Texas Border visualizes ways that BluServo trains a user to become a “Virtual Texas Deputy,” who manipulate mediated images in a video game–like interface and submit anonymous reports about suspicious activity by e-mail. As Moll notes, the website’s success with 203 thousand user volunteers and 165 million hits amounts to almost one million hours of free labor for the Sheriff’s Coalition. The website effectively outsources police work in a kind of role-playing game in which users act according to a model of vigilant justice mediated through Hollywood film and television about the so-called Wild West during the colonial era or so-called border hopping in commercial news media today. BluServo also has a presence on Facebook, so that its users could report suspicious activity and mysterious items in real-time discussions with representatives of the Sheriff’s Coalition, occasionally consulting Google Earth to determine whether the activities that they spot are on the US or Mexican side of the border.

The Texas Border renegotiates the complexities of the Mexican American borderland, recognizing it as one of the primary battlegrounds in the US War on Terror, US policy historically focused on selective repatriation through the Deportation Act (1929) and Operation Wetback (1954). With the reinvention of the border as a mechanism of neoliberal economies under NAFTA, policy shifted from apprehension to deterrence, inspired in part by 1993’s Operation Blockade (later, Operation Hold the Line), developed by regional Border Patrol supervisor in El Paso, whose specific goal was to intimidate “would-be-illegal entrants” by stationing agents visibly near border. With wireless surveillance cameras connected to the Internet, the borderlands are mediated through satellite-image display software. After an initial expenditure of USD 1.3 billion between 2006 and 2010, the US Department of Homeland Security (DHS) abandoned the Virtual Fence Program (aka SBInet) under the Secure Border Initiative, which proposed a vast network of sensors, cameras, and radar towers through the southwestern United States. Earlier projects included the Integrated Surveillance Intelligence System (ISIS), later renamed America’s Shield Initiative (ASI) launched by the Immigration and Naturalization Service (INS), the predecessor to the DHS, in 1997.

Other private border-watch communities have been organized by militia and by individuals, such as wireless-systems businessman Jon Healy, who founded TechnoPatriots in 2007 to police the Arizona border, allowing users as far away as New York to become “armchair warriors.” Healy launched the site after learning that his competitors were underbidding him because they employed undocumented labor. Although it might sound ad hoc, the highly selective enforcement of the laws about transborder crossing has been the modus operandi since the first policing of the border against Chinese immigrants in 1882. Other current and former websites include American Border Patrol, Wireless Border Cams, right-wing political activist Jim Gilchrist’s The Minuteman Project that announces, among other things on its homepage, that “U.S. citizenship shouldn’t be about money, influence, or election results” and “Americans shouldn’t have to compete against low-wage illegal workers!” As Moll argues, The Texas Border makes visible this infosphere of everyday acts of war and offers the possibility of political action through countersurveillance. The project has also been exhibited as a large-scale installation at venues including antiAtlas des frontières in Aix-en-Provence.

Surveillance as security can make visible in auto-generative work, such as Robert Spahr’s Crufts, which scrapes images and texts from the Internet and recombines them into a politically conscious form of glitch art. Spahr’s work draws information from governmental websites and databases to initiate acts of rejecting predetermined meaning and exposing the invisible structures of digital media, such as the significance of metadata, and digitally mediated everyday life, such as the countless images of ourselves captured by CCTV surveillance cameras. “Organized under the umbrella concept of Cruft,” explains Spahr, “I take apart, juxtapose, recycle, and interrupt the relentless flow of media to reveal a relationship in which we don’t simply consume media, but are also consumed by it.” Conceiving a practice that draws upon “collage, remix, automation, indeterminacy, and randomness,” his projects move between and combine aspects of computational art, performance, installation, and object making. His aim is one of interrupting our frequent complicity with technologies of surveillance.

Crufts uses computational algorithms to scrape the Internet for images that are recombined in digital collage. His code operates as an autonomous machine that instigates its own customized program of web surveillance. Cliff Dwellers (Drone Study #4) (United States, 2014–present; www.robertspahr.com/crufts/cliffdwellers/) harvests images from a CCTV camera in New York, as part of larger project Machine Vision: Images of Drone Landscapes (United States, 2014) on the hidden technologies and algorithms that constitute a machine vision of the world. An ongoing project, Machine Vision, repurposes footage from CCTV cameras and other media to create
images that pose questions about our role within a complex of war, surveillance, and automation inspired by Snowden’s whistleblowing on the role of corporations like Apple, Facebook, Google, and Microsoft in facilitating NSA surveillance on US citizens through automated systems. “Our personal lives and images are looked at by automated machines, shared by computational processes and controlled by hidden algorithm,” writes Spahr, suggesting a frightening moment when state aspirations for “total information awareness” have aligned with “capitalism’s need to consume itself at all cost.”

For Cliff Dwellers (Drone Study #4), Spahr adapts the title from “cliff dwelling,” a term that describes the practice of carving dwellings into cliffs, particularly as it was practiced by indigenous nations in what is now Canada, México, and the United States. For Spahr, cliff dwellings are an antiquated technology that precedes ones like fax machines, gaming consoles, and personal computers. Aesthetically attractive, the digital collages generated at two-hour intervals have highly saturated color and soft focus that render their photographic detail imprecise and illegible. Although their photographic imprecision provides little information on the subjects of the CCTV cameras—and potentially erases information useful in identifying people on the street, the images do provide useful information to us about ways that CCTV cameras are used in New York. The high-angle shots of streets with pedestrians show a machine-eye view of a world in which everyone is considered a potential victim or suspect in crime, as well as ways that automated technologies can fail to deliver data. Sometimes the images exist only as word, noting that the particular camera is being serviced. An archive contains multiple images for every day since 08 January 2014, offering a visualization of the much more massive state and corporate databases of images taken by CCTV cameras.

Negotiating Mobile Phones

India is a cutting-edge site for mobile phones. Henry Jenkins notes the first feature film distributed via mobile phone was Rok Sako To Rok Lo/Stop Me, If You Can (India, 2004; dir. Arindam Chowdhuri), screened via EDGE-enabled phone in Bangalore, Hyderabad, Mumbai, and New Delhi. As media industries explore greater mobile phones profits and market penetration, artists and collectives have worked toward more socially conscious ends. Through a joint venture with Indian and French organizations, Laurent Sauerwein attempted to launch an emergent nonprofit cell phone experimental research center. Taking its name from Pondywood after the commercial film industry in Puducherry (formerly, Pondicherry) in the south Indian state of Tamil Nadu, the NGO proposed “small videos can make a big difference.” Although the center has not yet materialized, Sauerwein did teach a course in Auroville as part of the American University in Paris (AUP’s) first Sustainable Development Practicum in 2008/2009. Two AUP students, Cody Merrit and Jacqueline Segal, shot on a Nokia N-95 and examined the ecological footprint of CO2 emissions. The three-minute film features shots of traffic-congested Puducherry, intercut with shots of tree planting to offset carbon emissions. Despite this potential, Pondywood, with its historical French colonial architecture often figured as exotic, has fared better as an alternative shooting location for films like Jism (India, 2003; dir. Amit Saxena) and Life of Pi (United States/Taiwan/United Kingdom/Canada/India, 2012; dir. Ang Lee), and television, including Alexandra David-Née: J’irai au pays des neiges (France, 2012; dir. Joël Farges).

The first Indian Festival of Cellphone Cinema was launched in 2008 by the Asian Academy of Film and Television (AAFT) and received submissions from Bhutan, Dominica, Haiti, Iran, Iraq, Kazakhstan, Kenya, Malaysia, Nigeria, and the United States. The festival was conceived by Karl Bardosh, professor at New York University in the United States, and Sandeep Marwah, director of AAFT and founder and managing director of Marwah Studios in Noida Film City in the New Okhla Industrial Development Authority (aka “Noida”) in the national capital region of Uttar Pradesh about 20 kilometers south of New Delhi. Bardosh and Marwah shot three feature films on cell phones before launching the festival. Rebranded as the International Film Festival of Cell Phone Cinema, the festival had its seventh edition in January 2014. The number of submissions swelled from 58 in 2008 to 450 in 2013. For Bardosh, the festival and cell phone movies “make cinema and the art an accessible non-discriminating platform.” His ambition is part of a broader enthusiasm for the democratizing potential of inexpensive digital technologies. Anyone, the aspirations dictated, could make media and distribute it online through a proliferation of websites hosting amateur video.

In the context of the on-going Syrian civil war (2011–present), protesters against the Ba’ath Party are sometimes shot by the army or police for taking photographs or shooting video with their smartphones. To become a Syrian filmmaker is often to become a martyr.
and ones we might never otherwise encounter. These projects thrust experimental media beyond its analogue traditions. Analytic montage and counterpointal sound-and-image matches assume more urgency than conventional experimental models, such as hand processing. Experimentation transitions to the algorithmic and speculative.

Robert Spahr's *Crafts* are several series of auto-generative images from source material scraped and harvested from websites. He appropriates the hacker term “crut,” which refers to unpleasant substances, superfluous junk, redundant or superseded code, and useless and badly designed computer programming. In his projects, found image databases are the Internet’s superfluous junk—or crutfts—to recycle. By using the software suite ImageMagick and scripts written in the computer language of Perl, algorithms manipulate images according to automated instructions at controlled intervals 24 hours per day and seven days per week. Each *Craft* contains an archive of images that can be downloaded, printed, and shared. “I take apart, juxtapose, recycle, and interrupt the relentless flow of media to reveal a relationship in which we don’t simply consume media, but are also consumed by it,” notes Spahr. Ranging from the absurd to the political, the series quietly interrupt and mimic the news cycle of outlets like CNN.

*Distress Craft* (my fellow Americans) (United States, 2007–2008; www.robertspahr.com/work/craft/distress/), for example, examines the practice of camouflaging security practices as a tourist-friendly service at the Empire State Building, where visitors are offered the opportunity to purchase their security photograph as a souvenir. The images of smiling families and loving couples are composited with the image of a US flag displayed upside down to signal severe distress. The series raises questions about the ethics of security. As a potential target for domestic or foreign terrorism, the Empire State Building is highly policed with CCTVs. The staged (i.e., smiling tourist) photo serves as a template for facial recognition software. The tourist photos are tagged and stored in a digital database, where they can be filtered as needed through large-scale systems used by agencies such as the Information Awareness Office (IAO), which uses the automated biometric identification technologies Human Identification at a Distance (HumanID). The watermark proof on the image becomes self-referential to the digital image, equally a proof of a visit and potential proof of a crime. The recycling of the security photos also points to the system’s vulnerability. Spahr offers the option for users to transfer the image onto personalized US postage stamps.

*Babylon Craft* (United States, 2005–present; www.robertspahr.com/work/craft/babylon) scrapes images from the US Air Force website and images from Internet sites for adult entertainment, presumably accessed by soldiers. The juxtaposition of a row of three small images—proud soldiers posing with officers or politicians, military jets on a tarmac, and frail senior citizens, likely veterans, posing with US flags—across the top of the crut with explicitly sexual images of adult entertainment at the bottom sets into motion thoughts about tags like innocence and guilt that we often attribute to images of strangers. In a crut compositcd on 21 July 2014, the upper images include a smiling, white male cadet and his female partner; a multiracial group of soldiers studying; and a frontal shot of a large drone above a nude white-male torso mounted atop a nude, white, female body. The juxtaposition of the phallic-shaped drone and the image of missionary-style (man on top of woman) heterosexual intercourse evokes the torpedo/bikini scene in Bruce Conner’s landmark found-footage film *A Movie* (United States, 1958). Like Conner’s film, the images in the series reveal the overwhelming whiteness of both the military-industrial and adult-entertainment industries, suggesting that nominative notions of beauty in both patriotism and pornography have changed little since the 1950s. *Data Loss Craft* (Corruption) (United States, 2013–present; http://www.robertspahr.com/work/dataloss/) inserts the text code from a report on casualties from US covert drone attacks in Pakistan, Somalia, and Yemen into the code for a photograph from Whitehouse.gov, a public relations site designed to promote the US government. File corruption occurs at the level of the image, revealing what is silenced and erased from official accounts of the US state and its foreign policy, particularly civilian deaths. Using automated content scrapers and combining different but related sources, critical glitch art highlights the darker underbellies of the institutions they represent, questioning the sincerity of the original image. Data corruption visualized in JPEGs suggests the fragility and impermanence of digital identities. In a crut from 25 November 2013, Michelle Obama is clearly visible beneath a layer of dark green, whereas the data corruption in an image from 04 January 2014, renders the image from the White House almost unrecognizable. Spahr’s crutfts point toward another extension of conceptual art, where the instructions are automated and the content is randomized.
"Thinking Through Digital Media brings readers into close contact with transnational environments, ecological interfaces, and machinic performances. Hudson and Zimmermann combine strengths as media curators and digital theoreticians to analyze over 130 art projects. Positioning glocal cyberplace over universal cyberspace, they highlight politically collaborative media performances to foreground the digital explosion of critical micropublics happening across the globe. This expansive book serves as an energetic intellectual platform for transnational environments and locative places."
—Timothy Murray, Curator, Rose Goldsen Archive of New Media Art, Cornell University, USA

"Thinking Through Digital Media makes a very welcome intervention into the way scholars approach digital media. The field of digital film studies is expanding rapidly. However, few of these works provide a clearly mapped way of understanding this massive body of digital work in relation to existing categories and concepts scholars use to analyze film as aesthetic and ideological objects. This book charts new territory by using emerging new media artists and their work to explore questions that form a fundamental part of film/media studies."
—Gina Marchetti, University of Hong Kong

"By bringing together examples of installation art, internet art, live multimedia performances, locative media, and digital compositing with the work of international theorists who attempt to conceptualize the phenomenologies of these new media, this book will be an extremely useful resource for students, professors, and laypersons investigating the ever-increasing role that new media play in our society."
—Jan-Christopher Horak, Director, University of California, Los Angeles, Film and Television Archive, USA

Thinking Through Digital Media offers a means of conceptualizing digital media by looking at projects that think through digital media, migrating between documentary, experimental, narrative, animation, video game, and live performance. Hudson and Zimmermann analyze projects at the intersections of embedded technologies, transitory micropublics, human-machine interface, and critical cartographies to forward a set of speculations about how things work together rather than what they represent. The book frames debates on participation/surveillance, outsourcing, global warming, migrations, GMOs, and war across some of the most dynamic, innovative sites for digital media, including Brazil, Canada, China, Germany, India, Indonesia, Italy, Kenya, Nigeria, Palestine, Saudi Arabia, Singapore, and the United States.

Dale Hudson is Associate Professor (NTE) and Curator of Film and New Media at New York University Abu Dhabi, United Arab Emirates. His work appears in American Quarterly, Cinema Journal, Screen, and other journals and anthologies.

Patricia R. Zimmermann is Professor of Screen Studies and Codirector of the Finger Lakes Environmental Film Festival at Ithaca College, USA. Her books include Reel Families: A Social History of Amateur Film; States of Emergency: Documentaries, Wars, Democracies; and Mining the Home Movie: Excavations in Histories and Memories.