

Beyond Binary: What the Vampire Squid from Hell Can Teach Us About Access and Ethics in the Digital Humanities

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Introduction

As a librarian who has spent the last several years working in both scholarly communication and digital humanities, I've become interested in how we create and disseminate culture and knowledge, and the tools we build and use to do so, particularly digital platforms and publishing online.

Two years ago, I began thinking about what exactly our common and popular platforms—both social and scholarly—might privilege, and how that privileging shapes our work, stories, new knowledge and culture in general. After a personal leave of absence, I'm just now starting to get back to catching up on and thinking about these issues, so this is still a work in progress and we have a lot of ground to cover. I'd really like this to also be a conversation, so please feel free to chime in whenever you want, and after each section of this presentation there will also be time to reflect on your projects specifically.

So, the squid! We'll get to the squid in a minute, but it's our organizing metaphor, an animal to admire but not exactly emulate; a creature who is defined by its environment and so also trapped in time.

And then there's us. Often times, the digital nature of our work both speeds things up and obscures things that should be of central concern. Things like

access and ethics. When I say access, I mean both the production and publication of digital content, and the sharing and consuming of it. By ethics, I mean the slowing down of these processes to consider the effects digital production and dissemination might have in a wide variety of social, political, and cultural spaces and circumstances. In a way, it's a call to center empathy in the digital creation and sharing of new knowledge, and to acknowledge both the differences the digital affords circulation, impact, and scale.

Of access and ethics, we will discuss six areas: digitization, copyright and fair use, open access, cultural protocols, accessibility, and privacy and labor. In each area, we will look at a work of art that speaks to access and ethics in the digital age, examine a few examples and explore resources, and, finally, discuss each area in relation to our projects, pedagogy, and other contexts.

But, first things first: the squid. Introducing, *Vampyrotheuthis infernalis*! I learned about *Vampyrotheuthis infernalis* by reading a treatise by Vilém Flusser, a philosopher and media theorist known for his provocative takes on our increasingly digital culture as we neared the end of the 20th century. It was from this reading, along with other works of his, that I began to realize how this squid that's not really a squid could help me understand how we negotiate culture, especially online through digital tools and platforms. I want to begin by reading a provocation of my own I wrote a few years ago, keeping in my mind that it is just that: a provocative and simple take; but like Flusser, one that I hope prompts critical engagement, consideration, and reconsideration, of both the ways we exist online and work within the digital.

(Note: This was originally presented at HASTAC 2014 in Lima, Peru, as part of the panel, "Political Platforms: Software, Social Justice, and Designing for Change," which included Beatrice Choi, Anne Cong-Huyen, Amanda Phillips, and Tara McPherson (as discussant).)

Provocation

At some point in the 1980s, the Czech-born philosopher and media theorist Vilém Flusser became obsessed with a squid. More precisely, Flusser began to look to the *Vampyroteuthis infernalis*, whose genus and species name translates into English as "the vampire squid from hell." Staring back at him from its barely-known, unlit deep-sea environment, *Vampyroteuthis infernalis*—this seemingly alien creature—became like a reflection to Flusser, both us and the squid acting like "mirrors of that which we have denied." And yet while this creature, so drastically different than ourselves, gazed back at Flusser with its distinctly human-like eyes, he was careful to note that, "Should we care to recognize something of ourselves in this animal, we will have to plunge into its abyss."

Vampyroteuthis infernalis is a mollusc, and the etymology of the creature's phylum was not lost on Flusser the media theorist. From the root word mollis, which means "soft," Flusser drew the connection to "software" and what he, at the time, saw as the processing of immaterial information. Beyond an etymological affinity with computing, *Vampyroteuthis infernalis* is quite literally a processor, though its processing is biological, indiscriminate, and mostly thrust upon it. Plunging deeper, Flusser turns to the German word *Dasein*, or, "being in the world," which is central to understanding both the squid and ourselves, as he writes, "Reality is neither the organism nor the environment ... but rather the concurrence of both." And so Flusser looks to the squid and its abyss, discovering a "*Vampyroteuthic Dasein*," in which "objects are free-floating entities in a current of water that happen to tumble upon [it]," and for whom culture is a binary act of "discriminating between digestible and indigestible entities."

In this brief provocation, I'd like to look at what we might be able to consider the abyss of our platforms, especially as a central few come to dominate our attention and affect our *Dasein Vampyroteuthically*, positioning us as

individuals tumbling upon the free-floating information, objects and relationships of our increasingly "open" culture.

Like the unlit, deep-sea abyss of *Vampyroteuthis infernalis*, computers, software, and platforms have long been cloaked in the rhetoric of darkness, most commonly today through the phrase "blackbox," which the Oxford English Dictionary defines as, "a device which performs intricate functions but whose internal mechanism may not readily be inspected or understood." But in order to confront the opaque, we must first, as Flusser wrote, "penetrate behind appearances in order to free things from the veil of light." For, amidst the mesmerization of our screens and interfaces, we often further veil, making it increasingly impossible to ever reveal the privilege of our platforms—both the embedded and the evoked. As Lori Emerson writes in her book *Reading Writing Interfaces: From the Digital to the Bookbound*, "what concerns me is that 'user-friendly' now takes the shape of keeping users steadfastly unaware and uninformed about how their computers, their reading/writing interfaces, work let alone how they shape and determine their access to knowledge and their ability to produce knowledge." There are quite explicit examples of these deceptive processes in action, what Harry Brignull calls "dark patterns," by which he means the "type of user interface that appears to have been carefully crafted to trick users into doing things." And while we associate these dark patterns most regularly with the nefariousness of spam, we're too often less-inclined to look toward the so-called light, the platforms we most use to represent ourselves, such as the popular commercial platforms of Facebook, Twitter, Gmail, and others. When we refuse to or cannot look into the light, behind the illuminated surface reflecting ourselves, we further elide, push deeper into the darkness, what powers the privilege of our platforms, across a continuum of technical mechanisms and, increasingly, cultural and political assumptions and ideologies. As Flusser sees in his devil squid from hell, so too does Wendy Chun, in her book *Programmed Visions: Software and Memory*, see something abysmal in our

platforms. Chuns says that historically our interfaces "render the central process for computation—processes not under the direct control of the user—daemoniac." When we combine Emerson's concern for access and use with Chun's notion of "the history of interactive operating systems as supplementing—that is, supplanting—human intelligence," we can begin to see the contours of the abyss—a space filled with values both human and machinic—and the changing nature of our *Dasein* in the so-called digital age.

In the introduction to his translation of Flusser's 1983 book *Post-History*, Rodrigo Maltez Novaes, writes of post-historical, "*Vampyrotheutian*" society—that is, "a society of artifice and lies, of surfaces"—that "if technical apparatus function ... according to binary values, then these are the values they impose onto the world." These binary values—the choice of on or off, one or zero—have increasingly affected more than the simple mechanics of our machines and platforms, but have infected culture in many ways. (The use of the word "infected" here, it should be noted, infers the many means we have to fight off infection.) One example of this is computationalism, what David Golumbia, in his book *The Cultural Logic of Computation*, describes as, "the view that not just human minds are computers but that mind itself must be a computer." Like binary values, this emphasis on computational thinkings fuels a neoliberal, techno-determinist ideology that sees in the networked computer the inevitability of a utopian future; a future that, as I've mentioned elsewhere, is "hostile to the race, gender, and class experiences of those outside the hegemonic white, wealthy, and vastly powerful venture capitalist class that supports it."

Along with the rise of computing and its inherent privileging of the binary, in addition to networking and social media, we've seen the effects of binary values on culture and communication, most clearly in the ideological regimes of openness—from the open society to open source, open government and open access. Within this paradigm, the binary is open or closed, and our platforms have predominantly implemented these binary values, with a clear

preference—based on funding models that rely on free labor and access to our data and content—for the open. Take for instance Twitter, whose user accounts default to open, but for whom the only other option for those interested in negotiating access remains the visibly marked "locked" account. And even when developers of these platforms—themselves deeply invested in computational conceptions of the world—do allow more robust settings, these are so ever-shifting and inaccessible so as to dizzy us until we, exhausted, only feel situated having chosen the open or closed setting.

While these simple examples may seem harmless, the implications of binary values and the privileging of openness are, as Flusser prophetically showed through his conception of post-historical humanity, quite profound. As Nathaniel Tkacz has argued, "the logic of openness actually gives rise to, and is perfectly compatible with, new forms of closure ... [and] ... there is something about openness, about the mobilisation of the open and its conceptual allies, that actively works against making these closures visible." These closures—enabled by openness, centrally controlled, and algorithmically patrolled—enact something like a *Vampyroteuthic Dasein*, in which no longer are we actively thinking ethically and negotiating and performing the various and complicated facets of our humanity; but, like Flusser's vampire squid from hell, are unthinkingly processing what's thrust upon us, our environments these dark, blackboxed spaces in which our objects of culture are "free"-floating entities in a current of wi-fi that we happen to tumble upon. This, then, might ultimately be the abyss of our platforms, but need it be?

In a recent talk [2014], Kim Christen Withey, discussing the ideology of openness, stated that "open is only one way of seeing," and that information is not, as Flusser says, immaterial, but embodied, and "always grounded." Indeed, embodiment allows us to confront the abyss of our platforms, to challenge binary values and the ideology of openness. Christen Withey's work on the Mukurtu (which we will look at later) is exemplary for challenging the binary of open and

closed, for embedding and enabling robust community control, agency, protocols, and constant cultural negotiation within a platform for managing and sharing digital cultural heritage. Indeed, Christen Withey's choice of the word "grounded" resonates with Flusser, who realized that in surmounting our animality, we were bestowed upon the ground, while *Vampyroteuthis infernalis* was banished to the abyss. Yet our task, despite our alienation, is to constantly confront and never lose sight of our groundedness, something our platforms have historically not been able to help us with. But it is in platforms like Mukurtu and others that we see a way forward for confronting privilege; and for refusing to adopt the *Vampyroteuthic Dasein*, seeing in it the vampire squid from hell, something we long ago rightfully denied.

Transition

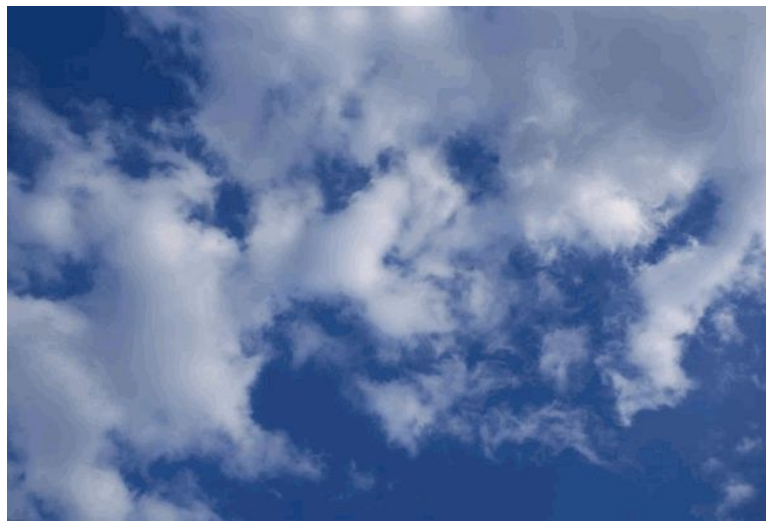
Yet, while that provocation had platforms as its main interest, I want to focus attention today on the ways we can and do negotiate culture and knowledge, and other systems of control that sometimes seek to place binary constraints on us. For example, something is either in or out of copyright, but the binary status of copyright does not dictate that or how a work can be shared. Likewise, Open Access ideology can sometimes rest on a rigid conception of information being either open or closed, but as we will see, there are other contexts that demand a much more sensitive, slow, nuanced, and empathetic approach.

Again, for each of these, we will take a look at a piece of art that speaks to the topic, look at some examples, and discuss in relation to our own projects and interests.

Digitization

From Wikipedia: "Digitizing or digitization is the representation of an object, image, sound, document or signal (usually an analog signal) by generating a series of numbers that describe a discrete set of its points or samples. The result is called digital representation or, more specifically, a digital image, for the object, and digital form, for the signal. In modern practice, the digitized data is in the form of binary numbers, which facilitate computer processing and other operations, but strictly speaking, digitizing simply means the conversion of analog source material into a numerical format; the decimal or any other number system can be used instead."

In other words, a remediation, a moving from one context to another, and sometimes a fundamental displacing and altering of the thing itself.



This is an animated gif from an art project titled "Cloud Face" by Shinseungback Kimyonghun, a Seoul-based artist group. As the artists write in their statement for the project: "'Cloud Face' is a collection of cloud images that are recognized as human face by a face-detection algorithm. It is a result of computer's vision error,

but they often look like faces to human eyes, too. This work attempts to examine the relation between computer vision and human vision."

For me, this piece speaks both to the language we use to describe the digital which often obscures its material nature, especially through terms like "the cloud." When something seems immaterial, we might also treat it with a lightness, forgetting embodiment and impact. Of course, this piece speaks to surveillance and control. But it also shows the ease in which we sometimes think we can and should digitize everything.

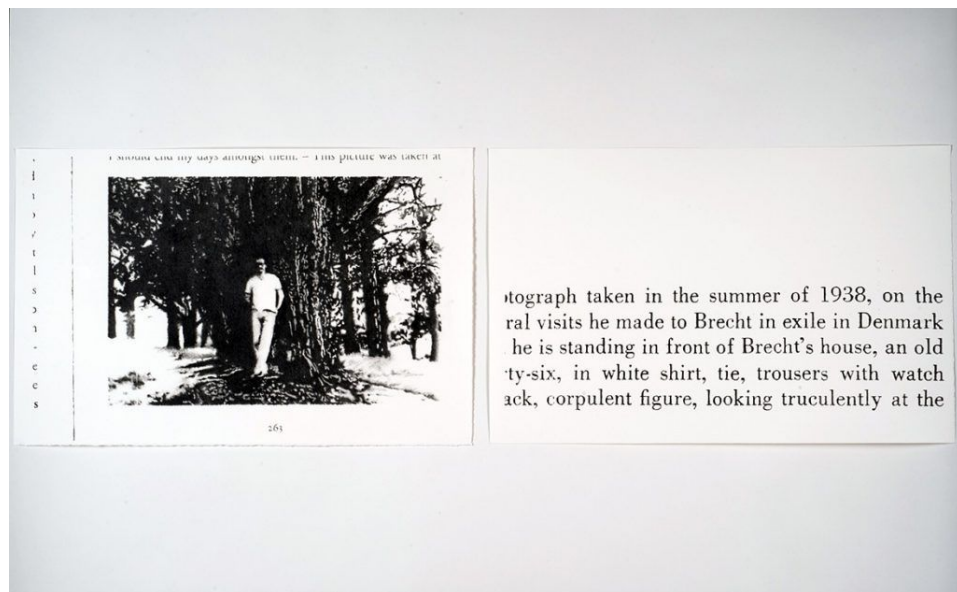
But, as Tara Robertson recently wrote, using one of my favorite phrases: "Just because you can, doesn't mean you should." Robertson, an Accessibility Librarian who is passionate about universal design, access to information, open source software, intellectual freedom, feminism, has written multiple posts about our first example, the proposed digitization of the complete run of *On Our Backs*, a lesbian porn magazine that ran from 1984-2004, and was to be included in the online repository, Independent Voices, an open access collection of the alternative press. You should read Robertson's work on this, but the short version is that while she was initially excited for such a project, it quickly became apparent that the digitization and broad dissemination online of this resource would not only violate certain contributor contracts, but also put in danger some of the women who had posed for the magazine. Once a work that was of and for lesbian communities, digitization and online publication threatened to decontextualize the work in ways both creators and contributors had never intended, or possibly even imagined and considered. After these concerns were brought up, Reveal Digital, while still claiming a legal position for them to publish the collection, agreed to at the very least suspend its publication while it worked with concerned members of the community (publishers, contributors, libraries, archives, researchers, and others) to come up with an "equitable process by which [*On Our Backs*] can be made accessible to future generations."

Perhaps a different model for digitizing culture needs to be explored and promoted, for example, something along the lines of History Harvest at the University of Nebraska, which seeks to engage the public in the description and dissemination of digitized cultural heritage objects.

This project, while still flawed (and awkwardly named), could lead to a more empathetic model which also privileges the subjectivity of our stories and histories, as opposed to more literal methods of metadata production.

Copyright & Fair Use

When you set something that's minimally creative down in a fixed format, you automatically have the copyright to that work. And, while work can be either in or out of copyright, there are other options available, especially to librarians and teachers, such as fair use.



This work by the artist Molly Springfield is called "Saturine," and it is part of her series "Under the Sign of Saturn," which she describes as "A small group of drawings pairing text from Susan Sontag's essay on Walter Benjamin, 'Under the

Sign of Saturn' with images from W.G. Sebald's novel The Rings of Saturn." Springfield creates her work by making transformative use of other creators' works, and her artwork speaks to notions of reuse, reception, remix and more. She makes her work by photocopying analog materials and then making pencil drawings of those copies.

Speaking of copies, many colleges and universities are a part of a project called HathiTrust, a digital repository for primary works, from books to newspapers and more. HathiTrust has a more or less simple approach to access: if it is out of copyright, it can be accessed; if it is in copyright, it will be archived but not made publicly accessible. In fact, the project has a detailed copyright statement and process for evaluating rights.

Yet other, smaller projects might wish to exercise our Fair Use rights. Fair Use is the part of the copyright law that allows works to be displayed (for our purposes online) if certain highly subjective criteria have been met. Those criteria consist of four factors:

1. purpose and character of your use
2. nature of the copyrighted work
3. amount and substantiality of the portion taken, and
4. effect of the use upon the potential market.

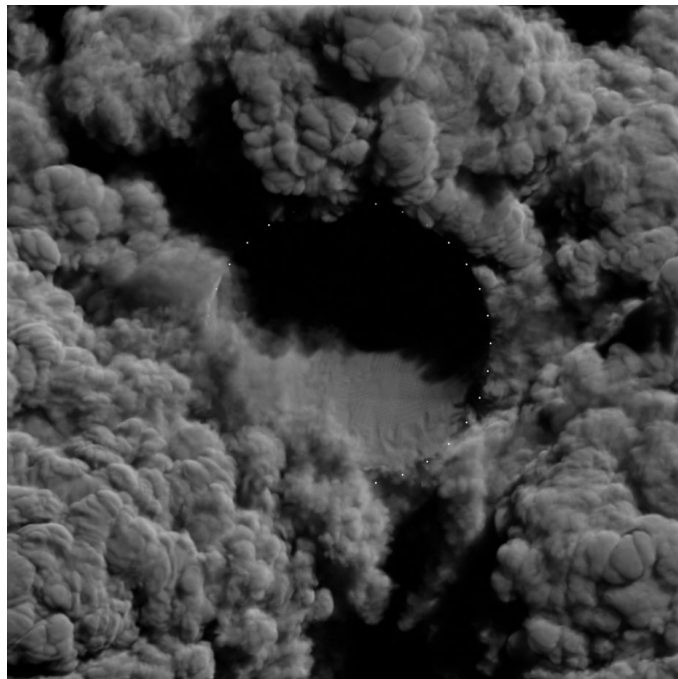
Fair Use is most often claimed for educational purposes, giving librarians and teachers a usually strong case. For instance, in consultation with many parties and carefully considering the content, the creators (which includes myself) of Open Door Archive assert their fair use rights in the publishing of "little poetry magazines."

Evidence has shown that as communities assert common approaches to Fair Use, courts look more favorably upon such uses, so setting guidelines helps create precedent and assure a more vibrant use of our rights. Given that many digital humanities projects are also library collection projects, I would

recommend taking a look at the Association for Research Libraries' Code of Best Practices in Fair Use.

Open Access

Broadly speaking, Open Access is a movement to remove any barriers from public access to scholarly research, from journal articles to books to data. It is often part of a broader ideological movement that sees the "open access" to information as an inherent good. As noted in the opening provocation, I don't subscribe to this ideology, but rather believe in an empathetic approach and understanding of the contextual and embodied nature of culture and knowledge. As Kim Christen Withey has asked, "Does Information Really Want to be Free?"



This work of art is titled "DW ∞ Simulation 01" and is by Félix Luque & Iñigo Bilbao, as part of their artistic study of forms of infinity and chaos. When I look at this piece and others in the series, I think of the amorphousness of the term

"open," an amorphousness that can be both useless and dangerous, though I also see forms within forms, many distinct groupings, which might be a metaphor for the many distinct ways we negotiate culture and knowledge, from friend groups to cultural norms.

Like asserting our Fair Use rights, there are other ways of performing more specific and unique kinds of sharing through the curation of copyright law, allowing creators to take an active role in the sharing and dissemination of their works, whether they are in print or online. Enter Creative Commons, which offers "tools to help share your work." As stated on its website, "Our free, easy-to-use copyright licenses provide a simple, standardized way to give you permission to share and use your creative work—on conditions of your choice. You can adopt one of our licenses by sharing on a platform, or choosing a license below."

Cultural heritage institutions now also have something similar, RightsStatements, which makes it easy for users to "make it easy to see if and how online cultural heritage works can be reused."

Cultural Protocols

Another way of sharing beyond the binary of open and closed, are cultural protocols, community specific ways of creating and sharing culture and knowledge. As mentioned in the opening provocation, digital platforms, both because of who is creating them and what's inherent to the technology itself, have a particularly difficult time handling robust protocols, which, as we will see, is especially the case with Native and Indigenous cultural heritage.



This piece—"Mrs. X"—is a collaboration by the writer and photographer Teju Cole and the photographer Jens Mortensen. This was created for a piece on Cole's "On Photography" column in the *New York Times*, titled, "The Digital Afterlife of Lost Family Photos." The piece begins: "The photographs were Polaroids, taken between the 1970s and the 2000s. Zun Lee bought them at flea markets, at garage sales or on eBay. Most of them depicted African-Americans: people wearing stylish clothes, relaxing in the yard, celebrating birthdays. A few depicted people in prison uniforms. All the photographs had somehow been separated from their original owners and had become what Lee calls 'orphaned Polaroids.'" We will return to these polaroids at the end of the presentation.

As noted in above, Mukurtu is a different kind of digital platform. With Omeka, one has the ability to upload and describe a piece of digitized/digital culture and either make it public or private. With Mukurtu, communities can implement robust and unique forms of sharing that adhere to their specific cultural protocols. Mukurtu was first conceptualized by Kim Christen Withey, Associate Professor and the Director of the Digital Technology and Culture program, Director of Digital Projects at the Plateau Center, Native American

Programs and the co-Director of the Center for Digital Scholarship and Curation at Washington State University. When she first began working with the Warumungu of Australia, she realized quickly that in order for this community to archive, preserve and share their cultural heritage online, there was no existing platform that would allow for the implementation of their specific cultural protocols.

Along with building a platform flexible enough to embrace the cultural protocols of any community, other tools have been created, like Traditional Knowledge Labels, as part of the Local Contexts project.

Let's take a look at cultural protocols by exploring a pre-Mukurtu digital project—"Digital Dynamics Across Cultures"—created by Kim Christen Withey, Chris Cooney, and Alessandro Ceglia, for the pioneering (though now defunct) digital humanities journal Vectors.

My argument is not that an indigenous community's cultural protocols be appropriated and reused as a way out of "our" traditionally binary legal and technical systems, but that by better understanding the complex, historical, active, and negotiated ways in which these cultural protocols are enacted, we might better understand the embodied and negotiated forms in which nearly all culture and knowledge is created, accessed, and shared, and so also better represent those in our digital platforms, whether they be for social or scholarly purposes.

Accessibility

Thus far we've talked a lot about access, but not much about accessibility. As the W3C, the organization directed by Tim Berners Lee, "inventor of the World Wide Web," states, "The Web is fundamentally designed to work for all people, whatever their hardware, software, language, culture, location, or physical or

mental ability. When the Web meets this goal, it is accessible to people with a diverse range of hearing, movement, sight, and cognitive ability."



This is a piece called "Plan B" by Constantina Zavitsanos. She describes her work as dealing with "issues of inconsequence to elaborate what is invaluable in the re/production of debt, dependency, and means beyond measure." To me, this piece is, yes, an alternate way out, but also what appears to be a highly inaccessible space. In web design, one way to make web content accessible is to design what is essentially a second version of a website, one that works on mobile devices, screen readers, and low-bandwidth connections.

"The Web Accessibility Initiative (WAI) brings together individuals and organizations from around the world to develop strategies, guidelines, and resources to help make the Web accessible to people with disabilities." A really powerful resource, the WAI makes available information on how people with disabilities use the web, guidelines and tutorials for designing accessible web content, and tools for evaluating the accessibility of websites.

Along with creating for users with disabilities, we should also take into consideration during the development of our projects the fact that a vast amount

of users do not have high-speed broadband connections, and/or are accessing digital resources via mobile devices. Take for example the Transborder Immigrant Tool, developed by Electronic Disturbance Theater, a work of performance art that is also "a mobile-phone technology that provides poetry to immigrants crossing the U.S.-Mexico border while leading them to water caches in the Southern California desert." I think this piece speaks both to the radical potential of digital projects, but also to issues of accessibility in geographical areas in which high-speed internet is not available.

Another accessibility issue is access to software, hardware, and the expertise and costs that come with the implementation of digital projects. At a recent conference for the Society of American Archivists in Cleveland, several archivists came together with community members to develop, A People's Archive of Police Violence, a now community-run Omeka instance of archiving and sharing stories, memories, histories of police violence in Cleveland. As one of those archivists, Jarret M. Drake, has written, "We have an opportunity before us to transform archive-making, history-making, and memory-making into processes that are radically inclusive and accountable to the people most directly impacted by state violence. #ArchivesForBlackLives is at once a call to question traditional archival authority, disrupt the status quo of memory, and decolonize conventional and mainstream approaches to information, knowledge, records and archives. #ArchivesForBlackLives recognizes that much in the same way that anti-blackness was and is central to Western capitalism and colonialism, anti-blackness is equally vital to archive-making and memory-making processes in the West."

Privacy & Labor

And last, but certainly not least, access and ethics issues of privacy and labor, particularly, for our purposes, as it concerns undergraduate pedagogy in digital humanities.



This is a still from a video work by Hito Steyerl titled "How Not to Be Seen." The gallery label from MOMA describes this work: "In this satirical take on instructional films, Steyerl demonstrates several tongue-in-cheek strategies for remaining 'unseen' in a world subject to new, sophisticated means of surveillance—pointing to the ways in which our technologies encroach on physical experience. Much of the work was shot on a desert site riddled with photo calibration targets used by the military to hone the focus of airplane cameras. Acts of war are therefore mediated by digital tools; Steyerl drives this point home by superimposing a computer desktop onto the desert landscape, underscoring the links between economies of violence, communication, and entertainment. In her words, 'How do people disappear in an age of total

over-visibility? . . . Are people hidden by too many images? Do they go hide amongst other images? Do they become images?"

When it comes to forms of digital and online pedagogy, student privacy is a very important. As I think we've seen the differences between analog and digital are enough that new considerations need to be thought through and implemented. Matt Taylor and I have thought about this a lot, and some suggestions we've come up with, include the following:

- Provide the class with a password-protected environment accessible only to the instructor, students, and others affiliated with the course.
- Inform students in advance (no later than the deadline to withdraw) that they will be performing publicly in the course, and allow for private meetings with each student should they be needed.
- Allow students to perform publicly under an alias or pseudonym that is shared with only the instructor and the class.
- Provide alternate ways for students to complete assignments, including using the password-protected course management system or via email.
- Allow students to perform publicly under their real name only after signing a consent form (University of Oregon provides such a form).
- Promote digital literacy in the classroom, including discussions of online privacy.

For digital humanities courses and projects that involve students, I recommend reading "A Student Collaborator's Bill of Rights" from the UCLA Digital Humanities program. It's a really amazing document written by students in consultation with faculty and covers issues of unpaid internships, scholarly acknowledgement, project sustainability and representative on a CV or resume, and the right to privacy.

Finally, while *Vampyroteuthis infernalis* started us off provocatively, let us return, as it reminded Flusser to do, to embodiment, to us humans, our histories, our ways of being in this world.



This is another image from Teju Cole's piece, "The Digital Afterlife of Family Photos." The piece discusses the collecting of found photographs, by the Zun Lee and also Cole himself, who both collect portraits and photographs of African-American families. Unlike Lee, Cole decided to keep his collection private and not publish them online. When Lee put his collection online, a man was tagged in them, but that man wanted no part in the project. As Cole writes, "Lee was disappointed but sympathetic. He said he'd already been thinking about how databases and tags are not neutral, how they can wind up being hostile toward communities of color. 'I completely understood,' Lee told me. 'This man was saying, 'We are not willing participants.' The black body is used as a commodity, as something that is surveilled. The man was telling me, 'No, you're not welcome, this is not art, get the hell out of our lives.' And I understood it."

Prompted by these photographs, Cole also asks: Under what circumstances do so many of these photographs end up in resale shops? Who actually "owns" these photographs—whose are they? And what about, "the encounter between the analog experience of life and the futuristic algorithms that often prioritize what is possible over what is desirable?"

Finally, if I may, I'll conclude with Cole's concluding words: "American history has long struggled to believe the joys and intimacies of black American life. Social media, fortunately, makes those human realities visible to a much larger swath of the population than ever before. But there's also a paradox: To make intimacy public is often to render it less intimate. For all of us, but especially for those in communities of color, being digitally tracked does not solve the conundrums of inequality. Whatever else the machines learn, they'll have to learn about our sense of privacy too, the human necessity of leaving some things untagged and undeclared."