Prim Drift, CopyBots, and Folk Preservation: Three Copyright Parables about Art in the Digital Age

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ABSTRACT
This paper employs a series of case studies from the domains of digital arts and creative/experimental new media to elicit tensions and contradictions in the current state of copyright and intellectual property law. I pay particular attention to the role of the "pirate" as preservationist--rather than taint or corrupt, historically we know that piracy has helped guarantee the survival of important works of literature and art. Throughout, I insist that the humanist is not a dabbler or interloper in these matters; humanistic knowledge, particularly semiotics (the study of sign systems) has the potential to lend consistency and coherence to case law that is currently shot through with loopholes, contradictions, and dead ends. To that end, I also outline the potential of a center devoted to intellectual property law and humanities advocacy.

Topics
Information policy, ethics, and law
Preserving digital information

Keywords
Second Life, virtual worlds, intellectual property, copyright, arts and humanities, preservation, multi-user virtual environments

1. INTRODUCTION
In 2006 the American Council of Learned Societies published “Our Cultural Commonwealth,” a landmark report on cyberinfrastructure for the humanities and social sciences. As used by the Commission, the term “cyberinfrastructure” covers the aggregate social, technological, institutional, legal, economic, and human capital needed to advance the humanities and social sciences in a global digital environment (ACLS 6). Brett Bobley of the National Endowment for the Humanities provided some indication of the stature of the ACLS report at a recent talk at the Maryland Institute for Technology in the Humanities when he referred to it as the “Bible” of the NEH’s new digital humanities initiative.

“Our Cultural Commonwealth” identifies six key challenges that must be overcome if we are to fulfill the promise of a robust cyberinfrastructure, of which arguably the most daunting and complex is copyright (18-25). In its 51-page document, the Commission invokes intellectual property no less than 47 times, ultimately concluding that although it “can offer no simple solutions” (31), the various stakeholders named in the report nonetheless have an obligation to do what they can to strengthen and support the public domain and fair use provisions of the law. To decline this advocacy role is to jeopardize the precious few limitations on absolute copyright upon which we as information professionals rely in our efforts to preserve and transmit the cultural record. Perhaps nowhere is that danger more ominously expressed than in Susan Bielstein’s Permissions, A Survival Guide: Blunt Talk about Art as Intellectual Property:

Asking permission [of a rights holder] zealously and unnecessarily also catches you up in a mentality of acquiescence. Acquiescence is a wasting disease rooted in anxiety and ignorance, and it helps propel the all-consuming permissions culture . . . in the quotidian world of intellectual property, acquiescence operates far beneath the beacon eye of statute or treaty, and capitalizing on it is not good for anyone’s health. It wastes time, it wastes money, and it produces a compliant society vulnerable to abuse and wholesale ideological shifts in the law. (10-11)

The purpose of this talk, then, is twofold: first, to furnish a case file of network-driven digital art that dramatizes the conflict between private and public rights in creative culture (i.e., the provocative “prim drift,” “copybots,” and “folk preservation” mentioned in my title, which are part of a larger conversation about emergent art genres and creative communication technologies, such as 3D virtual worlds, that, although still in their infancy, will shortly become as established in their own way.

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as television and video are today); and second, to propose, as an experimental intervention into the legal system (and modeled in part after the Electronic Frontier Foundation) a humanities center staffed by archivists, librarians, visual resource curators, art historians, humanities researchers, and lawyers dedicated to testing in a court of law (with the aim of legally validating) claims that, in the words of Gary Schwartz, have the potential to “maximize our own collective position as holders of copyright” in public domain works or, I would add, as users of copyright in private domain works.

The choice of an arts and humanities dataset to seed the discussion about copyright is inspired in part by a venerable roster of artists who have challenged prevailing assumptions about the nature of creativity, originality, and authorship. These assumptions in turn inform cultural attitudes toward intellectual property. The cut-ups of William S. Burroughs; the ready-mades of Marcel Duchamp; the appropriation art of Sherrie Levine, Jeff Koons, and Andy Warhol all potentially run afoul of modern IP law. For this reason, the arts frequently act as an early warning system for copyright, alerting us to potential ambiguities in the case law or to legislative actions that alter, intentionally or not, the delicate balance between the rights of creators and the rights of users that the framers of the Constitution sought to protect. It is not only artists themselves, but also the collectors, scholars, publishers, museums, libraries, executors, and rights agents drawn into their orbit who have the power to upset or restore the golden mean of copyright.

2. PRIM DRIFT

In the multi-user virtual environment Second Life, “prims”—short for “primitives”—are the basic building blocks from which 3D objects such as cars, houses, books, and furniture are built. Individual prims can be linked together into larger systems to form complex shapes. Although generally stable, such builds will sometimes “drift” over time: like tectonic plates sliding past each other, prims can randomly shift out of position, producing distorted visual effects (Walsh, “Drifting Apart”). While content creators can edit their scripts to repair the damage, potential problems arise once the items have been sold. This is because every creative asset in SL is encoded with a set of permissions that dictate how it may be distributed and used by other residents. The permissions system includes four fields: move, modify, copy, and transfer. If either the second or fourth of these is disabled, the owner of the object, as distinct from its creator, is prevented from exercising freedoms that are normally either unregulated or protected by law in real life: the right to modify an object for personal use and the right to resell or give away a lawfully obtained copy under the First Sale Doctrine (Figures 1, 2, and 3). Thus, for example, in RL I may annotate my copy of Gone with the Wind in preparation for class discussion or take it to the bookbinder for repair if the pages come loose or donate it to my local public library when I no longer need or want it without infringing on the author’s copyrights. By contrast, if I own a book in SL, I may not be able to do these things: I may not be able to repair the book if it shows signs of prim drift or give it as a gift to someone else. The inability to alter objects for personal use warrants further consideration: as an analogy, it would be as if I suddenly found myself in a world where there were no tailors to hem pants or cloggers to mend shoes or antique experts to restore Grandma’s heirloom hutch.

The set of problems I’m describing are as applicable to the 2D web as they are to the 3D web. Increasingly contract law overrides copyright law in electronic commerce. End User Licensing Agreements (EULAs), for example, complicate the transfer of software applications from one party to another, suggesting that the erosion of the First Sale and Fair Use doctrines in Second Life is part of a much larger trend.

Because this example and the other two mentioned in my title function as limit cases for copyright policy, showing us where the system breaks down in a digital environment and allowing us to probe its edges, they help justify what might otherwise be seen as an implausible proposal: to establish a humanities center that would expand the site of activism to include not only the customary conference proceedings, working groups, white papers, articles, and symposia, but also, crucially, the courts. Nearly a decade ago, art historian Gary Schwartz urged his colleagues in a spirited talk at the annual meeting of the College Art Association to adopt more assertive measures to revive an ailing fair use doctrine. In an attempt to persuade his audience members of the need for innovative approaches, Schwartz informed them that he had been “assured by counsel that test trials on any of these [copyright] issues, in a well-chosen court, stand an excellent chance of success.” In 1998, such a strategy might have seemed improbable; in 2008, I’m convinced it is not. With the establishment of a grant initiative in 2003 to fund work “in the area of intellectual property and the long-term protection of the public domain,” the MacArthur Foundation has signaled its readiness to support experimental programs; recent recipients include the Electronic Frontier Foundation, which was awarded over half a million dollars in 2007. The EFF—whose mandate is to protect the public interest in a networked world—helps defend free speech, privacy, and consumer rights, in part by subjecting them to legal proceedings in a court of law. It thus serves as an important precedent for the course of action advocated here.

What would distinguish the center I envision from either the EFF or Stanford’s Center for Internet and Society is the role of the humanist, who would serve not as an ancillary figure, but one central to the center’s mission and success. Although I suspect many are capable of envisioning humanities scholars as evangelists, public relations spokespersons, or legislative advocates in this enterprise, I believe they are qualified to do more: to serve as expert witnesses or consultants in civil cases involving intellectual property and the arts. The literary scholar who specializes in textual transmission, the philosopher who investigates theories of language or the nature of universals, and the art historian who publishes on reproductive printmaking are all de facto semioticians, experts in sign systems and how they work. Because intellectual property concerns itself with originals and copies, a substantial body of case law hinges on the semiotic distinction between the two. The ability to state when two objects are fundamentally the same or different—to determine, for example, if a copy of Salvador Dali’s Persistence of Memory is primarily substitutive or transformative—is therefore a legal desideratum, one which many humanists are qualified to help address.

“Given the central and fundamental role of sign systems,” writes Jeffrey Long in a special issue of Semiotica, “why is the field that studies them—semiotics—so unknown amongst many who wish
to solve practical problems in business, science, the arts . . . government” and, we might add, the law (1)? A preliminary survey of judicial opinions on court cases that involve accusations of copyright infringement of visual works of art turns up a network of seemingly contradictory, ad hoc, or ambiguous rulings that would benefit from the rigorous application of semiotic principles of individuation, principles that would allow us to make tighter discriminations among things like originals, copies, versions, remixes, editions, and other relevant categories. The point here is that semiotics could be instrumental in helping courts adjudicate between the competing copyright claims of plaintiffs and defendants, as well as in fortifying fair use and the public domain. Contrary to the position recently espoused by Stanley Fish, professor of English and Law at Florida International University, regarding the lack of any utilitarian value whatsoever of a 21st century humanities education, the center I’m proposing would provide an affirmation of the power of humanistic knowledge to shape public policy in the digital age.

3. FOLK PRESERVATION

By “folk preservation,” I mean preservation that is amateur rather than professional; distributed rather than centralized; and unauthorized rather than authorized. It is often of an avocational rather than vocational nature. Many of the current preservation initiatives in Second Life, for example, are folksonomic in character: one of the longest standing structures in the metaverse, a statue representing the burning man effigy of the annual art festival held in the deserts of Nevada (“The Man”), continues to survive in an old parcel of Natoma, not, at least initially, because of any top-down decree from Linden Lab, the developer of SL, or the intervention of Real Life (RL) or Second Life (SL) conservators, but because of the on-going support and efforts of residents.

Of the many varieties of folk preservation, the one on which I’d like to focus is piracy. Consider three examples: According to industry insiders, the New York Philharmonic was ironically forced some years ago, when it began to think seriously about its preservation program, to purchase surreptitiously made sound recordings of its live performances from concert-goers who had smuggled their portable recording devices into the concert hall (Manildi; Winner). The 10-CD commemorative archival box set of Leonard Bernstein Live, for example, which was issued by the NY Philharmonic, includes an entire Wagner concert from 1970 taken from an illicit tape made by Roger Frank (Godell). Such bootleg music was a mainstay at William Lerner’s record shop Music Masters in the 60s and 70s, a hangout for musicians and collectors often in search of rare material (Kozinn). Although Lerner’s reasons for hiring freelancers armed with recorders to fill the seats at concert halls were strictly commercial, both he and Frank nonetheless join the historical ranks of pirates who deserve recognition for archival and preservation achievement in the arts.

My second example comes from the world of cinema. In an online interview, the British screenwriter Peter Briggs relates how he lost and subsequently found his Alien vs. Predator script:

I wrote “A vs P” originally . . . on an Amstrad computer, which was about one step above a Univac Room Filler. In ’82 I swapped to an Apple Mac, which I’ve used ever since. And I ended up losing the Amstrad disk, which was some weird, unreadable proprietary brand anyway. It wasn’t until whoever it was transcribed it and pirated it onto the web years later, that I was able to cut-and-paste it into Final Draft and have an electronic copy again. So, thank-you, Internet Leaker, wherever you are! (Qtd. by Doctorow)

My third example, the one on which I’d like to spend the most time, is Agrippa (a book of the dead), an artist’s book co-authored by the writer William Gibson and the artist Dennis Ashbaugh, and published by Kevin Begos, Jr. in 1992. Described in contemporary press releases as a “multi-unit artwork” (Gibson, “Introduction to Agrippa”), Agrippa is difficult to classify, both physically and generically. It was originally sold in two versions. The deluxe version came wrapped in a shroud, its cover artificially aged and its pages scorched—“time-burned,” like the photo album described in Gibson’s poem (“Agrippa Files”). Inside are etchings by Ashbaugh and double columns of DNA that ostensibly encode the genome of a fruitfly (Kirschenbaum xi). Nestled in the center of the book is a 3 ½ inch floppy disk that contains the poem, a meditation on time, memory, and decay. Its governing metaphor is that of the mechanism “a trope,” notes Matthew Kirschenbaum, “that manifests itself as a photograph album, a Kodak camera, a pistol, and a traffic light, as well as in less literal configurations. (ix)” Agrippa, among other things, is about our misplaced faith in the permanence and objectivity of media. Like human memories, media distort, invent, and erase the very objects they’re designed to preserve: handwriting fades and becomes illegible, photographs break the fourth wall by constantly reminding us of the world that lies just outside the picture frame, and inert technological artifacts put up no resistance when new ones come along to replace or destroy them. Paradoxically, the speaker of the poem takes recourse in his own recollections to supplement the incomplete records of the past, records that were originally intended to compensate for the limitations of memory. By such a process, he tries to recapture, for instance, the smells of the saw-mill once owned by his father, whose “tumbled boards and offcuts” are pictured in an old photograph (Gibson Agrippa). Drawing on a synaesthetic imagination, he uses the visual stimulus to prompt an olfactory memory. This complex interplay between mechanism and memory structures the poem as a whole and shapes its manifold meanings.

Agrippa’s core themes are expressed through form as well as content: some of Ashbaugh’s etchings are overlaid with images printed in uncured toner, which are inevitably smudged and distort those beneath and facing them when the pages are turned (Kirschenbaum xi). More stunningly, as has been often described, Gibson’s electronic poem is encrypted to scroll automatically down the screen once before being irrevocably lost, its text disappearing after a single reading. Agrippa is therefore subjected, like all material objects, to the forces of decay, but here those forces are manufactured rather than natural, causing the work to disintegrate at an accelerated rate. Ashbaugh, in particular, took considerable delight in anticipating how this volatility would confound librarians, archivists, and conservators: as Gavin Edwards explains, to register the book’s copyright, Ashbaugh “would need to send two copies to the Library of Congress. To classify it, they . . . [would] have to read it, and to
read it, they . . . [would have to] destroy it.” Significantly, however, it was not the librarians who found a workaround to the problem, but the pirates. On December 9, 1992, a group of New York University students secretly video-recorded a live public performance of Agrippa at The Americas Society, an art gallery and experimental performance space in New York City. After transcribing the poem, they uploaded it as a plain ASCII text to MindVox, a notorious NYC Bulletin Board, “the Hells Angels of Cyberspace,” according to Wikipedia, where it was readily available for download and quickly proliferated across the web. “The Hack,” as the incident has come to be called, is told with the hard-boiled suspense of a detective story by Matthew Kirschenbaum, who uncovered the gritty details while working on his new book Mechanisms: New Media and the Forensic Imagination, recently published by MIT P.

Although many rare archival and research materials (images, scans, transcriptions, video footage, and simulations) related to Agrippa are published on the Agrippa Files website with the permission of Kevin Bogos Jr., the complete text of the poem—arguably the central node of the work—is not. The editorial team at the University of California Santa Barbara provides the following notice by way of explanation: “Currently, the Agrippa Files does not have permission to reproduce the full text of the poem. Many wild copies of the text exist on the Internet. The official copy is on William Gibson’s Web site” (“The Poem”). What is worth noting here is that the access mission of the site is to some degree undercut by copyright laws. Whereas publicly accountable archival projects must abide by these laws, they go unheeded by shadow groups, such as the MindVox users, who transmit culture at risk of civil litigation. The irony, of course, is that despite the poem’s omnipresence on the web, it is absent from the one authoritative site dedicated to documenting and preserving it. What the incident underscores is the way in which short-term private rights potentially obstruct long-term public rights in cultural heritage.

4. COPYBOTS

In an entry dated from January 2008 on Architecture +, a blog covering commercial products and services for multi-user virtual environments, JeanRicard Broek cryptically proclaims that a “Library of Congress copybot is preserving virtual worlds.” Broek, it turns out, is reporting on a recently funded grant sponsored by the Library of Congress to preserve early computer games, interactive fiction, and 3D virtual worlds. The multi-institutional project, with which I’m directly involved, includes the University of Illinois Urbana-Champaign (Principal Investigator), Stanford University, the University of Maryland, and the Rochester Institute of Technology. Because interactive media are highly complex and at high risk for loss as technologies rapidly become obsolete, the project seeks to provide basic standards for metadata and content representation, and conduct a series of archiving case studies for early video games, electronic literature, and Second Life.

The “CopyBot” to which Broek refers is the famed software tool that wreaked havoc on the fledgling economy of Second Life in 2006. Developed by libsecondlife, which describes itself as a project directed toward “understanding how Second Life works from a technical perspective, and extending and integrating the metaverse with the rest of the web,” the program generates clones of in-world objects, such as avatars, buildings, books, furniture, cars, and the like (Reuters). Libsecondlife, which originally created CopyBot with the blessing of Linden Lab, intended for it to be used as a debugging and back-up application (Reuters). Once the source-code was released and distributed through the SL Exchange marketplace, however, it was edited and recompiled to duplicate objects without authorization from content creators, to the great consternation of artists and merchants, many of whom apparently suffered considerable financial losses as a result (Wikipedia, “CopyBot”). Nonetheless, the CopyBot is a technology that, although used by some customers to violate the law, is capable (like the home video recorders, photocopying machines, and computers that came before it) of “substantial non-infringing uses” (EFF, Betamax Case).

What are we to make of Broek’s analogy, however facetious, between a legitimate, federally funded preservation program and a software tool best known for its ability to facilitate criminal activity? The easy conflation of preservation with piracy no doubt has something to do with the fact that the simple act of copying is central to both. One of the most reliable ways to preserve an object, after all, is to duplicate it. This idea is so basic that it has been codified as a general principle: “lots of copies keep stuff safe” (LOCKSS). But an intellectual property system that grants only minimal exemptions to libraries, museums, and archives from the prohibition against copying provides insufficient grounds for putting this principle into action —unless, that is, there are official or unofficial lines of communication that exist between them and a grey market economy that plays by different rules.

This, indeed, is the lesson of history: our creative heritage infrastructure has not evolved independently of piratical practices, but co-dependently with them. Writing about early European print culture, for example, in his magisterial The Nature of the Book, Adrian Johns observes that in the sixteenth through the eighteenth centuries “pirates were . . . not a distinguishable social group. They existed at all ranks of the Stationers’ community, [the guild responsible for enforcing copyrights], and at times were among its most prominent and upstanding members” (167). Similarly, Meredith McGill suggests that unauthorized reprinting in nineteenth-century antebellum America was so pervasive—so fully embedded in everyday publishing practices—-that it constituted “part of the horizon of the ordinary” (4). We need, then, to better understand the systems of exchange that exist between lawful and unlawful preservation regimes and determine the extent to which the former is beholden to the latter. And we need to get a better purchase on the intellectual property restrictions that apply, directly or indirectly, to the contact zone between them. (For example, if a benefactor were to donate a large collection of materials to a library that included pirated books or software, the First-Sale Doctrine would presumably be rendered moot, making parts of the transaction illegal).

Giving credence to the historical importance of the pirate as preservationist provokes new kinds of questions, some answerable, some probably not:

- Are there authors whose works have descended to us exclusively in pirated editions or unauthorized copies or reprints? If so, who are they?
- If we could tally the total number of books that exist in the world and divide them into two groups, one
isn't the enemy of the good? Is the transformation of culture from one generation to the next something to be valued rather than lamented? Can a fragment or a shard serve as a synecdoche for a larger whole that once existed?  

My background in textual scholarship and bibliography tells me that we would be wise to lower the threshold of what constitutes successful preservation. The distinction between a legitimate preservation regime and a piratical one is often illusory, based on the faulty assumption that the former is the guarantor of stability, while the latter delivers only volatility. As an antidote to such notions, I’d like to close with an account of textual transmission and piracy demonstrate the truth of the old adage that the perfect is the enemy of the good? Is the transformation of culture from one generation to the next something to be valued rather than lamented? Can a fragment or a shard serve as a synecdoche for a larger whole that once existed?  

Anyone with a secretary knows that what Catullus really wrote was already corrupt by the time it was copied twice, which was about the time of the first Roman invasion of Britain: and the earliest copy that has come down to us was written about 1,500 years after that. Think of all those secretaries!—Corruption breeding corruption from papyrus to papyrus, and from the last disintegrating scrolls to the first new-fangled parchment books, with a thousand years of copying-out still to come, running the gauntlet of changing forms of script and spelling, and absence of punctuation—not to mention mildew and rats and fire and flood and Christian disapproval to the brink of extinction as what Catullus really wrote passed from scribe to scribe, this one drunk, that one sleepy, another without scruple, and of those sober, wide-awake, and scrupulous, some ignorant of Latin, and some, even worse, fancying themselves better Latinists than Catullus—until!—finally and at long last—mangled and tattered like a dog that has fought its way home, there falls across the threshold of the Italian Renaissance the sole surviving witness of thirty generations of carelessness and stupidity: the Verona Codex of Catullus; which was almost immediately lost again, but not before being copied with one last opportunity for error. And there you have the foundation of the poems of Catullus as they went to the printer for the first time, in Venice 400 years ago.  

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https://listserv.indiana.edu/cgi-bin/wa-iub.exe?A2=ind0801&L=SHARP-L&T=0&P=--S--&P=--S--&P=--S--

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Figure 1: Notice (left page) published by the Bobbs-Merrill Co. in *The Castaway* by Hallie Erminie Rives in 1904. The attempt to use the right of distribution to control resale of the book eventually led to the landmark Supreme Court decision Bobbs-Merrill Co. v. Straus, 210 U.S. 339 (1908). The case codified The First Sale Doctrine. The image is a screenshot taken from the electronic version of the novel available on the Internet Archive at [http://www.archive.org/details/castaway00riveiala](http://www.archive.org/details/castaway00riveiala).
Figure 2: A physical copy of the novel *Anima* by Dalian Hansen (digitalKu 2007). The freedoms to modify (write in the margins, dogear the pages, etc.) and resell lawfully obtained copies of the book are protected by Fair Use, First Sale, and *de minimis* doctrines.

Figure 3: Virtual Copy of *Anima* by Dalian Hansen. This version of the novel can only be read in the virtual world of Second Life. In this case the author has disabled transfer and modification rights. The permissions system of SL partially nullifies the Fair Use, First Sale, and *de minimis* doctrines that operate in real life.