Aura in the Age of Computational Production

Does a work of electronic literature that's summoned on demand have "aura"? What is the role of code, platform, and human performance in conjuring or coaxing aura from digital writing? How does this affect the cultural and market value of the work?

This piece collects seven statements for a roundtable that interrogates whether creative computational work can conjure aura, and to what extent the authoring and distribution systems those works rely on foreclose upon or enable "aura." Walter Benjamin's seminal "The Work of Art in the Age of Mechanical Reproduction" (1935) describes fascistic modes of production and mass deception that forecast -- in very specific ways -- iOS.

1. Leonardo Flores frames the discussion with "Scarcity, Spreadability, and Aura" which focuses on two PC works-- William Gibson's Agrippa and Nick Montfort's "Taroko Gorge" along with all its remixes-- both of which gain aura by virtue of their 'spreadability,' a concept put forth in Henry Jenkins' book *Spreadable Media*.
2. In "A Non-Linear Timeline of Twenty Years Online" J.R. Carpenter frames her oeuvre within the contexts of print and digital reproduction, canon formation, performance, and dissemination through print and social media.
3. Nick Montfort examines the obligatory underlying computational process of copying in "Auraless E-Lit" and its inherent incompatibility a Benjaminian notion of aura.
4. In "How to Sell what Is Free?" David Jhave Johnston examines poetry and electronic poetry's monetary worth and aura in the contexts of a free and open Web.
5. Erik Loyer's statement, "Aura as Groundwater," explores a similar concept within the more restrictive, proprietary, market space of iOS and the Apple Store.
6. Jason Edward Lewis' "Aura vs. Apple, or the Rich Get Richer While the Bastards Go Unloved" offers a chilling account of the pricing limits placed upon artists within the Apple's App Store, as he experienced with his limited edition poetic art app "Bastard."
7. Kathi Inman Berens "Steve's Shroud: Aura & iOS" closes the frame by showing how Jason Edward Lewis' touch poem "Smooth Second Bastard," and Ian Bogost's iOS game and museum installation "Simony" create and engage procedural rhetorics that disrupt the fascistic environment created by iOS.

Collectively, these statements depict the current landscape of options and paradigm shifts for generating cultural and monetary value in the current age of computational production.

Scarcity, Spreadability, and Aura (Leonardo Flores)

Personal computers are spaces for the production, distribution, and reception of digital objects, offering powerful tools that allow for empowered performances that have shifted the dynamics of closed works, and scarcity, to openness, free circulation, and spreadability. Walter Benjamin's concept of aura is predicated upon notions of uniqueness, or scarcity in the case of mechanically reproduced works. In *Spreadable Media*, Henry Jenkins proposes a model of spreadability as a measurement of value in an age of social media: 'if it doesn't spread, it's dead.'

William Gibson's 1992 disappearing poem and artists book *Agrippa* and Nick Montfort's 2009 infinitely generative "Taroko Gorge" poem were created under different paradigms for cultural value. *Agrippa* is a set of physical and digital objects created at a key moment in the history of publishing, computation, and networks in which the logic of Benjaminian 'aura' encountered the

logic of Jenkins' 'spreadability' and it exemplifies and benefits from the logic of both paradigms. "Taroko Gorge" is a poem created under a spreadability paradigm that has led to many remixes, modeling a different path to aura built upon the computational notion of version control.

Agrippa was published as an artist's book printed on photo-sensitive paper that would fade after an initial reading and as a 3.5' disk with an encrypted program that would display the poem once and self-destruct. To perform this poem meant to consume a rare and expensive art object, leaving behind a shell, emptied of its poetic text and functionality. The extremely limited editions and self-destructing mechanisms were designed to concentrate the work's aura-- authorial, artistic, capitalistic-- onto a handful of surviving, unread objects. The Benjaminian logic of aura deployed by Gibson, Ashbaugh, and Begos Jr. resulted in a work that could evoke an aesthetic experience of reverent engagement through the manipulation of objects made sacred through their fungibility.

When the aptly named hacker known as Templar hacked the text and circulated it online the day after its launch, it signaled a paradigm shift to aura based on spreadability. The illicit digital reproduction of the poem's text on the network both stole away and reaffirmed Agrippa's aura because the spread of the copies increased the interest in the original objects. Its subsequent free and open circulation via William Gibson's website and documentation through The Agrippa Files (which circulated disk images) and Cracking the Agrippa Code (which led to cracking the encryption) have eroded what Benjaminian aura remained in the digital portions of the work, though the remaining physical documents have increased in value. From a spreadability perspective, Agrippa's aura increases with its digital reproduction. The more times it is downloaded, accessed, read, hacked, reviewed, and written about the greater cultural currency it commands. Its original objects, initially assigned value through scarcity, would have little or no aura if they hadn't been hacked and spread throughout the Internet.

When its code is executed, "Taroko Gorge" produces a very similar scrolling poem as *Agrippa*, but its performance and aura are different. Readers inexperienced with the work enter into a reading performance that begins with the rapt attention of reading and can either devolve into the 'distracted' and 'absent-minded' engagement of film, as imagined by Benjamin, or lead into a new kind of attention to its generative patterns and logic. This attention to the framework, particularly for the code-literate, leads to the realization that this is a work that can easily be repurposed and remixed. The spreadability of this code and its many remixes aligns "Taroko Gorge" with poetic forms such as the sonnet, villanelle, or sestina which gain aura the more they get used and repurposed by others. In this paradigm, the cultural value resides in the work that offers a replicable pattern that gains aura in a direct relation to how much it spreads, whether through sharing, remixing, or critically appraising.

The openness of Nick Montfort's digital poem is in sharp contrast with the closed design of William Gibson's, computationally and legally. Montfort's open source HTML and JavaScript poem is also published openly, without any kind of Creative Commons license, while Gibson's copyrighted digital poem was programmed in Macintosh Allegro Common Lisp and encrypted before publication. And while both works circulate openly in the network, "Taroko Gorge" does so in the spirit of "libre" open source software such as Linux and as exemplified by code-sharing services like GitHub. Every remix, derivative, and fork increases rather than decreases an open work's aura-- while closed works paradoxically gain cultural value and lose aura through increased circulation.

The challenge ahead for creators of works of art in an age of digital reproduction is to convert cultural capital and aura gained through spreadability into monetary value.

"On the Internet, nobody knows you're a dog."

July 1993. The New Yorker published a cartoon by Peter Steiner depicting a dog sitting at a computer informing another dog sitting on the floor that: On the internet, nobody knows you're a dog.

November 1993. I got my first Unix account. On the internet, in those days, they used to say: On the internet nobody knows you're a dog. On the internet, nobody knew I was a woman and nobody knew I was fiction writer. Not even me.

November 1995. I made my first web art writing project. Fishes and Flying Things remediated a zine printed from a QuarkExpress file stored on a 44 MB SyQuest cartridge which I still own but can no longer open. The images were scans of photocopies of borrowed books. The text was based on the title of an installation art exhibition I had on at the time, of which nothing remains. Artist friends informed me that web-based work was elitist, because so few people could access it. Writer friends assured me that the internet would never catch on.

November 1998. I gave an artist's talk called A Little Talk About Reproduction which reflected on the transition from zine to web, from the vast perspective offered by the passage of three whole years. On the internet, nobody knows how far we've come.

February 2010. I gave an artist's talk called A Little Talk About Reproduction. The first talk had been prognostic, to use Benjamin's term. By the time of the second, everything expected of the future had long since transpired. We might say that in the age of computational production longevity lends aura to a work. Except. On the internet, nobody knows how far we have left to go.

June 2008. I made a web-based work called in absentia. The launch event was a six-hour

outdoor neighbourhood block party attended by over a thousand people. There were DJ's and bar-tenders and Port-o-Let portable toilets rented especially for the occasion. The police came six times.

November 2012. Alexandra Saemmer suggested that in absentia can be considered part of the cannon because it is contained in certain collections. Which lends more aura to a work, canonical status or Port-o-Lets and police presence?

At 4:40PM on 1 April 2012. Andy Campbell tweeted a link to a blog post called "The closed circles of elit" in which he wrote "I can't see how electronic literature can really evolve though without being exposed to an audience outside of academia."
http://www.newmediawritingforum.co.uk/viewtopic.php?f=6&t=156

At 4PM on 2 April 2012 I tweeted: "as an author of web-based #elit I've always assumed my audience to be people at work who are supposed to be doing other things". William Gibson re-tweeted this, to his 100,000 followers.
https://twitter.com/jr_carpenter/status/186905845043429377

Today, as I sat down to write this, I Googled "On the internet, nobody knows you're a dog." On the internet, it says this is the most reproduced New Yorker cartoon of all time. Steiner has earned over $50,000 from its reprinting.

Auraless Electronic Literature (Nick Montfort)

Electronic literature is that which can't not be reproduced. It brings together two threads of practice which have thrived without Benjaminian aura: literature and the computational.

An important concept, originating with Nelson Goodman, is that certain works of art (broadly speaking) are autographic (and thus can be forged or reproduced without producing a new instance of the work) while others allographic and can be written down in reproducible notation. This autographic vs. allographic distinction explains why it is a sensible question to ask whether someone has seen the Mona Lisa, and to expect that people who answer "yes" have personally visited the Louvre and cast their gaze on the original painting. However, it is not sensible to expect that someone will affirm having read The Great Gatsby only if that person has visited Princeton and read the handwritten manuscript of the novel. Literature, as with several of the arts, thrives and radiates by being reproduced, and, since the age of print began, by being mechanically reproduced. Whether it is Harry Potter and the Philosopher's Stone or The Sorrows of Young Werther, literary works are popularly judged to be more original the more they are duplicated. A large printing no more causes a loss of aura than success at the box office causes Dr. Strangelove a loss of essence. For film, music, and almost all sorts of textual work, there has never been an aura to lose.

Now, consider that electronic literature also is a computational practice. It is impossible to view data or run programs without copying them. Even if we are not speaking of digital media accessed over the network, which we practically always are these days, a system still must copy digital information across a bus to RAM, to a cache, and into the registers of a processor to do anything with it. At this basic level, there is no issue of proprietary or free software, an open system for distribution or a locked-down corporate store, digital work that is encumbered or unencumbered by DRM. Copying has to take place for computation to take place, whether people struggle for domination and control or whether they work together for social good and share the fruits of their work. The choice is not between aura and the decay of aura, but between a useless digital corpse, not at all exquisite, and data and instructions that can animate our

meaning-machines. Without copying, a digital work remains in the tomb of a song that is written down but never sung.

Electronic literature brings together two practices that are not simply auraless; they seem inherently incompatible with the concept. Are there any positive qualities that the aura could provides that can be brought to electronic literature? Yes—some can be, although none that I have found require limiting the reproduction of a work. I will describe some approaches to making work electronic literature special and better situated: By commissioning it, for instance, and by developing work that is open to re-use, remixing, and modification.

How to sell what is free? (David Jhave Johnston)

Poems are worthless; they cannot be eaten, and they are very hard to sell. Yet they are at the core of what is beyond all value.

Poets are usually depicted as a paragons of depravity: refusing gainful employ in a quest for metaphysical erudition; hay stalk, cigarette, pen or stylus jauntily protruding from mouth; drunk at noon, stoned at dawn, insane, sensual ambulant negations. Their catastrophic descents attract aura. Without aura, there'd be nothing in it except poverty and disintegration. Aura compensates for a lack of cash.

Therein lies a dilemma: poems oscillate from zeroworth (unsellable) to infinite worth (transcendent and essential). They rarely bother with inbetweens.

Deyan Sudjic recently restated an idea from Thorsten Veblen's (1899) *Theory of the Leisure Class* as "Useful is inversely proportional to status. The more useless an object is, the more highly valued it will be." The "useless" Sudjic is referring to is high art. Unfortunately for writers, (Deyan) useless poems are not incredibly valuable (as some contemporary art is). Perhaps poems are materially worthless because they are not objects; they are mere words. The problem is compounded with digital poetry: networked media, infinitely replicable, available everywhere; it is mere data.

Netart is the worst hit: perpetually free, why buy it? To that end, I collected all my netart digital poems from 2000 to 2010 and put them on a USB key for sale; then I instigated an annual price doubling. The Glia USB key [http://glia.ca/2011/usb/prices.html] launched in 2011 at a price of $25, is now in 2013, for sale at $100. In 2029, it will cost $6,553,600. Meanwhile, all the content is online; so no one buys it. At what price will its aura really shine? Is aura relative to purchasing power or prophetic potency?

Aura is a lottery. It's as if fate/luck/algorithm arbitrarily selects a handful of sand from a beach and throws it in the air. There it temporarily glitters against the sun.

Aura as Groundwater (Erik Loyer)

Aura seems to behave like the water table; it seeks its own level depending on the environmental pressures that surround it, and so the question with respect to electronic literature can be turned to the conditions and ethics of its presence. Individual creators have a vested interest in seeking an increase of the aura that derives from the reputation of their works, and of themselves—such aura represents increased potential of many kinds. Margaret Atwood's *LongPen*, for example, is a product which seeks to apply such aura to digital works by enabling remote signing and personalization.

The technological underpinnings of electronic literature also contribute to its aura, for as time passes, rendering various authoring and reading technologies obsolete, scarcity and thus aura are created. The ELO's exhibitions of e-lit works on "vintage" hardware always carry special fascination for this reason. Conversely, efforts like the ELO-commissioned paper "Acid-Free Bits," which seeks to educate e-lit creators on sustainable authoring practices, could be said to have as their implicit goal the reduction of aura that accrues due to obsolescence, aura that most digital creators lament.

Authoritarian control of technology platforms like iOS is a powerful source of aura, because the forces involved are more intense, and the artifacts more ephemeral. Closed platforms rapidly pit the user's own investments of time, money, and data in the platform against their desire to preserve a particular artifact in perpetuity. Since such platforms make it more difficult to reliably "collect" software artifacts the way we might physical artifacts, users who want to increase the longevity of an aura-infused piece of software are forced to refuse updates that promise to increase the value and usefulness of their hardware and software.

A beta tester of my app Strange Rain told me she hadn't installed the final release version because she didn't want to lose access to the in-progress beta. A Star Wars fan described to me how he had refused to install the latest version of a lightsaber app because it had started as an independent, unauthorized fan project, and the most recent update had been co-opted by Lucasfilm. Apps that make political interventions or which contain hidden features disallowed by the platform owner are rapidly downloaded by those "in the know" before they are pulled from circulation—itself a form of aura-driven entertainment made possible by the strictness with which the platform is controlled.

As a creator I naturally tend to welcome those aspects of aura which I can either control or which directly benefit me; I'm less fond of those imposed by "outside" forces, even though the ultimate effects of each may not be that different. What seems clear is that aura is alive and well—and surprisingly durable—in the current epoch of digital publishing, with many, sometimes contradictory, masters.

Aura vs. Apple, or the Rich Get Richer While the Bastards Go Unloved (Jason Edward Lewis)

R (App Store reviewer): R here.

J: Jason Lewis here.

R: Right. The guy with the $999 limited edition art app.

J: Yes, that's me. I was wondering if our conversation the other day had made any difference in whether it would get approved.

R: We can't let you publish it at the $999 price point.

J: Why not?

R: Not enough value.

I tried selling my iOS app for $999.

Apple wouldn't let me.

The app is called Bastard. It's an art app. Or a poem app, depending on how you squint. It's neither angry, nor social; it doesn't take photos. It isn't a game.

You use it because it's beautiful. It has something to say. It moves you. At least it tries to.

I wanted to produce it as a limited edition, 10/10, as an experiment. A probe. A technical probe, to see how it might be done. A financial probe, to see if a market might exist for such a thing. A conceptual probe, to explore ideas of artificial scarcity and the values of the code object. As a personal probe, to explore an art market with which I had rarely engaged before.

But. The lack of functionality…bothered Apple. More precisely, it bothered the App Store staff responsible for reviewing apps before allowing them to be published. They couldn't understand the value proposition. They couldn't believe that anybody would pay that much money for an app that didn't do anything except let the user navigate through a text. They were unable to grasp that I wanted to limit the number of people who bought the app. As one of them said to me while discussing the $999 price, "What you're doing, it's just, it's just stupid."

J: So what should I charge?

R: I can't tell you that.

J: Why not?

R: We're not allowed to set pricing for 3rd-party apps.

J: But if you're telling me what I can't charge, isn't that the same thing?

R: No.

J: --silence--

R: Are you there?

J: [mumbling] You ever read any Kafka?

R: What?

J: Never mind.

I tried summarizing the history of contemporary art in five sentences or less. I talked about sculpture and photography and the development of limited editions. I asked if they've ever had a sublime experience, either with an artwork or any other way. I pointed out that if art collectors are willing to pay thousands, tens of thousands, millions of dollars for a painting that does nothing, they must certainly find some value in it. A value that lies outside of functionality. A value that lies, perhaps, and in part, in its aura.

Members of the Silicon Valley tribe have no word for 'aura' in their language. There are no unique items, only those that can be reproduced with greater (iPhone) or lesser (app) difficulty. Real artists ship, yes, and they also ship as much as they can.

In the summer of 2008, Armin Heinrich published an app called *I Am Rich* to the App Store. He priced it at $999 (the price ceiling for any app). It did almost nothing, except identify the user as somebody who could spend a thousand dollars on a piece of software that did almost nothing. Eight people bought it. Two subsequently demanded and received refunds from Apple. Six

people kept it. Six people found it worthwhile. I tried arguing that Bastard was clearly superior art to I Am Rich, and, furthermore it was my fourth app published to the store. The other three were free. Clearly, I wasn't just trying to scam people out of their money. But it came increasingly difficult to make any meaningful distinction between what I was doing, and what Heinrich did. And he did it first.

J: Are you going to be the one who reviews the app when we re-submit for approval?

R: Yes.

J: Good. I'd hate to have to go through all of this again, use-value theory, art-world pricing, artificial scarcity, Kafka, code as object, you know, all of that.

R: I wouldn't want to go through it again, either.

J: Great. We understand each other, then.

R: I'm not sure if I'd go that far.

J: Really?

R: Goodbye.

*Steve's Shroud: Aura & iOS (*Kathi Inman Berens)

It's hard not to see iOS -- with its cult of Jobs, its fetish of self-expression manufactured through tightly controlled proprietary software, its petty personal battles rendered as prohibitions of interoperability, its culture of information hoarding -- as a fascistic environment for the creation of new art. Benjamin's seminal essay from 1935 freshly explains what's at stake in an uninterrupted and untheorized participation in Apple's veneer of cool.

'Fascism sees its salvation in giving the masses not their right, but instead a chance to express themselves,' Benjamin observes. 'The tasks which face the human apparatus of perception are mastered not by optical means, but … under the guidance of tactile appropriation.' Humans perceive aura through touch, and transfer their reverence for the digital literary art object via touch to the device itself. I examine how Jason Edward Lewis' touch poem '[Smooth Second Bastard](#),' released as a $9.99 Limited Edition, and Ian Bogost's iOS game and museum installation '[Simony](#)' create and engage procedural rhetorics that disrupt the iOS.

Digital literary artists are exploring app distribution models as one way to earn money; free distribution via browser deprives them of the opportunity to earn money the way print authors have done: mass distribution. People's habits of engagement with iOS make the App Store an inhospitable environment for artists.'[T]his app is expensive for a small download,' notes the only commenter on "Smooth Second Bastard's" iTunes page. 'I like J.E.L.'s apps.... But this idea of a limited edition is a hurdle.' To date, Lewis has sold 25 numbered editions of 'Smooth Second Bastard.' The three previous digital poems in the series, also released as apps, were free.

"Value" is now an implied procedural rhetoric of any iOS app, game or poem. Quantification diminishes aura because it commodifies the art perceptive process through exchange value. "Simony," Ian Bogost's new game commissioned by the [Museum of Contemporary Art Jacksonville](#) and also installed there, lays bare "value" in iOS procedural rhetorics. "I'd thought about making a game that addresses the topic of in-app payments and free-to-play games for some time," he discloses in an [interview](#). "Simony" is the medieval practice of buying and selling

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of church offices, a way of "levelling up" without righteousness. The game Simony is about that but also "Simon" the touch memory game from the early 1980s transposed to a medieval illuminated manuscript rendered mostly in Latin. Monastic chants and lute music waft soothingly in the game's background.

"Simony" gestures extravagantly toward aura, but the mechanics of play overlay aura with irony. Even if one were playing Simony inside the installation, atop the dias meant to replicate a cathedral but also, according to Bogost, "an Apple store," remote gamers would crowd the leaderboard at Apple's Game Center and impinge upon aura's unities of space and time. Lost unity can't be supplemented by the museum installation, but money can purchase access to higher scores and an actual award: the top ten gamers are the Jury that will decide how to dispose of the proceeds the museum earns from in-app purchases. The game's joke about reverence and cheating becomes a meta-commentary on aura and iOS itself.

Personal computers are spaces for the production, distribution, and reception of digital objects, offering powerful tools that allow for empowered performances that have shifted the dynamics of closed works, and scarcity, to openness, free circulation, and spreadability. By contrast, Apple's iOS devices and its virtual and physical Apple Stores are spaces for distribution, sales, and consumption of digital literature: closed systems in which works are licensed in perpetuity to clients, and limit use cases because the code is inaccessible. Thus the code itself becomes the origin of aura: invisible, inaccessible, a fetish object.

Conclusion

Aura invokes numerous questions that inevitably awaken conflicts about value. Conjoined with the digital (platforms, networks, proprietary tools) and literature, aura becomes even more ambiguous and contentious. How exactly will the emergent nascent data-fed field of e-lit navigate these issues? Are cyborg generative poets aura-full, value-laden? Is the poetic a price-tag trope, a data-canon, an info-utility to be purchased and siloed like other commodities?

Even if Apple is "a fascistic environment for the creation of new art"(Berens) where "members of the Silicon Valley tribe have no word for 'aura' in their language"(Lewis), it is possible to accept the contradictory assertions that "aura is alive and well" (Loyer) and "is a lottery" (Jhave) and simultaneously "there has never been an aura to lose"(Montfort). That means the "challenge ahead for creators of works of art in an age of digital reproduction is to convert cultural capital and aura gained through spreadability into monetary value" (Flores). Luckily, "on the internet, nobody knows you're a fiction writer" (Carpenter), so it could be we are about to enter an era where the aura of everything enters into networked flow, arising and dissipating as effortlessly as light.

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