

THOUGHTS ON GLITCH[ART]v2.0

.....Nick Briz

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whois (preface)

hi! my name is [Nick Briz](#) && i'm a new-media artist/educator/organizer living + working in Chicago, Illinois. This hypermedia essay is a follow up from my 2009 hypertext essay [THOUGHTS ON GLITCH\[ART\]v1.0](#) (no longer functional) >> the conversations around glitch art have grown && changed a lot since 2009 && these have informed my own thoughts as a glitch artist/educator/organizer; a fellow glitch artist/educator/organizer [Antonio Roberts](#) (aka hellocatfood) recently informed me that THOUGHTS ON GLITCH[ART]v1.0 was down, in part for this reason but mostly in the interest of addressing a set of glitch-related questions i often get asked online--i present: THOUGHTS ON GLITCH[ART]v2.0

first >> some quick [personal] context: i went to film school in the mid-2000's, there i was inspired by the worx && techniques of experimental filmmakers like [Stan Brakhage](#) who would [paint + scratch](#) directly on celluloid film, i figured i'd do the same w/ digital video. though i couldn't literally scratch my digital video files (which are really just a bunch of 1's && 0's which can take different physical form on different storage media) i could hack away at their data && often this [resulted in](#) footage that seemed to me not only technically but also aesthetically in line w/ my experimental film heroes; i called these pieces "[binary videos](#)." shortly thereafter i discovered i wasn't alone, like all xciting discoveries mine was not original. a small online [community](#) of folks were making similar work w/ the same techniques under the much cooler label of "glitch art." i embraced that #tag + started showing my work @ galleries && festivals around the world && then, just like many of the other glitch artists in these communities, i started sharing my process+thoughts on the subject. i created online [tutorials](#) && started lecturing+teaching @ Universities eventually co-founding (w/ [jon.satrom](#) + [Rosa Menkman](#) + [Evan Meaney](#)) a glitch art conference/festival/gathering in 2010 called [GLI.TC/H](#) around which this once small + online community grew in more ways than one (+it's this project/community more than any other which have informed my thoughts)

...so as u might imagine i have a lot of thoughts + feelz on the subject. this hypermedia essay is a collection of some of these thoughts as they stand at the moment of this coding [late 2015].

how to glitch art

there's a couple of angles u can come at this from: u can start a bug collection, stay alert, wait for glitches to happen && catch them when they do, via screenshot, photo, audio recorder, etc. (a bit more on this later). or u can instigate glitches urself, there's a seemingly infinite number of ways to do this, but if we were to reduce these to their basic formula it would read something like: **take a familiar piece of technology && do something unfamiliar with it.** or if u prefer a more detailed example:

1. copy a file, jpg, mp3, mov, obj, ppt, etc. (ideally a familiar file type)
2. open that file w/a (familiar) application that wasn't programmed to work w/that file type u're likely to get an error along the lines of: "sorry, unsupported file type" ...or (if u're lucky) some unusual interpretation of the file will present itself
3. edit the file (given the tools of this particular app) >> then save it
4. open the file in it's default application && be surprised

this specific process is known as "data bending" >> i'll be referencing this throughout these thoughts. what's most important isn't these specific steps, but rather the fundamental idea of taking some familiar piece of technology and do something unfamiliar with it.

definitions && conditional statements

in the past i've avoided defining glitch art in fear of codifying a practice i felt defied codification in it's form; but that's not very helpful. so in this section i'm going to layout a set of very specific conditional statements b/c definitions + delineations help provide context && carve out space for conversation (keeping in mind: my own thoughts may radically change by v3.0 as they have since v1.0 ...these conditional statements can be versioned)

glitch != error

common definitions of the word glitch read something along the lines of: a malfunction or error in a computer or machine. while i won't argue this sort of colloquial use, for the purpose of this essay i think it's important to point out that a glitch is-not-equal-to (!=) error. typically (though maybe not technically) when we say "there's an error" or "my computer is malfunctioning" we're placing the onus on the machine. but computers don't make mistakes, people do. given the same input (&& all variables remaining the same) the computer will always give u the same output; whether or not we were expecting a particular output has less to do w/the computer than it does that particular user +/- or the developer of that particular application +/- or the manufacturer of that particular machine. take the [internet]age-old glitch art technique of data bending for instance: give 2 glitch artists the same file, on the same platform, ask them to make the same exact "bends" (edits) && they'll get the same exact glitches in return.

glitch == unexpected

so a glitch isn't an error in the sense that the computer has done something "by accident," the machine has done exactly what it's supposed to do given all the factors at play, however, what it's done is something we didn't expect. a glitch is-equal-to (==) something unexpected. a glitch is a moment in a system that catches us off guard; what was, until that moment, an "intuitive" user "experience" has been interrupted. **a glitch is an unexpected moment in a system that calls attention to that system** (perhaps even brings to light aspects of that system that might otherwise go unnoticed... more on that later).

i use the word system to deliberately leave this a bit open for the future, but in the present i mean specifically digital systems (computers & networks). some of my glitch-cohorts extend this definition to include non-digital systems (environmental systems, biological systems, etc.) & while i find these conversations/perspectives interesting i think expanding glitch's definition to this extent dilutes its meaning, undermines its contemporaneity & ignores the fact that the word "glitch" has very digital origins. In [Google's Ngram Viewer](#) the word doesn't really show up until the 1960's & these earliest uses came from astronauts describing "[irritating disturbances](#)" in their computer systems.

that said, i think there's definitely value & perspective to be gained from applying glitch discourse to non-computer conversations. in an essay i wrote in 2010 (then redux'd in 2011 for the [GLI.TC/H READER\[ROR\]](#)) entitled [Glitch Art Historie\[s\]](#) i drew comparisons between glitch art & various other cultural practices, not to retroactively frame these as glitch practices but rather to demonstrate in which ways glitch practices were like these other practices.

glitch != a file

seasoned glitch enthusiasts know that when u corrupt a file, say an image file, (by data bending it for example) the glitch artifacts that result from that process are unique to that file, or more precisely, that file type. if u glitch a jpg image file & a png file of that same image, the artifacts that result are very different (see the [Vernacular of File Formats](#) or the [Ceibas: Future Body... downloads page](#) for details). but it would be a mistake to locate the glitch in the file (the container of data) itself. when we experience new media we're experiencing something part data & part algorithm, part object & part process. when u corrupt an image file the glitch that results may look one way when viewed in one application & look entirely different when viewed through a second application (& a third application might refuse to open that file entirely). in one sense the computer is a "remediation machine", capable of simulating older media w/in it. but when u digitize older media it becomes something else entirely. a digitized text for example can be searched, copied, pasted, etc. once u turn traditional media into data u can algorithmically analyze it which changes it's very nature. the fact that a glitched file renders

differently when viewed in different applications reminds us that new media exists somewhere in between the files (collection of 1's && 0's) and the software (algorithmic processes).

glitch art != glitch

Wikipedia defines glitch art as “the aestheticization of digital or analog errors, such as artifacts and other ‘bugs’, by either corrupting digital code/data or by physically manipulating electronic devices.” I [started](#) the glitch art wikipedia page that exists today back in the later 2000’s as part of an independent study i was working on in college. that page has [changed](#) a lot since then (as wikipedia pages do). the only remnant of my original article is this opening line... today i totally disagree w/this definition && would like to offer an alternative: if a glitch is an unexpected moment in a system that calls attention to that system, **glitch art is anytime an artist intentionally leverages that moment, by either recontextualizing or provoking glitches.**

by recontextualize i mean folks who take glitches they’ve captured in the wild && then framed/posted (domesticated?) for others to consider, for example the [Art of Google Books](#) by Krissy Wilson or the [Glitch Safari](#) groups initiated by [Antonio Roberts](#) && [Jeff Donaldson](#). by provoking i mean the act of deliberately instigating a glitch (for example [data bending](#) or [datamoshing](#)) as most self-identified glitch artists do.

the keyword in this definition is “intentionally”; glitch art is always done on purpose but the impetus behind it varies. in my original definition i said glitch art was the “aestheticization” of artifacts or bugs, but not all artists are motivated by the aesthetic potential of glitches ([though many are](#)). these days i myself am mostly interested in glitch’s political potential like this technologically irreverent [piece](#) by tokyo-based glitch artist [ucnv](#) or these [retail-poisoning](#) pieces by paris-based glitch artist [Benjamin Gaulon](#) (more on politix later). some artists are interested in glitch’s [psychedelic](#) potential, and others see glitch as a means to explore themes of [failure](#), [chance](#), [memory](#), [entropy](#), [nostalgia](#), to call attention to the growing [mediation](#) of our social relationships or as a lens through which to analyze [gender && identity](#).

glitch art != a medium

glitch art isn’t a medium so much as it is a way to approach media (an ethic, more on this in a bit). some glitch artists make [gifs](#), others make [videos](#), or [perform](#), others make [software](#), or [installations](#), or [prints](#) or [wall drawings](#) or [textiles](#) or [furniture](#), etc. the one thing all these glitch artists can agree on is the potential in recontextualizing/instigating that moment we call a glitch.

glitch art != an aesthetic

lots of folks are drawn to glitch by what’s generally referred to as the glitch aesthetic. there’s something very exciting about glitch [artifacts](#), the way a jpg “[bends](#)” the way pixels “[bleed](#)” “[bloom](#)” && “[mosh](#)” in temporally compressed videos, the way [zalgo-use](#) of super/subscript

characters spill outside their text-boxes. these are aesthetics that are very specific to our digital age && so there's something that feels very contemporary about them (&& thats xciting).

that said, we shouldn't confuse these glitch artifacts/aesthetics with glitch or even glitch art as a whole. glitches look/sound/feel the way they do today b/c of the technology we have today, but the technologies of the future (wearables? smart homes? self driving cars? delivery drones?) might look/sound/feel entirely different when they glitch + this may come w/an entirely different aesthetic. so the artifacts will change w/time but the glitch "ethic" remains the same.

glitch art == an ethic

"the mistake is nothing wrong, the computer keeps working. something wrong still works, there's nothing wrong with something wrong." jodi.org¹

I mean 'ethic' not in the traditional 'moral' sense, but in the general sense: as a set of principles for practice in accordance with some convention[s]. technology always comes w/ instructions && "best practices," there's a "right" way to use it + a "wrong" way. sometimes these instructed-uses are more like rules or even legal doctrine (in the case of terms && agreements). but glitch artists often start by rejecting all those in favor of experimentation, "what happens if i do this instead? what am i not supposed to do with this technology?" this is the glitch ethic; it's a way of working w/ technology that questions/challenges the expected / instructed-uses , **it's about consciously doing things the wrong way.** that's how u discover new ways to "glitch" as an artist, but also more generally new ways of using as a user, +thus new perspectives on the technologies && digital/network environments upon which we increasingly depend.

a question i often get is, "what kind of software do i need to make glitch art", to which i usually reply, "any piece of software, it's all about choosing the wrong tool for the job", this is the name of an assignment in [jon.satrom](http://jon.satrom.com)'s glitch class where students choose any piece of software && use it for something it wasn't intended to be used for (opening music files in photoshop, opening image files in audacity, using microsoft excel as realtime vj software, etc.). other times i'm asked, "if i use a 'glitch art' smart-phone app or a set of filters to produce a 'glitchy' image is that still glitch art?" >> though the images produced by these apps/filters might be indistinguishable from a glitch image produced via data bending (or some other mis-use of software) i'd argue that it's not glitch art. this doesn't mean these images aren't interesting or xciting, they've certainly got a glitch aesthetic + can be discussed as art... but there's no misuse, there's no wrong use, there's nothing unexpected about using a glitch-app to produce a glitchy-image +thus no glitch (as i defined it earlier). can a filter produce glitch aesthetics? yes. can these images be interesting? yes. can they be art? quite possibly. is it glitch art? no. but not every bleeding pixel needs to be a glitch.

¹ <http://motherboard.vice.com/read/jodi-something-wrong-is-nothing-wrong>

the politix in/of glitch

...this was the title of a panel i organized at the 2011 GLI.TC/H in Chicago, IL & a [talk i gave](#) at Vivid Gallery in Birmingham, UK that same year. i mentioned b4 that there's a whole host of themes explored by glitch artists. i myself am most motivated by the glitch's potential to bring to light the (often unrecognized) politix embedded in our technological systems. though most of my early videos were formal (structural/materialist in the experimental film sense), in 2009 i went to grad school in Chicago & working w/ advisors like [jonCates](#) + [Ben Chang](#), i released a hybrid essay/tutorial/video/artware project called the [Glitch Codec Tutorial](#), which prioritized the glitch art process as a way of experiencing the politics + true nature of the digital medium rather than as a means to an end. i've since lectured a great deal on the subject + co-curated a show entitled [Tactical Glitches](#) (w/ [Rosa Menkman](#)) in 2014 at Sudlab in Naples Italy + co-wrote [Sabotage! Glitch Politix Manifesto](#) (w/ [Curt Cloninger](#)).

"I'd like to think that computers are neutral, a tool like any other, a hammer that can build a house or smash a skull. But there is something in the system itself, in the formal logic of programs and data, that recreates the world in its own image. [...] We think we are creating the system for our own purposes. We believe we are making it in our own image. We call the microprocessor the 'brain'; we say the machine has 'memory.' But the computer is not really like us. It is a projection of a very slim part of ourselves [...] We place this small projection of ourselves all around us, and we make ourselves reliant on it. To keep information, buy gas, save money, write a letter—we can't live without it any longer. [...] We think we are creating the system, but the system is also creating us. We build the system, we live in its midst, and we are changed."

Ellen Ullman ²

technology is not neutral; any given technology's characteristics are not simply determined by its utilitarian agenda, they are also (consciously or not) symptomatic of their producer's worldview. Compare a .txt <vs> .pdf <vs> .doc <vs> .wwf file formats. from a utilitarian perspective these formats are very similar. ultimately they're all ways of storing text documents on ur computer. a .txt file is an open format (which means it can be used/implemented by any app) which is why u usually never have any issues opening .txt files. a .pdf is also an open format but w/more features +thus arguably better? from a cultural perspective some of these xtra features make it worse. for example: a .pdf can be made to prevent the user from copying text out from it. to someone who believes information is most valuable when it can be copied + shared + built upon, this xtra "feature" poses a political threat. the .doc format (unlike .txt & .pdf) is not an open format, which means only authorized applications can open/edit these files, it reinforces Microsoft's hegemonic view on computing. a .wwf file format is almost identical to the .pdf format w/one tiny difference: it can not be printed. it was produced by the World Wide Fund for Nature Germany, for the purpose of discouraging unnecessary printing of files & thus

² Ullman, Ellen. Close to the Machine: Technophilia and Its Discontents. Macmillan. 1997.

conserving paper. ultimately all these formats serve the same purpose, but their details reveal a lot about the worldviews of their creators. when we use these formats, we subscribe to these politix (consciously or not). this is not only true of file formats but of all technologies + as more+more of our world becomes digital it's wise to view these technologies less as tools && more as environments.

*"All media work us over completely. They are so persuasive in their personal, political, economic, aesthetic, psychological, moral, ethical, and social consequences that they leave no part of us untouched, unaffected, unaltered. The medium is the message. **Any understanding of social and cultural change is impossible without a knowledge of the way media work as environments.**"*

Marshall McLuhan ³

it doesn't much matter what u post on twitter. the app as a service is a huge environment, && that is the medium. && the environment affects everybody, what u post on twitter affects very few. && the same w/facebook && any other app, what u post is nothing compared to the effect of the social media post, social media sets up a paradigm, a structure of awareness, which affects everybody in very very drastic ways && it doesn't very much matter what u post as long as u go on w/that form of activity. && so to return to Ullman, we build the system[s] (pregnant w/the bias of their creators) we live in it's midst && we are changed >> && this cycle (more/less) goes unchecked. viewed this way a digital literacy isn't a privilege, it's a prerequisite for agency in the digital age.

"We believe that technology is at its very best when it is invisible, when you are conscious only of what you are doing, not the device you are doing it with [...] iPad is the perfect expression of that idea, it's just this magical pane of glass that can become anything you want it to be.[...] It's a more personal experience with technology than people have ever had."

Apple Inc ([iPad Trailer](#)) ⁴

While i can appreciate Apple's part in the computer's evolution from a device which required a dual degree in engineering + mathematics to an easy-enough tool that has empowered the masses, the sentiment expressed in this iPad commercial (&& nearly all their products today) is a step in the opposite direction. Alan Kay && Adele Goldberg (who's work "inspired" Apple's original Macintosh a great deal) described computers this way (long b4 anyone thought they'd ever be "personal" machines) >> as a kind of meta-medium, "whose content would be a wide range of already-existing and not-yet-invented media." && today a computer can most definitely "become anything you want it to be"... the iPad however, in all it's "magical" glory doesn't allow for this. it's an opaque system, it's code is proprietary && closed, it's case is shut w/non-standard screws to discourage tinkering + the terms && conditions do the same. even developers are met w/ financial + political hurdles: u've got to pay for the right to develop apps

³ McLuhan, Marshall. The Medium is the Message: An Inventory of Effects. Gingko Press. 1967.

⁴ <https://www.youtube.com/watch?v=RQieoqCLWDo>

that not only generate revenue for Apple (they get a cut of every sale) but give users a reason to buy the device in the first place. often apps are rejected by the gatekeepers, dismissed +/- or censored. clearly, this cannot “become anything you want it to be”.

now let's return/recap glitch >> a glitch is this (unexpected) moment in a system that catches us off-guard && when it does that, it (more often than not) reveals aspects of that system which might otherwise go unnoticed (while the system attempts to remain “invisible”). b/c glitch art is fundamentally about using technology in ways they weren't intended, it's not uncommon for glitch artists to be met w/all kinds of obstacles (in the form of “error” messages or “updates” that render a glitchy-exploit obsolete) which, regardless of the artist's intention, forces them to either accept the tech's embedded ideology or actively rail against it.

“An iPhone is not technology, it's packaging and conventions. [...] Your software choices are like any addiction or religion, they want your loyalty and they want your money and they want you to think like them. [...] it's culture politics masquerading as technology.”

Ted Nelson ⁵

the practice of everyday glitch

last year i gave a talk at the MediaLive festival in Boulder, CO entitled [how && why u should corrupt ur files](#) which framed glitch art less as a Fine Art practice && more as a digital folk practice: i went over all the “classic” data bending techniques as digital literacy exercises rather than as a means of producing glitch art objects. again: digital literacy is a prerequisite for agency in networked culture. there are many different paths towards digital literacy, one path (which i fully endorse/advocate) is learning to program, another is glitch art: not as a means to an end, but as an everyday process/exercise. i gave a remix/d version of that talk/tutorial (as: the practice of everyday glitch) after hours at SAIC (one of the schools i teach at) in preparation for a talk i was invited to give at [refrag:glitch](#) at Parsons Paris.

the new title of that talk is a reference to the book, The Practice of Everyday Life by Michel de Certeau, “which examines the ways in which people individualise mass culture, altering things, from utilitarian objects to street plans to rituals, laws and language, in order to make them their own.” According to de Certeau, we do ourselves a disservice when we understand everyday folks as passive “consumers,” when in reality, de Certeau argues, as “users” we're always automatically re-contextualizing && subverting in everyday situations the strategic intentions of the institutional producers. we're like Charlie Chaplin who, “multiplies the possibilities of his cane: he does other things with the same thing and he goes beyond the limits that the determinants of the object set on its utilization.”

I appreciate de Certeau's perspective, a hopeful twist on resistance when it might otherwise seem futile... but it can be problematic to directly apply it to contemporary digital/networked life,

⁵ <https://www.youtube.com/watch?v=KdnGPQaICjk>

where institutions of power presuppose a “user” in their design. In his essay [Commodify Your Consumption: Tactical Surfing / Wakes of Resistance](#), Curt Cloninger explains:

“The agency that de Certeau’s consumer enacted to tactically reassemble the one-to-many media broadcasted to her in 1980 is being increasingly usurped by institutionally recommended (and protocologically enforced) modes of interactive behavior. Once the consumer mistakes these institutional ‘suggestions’ for the exercises of her own tactical agency, she fails to exercise that actual agency. With so many ‘customizable options’ available, how can she ‘resist?’ [...] The danger of MySpace and YouTube is not the threat that they may wind up archiving and owning all the ‘content’ I produce, or that they are currently getting rich off the content I produce, but that they control the parameters within which I produce ‘my original’ content.”⁶

Cloninger brings to light an issue beyond the familiar (&& important) conversations around user generated content and digital labor: user agency. How decentralized/distributed is our experience of the network when we “use” (consume/produce) it through a relatively few set of centralized/controlled apps (think Facebook). at the end of *The Work of Art in the Age of Mechanical Reproduction*, Walter Benjamin warns, “Fascism (think Facebook) attempts to organize the newly created proletarian masses without affecting the property structure which the masses strive to eliminate. Fascism sees its salvation in giving these masses not their right, but instead a chance to express themselves. The masses have a right to change property relations; Fascism seeks to give them an expression while preserving property.”

and so it would seem de Certeau’s tactical user has been co-opted (as the story goes). && yet i see another hopeful twist on resistance: what if we embrace mis-use (glitch art) as an everyday practice? let’s all take a few mins every morning, just after checking our social media && just b4 going through our email: open a few applications at random && mis-use them. do whatever it wasn’t designed to do. b/c glitch is all about doing things the wrong way i’d argue it’s an exception to Cloninger’s rule. disregard for a moment the “institutional suggestions” && “customizable options” of that particular app/platform && see if u can break it... not for the sake of breaking it, but for all the discoveries along the way (the informal digital literacy).

u can share/like/comment/post on Facebook, but what can’t u do? or what isn’t it designed to do? what aren’t u suppose to do? In an interview with [Creators Project](#), [Laimonas Zakas](#) (aka [Glitchr](#)) explained this line of thought behind his own Facebook-bending practice, “My initial idea was to explore how far I can go beyond the strict constraints of Facebook’s layout. It all started with combinations of unicode, but later I discovered that I could embed [the] site’s own graphical elements (chat boxes/search bars/captchas etc.) in the posts and this way distort the whole layout even more.” What would result was not only unexpected for Glitchr but for any of his friends who’s feeds would break when scrolling past one of his posts. often these posts would lead to realizations/conversations about these limitations. at one point (bax when the

⁶ Cloninger, Curt. *Commodify Your Consumption: Tactical Surfing / Wakes of Resistance*. 2009.

only form of media allowed on Facebook was text and static images) Glitchr found a way to post an animated gif to his wall, inciting a long discussion in the comments about the restriction && tactics for how to circumvent them.

eventually the gif was spotted by Facebook developers && the “glitch” was “fixed”, which seems to be the typical narrative of Glitchr’s exploits. at one point Facebook even offered Glitchr \$500 for every “bug” he “reports”. while i’m happy to say he’s passed them up on their offer, this brings up an important point. there may come a time when silicon valley (&& prevailing power structures) find a way of co-opting misuse as they did tactical use, but at the time of this coding they have not + so i implore u: make glitch art a practice in ur everyday life, not in the interest of becoming a “glitch artist” per se, rather in the interest of reclaiming some agency in ur digital space.

<3 ../n!ck

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<http://nickbriz.com/thoughtsonglitchart/>

URLs [in order of appearance]

<http://nickbriz.com/>

<http://nickbriz.com/glitchwebessay.html>

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<http://www.recyclism.com/>
<http://www.eai.org/title.htm?id=14351>
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<http://www.beflix.com/works/glitch.php>
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