Flaws in the flow: xerox, digital media and glitch

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The aesthetics of glitch have long shaped the intersections of media, art and literature, revealing the creative potential embedded in errors and malfunctions. My essay investigates glitch aesthetics through a comparative media lens, focusing on the experimental practices of copy art and electronic literature. By exploring how a selection of works harnesses technological breakdowns and information excess to produce new modes of expression, I argue that glitches transcend medium-specific boundaries, functioning as a cross-media category that destabilises traditional expectations of functionality and meaning-making. Through my analysis, I aim to uncover how glitch procedures not only subvert the tools of their creation but also interrogate broader cultural and technological paradigms.

Long before the emergence of digital media, xerox was regarded as a revolutionary medium that introduced profound technical and social changes in document reproduction and circulation. Promising ease, speed and affordability, the photocopier was idealised as a tool with transformative potential, though it ultimately fell short of expectations that would only be realised with the advent of the personal computer years later.

It is striking to note that, for instance, Marshall McLuhan considered this new process of copying revolutionary: "Xerography is electricity invading the world of typography, and it means a total revolution in this old sphere."[1] As Kate Eichhorn's research at the McLuhan Collection reveals, the prominent media scholar was deeply interested in how photocopies were impacting authors and readers, thereby transforming the structure of textual relations in a broad sense.[2] For McLuhan and others, as Eichhorn notes, the promises of this then-new technology served as an anticipation of technologies that would emerge further down the road:

> Xerography in the mid-twentieth century carried the **promise of all the advancements that would transform communication technologies** in the late twentieth century. It promised consumers the opportunity to reproduce texts and images quickly and inexpensively in a portable format, to make enlarged copies of data stored in compressed formats, and eventually to transmit texts and images across vast distances in a matter of minutes. Beyond revolutionizing printing by enabling one to photocopy anything on a wide range of surfaces in myriad contexts, then, xerography **anticipated the mobile, high-speed, real-time forms of communication** that would be taken for granted by the end of the century.[3] (my emphasis)

1 Marshall McLuhan, Jovanovich to Marshall McLuhan, July 2, 1969, Marshall McLuhan Collection, National Archives of Canada, Ottawa, Canada. [Reproduced in Kate Eichhorn, *Adjusted Margin: Xerography, Art, and Activism in the Late Twentieth Century*. London, England/Cambridge, Massachusetts: The MIT Press 2016.]

2 Kate Eichhorn, *Adjusted Margin: Xerography, Art, and Activism in the Late Twentieth Century*. London, England/Cambridge, Massachusetts: The MIT Press 2016, p. 39.

3 Kate Eichhorn, *Adjusted Margin: Xerography, Art, and Activism in the Late Twentieth Century*. London, England/Cambridge, Massachusetts: The MIT Press 2016, p. 18.

Curiously, in McLuhan's case, his point of reference was not any of the new technologies he famously anticipated. Instead, when writing about copiers, they were compared to the book form. In fact, the media theorist approached this new technology much like Perseus gazing at Medusa through a mirror. As McLuhan argued elsewhere, the best way to understand a new technology is not by looking at it directly but by observing it indirectly:

> I invite you to consider that perhaps the best way of estimating the impact of any new environmental technology is to notice what happens to the older technologies. (...) You have to perceive the consequences of the new environment on the old environment before you know what the new environment is.

I will follow McLuhan's invitation. In this essay, I conduct a comparative analysis of works created using photocopiers (copy art) and computers (electronic literature). While this approach might seem incompatible due to their distinct media affordances and the temporal separation of their contexts, my goal is not to adhere to a linear timeline or to focus on which came first, nor to explore whether there are influences or direct connections between them.[4] Instead, my aim is to create a space for critically understanding modes of inscription, mediation and meaning production through comparative media research. In doing so, I am guided by Michael Goddard's assertion that "both media inventions and creative social practices are nonlinear and (…) key developments often take place at the edges, far from the dominant paradigms of the mass media in any given era."[5]

In copy art, the expressive use of the copier expands textual media codes through intermedial interplay between inscriptional materials, creative processes and the resulting artefacts. These works often exhibit what has become known as glitch aesthetics, a concept popularised in new media arts and particularly in net art. For this analysis, in the following sections of my essay I examine glitch techniques as employed by international

4 A historical timeline might be useful for operative purposes, but it remains inherently artificial, nonetheless. On one hand, Christopher Strachey's *Love Letters* (1952) and Theo Lutz's *Stochastische Texte* (1959) – two seminal computer-generated literary works – were created using mainframe computers before photocopiers became accessible in the 1960s. On the other hand, the copy art works examined in this essay were produced either long after that period or concurrently with later developments in electronic literature. For an account of early works of electronic literature, see: Loss Pequeño Glazier, *Digital Poetics: The Making of E-Poetries*. Tuscaloosa: University of Alabama Press 2002; Chris Funkhouser, *Prehistoric Digital Poetry: An Archaeology of Forms, 1959–1995*. Tuscaloosa: University of Alabama Press 2007; Manuel Portela, *Scripting Reading Motions: The Codex and the Computer as Self-Reflexive Machines*. Cambridge: The MIT Press 2013.

5 Michael Goddard, *Guerrilla Networks: An Anarchaeology of 1970s Radical Media Ecologies*. Amsterdam: Amsterdam University Press 2018, p. 11.

artists working in the realms of copy art and electronic literature. Drawing on various theoretical contributions, I argue that glitch constitutes a cross-media category in its own right. As such, these diverse artistic practices cannot be fully understood through the lens of media-specificity unless the affordances of each medium are subjected to radical comparison.

Copy art and glitch

During the 1960s, as photocopiers gradually became common in offices and businesses, artists swiftly appropriated these machines to produce artworks. These artistic practices – known as copy art, electrography or xerography – were developed by visual artists, graphic designers and visual poets from the 1960s through the 1990s. For these creators, the copier's ultimate goal was replication rather than creation, and its "built-in restrictions (…) [were] part of their attraction and challenge."[6] By often engaging with the relationship between word and image, copy art broadens the reflection on the visuality of text and the topology of the printed page.

Copy art works utilise a variety of strategies and techniques tied to technological reproduction processes. In most instances, reproduction also becomes re-production. For example, when artists appropriate materials from mass culture, they do not simply duplicate the appropriated images and texts, instead transforming them into entirely new objects.

6 Kate Eichhorn, *Adjusted Margin: Xerography, Art, and Activism in the Late Twentieth Century*. London, England/Cambridge, Massachusetts: The MIT Press 2016, p. 46.

Figure 1. *ROTE BETE* (one-spread example)

This is exemplified in several of César Figueiredo's works, such as *ROTE BETE (Trip in Supermarket)*,[7] created with Jürgen O. Olbrich in December 1992 by placing consumer products directly from the supermarket onto the glass of the copier machine. In this work, the artists employed various strategies, including amplification and reduction, superposition, deformation and repetition. The successive photocopies obscure the original product packages and labels, making them unrecognisable at first glance – they are not perfect copies because they are not intended to be. Instead, they emphasise excess and flaws.

7 César Figueiredo and Jürgen O. Olbrich, *ROTE BETE (Trip in Supermarket)*. S.L. [Porto]: self-published, 1993. https://po-ex.net/taxonomia/materialidades/planograficas/jurgen-o-olbrich-cesar-figueiredo-rote-bete/

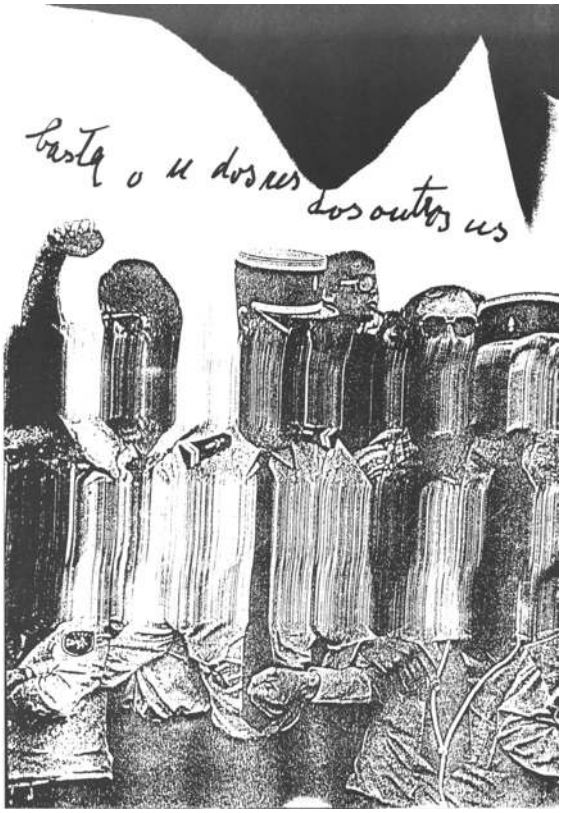


Figure 2. *Electrografia 2* (one-page example)

The 80 pages of *Electrografia 2*[8] (1990) by António Aragão are derived from only four photographs, each transformed through manipulation during the photocopying process. For instance, the image of a demonstration depicted in Figure 2 exhibits a glitched appearance caused by the motion of the paper on the copier's glass during copying. Adding to this effect, Aragão deliberately exploited the textured granularity characteristic of photocopies and incorporated verbal fragments written in cursive. These sentences merge with the images, embedding the aesthetic distortion of discourse through non-sense.[9] The words do not contribute to explaining the images, and the images are not

8 António Aragão, *Electrografia 1 (o elogio da loura de Ergasmo nu Atlânticu)*. Lisboa: Vala Comum, 1990. https://po-ex.net/taxonomia/materialidades/planograficas/antonio-aragao-electrografia-1/

9 The Portuguese sentence "basta o u dos us dos outros us" can be roughly translated as something like "we need only the u of us of the other us" or "enough with the th of the thes of other thes," which are two extremely bad translations that make no sense at all (still, that is the point I am trying to make here).

illustrations of the words. Yet, when combined, they both act as glitches in equal parts. This interplay results in the implosion of meaning, creating a process of recursive destruction that reinvents established rhetorical discourses.

In copy art, appropriation can be understood as operating on two interconnected levels: the creative process involves the appropriation of both the machine and the document. In this context, as demonstrated in the previous examples, the copies produced by artists consistently retain traces of the original documents, aligning with what cultural historian Hillel Schwartz referred to as "vanishing twins."[10] These works ultimately result in hybrid artefacts that foster a dialogue between past and new meanings.

Additionally, it is important to recognise that in copy art, the copier itself is appropriated for purposes beyond mere document reproduction. This act constitutes a situationist-like *détournement*, involving the defunctionalisation and subsequent refunctionalisation of the machine. As McKenzie Wark explains:

> *Détournement* attacks a kind of fetishism, where the products of collective human labor in the cultural realm can become a mere individual's property. (...) *Détournement* restores to the fragment the status of being a recognizable part of the process of the collective production of meaning in the present, through its recombination into a new meaningful ensemble.[11]

This "new meaningful ensemble" in copy art must be understood within its specific context. What is at stake is not only the creative appropriation of documents and machines but also an active subversion of the visual and textual materials that permeate our world. Copy art challenges these materials in their entirety while simultaneously subverting an instrument originally designed by the techno-industrial complex to enhance productivity in business and administration.

In this context, glitch is not employed solely for aesthetic purposes; it provides insight into the political economy of images and image-making technologies. As extensively discussed in glitch art scholarship,[12] glitches are not merely system bugs – they are

10 Hillel Schwartz, *The Culture of Copy: Striking Likenesses, Unreasonable Facsimiles*, 2nd ed. New York: Zone Books 2014.

11 McKenzie Wark, *The Beach Beneath the Street: The Everyday Life and Glorious Times of the Situationist International*. London / New York: Verso 2011, p. 40.

12 Iman Moradi et al., *Glitch: Designing Imperfection*. New York: Mark Batty Publisher 2009; Rosa Menkman, *The Glitch Moment(Um)*. Amsterdam: Institute of Network Cultures 2011; Mark Nunes, (ed.), *Error: Glitch, Noise, and Jam in New Media Cultures*. New York/London: Continuum 2011; Peter Krapp, *Noise Channels: Glitch and*

socially engaged gestures imbued with symbolic connotations. I propose that copy art works can be interpreted within this theoretical framework. These works often embrace unexpected errors and malfunctions during their creation, with the resulting effects frequently surprising the artists themselves. Ultimately, it is always up to the artists to decide whether to accept or reject the unforeseen outcomes.

If we connect the notion of glitch to Johanna Drucker's concept of "performative materiality", we can assert that copy art works are composed of performative gestures. These gestures involve both the artist and the machine: the artist's gestures are mediated by the machine, and the machine's gestures are mediated by the artist. In this framework, Drucker's "performative materiality" signifies not only that a work is created through dynamic, performative gestures that manipulate materials but also that these gestures become encoded within the material itself. Consequently, the artist's gestures are revealed anew in the very act of viewing the final work on paper. An object's characteristics stem from its medium's affordances, yet they are only fully realised when activated by the reader or interpreter. As Drucker explains: "Performative approaches are modeled on a probabilistic premise that suggests an object is produced as an effect of a dynamic relation between provocation of the object's characteristics and an interpretative process."[13]

In a similar vein, and returning to glitches, Tomáš Jirsa argues that "formal disturbances are grounded in the affective operations that rewrite form."[14] As Jirsa further notes, there is a "two-way movement of affects (…) in their performative mediality produced by and within texts, images, and sounds."[15] Within this framework, "as the performative force of affects needs to be thought relationally, the aesthetic forms and cultural objects should be considered intermedially."[16] This perspective suggests that glitches, through their intermedial and affective dynamics, challenge traditional boundaries and, thus, invite new interpretations of form and meaning.

In digital culture, glitch strategies typically involve distortion, misalignment and techniques like databending and datamoshing. These digital glitch practices highlight a

Error in Digital Culture. Minneapolis: Minnesota University Press 2011; Carolyn L. Kane, *High-Tech Trash: Glitch, Noise, and Aesthetic Failure*. Oakland, California: University of California Press 2019.

13 Johanna Drucker, "Performative Materiality and Theoretical Approaches to Interface", *Digital Humanities Quarterly* 7, no. 1 (2013): para. 4, http://www.digitalhumanities.org/dhq/vol/7/1/000143/000143.html

14 Tomáš Jirsa, *Disformations: Affects, Media, Literature*. New York: Bloomsbury Academic 2021, p. 10.

15 *ibidem,* p. 15.

16 *ibidem.*

fundamental fact: digital files are all composed of text. Since digital formats are code-based, they are inherently text-based. A digital image, sound or video file is ultimately a text. In contrast, xerox manipulations focus on processing images, meaning that a photocopied text is merely an image of text. This rationale can even extend to copied objects or "situations" (see Figures 3 and 4). Thinking about copy art *intermedially* in this way requires further clarification to emphasise that the medium's self-reflexivity does not necessarily equate to media-specificity.

Following this trajectory, it is essential to recognise that copy art is not limited to print-based works. Many artists have creatively expanded the use of photocopies, producing works across diverse media, including video, sound and performance. A few brief examples help illustrate this more clearly.

Figures 3 and 4. *Photo Copy Rock'n'Roll*

Figure 5. *Xerophonie*

Figures 6 and 7. *Die Kopierte Galerie*. Photos: Jürgen Schwarz

Back in 1984, Jürgen O. Olbrich loved to dance with copy machines. *Photo Copy Rock'n'Roll*[17] is both a performance and an object: the artist performed live atop a copier, photocopying his feet as he danced. The result is a reproduced object that is inseparably linked to the process that created it.

In 1985, Karl-Hermann Möller, fascinated by the sound and visual impact of copy machines, created *Xerophonie*.[18] This artwork consists of a booklet, a VHS tape and an audio cassette. The booklet contains photocopies, while the VHS tape documents the act of photocopying these contents and the audio cassette captures the sounds.

Two years later, in 1987, Franz John created *Die Kopierte Galerie / The Copied Gallery*.[19] The work exhibited in Galerie Paranorm was a 1:1 scale reproduction of the empty gallery itself. The artist photocopied every element of the space – walls, windows, doors – using a portable thermographic copier. He then meticulously glued the copies onto the exact locations they represented. This project took four weeks to complete, and the artist described it as both an installation and a performance.

These three examples demonstrate how some artists employed the copier to create works that transcend the illusion of mere copying, embodying a purposeful glitch in itself. Copy art is not limited to the printed sheet that comes out of the copier's tray; instead, the copier can be understood as a medium in its own right. In this context, it functions not only as a tool for reproduction but also as a distinct creative medium. Artist Sonia Landy Sheridan contributed to this perspective by describing copiers as "generative systems."[20] For Sheridan, the copy machine operates as an integrated system for producing generative content. This concept clearly links the copier to historical generative forms of art and literature and, more recently, to generative artificial intelligence. In this context, copy art fosters intersections between the human agent and the machine, emphasising the entanglement between the creative process and the resulting artefact. The result is often a glitch of both the human and the machine.

17 Jürgen O. Olbrich, *Photo Copy Rock'n'Roll*. Kassel 1984.

18 Karl-Hermann Möller, *Xerophonie. Ein Stück für Bild- und Ton-Reproduktionsmaschinen*. Kassel: KHM, 1985–1990. https://makroscope.eu/xerophonie/

19 Franz John, *Die Kopierte Galerie / The Copied Gallery*. Berlin: Galerie Paranorm, 1987. https://f-john.de/en/projects/a-gallery-exhibits-itself/

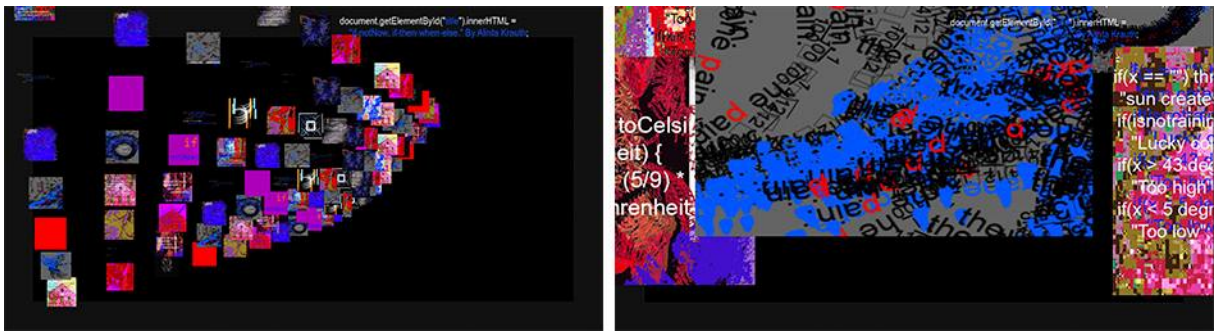
20 Sonia Landy Sheridan, "Generative Systems versus Copy Art: A Clarification of Terms and Ideas", *Leonardo* 16, no. 2 (1983), pp. 103–108.

Electronic literature and glitch

Glitch aesthetics is often linked to techniques such as misalignment, datamoshing, circuit-bending and other methods of aestheticising failure. Glitch art usually takes the form of images, videos, sounds or computer-based works. For example, consider the technique of rewriting or deleting small portions of an image's source code, or the process of creating distortion by opening a text file with a sound editor or a video file with image-editing software, and so on and so forth.

Although copy art and electronic literature employ different media, they share certain affinities at a medial level and connect even more intriguingly when it comes to glitch aesthetics. I have already examined examples of copy art that demonstrate how it incorporates glitch as a fundamental feature. In what follows, I aim to support my argument with examples of glitches in electronic literature and related forms, such as Twitter bots.

Several well-known works of electronic literature explore user expectations and the challenges of reading or interacting with digital objects initially intended to be readable. However, this does not necessarily mean they embody glitch aesthetics. For a work to be identified as a manifestation of glitch, it must deliberately provoke a radical overload of its contents and a disruption of its structural coherence.



Figures 8 and 9. *if-notNow, if-then-when-else* (Screenshots)

At a glance, it is clear that digital artist and poet Alinta Krauth was aligning herself with glitch art communities when she created *if-notNow, if-then-when-else*[21] (2015) (Figures 8 and 9). This work addresses climate change as disruption, employing a fragmented interface composed of numerous small movable squares. Within these squares, pro-

21 http://www.alintakrauth.com/ifthen/

gramming code is interwoven with natural language, accompanied by flashing colours and continuously shifting forms. Navigation is intentionally the opposite of user-friendly. Similarly, synthesised voices, sound noise and repetitive overloads amplify the disorienting experience. The glitch engages the eye and ear even before the brain has time to process it. In this sense, glitches manifest through distortion, noise and the disruption of our perceptual channels.

With this in mind, we can draw on Andersen and Pold's concept of a "metainterface",[22] which captures user behaviour, or refer to what Marques has termed a "haptic Inter[(SUR)Face]",[23] an interface that engages the senses through different surfaces of mediated bodies. Glitch gains its power within this perceptive labyrinth, serving as a potent counterbalance to the prevailing ideology of frictionless, user-friendly interfaces, which prioritise utility and seamless interaction. As Jakko Kemper explains:

> Frictionlessness shapes a strange perceptual situation where the reduction of notable friction in user experience is glorified (technology should be convenient and on-demand, host entirely noiseless communication and operate without delays), but where the way in which this is achieved is by expanding *and* obscuring vast systems of material extraction, exploited labor and environmental destruction.[24]

Once again, glitch derives its strength from the perceptive labyrinth, creating small windows that allow us to glimpse imperfections, misunderstandings and flaws. As the GLI.TC/H collective (Nick Briz, Rosa Menkman and Jon Satrom) aptly describes, "[a] glitch is an unexpected, non- or mis-understood break in a technological flow that for a moment reveals (gives a window into) its system."[25] In this way, glitches shift our attention from the artefact and its aesthetic qualities to the underlying processes and methodologies.

Furthermore, glitch aesthetics challenge not only the medium itself but also the broader social context that intertwines media, people and politics. While glitch works alone may not directly bring about social change, they can play a significant role in rais-

22 Christian Ulrik Andersen and Søren Pold, *The Metainterface: The Art of Platforms, Cities, and Clouds*. London, England/Cambridge, Massachusetts: The MIT Press 2018.

23 Diogo Marques, "Reading Digits: Haptic Reading Processes in the Experience of Digital Literary Works" (PhD dissertation in Materialities of Literature, University of Coimbra, 2018), http://hdl.handle.net/10316/81171

24 Jakko Kemper, "The Environment and Frictionless Technology", *Media Theory* 6, no. 2 (2022), p. 62.

25 GLI.TC/H collective (Nick Briz, Rosa Menkman, and Jon Satrom), "GLI.TC/H – the F.A.Q. Page", GLI.TC/H Website, 2012. https://gli.tc/h/faq/

ing awareness of the material conditions that shape our lives and experiences. In this sense, we can echo Ted Gournelos, who states: “Exploiting error and noise (…) is not about challenging the Dominant itself as much as it is about challenging the symbols and codes by which the Dominant retains control.”[26]

This is exactly what occurs in several works and series by the Jim Punk collective, whose members, for a time, flooded Twitter (now X) with content under the handle @crashtxt (Figure 10). Similarly, bots like @ClearCongress and @GlitchLogos polluted social media with glitch aesthetics by spamming Twitter with messages from the United States Congress that featured erased sections (Figure 11) and distorted brands and logos (Figure 12).

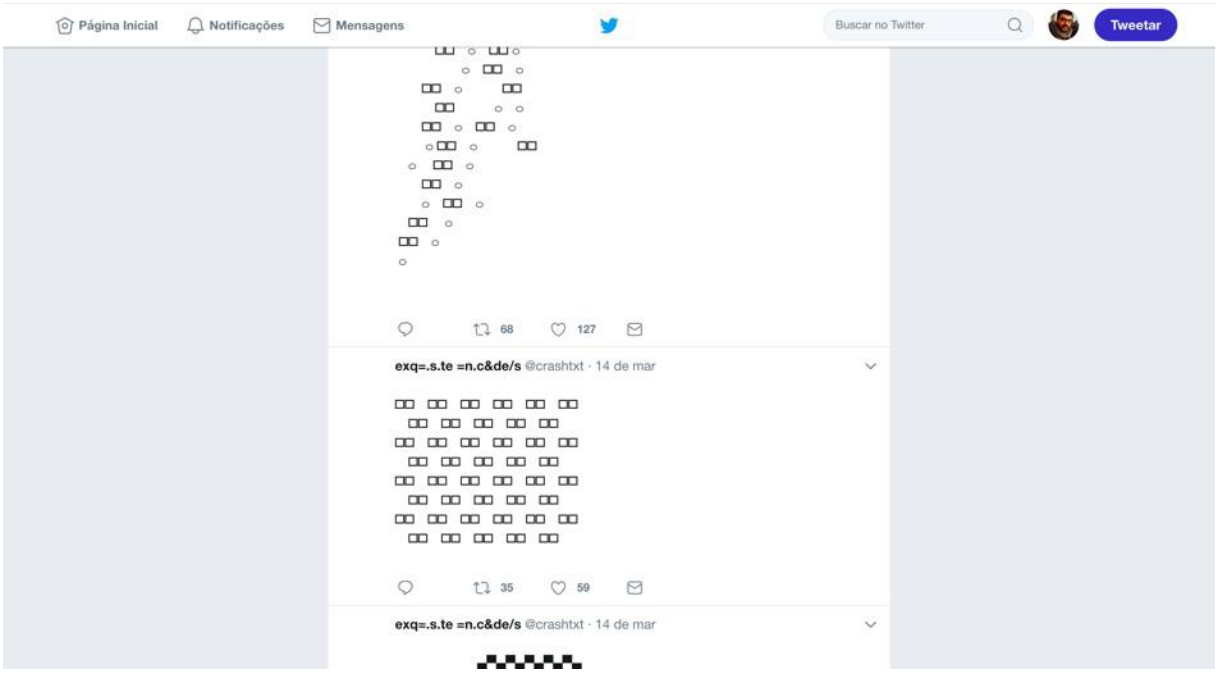


Figure 10. @crashtxt (Screenshot 2017)

26 Ted Gournelos, “Disrupting the Public Sphere: Mediated Noise and Oppositional Politics”, in: *Error: Glitch, Noise, and Jam in New Media Cultures*, Mark Nunes (ed.), New York/London: Continuum 2011, p. 166.

Figure 11. @ClearCongress (Screenshot 2017)

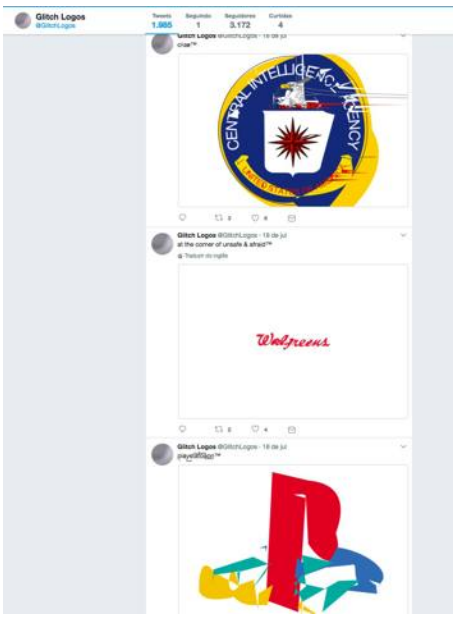


Figure 12. @GlitchLogos (Screenshot 2017)

Examining bots like these, some researchers and creators have argued that they are overtly political.[27] One might assert that most are political at least in the sense that they engage with social media platforms to disrupt them. However, as is often the case with platform-specific art forms, this battle is destined to fail from the outset. To clarify, in February 2023, Twitter revoked free access to its API, rendering obsolete many bots that did not produce what Elon Musk then described as "good content" according to his own personal criteria.

While Twitter bots are often explored in electronic literature scholarship, they are not considered the most canonical digital literary form within the genre. Key historical traditions of electronic literature include animated and kinetic poetry, hypertext fiction and generative or combinatorial works, among various other sub-genres.[28] This indicates that the most recognised forms of electronic literature predominantly rely on "cerebral" approaches to meaning construction. Consequently, they often exclude the possibilities of messy excess and information overload, which are defining features of our current algorithm-driven culture and interface-centric society.[29]

We could then ask: Where is the visual noise and sound pollution in electronic literature? Is there room for error and malfunction? Is there space for an "assault on the interface"?

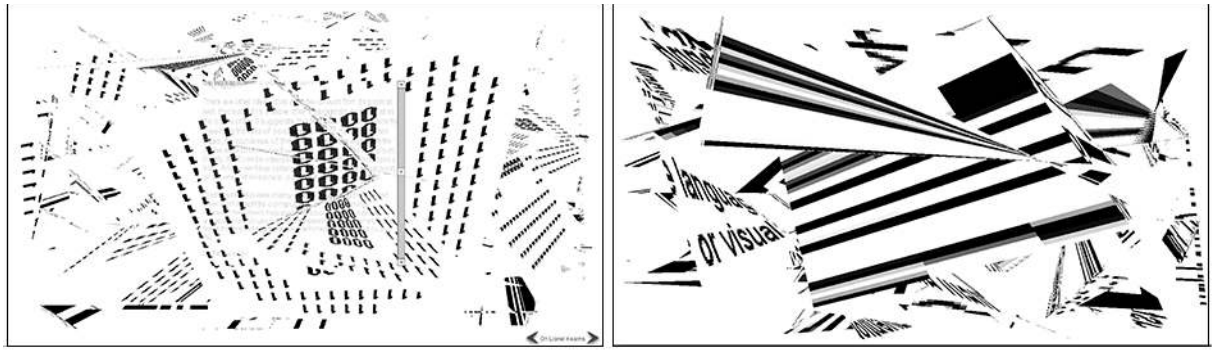
The expression above is a quote from Lionel Kearns, a Canadian visual poet who, in 1969, published a book with the long and exciting title *By the Light of the Silvery McLune: Media Parables, Poems, Signs, Gestures, and Other Assaults on the Interface*. Beyond its creative nod to McLuhan, the title, for me, also resonates with what Stewart Home would later describe as an "assault on culture",[30] referring to the actions of utopian artists and writers challenging mass culture and its exploitative mediations.

27 See for instance Leonard Richardson's text "Bots Should Punch Up" (*Crummy*, 27 November 2013, https://www.crummy.com/2013/11/27/0) and Mark Sample's "Call for Bots of Conviction" (*Medium*, 2014, https://medium.com/@samplereality/a-protest-bot-is-a-bot-so-specific-you-cant-mistake-it-for-bullshit-90fe10b7fbaa). For a short introduction and extensive reviews of different Twitter bots, check this index page written by Leonardo Flores in 2013: https://web.archive.org/web/20240222120419/http://iloveepoetry.org/?p=5427

28 See Scott Rettberg's *Electronic Literature* (Polity, 2019) for a survey of the traditional genres of electronic literature, including chapters dedicated to combinatory poetics, hypertext fiction, interactive fiction and other gamelike forms, kinetic and interactive poetry, and network writing.

29 It is worth checking ELMCIP for a virtual collection curated by Gonzo Gaard with "77 hackable works of elit," some of which akin to glitch aesthetics: https://elmcip.net/research-collection/qmvyz2vu

30 Stewart Home, *The Assault on Culture: Utopian Currents from Lettrisme to Class War*, 2nd edition. Edinburgh: AK Press 1991.



Figures 13 and 14. On Lionel Kearns (Screenshots)

Jim Andrews' digital poem *On Lionel Kearns*[31] (2004) establishes a connection between visual poetry and electronic literature by using some of Kearns's historical works as the foundation for glitch-based experiments. To create this piece, Andrews appropriated Kearns's visual poems, constructing glitch screens with interactive animation and deformation through repetition and juxtaposition. Interaction in this context means that the user influences what occurs on the screen, but paradoxically, they lack full control over the experience. For instance, deformations occur when the user moves the mouse and clicks on the screen, but these distortions continue reproducing themselves autonomously, leaving the user lost in the interface. This glitch is not incidental – it is an integral part of the experience.

Figures 15 ad 16. degenerative (Screenshots by the artist 2005)

31 https://vispo.com/kearns/indexenglish.htm

Eugenio Tisselli's work *degenerative*[32] (2005) began as a straightforward text (Figure 15) that gradually became unreadable, as its web page was programmed to delete one character with each visitor's access. The author documented the various stages of this degeneration. Initially, the page displayed the sentence, "your visit will leave a permanent mark." After day 1, it read, "your _sit wil leave a pe*manet ma-k," and by day 8, "yor t*wl**eave a _e mane*ma__ *." Beyond this point, tracking the sentence's remnants became nearly impossible (see day 13 in Figure 16). According to Tisselli, after four months, the page had transformed into a blank interface. Davin Heckman and James O'Sullivan described it as a "Schrödinger's Cat interface",[33] noting that "the reader does not control, but nevertheless is implicated in the singularity of the work as a series of events that belong, if they exist at all, in memory".[34]

As of today, clicking the link "read more" at the bottom of the index page leads to a defaced page titled "Hacked By Nero Hacker!" In hacker culture, defacement is a common method of intrusion, involving the replacement of the original page's content. This act leaves a mark, akin to a "tag" in graffiti culture. In this case, the defacement is particularly intriguing because it resonates with the work's central concept of deformation. Tisselli is probably aware of this defacement and didn't seem to bother with it. Again, here too, I would say that this is an integral part of the experience.

Figure 17. *11 Ways to Escape the Symbolic Regime* (Screenshot)

32 http://motorhueso.net/degenerative/ (also available in Spanish: http://www.motorhueso.net/degenerativa/).

33 Davin Heckman and James O'Sullivan, "'your visit will leave a permanent mark': Poetics in the Post-Digital Economy", in: *The Bloomsbury Handbook of Electronic Literature*, Joseph Tabbi (ed.), London, England/New York: Bloomsbury Academic 2018, p. 106.

34 *ibidem*., p. 107.

Among the works of Andreas Maria Jacobs, *11 Ways to Escape the Symbolic Regime*[35] (2013) stands out for its chaotic interfaces, teeming with hyperlinks and low-resolution images interspersed with unreadable text. These words are illegible not only because they are tangled with other words and pictures but also because they are presented in multiple languages. The fact that its interface can be described as radical nonsense is, perhaps, one of the work's most significant and thought-provoking aspects.

Navigating through a labyrinth of hyperlinked pages and scrolling from top to bottom on each one, we experience a sensory overload. This excess of stimuli opens the door to nonsense. From personal experience, we know that having too much information can feel like having no information at all. To some extent, this mirrors the experience of doomscrolling on social media. Such endless, mindless scrolling is characterised by both boredom and addiction. It also reflects what has been termed "digital lethargy", defined by Tung-Hui Hu as "a recalcitrant set of feelings here—of being passive, or wanting to disassociate and be anyone but yourself, or avoiding decisions."[36]

However, taking a more radical perspective, Hu argues that "digital lethargy" also reflects a deeper alienation, manifesting as "exhaustion, disappointment, and listlessness experienced under digital capitalism." This perspective aligns with the curators of the exhibition *Chercher le texte*, who highlighted the potential of *11 Ways to Escape the Symbolic Regime* to "emphasize the eroding effects the internet has on the literacy of the 'general audience'."[37] All these glitches disrupt the automatisms that underpin our assumptions of transparency in mediated everyday life. This disruption – again – is an integral part of the experience.

It is notable, yet not surprising, that modern browsers such as Firefox immediately display an error message when attempting to access Jacobs' work. The message warns, "Warning: Potential Security Risk Ahead", presenting two options: "Go Back (Recommended)" or "Accept the Risk and Continue". While access is not outright denied, the implication is clear – it is risky to proceed. In the context of glitch, however, one must embrace uncertainty, take the leap of faith, accept the risk and choose to continue.

35 https://www.nictoglobe.com/11waystoescapethesymbolicfield/

36 Tung-Hui Hu, *Digital Lethargy: Dispatches from an Age of Disconnection*. London, England/Cambridge, Massachusetts: The MIT Press 2022, vii.

37 This work was presented in 2013 at the Bibliothèque Nationale de France in Paris, during the Electronic Literature Conference – *Cherchez le texte*. Archived here: https://web.archive.org/web/20150908045801/http://gallery.dddl.eu/en/gallery/11_ways_to_escape_the_symbolic_field/. Record also available in ELMCIP: https://elmcip.net/creative-work/11-ways-escape-symbolic-field.

Final remarks (or glitching it all)

We know from experience that successive copies of a document gradually lead to its disappearance. As Lev Manovich has observed, there is a prevalent myth suggesting that "in contrast to analog media where each copy loses quality, digital media can be copied endlessly without degradation".[38] Scholars such as Manovich have demonstrated that this is not entirely accurate, as compression is not an "aberration" but rather "the very foundation of computer culture".[39] Thus, whether analogue or digital, glitch works – like those analysed here – reveal that media inherently entails failure, because achieving a truly noiseless channel of communication is ultimately impossible.[40]

However, glitches are not always caused by technical malfunctions. According to Rosa Menkman, a glitch is "a (actual and/or simulated) break from an expected or conventional flow of information or meaning within (digital) communication systems that results in a perceived accident or error". Thus, as the artist-theoretician explains, "a glitch occurs on the occasion where there is an absence of (expected) functionality, whether understood in a technical or social sense".[41]

The "social sense" is crucial here, as it highlights the politics of glitch. As stated, "[i]n its 'failure to communicate,' error signals a path of escape from the predictable confines of informatic control: an opening, a virtuality, a *poiesis*".[42] Glitches possess symbolic power that transcends media regimes, guiding us toward what Ellen Rutten and Ruby de Vos have recently termed "the imperfect turn".[43] While another "turn" in academic discourse might make us feel a little dizzy, it provides a useful framework for encompassing a wide range of creative works and scholarship – from the pioneering net art of Olia Lialina and the glitch art of Ant Scott (Beflix) to the glitch feminism of Legacy Russell[44] and the post-digital glitch poetics described, for instance, by Nathan

38 Lev Manovich, *The Language of New Media*. London, England/Cambridge, Massachusetts: The MIT Press 2001, p. 54.

39 *ibidem*, p. 55.

40 Rosa Menkman, *The Glitch Moment(Um)*. Amsterdam: Institute of Network Cultures 2011, p. 65.

41 *ibidem*, p. 9.

42 Mark Nunes, *Error: Glitch, Noise, and Jam in New Media Cultures*. London/New York: Continuum 2011, p. 3.

43 Ellen Rutten and Ruby de Vos, "Trash, Dirt, Glitch: The Imperfect Turn", *European Journal of Cultural Studies* 26, no. 1 (2023), pp. 3–13, https://doi.org/10.1177/13675494231152371.

44 Legacy Russell, *Glitch Feminism: A Manifesto*. London/New York: Verso 2020.

Allen Jones.[45] As I see it, the "imperfect turn" also embraces the works I have explored in this imperfect essay.

The works I analysed merely scratch the surface – or perhaps, more aptly, the interface. From my perspective, what they truly promote is an interference with the interface. This interference operates on a virtual level, as the scratch impacts only the surface, leaving the deeper mechanisms of technological and social systems untouched. For instance, programming code does not tolerate malfunction or error; when something goes wrong, it must be debugged. In contrast, the interface permits accidents, the unforeseen and the unexpected. Thus, we can conclude that this interference occurs exclusively at the interface level, yet it suggests that "interface interference" is precisely the condition under which a glitch becomes political.

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