complex under Covid-19. At the same time, purely psychological approaches that ignore network media technologies, the commodification of image data and the increasingly social connections that image-sharing offers in the Zoom era, also fail to capture three emerging dimensions of the new imagescape: a new socialisation, a new inclusion of

technologies in popular understanding of the social, and new imaginaries of technologically-mediated social forms.

These changes in the relationship with and through images have not been smooth. The digital divide between generations and classes has only got more extreme. The virtual colonization of the image will present new challenges in the post-COVID era. Anxiety over the future and means for validation have been fractured. The focus of political critique and affirmative examples of an emancipated life have been blurred. The multitude of micro perspectives and the boom in visual auto-ethnography, like autofiction, speaks to and from a deeper insecurity over the socialized narratives that were underpinned by ideological certitude. With this rupture, there is both the mobilization of the indignant and the spawning of post-truth conspiracy theories.

The poverty of images that Hito Steyerl describes is once again reconfigured. The ability to upload, download, format and share without degrading the quality of the image continues to expand, while the flattening out of content is accompanied by a reassertion of the value of documenting the world 'out there.'<sup>7</sup> The photographic image, like any other digital image, is valued for the connections it can make, the circuits it can travel, the likes it can provoke—but in the time of COVID, the ability of the image to reflect on its own conditions of existence has demanded some acknowledgement of a reality that not only includes us, and our domestic and other contexts, but also what we see, our seeing. The flattened content of the image has acquired new depths. Relations to and across contexts combine in new ways. The 'class divide' of images has splintered yet still further.

Writing before the pandemic of a practice that has only become more common, Jeff Sharlet writes of his Instagram portraits,

We're all photographers now, all of us with smartphones at least, creating vast image libraries of family and funny signs and architecture, party pics and cloudscapes and portraits of our morning lattes. We're constantly practising, extending our gaze, learning to see, ... It's a tentative process, this stepping out into the world.

"Is honing one's eye for phone pics 'stepping out into the world'?" asks a friend. (2020:6) 'Yes,' he replies. For Sharlet, the photograph—specifically the snapshot that is shared on Instagram—no longer says, 'This has been' but rather 'I saw and I want you to see too.'"<sup>8</sup> When Melbourne went into hard lockdown for four months in 2020, friends couldn't visit each other's houses at all. This physical isolation impacted most severely on the elderly who lived alone, but also had a profound effect on teenagers. We watched our youngest son's daily routine of making and sending long series of images to friends on Snapchat. Each image was a kind of self-portrait—usually, a part of his body, such as an arm, shoulder or ear, barely recognisable in itself but of course locatable by the receiver because it arrived under his name. Instead of sending the same image multiple times, each image had to be unique, captured only for that particular friend. What do such mundane practices tell us about photography today? First, that the cost of capture and distribution has fallen to historic lows so as to be almost beyond consideration. Second, that these images were less about showing or seeing in a conventional sense than 'sharing.' In the overloading of this term—does sharing involve reciprocity and mutuality or merely mask economic exchange under the guise of the 'snapstreak'?-we can find the crystallization of our ambivalence to the contemporary digital image. On the one hand, is its undoubted intimacy, born paradoxically of the massive infrastructure which enables lightweight, handheld camera phones to capture and distribute close range, autofocused images seemingly without much human effort. Taking and sending an image either barely makes a ripple, or it unleashes a torrent of abuse and anxiety in the ongoing flow of teenage activity. On the other hand, each and every image channels personal claims of selfie-hood into massively globalized currents of surveillance and commodification.

Writing in the 1920s, the great Russian photographer Aleksandr Rodchenko was one of the first to appreciate the full implications of the camera for the traditional notion of a static and unchanging truth. Running against the grain of 'objectivity,' which arguably reached its apotheosis in the documentary photography of the 1930s and 1940s, Rodchenko asserted: 'With photography we can refute the idea that one set [of characteristics] exists for a given subject.'<sup>9</sup> In place of the singular moment that framed the traditional portrait, Rodchenko advocated portraits assembled from diverse 'photo-moments.' Such serial portraits belong less to the problematic history of attempts to totalize knowledge by multiplying data points than to a profound questioning of the certitudes of identity and the correspondence theory of truth.

Who views all those ephemeral Snapchats? Or all the images that percolate through Instagram, WeChat, Facebook and other

services? One answer is that we can never really know. Despite the attractions of social media in claiming to precisely document viewer demographics through the accretion of likes, shares, and other signals, digital images to some extent remain in the archetypal space of the analogue image that Derrida addressed through the concept of the trace. They are messages without address, in the sense that they lack all finality-final destinations, stable forms, secure meanings. This status points to another, equally compelling answer to the question of seeing and viewing: insofar as these images are addressed to *no-one*, they exemplify what Paul Virilio evoked in the 1980s as the vision machine. If this firstly designates images made without direct human intervention—such as the ubiquitous surveillance cameras that watch over our cities-it also signals that most images, even the most intimate ones, are no longer primarily destined for the human eye so much as the algorithmic parse.

We are living, in short, through the mass adoption of computer vision in our lives. In terms of everyday photography, for instance, the human eve and machinic processes are fused together not only in the taking and editing of photographs (using the camera phone's facial recognition and filters, and so on), but also at their multiple points of reception. This applies even and especially to our own collections of images that are not necessarily shared and would once have been kept in albums or shoeboxes. To take one example, our archives of images on our phones and on platforms such as Facebook are now subject to the periodic production of involuntary 'memories'-software-generated accumulations of sometimes forgotten images assembled around a date, a location, a theme, or a frequently appearing human face. Facebook introduced this feature with its 'On This Day' notifications (now called 'Memories'), which were met with significant criticism for clumsily reminding users of things in the past they might prefer to forget. On Apple devices such as iPhone or iPad, facial recognition is increasingly exploited to draw together images of people who appear in our photographs at various stages in their lives (for instance 'early moments' in the case of a young child), or the relationship of two people frequently pictured together ('Together'). A person living in a suburb called Fitzroy with a lot of photographs of food will generate the memory 'Tastes of Fitzroy,' and so on. These photographs are then animated into short videos-slideshows with Ken Burns motion effects, accompanied by sentimental music. The effect is intentionally nostalgic, and can be enjoyable way to explore an archive of family photographs. However, it can also generate unexpected and even unnerving results when images taken for entirely utilitarian purposes appear alongside precious moments. Various commentators have observed the "creepiness" of the digital device mediating our memories in this way, and the "heavy-handed attempts on Apple's part to repackage your life back to you."<sup>10</sup> For its part, Apple seems to relish the uncanniness, with its notifications advising us: "You have a new memory."

These acts of algorithmic 'curation' (as Apple's software refer to it) are clearly driven as much by technical novelty as the realisation that few people have the time or inclination to review their own prodigious production of photographs. And much of these software-enhanced viewing practices simulate or attempt to improve earlier habits in the history of photography, most obviously the slideshow. Equally, the single still image is still taken here as a transparent recording of reality, in the long tradition linking photography with a slice of real life. This ongoing desire for authenticity in the photograph, however, did not flow through to Apple's 2020 promotion for its new photo editing feature on the iPad. Here, the marketing slogan "Perfecting your memories" incorporated the old idea of erasing a former partner from a photograph using a digital pen. A short video advertisement featured a woman alone at home with her iPad rubbing out an unwanted man, and the tagline "Turning any memory into the perfect memory is as easy as iPad." In other words, the notion of perfecting a memory continues the long practice of manipulating and faking the historical photographic archive, now applied to the personal archive. While it seems likely that Apple presented this advertisement for visual effect rather than seriously instructing the manipulation of our photographic memories, the suggestion to fictionalise one's visual history is nevertheless notable in the context of post-truth Trump politics. More generally, it underlines the role that personal photographic archives play in the intimate connections we have with our digital devices.

Image oversaturation, the interweaving of commercial and emotional currents, images for and by machines, algorithmic curation, the networked 'trace' image—these are all factors serving to underscore the complexities of living in an age of ambient images. Taken together, they indicate a need for a renewed exploration of how we learn to read the image, and for whom (or what) images are legible. Extending László Moholy-Nagy's claim from 1927 that the "illiterate of the future would not be the person unable to read or write, but the person ignorant of how photography signifies" to our contemporary context, today's illiterate are those who are unable to locate signals in the immersivity of ambient images.11 This takes on additional tensions in algorithmic mediation. Consider Umberto Eco's 'conditions of perception,' the conditions "needed to distinguish subject from background."12 More than ever before, these conditions are implicated in machine processes—whether the algorithmic curation of personal archives, or the clicks on social media that direct and reinforce our attention. If "every image is born of successive transcriptions," it is vital to recognise the algorithm's veiled role as transcriber in the process of image legibility.13 Through our screens, the ambient is funnelled into signals. We outsource our literacy to cope with the sensorial complexity of ambient images. We can observe this as a contributing factor to the escalating fragmentation found in world politics, our 'posttruth' era, our aversion to acts of translation. During the pandemic, this became increasingly problematic as we were no longer able to rely on encounters in public place, encounters that go some way toward offsetting this disconnect.

While in many ways the pandemic heightened our reliance on our devices, it also rendered this dependence extremely visible. Consequently-and following the pre-existing countermovements such as 'slow culture'-more people began to strategize to find a balance in their relationship with machines. Over the course of 2020, our students overwhelmingly reported a growing disinterest in their smartphone applications during lockdown, forsaking the 'endless scroll' of Instagram and Facebook for the greater intimacy and co-presence afforded by video calls. Many-for the first time-set automatic time limits in their phone settings to block certain platforms, enabled the 'do not disturb' function, and implemented self-imposed quotas to restrict their daily news consumption. It is indicative of the way in which we need oscillations in intensity in order to see, read, feel, and think in the atmosphere of ambient images. Without these changes in intensity, the image loses its capacity to affect.

The ongoing shift in digital photography towards a medium for socialisation and communication reflects how images have become nodes in a network. Digital photography is less concerned with the subject-form than its tags and relational capacity, visually exemplified by the use of arbitrary body parts as communicative portraits on Snapchat. Since the smartphone cameras acceleration of digital photography, the distance between the visible photograph and the image file has mushroomed. The screen operates as an intermediator, feeding both human perception through visual representations and the underlying computational dynamics—the surface and the subface of the image.<sup>14</sup> The lack of stability and finality weakens the image's surface, as explored through Steyerl's 'poor image,' while potentiating the subface. The image-as-data gains momentum through its constellation.

On the screen's subface, the steady acceleration of digital photographs seen in the last two decades has opened up its source material, from predominantly light-based to data. The digital image, in this sense, has become less a *photograph* than a *datagraph*. At the height of this tendency are Generative Adversarial Networks producing photographic images, culturally known as deepfakes. However, elements of this trend are also prevalent in smartphone cameras and other everyday digital image technologies. Algorithms rely on existing data to produce new, artificial representations. The outcome of the image will differ depending on the organisation of the archive, how it is labelled, compressed, and the relationships between its constituent parts. As such, the vast libraries of images we produce do not just feed us with involuntary and curated memory prompts; they also help sharpen future images and can produce images representing entirely different modes of reality. As these image technologies improve, they hold the potential to become self-referential, independent image production machines from which new realities can materialise. In addition to obscuring the question "what digital photographs are for," this tension opens the question of what makes them "real."

Human perception alone will not suffice to distinguish between a photograph and an AI-generated photographic image.<sup>15</sup> The invisible algorithmic space intertwines with our ways of seeing, creating visions that are an assemblage of human and nonhuman agencies (Zylinska, 2017).<sup>16</sup> The pandemic increased both the role of the screen as human intermediator and the importance of digital photographs for socialisation and communication. The restriction of person-to-person encounters also intensified the anxiety of person-machine(-person) encounters.

What does the exponential growth in the means of production and circulation of images mean to the experience and interpretation of the image? Do we even see an image as a singular, discrete and framed entity that is isolated from the billions of other images, or are the images always jostling, rubbing, folding and spilling with one another? Compounding this boom in the personal use of images is the advent of machinic technologies that make images from the capture and organization of exisiting images. There is much debate about whether AI will simply devour the personal image into bits for a big data world, or whether it can be aligned with human needs and thereby provide novel opportunities for creativity and freedom. The new digital media platforms have exacerbated the tensions between commercial imperatives and the conditions of sociality. They have facilitated changes that operate on a scale and with such speed that they have exposed the limits of existing personal protocols, collective memories, and modes of public governance. By aggregating and storing billions of private images, new companies have gained rights of access to unimagined domains. However, as the performance of the image has expanded, the conduct of privacy has been reconfigured and the adoption of new commercial genres in everyday life has, according to Manovich (2016), also been 'democratized.'<sup>17</sup> The consequences of the ambient image are far from certain.

SEAN CUBITT is Professor of Screen Studies at the University of Melbourne. He works on ecocritical approaches to the history and philosophy of media with current projects on aesthetic politics and practices of truth.

CELIA LURY is Professor in the Centre for Interdisciplinary Metho-dologies, University of Warwick. Her most recent book is *Problem Spaces: Why and How Methodology Matters*, Polity.

SCOTT MCQUIRE is Professor of Media and Communications at the University of Melbourne where he researches the crossroads of digital media, contemporary art, and urbanism.

DANIEL PALMER is Associate Dean of Research and Innovation in the School of Art at RMIT University. His books include *Photography and Collaboration: From Conceptual Art to Crowdsourcing* (Bloomsbury, 2017).

NIKOS PAPASTERGIADIS is Director of the Research Unit in Public Cultures at the University of Melbourne. His recent books include *Museums of the Commons* (2020), *On Art and Friendship* (2020).

JASMIN PFEFFERKORN is a Postdoctoral Research Fellow in the School of Culture and Communication at the University of Melbourne. Her research interests include emergent museum practice and digital media cultures.

EMILIE K. SUNDE is a PhD student at the University of Melbourne. Her research combines digital media, screen cultures, and photo-graphic images to study new modes of realism after AI.

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