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This article reflects on the oddities of recent artificial intelligence (AI) tools available on the internet, with the aim of creating an internet artwork titled AIDOJ (2023). It examines the biases stemming from the intrinsic elements of these tools — namely statistical principles and the interpretation of pre-existing data — as well as their large-scale nature. These factors tend to make the tools aesthetically conservative (Martín Prada, 2024), promoting "average" versions of the language (Weatherby, 2023) and reinforcing conventional and hegemonic norms. Believing that the field of art serves as a powerful space for critically reflecting on the implications of technology, we begin by encountering the term "disruptive" — a term whose modern usage denotes a contained and "marketable" form of rebellion. This inadvertently defines one of the most transgressive movements in the history of internet art: the European duo JODI — formed by Joan Heemskerk and Dirk Paesmans. We then prompted one of the most popular AI systems to generate creative outputs as chaotic and subversive as JODI's work. Through this process, the compilation of a hundred generated outputs represented as HTML pages — forms an internet artwork. The work materialises, and as a result, AIDOJ raises critical questions about artistic creation with AI systems, exposing the aesthetic timidity of these technologies.

Keywords: artificial intelligence, creative processes, web art, net art, internet art

De JODI a AIDOJ: "Disrupção" da Arte da Internet por Inteligência Artificial

Este artigo tece reflexões em torno de idiossincrasias das ferramentas recentes de inteligência artificial (IA) disponíveis na internet com o objetivo de criar uma obra de arte para a internet chamada AIDOJ (2023). Consideram-se os vieses decorrentes dos elementos intrínsecos destas ferramentas — os princípios estatísticos e a leitura de dados preexistentes — bem como o caráter massivo envolvido. Assim, estas ferramentas tenderiam a ser esteticamente conservadoras (Martín Prada, 2024) e a promoverem versões "medianas" de linguagem (Weatherby, 2023) reforçando o que é convencional e hegemônico. Daí, acreditando que o campo da arte é um espaço potente para refletir de forma crítica sobre implicações da tecnologia, em primeiro lugar, nos deparamos com o termo "disruptivo" cujo sentido atual denota uma rebeldia contida e "vendável" —, desavisadamente definindo um dos percursos mais transgressores da história da arte da internet, o duo europeu JODI — composto por Joan Heemskerk e Dirk Paesmans; em sequida, instigamos um dos mais populares sistemas de IA para que gere outputs criativos tão caóticos e subversivos quanto JODI. Neste processo, a reunião de uma centena de outputs gerados — neste caso, páginas criadas em HTML compõe um trabalho de arte para a internet. Então, a obra é realizada e enquanto resultado reflexivo. AIDOJ traz questões acerca da criação artística com sistemas de IA, revelando criticamente a pusilanimidade estética destes sistemas.

Palavras-chave: inteligência artificial, processos de criação, web arte, net art, internet art

Introduction

At present, advances in artificial intelligence (AI) have garnered significant attention in the field of digital art, particularly due to the widespread availability of online tools that enable anyone to instantly generate images, texts, music, and other creative works without requiring any specialised technical or artistic knowledge. In its current usage, AI refers to a range of capabilities demonstrated by machines when performing complex tasks with a degree of autonomy¹. Historically, artists have frequently employed digital systems with such characteristics across various forms and languages of creation, indicating that the intersection between AI and art is far from new. However, the change in scale brought about by the current AI tools available on the internet is undoubtedly new to the field of creation, providing a highly fertile ground for reflection and, naturally, for artistic works that engage with this evolving situation.

Over the years, the use of AI in artistic creation has been a recurring theme in

¹Artificial intelligence is also a field of study within computer science. One of its historical milestones was the 1956 meeting organised by John McCarthy at Dartmouth College in New Hampshire, United States. It brought together several scientists interested in automata, neural networks, and the study of intelligence, focusing on how human intelligence could be translated into a form that machines could simulate.

experimental digital art practices. We often see proposals based on statistical analyses of creative works, where the artist inputs a large volume of poetic material — such as images, texts, or music — into an AI system. By analysing the patterns, the system is then able to "create" something new. This analysis is typically limited to specific authors, genres, or periods. For instance, AARON, a programme created by artist Harold Cohen in 1973, generated images as an extension of the artist's own creativity. In the 1980s, musician David Cope developed the EMI (Experiments in Musical Intelligence) programme, which can compose music by drawing on patterns from the works of Bach, Chopin, Rachmaninov, and Stravinsky. In 2016, the project The Next Rembrandt (Figure 1), by ING and Microsoft, aimed to generate a new painting by the famous 17th-century artist, using his previous creations as a reference. That same year saw the release of the film *Sunspring*, whose script was written by an AI system developed by Oscar Sharp and Ross Goodwin, drawing on pre-existing science fiction film scripts. Close to this is *Portrait of Edmond Belamy* (Figure 2), produced in 2018 by the Obvious collective based on 15,000 classical portraits painted between the 14th and 20th centuries.



Figure 1: The final outcome of The Next Rembrandt project (2018) by ING and Microsoft

Source. From The Next Rembrandt by ING Group, 2021, Wikimedia Commons(ht tps://commons.wikimedia.org/wiki/File:The_Next_Rembrandt_1.jpg). CC BY 2.0.



Figure 2: Portrait of Edmond Belamy (2018) by the Obvious Collective Source. From Edmond de Belamy by Artificial intelligence software, 2018, Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Edmond_de_ Belamy.png). Public domain.

A new scenario emerges with AI tools available on the internet, such as StyleGAN (2018), DALL-E (2021), Midjourney (2022), and Stable Diffusion (2022). These systems share a common premise: they enable any user to obtain images based on text descriptions provided. Also noteworthy is the well-known ChatGPT², launched by OpenAI in 2022. Unlike the experimental approaches taken by

²ChatGPT: the name combines "chat" — reflecting its functionality as a chatbot — and "GPT", which stands for *generative pre-trained transformer*. It is a language model (also referred to as such) capable of processing natural language (languages developed by humans in a "natural" manner, including writing and speech) through artificial intelligence, enabling human-like conversations with the bot (Nunes, 2023). Access is available via the website: https://chat.openai.com/.

artists, these corporate-generated systems are broadly designed, drawing on the vast amount of data available on the internet. They can be accessed by anyone through simple interactions, producing creative outputs in abundance. These systems facilitate the massification of AI, leading to a significant change in scale on both ends: a vast database — the internet itself — and the generation of creative outputs in industrial volumes targeted at millions of lay users who may not necessarily be familiar with the history of art.

Certainly, this massification has come with its implications. In light of the increasing sophistication of these systems in generating creative outputs — images, texts, and other creations — that are seemingly indistinguishable from those traditionally produced by humans, concerns have emerged about the potential takeover of the art field by these recent AI tools. However, before delving into this worry, it is essential to examine the oddities of these systems' processes. For instance, while they aim to be universal by encompassing the entirety of existing creations to generate new works, their reliance on this extensive repertoire challenges fundamental concepts such as originality and, particularly, uniqueness — values that are typically associated with creative works. For example, it is quite common for texts and images produced by these tools to include a surplus of clichés and platitudes, resulting in an average sensibility that is generally quite predictable.

Therefore, the quirks of these AI tools not only provoke numerous reflections but can also inspire artistic ventures that critically examine the implications of technology. Such creations serve as metacommentaries on the current landscape of mass AI, reviving concepts from the field of art media, which appropriates and challenges the principles of productivity, rationality, and the industrial scale prevalent in the media (Machado, 2004). We will begin by highlighting the conservative and "average" aesthetics of these AI tools in the next section. Next, we will come across the term "disruptive" — which in its current context refers to a restrained and "marketable" form of rebellion. An AI system used the term to define one of the most transgressive legacies in the field of internet art, the works of the duo JODI. Throughout this discussion, we are particularly informed by one artistic creation: *AIDOJ*, conceived from a hypothetically transgressive proposal. In the final sections of this article, we will explore how this work was completed.

The Problem

In the text "Towards 'General Artistic Intelligence'?", Lev Manovich (2023) expresses his frustration with the process of providing absurd, strange, surreal, and bizarre descriptions to current AI tools for generating images. The outcome is consistently underwhelming, often resulting in ordinary and predictable scenes. His disappointment leads to a provocative comparison regarding AI-generated images; according to Manovich, the results produced by AI often resonate with the aesthetics of Classicism and Kitsch. As we know, Classicism is characterised

by aesthetic values rooted in the heritage of Classical Antiquity, emphasising principles such as formal purity, rigour, balance, and the imitation of nature — values that align with a traditionalist view of artistic imagery. Conversely, Kitsch is given a harsh definition by Manovich himself (2023):

Kitsch (...) is melodramatic, shows only stereotypes, and lacks originality. This, to me, is an excellent description of the default images produced by AI tools. It is possible to make them not kitsch looking, but it takes time and prior experience in a field such as illustration or photography. (para. 6)

Both definitions reveal a conservative inclination. Classicism, after all, alludes to an aesthetically glorious past. Meanwhile, Kitsch, which Manovich critiques in the preceding lines, celebrates the established even in its most favourable interpretations. The term has a derogatory origin dating back to the 19th century, referring to something that imitates what holds value — indicative of a non-authentic creation. Neither concept embodies a tension or a break from the hegemonic. This observation serves as the starting point for our problem: if non-conformity with the established norms is one of the prevailing ideals of contemporary art — a condition evident since the avant-garde — can we consider creations that are truly transgressive when utilising current AI tools?

A common application of AI tools is their ability to generate creative content inspired by the "styles" of various authors, encompassing images, texts, and other forms of production. For instance, one could request ChatGPT to compose a poem reflecting modern life in the style of the 16th-century poet Luís Vaz de Camões. One could also use a "text-to-image" system to produce photographs reminiscent of the work of Sebastião Salgado or Oliviero Toscani or even create pictorial images inspired by Claude Monet or Romero Britto, showcasing a range of distinct styles and poetics. This capability has significant implications for professional creators, who may feel that AI systems are appropriating their styles without any form of compensation.

It is important to note that these systems function based on patterns, meaning their models are trained by analysing digital content produced either by humans or other AI systems, depending on the predominant features within a dataset. For instance, if a dataset is predominantly composed of white faces, AI systems will struggle to accurately recognise and generate images of Black, Indigenous, or Asian individuals³ (Beiguelman, 2023). Similarly, landscapes and scenes from countries in the Northern hemisphere are disproportionately represented, as AI models are frequently trained on images from these regions; for example, ImageNet (Silva, 2021) — a commonly used database for training computer vision systems — contains a significant concentration of pictures from the United States (45.4%), the United Kingdom (7.6%), Italy (6.2%), and Canada (3%).

³This principle of prioritising the majority within a data set can be particularly detrimental to exceptions and minorities. Beiguelman (2023) contextualises this phenomenon as a key factor in what is referred to as "algorithmic racism".

As a rule, these systems default to what emerges from the majority of the data they analyse. This explains the difficulty they encounter when dealing with lesser-known or highly specific subjects, such as the life and work of artists unfamiliar to mainstream audiences (Nunes, 2023). Spanish theorist Juan Martín Prada (2024) provides a thorough analysis of current AI tools in his article "La Creación Artística Visual Frente a los Retos de la Inteligencia Artificial" (Visual Artistic Creation in Response to the Challenges of Artificial Intelligence), where he addresses, among other issues, the conservative tendencies in the way these systems generate images:

artificial intelligence models that generate images based on textual descriptions function by analysing datasets of existing visual files and synthesising patterns from different styles. As a result, despite being cutting-edge technologies in the field of computer innovation, we can say that they inherently lean towards aesthetic conservatism. The output of these models largely revolves around reworking what has already been created. (p. 19)

The conservative principles found in AI-generated content are certainly not exclusive to AI itself but are inherent in other technological media as well. Arlindo Machado's (2004) reflections in "Arte e Mídia: Aproximações e Distinções" (Art and Media: Approximations and Distinctions) remain relevant today, highlighting how media are designed and developed around principles of productivity and rationality, shaped within industrial environments governed by capitalist expansion. According to Machado, even the most modern technological media simply formalise pre-existing processes inherited from a well-established history of art that has already been absorbed and consecrated. He also notes that this heritage is systematised and simplified to be made accessible to the general public, particularly non-specialists, allowing for large-scale productivity to meet an industrial demand.

In this context, we can revisit ChatGPT, which is undoubtedly one of the most prominent examples of the mass adoption of recent AI tools. It is the most widely used chatbot ever created, reaching 100,000,000 users in just two months, making it the fastest-growing application in history (Margues, 2023). ChatGPT's capabilities span a wide range of tasks involving text, including translating into various languages, generating poems, crafting institutional announcements, producing social media content, organising lecture topics, and even writing code in different programming languages. Reflecting on the distinct features of this system, Leif Weatherby (2023) explores AI's role in the production of meaning, arguing that the widespread use of such technologies signifies not only shifts in labour and geopolitics but, more significantly, a process of "mass cognitive deskilling" (para. 3). According to the author, because AI systems can perform tasks that closely resemble what we perceive as inherently human, they have the potential to alter how we think. The way these systems handle message production — primarily based on statistical patterns — results in "average" versions of content. This aligns with the unoriginal images Manovich referred

to earlier. As a result, AI tends to shape language in a specific direction: "this is 'language as a service', packaged and prepared, including its dynamism and meaning-generating properties, but channelled into its flattest possible version so as to be useful to those who mainly use language as liability control" (Weatherby, 2023, para. 10).

Language under an "average" paradigm reinforces hegemonic structures; as a result, it perpetuates an ideology that dismisses what is unconventional, obscure, experimental, or even particular and outside the norm. In essence, it promotes a conservative outlook that reduces reality to mere statistical phenomena. Despite this, such language is becoming increasingly pervasive in contemporary society, underscoring the importance of engaging with and critically examining this trend.

Believing that art serves as a powerful arena for critically reflecting on contemporary life and its complexities, we focus on a particular paradox: while these systems are often portrayed as embodying what is most "disruptive", they remain fundamentally predictable in their production of meaning.

Objective

In recent decades, the term "disruptive"⁴ has become a popular buzzword in business and technology circles. Historically, it carried negative connotations, often used to describe unruly or disorderly individuals. However, its meaning shifted when Clayton Christensen and Joseph Bower (1995) introduced it in their paper "Disruptive Technologies" to define a new model of corporate management. Since then, the term has been widely used indiscriminately as a kind of contemporary mantra, applied to various innovative practices, often to the point where its significance risks becoming diluted (Gerstenberger, 2023; Mazzetto, 2023). Far from being a novel concept, art "has always had or will always have something disruptive about it, in the sense of transformative rebellion as a displacement of the status quo" (Santaella, 2018, p. 294). This disruptive nature of art manifests through processes that embrace subversion, rupture, confrontation, deviation, strangeness, friction, discomfort, chaos, and interference. These and many other characteristics have defined artists across various periods and have been seamlessly integrated into the realm of creation with electronic media. For instance, the work of artist Nam June Paik, who created Magnet TV (1965) by placing a magnet on cathode ray tubes, is emblematic of this disruptive spirit. Paik interfered with the television image while also surpassing a technical boundary, as magnets are known to damage such devices. Similarly, we can recall the symbolic invasion of the Louvre Museum by Brazilian artists, led by Paulo

⁴The term "disruptive" has its etymological roots in Latin — diruptus/disruptus — meaning "that which causes disorder, which disorganises". It comes from the past participle of di(S)Rumpere, which means "to disorganise", formed by the prefix dis, meaning "out", and rumpere, meaning "to break" or "to rupture" (Mazzetto, 2023, para. 3).

Laurentiz, through the institution's fax machine⁵ in action L'Oeuvre du Louvre-Invasões Poéticas (1990), a kind of symbolic bombardment of institutionalised art. Additionally, the artist duo Eva and Franco Mattes challenged notions of privacy and surveillance in *Life Sharing* (2000–2003) by allowing unrestricted online access to all the files on their personal computer, including emails, bank statements, and images.

In the realm of internet creations, particularly when artists develop works using websites, a transgressive approach is clearly distinguishable from that of nonartistic counterparts. This is because web addresses are typically designed not with an aesthetic intent but rather with the aim of conveying information as "efficiently" as possible. Thus, an art website represents a departure from the expected functionality of this medium; the history of this form of artistic expression has produced a number of iconic creations, such as *Unendlich*, *Fast*⁶ (1995) by Holger Friese, a website that features nothing but an "infinite" blue; *Form Art*⁷ (1997) by Alexei Shulgin, where the artist creates compositions using elements of forms; *Lands Beyond*⁸ (1997) by Celso Reeks and Thiago Boud'hors, a website rich with literary references expressed through simple HTML⁹ elements; and *No Content* (2001) by Brian Mackern, which consists of a series of animations based on data loading pages — an inevitable occurrence in times of limited internet bandwidth. These works, along with many others, challenge the established rules of interaction design.

To rephrase, when we flirt with the term "disruptive", it is impossible to overlook that we are not only referencing the transformative rebellion and innovation the word seems to evoke but also the meaning it has taken on through its widespread, indiscriminate use. As a result, it has morphed into a type of rebellion that can be packaged and sold, often found in flashy internet coaching schemes and other trends that populate the corporate mindset. It elicits a sense of provocative disobedience and innovation, yet there is a risk that it may become hollow and artificial. The term "disruptive" is imbued with the *zeitgeist* — the spirit of our times — much like, even statistically speaking, internet-based AI tools, such as ChatGPT, are similarly infused with this essence. Therefore, when ChatGPT describes one of art's most anarchic legacies on the internet as "highly disruptive", it presents an intriguing connection that highlights the oddities of contemporary technological tools.

The "highly disruptive" example cited by ChatGPT is JODI, a renowned duo of European artists Joan Heemskerk and Dirk Paesmans, who are considered paradigmatic in the realm of internet art¹⁰. JODI's work defies typical web user

 $^{^5\}mathrm{Fax}$ is a technology that transmits printed/handwritten documents over a telephone line.

⁶http://www.ljudmila.org/~vuk/dx/friese/ende.htm, accessed on June 10, 2024.

⁷https://www.c3.hu/collection/form/, accessed on June 10, 2024.

⁸https://www.distopia.com/LandsBeyond/, accessed on June 10, 2024.

 $^{^9\}mathrm{HTML}$ stands for Hypertext Markup Language, the coding language used to structure and create websites.

 $^{^{10}}$ We discussed JODI's works in one of the episodes of the *BEM WEB ART* web series on August 23 2020: (FABIOFON[DOT]COM, 2020).

expectations, crafting experiences that mimic computer virus attacks or system failures. By causing chaos and loss of control through windows, links, and other web elements, they turn browsing into an uncomfortable, unpredictable, and erratic experience — completely detached from the functional expectations we usually have for web content. In fact, it is said that JODI's website, created in 1994 and submitted to the Yahoo! website directory — at a time when accessing lists of websites verified by human professionals was as common as using Google today — was promptly rejected for supposedly having "no content" (Nunes, 2011). Despite this, JODI's influence in the realm of network creation is so profound that their technological approach, established in the 1990s, still resonates with many artists in the field of internet art (also referred to as "net art" or "internet art"). This is particularly significant given that this area of creativity is defined by its engagement with the meanings, technicalities, and conceptual peculiarities of the internet (Nunes, 2010) — a core aspect of the duo's work.

Thus, JODI, as a model of artistic transgression, will serve as our starting point for creating a work of art using one of the widely available AI tools on the internet, ChatGPT. The goal is to develop a web art site composed of pages entirely written by ChatGPT, guided by the more "disruptive" principles embodied by JODI.

Therefore, in developing this artistic experiment, we will adhere to the following precepts:

- Push the system to generate pages at its "limit" of disruption, emphasising the subversive, transgressive, and chaotic elements inherent in JODI's legacy without providing concrete guidance on how to implement these premises;
- Attribute, as in artistic processes, a supposed intentionality to the choices made by the system, working solely from ChatGPT's "aesthetic" suggestions in the creation of the pages;
- Maintain the integrity of the system's original writing by requesting Chat-GPT to generate HTML source codes, ensuring the process remains entirely within the system's domain.

Method

We attempted a series-based experiment involving multiple interactions with ChatGPT through cyclical reiterations. Before this, we developed a prior work titled $Mit\hat{o}mato^{11}$ (2023), an experiment addressing the role of current AI tools in disinformation processes. This is not solely about continuing the cyclical interrogation of the system to obtain specific creative outcomes but also about exploring the bot's behaviour and, based on this exploration, pursuing a critical-creative approach to the use of these tools. *Mitômato*, then, is based on a

 $^{^{11}{\}it Mitômato}$ can be accessed at https://www.fabiofon.com/mitomato.

sequence of questions to the bot about my own life and work: "do you know who Fabio FON is?". To fulfil the task, ChatGPT tries to follow the standards expected in biographical texts about artists. However, almost every time, "the system ends up mixing some inaccurate data with much false information" (Nunes, 2023, p. 36). In the work, which consists of a video sequence, texts with incorrect data are identified as strikethrough text (Figure 3).

| controlados por | "Conectivos" (2002): |
|-------------------------------|---------------------------------------|
| computador | <u>uma série de</u> |
| "CodeZebra" (2001): ur | n- instalações interativas |
| projeto de arte digital | -que exploram a relação |
| que utiliza códigos de | entre som e movimento, |
| computador para criar | -criando ambientes |
| uma linguagem visual | -imersivos que |
| que se assemelha a | -respondem aos |
| padrões de zebra. A | -movimentos do público. |
| obra foi exibida em | |
| galerias de arte e | uma instalação sonora |
| festivais de tecnologia | -interativa que utiliza |

Figure 3: Frame by Mitômato (2023) Credits. Fábio Oliveira Nunes

The experiment conducted in Mitômato goes beyond mere personal observation regarding the accuracy of the information about me. In fact, the tendency of AI systems to generate false information is so prevalent that it has been dubbed a euphemism in the specialised press: the act of "hallucinating" by an AI system. It is important to note that artists who lack sufficient fame — whether due to working in niche areas, being referenced in languages other than English, or simply not being deemed interesting enough for thorough citation, along with various other factors that hinder the availability of comprehensive information in the data sets used by AI tools — often find their contributions misrepresented by bots.

We decided to create AIDOJ (2023), a title that is an inverted juxtaposition of AI and JODI. The creation process begins by asking ChatGPT, version 3.5^{12} , what it knows about JODI's works. Once this initial inquiry is complete, we proceed to the page generation process: first, we ask for suggestions for creations inspired by the duo's legacy; in response, the AI provides a list of proposals, from which one will be selected for the bot to generate a corresponding source

 $^{^{12}\}mathrm{Version}$ 3.5, trained until September 2021. The interactions occurred between June and September 2023.

code; if the result is functional and viewable in a web browser, the page will then be added to the *AIDOJ* collection.

This method focuses on understanding how ChatGPT aims to translate its conceptual insights regarding JODI's work into digital creations. The system characterises JODI's artworks as "highly disruptive and challenging", renowned for "questioning the aesthetic and technical conventions of digital art". However, when these concepts are put into practice, the lists of suggestions for JODI-inspired HTML pages come across as timid compared to the previously outlined premises, lacking the "impactful", "intriguing", and "chaotic" outcomes that were previously mentioned, despite the presence of those adjectives. Here is an excerpt from one of the suggestion lists provided by ChatGPT:

Mouse Tracker Abstract Art: Design a webpage where the movement of the mouse cursor leaves behind a vibrant and chaotic trail. As users navigate the mouse across the screen, they can "paint" in real-time, resulting in an ever-evolving abstract artwork.

HTML Noise Landscape: Construct a digital landscape composed of "noise" using HTML elements that move and interact with one another. Incorporate vivid colours, random patterns, and erratic movements to create a visually captivating scene.

Web-Based Error Simulator: Create a webpage that mimics system errors, featuring elements like error messages, pop-up windows, and blue screens of death. The page components can move and collide, generating a visually engaging error-themed environment.

HTML Abstract Sculpture Park: Design an abstract digital sculpture park where various geometric shapes and elements interact chaotically. Users can influence the movement of the sculptures using their mouse.

CSS Interactive Art Generator: Develop a blank canvas that allows users to draw with their mouse. Use CSS to produce abstract and vibrant visual elements that respond to mouse movements, creating a collaborative and chaotic work of art.

Virtual Reality Deconstruction: Simulate a virtual reality space where webpage elements are continuously disassembled and reconstructed into chaotic, disjointed forms. This effect can be achieved through CSS animations and mouse interactions.

Conceptually, the propositions are rather simplistic. It is important to note that ChatGPT's suggestions for creating interactive works, which are evidently rooted in statistical patterns, reflect the clichés of digital art. Specifically, they highlight the recurring technological allure inherent in this form of production, as well as the frequent tendency to reduce digital artworks to their interactive components. However, when these suggestions are put into practice — translating them into source code — the outcomes fall short of the initial boldness they imply. Even when ChatGPT is prompted with requests for more "creative" or "chaotic" codes, the practical results are significantly more restrained. At times, the system even warns against making the experience "confusing or frustrating for users", which stands in stark contradiction to JODI's *ethos*, as many of their works intentionally create confusion and frustration for their audience. Clearly, the bot fails to grasp the essence of what JODI represents.

At the end of the process, the codes generated by ChatGPT were converted into HTML pages and collected on the *AIDOJ* website. However, not all of the generated code was functional; approximately a quarter contained errors and could not be displayed. When attempts were made to correct these display issues, the bot was not consistently effective. As a result, the non-functional codes were discarded. To facilitate continuous navigation between the generated codes, a display window was implemented that shows each page to visitors for only five seconds before a new page is randomly loaded. Due to this random display, each visit to *AIDOJ* generates a unique sequence of pages. In its current configuration, created in 2023, *AIDOJ* consists of 100 pages, accessible from https://www.fabiofon.com/aidoj.

Outcomes and Insights

Across the hundred pages of AIDOJ, there is a diverse range of interactive experiences (Figure 4). Some pages allow users to interact with objects, adjust their positions, or alter visual elements by clicking or dragging the mouse. On one page, labelled "Graffiti" in the source code by the bot, moving the mouse across the black background creates a continuous trail of characters — which pulse rhythmically on the screen. Another page features a pulsating greenish background, where transparent squares appear chaotically — accompanied by repeated instances of the word "hello!" as the mouse moves across the screen. Without any interactive elements, we can also mention the "Chaotic Page". as named by the bot, where characters and numbers rotate smoothly around their axes in an orderly and predictable manner, set against a backdrop of image-loading error icons. Another is the "JODI-Inspired Page", a static display featuring a line of basic characters — letters, numbers, and symbols — arranged in alphabetical order at the top of the screen, rendered in Courier New font. This typeface is often associated with early computing, presented in white against a black background. Interestingly, the "JODI-Inspired Page" lacks the glitch effect mentioned in its source code, which defines a "glitch-effect" animation in two-second intervals, suggesting an error in the code. Despite this glitch, the page evokes a minimalist aesthetic, fostering a subtle sense of unease.

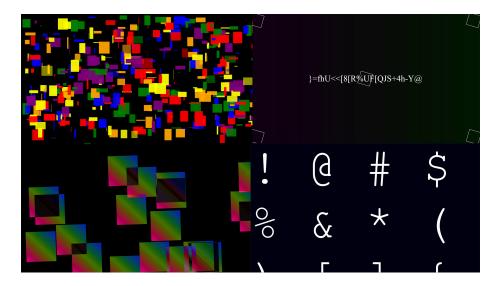


Figure 4: *Different pages by* AIDOJ *Credits.* Fábio Oliveira Nunes

In these pages (Figure 5), we observe an aesthetic oriented towards glitches, or in other words, an "aesthetic of error" — especially when artists and creators appropriate glitches or draw inspiration from computational errors to explore a raw, untamed space that defies the expectation of functionality, seeking a realm for the unpredictable (Fon, 2023). In this context, JODI serves as a significant reference for glitch art, with works like *Wrong Browser* (2001), a browser that deconstructs the internet browsing experience and the websites themselves, or *Untitled Game* (1998–2002), which creates a glitch-based experience using the game *Quake 1* (1996), reducing the original game's complex graphics and environment to their bare essentials.

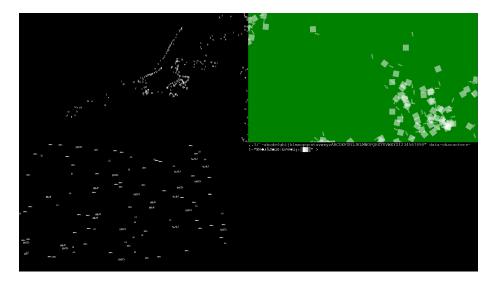


Figure 5: *Different pages by* AIDOJ *Credits.* Fábio Oliveira Nunes

When the glitch is embraced as an aesthetic choice, it undeniably brings a sense of malfunction that can be interpreted as transgressive. However, it is important to recognise that the widespread fascination with computational errors — fuelling countless apps and filters that simulate noise, interference, and other possible visual flaws in photos and videos, often generated based on user-selected parameters — can also be understood as a domestication of the creative act with the glitch:

this form of "conservative glitch art" focuses more on design and end products than on the procedural breaking of flows and politics. There is an obvious critique: to design a glitch means to domesticate it. When the glitch becomes domesticated, controlled by a tool, or technology (a human craft) it has lost its enchantment and has become predictable. It is no longer a break from a flow within a technology, or a method to open up the political discourse, but instead a cultivation. For many actors it is no longer a glitch, but a filter that consists of a present and/or a default: what was once understood as a glitch has now become a new commodity. (Menkman, 2009/2010, p. 7)

In other words, glitch alone does not guarantee a truly transgressive stance when considering digital production. Once again, the source code generated by ChatGPT fails to deliver a "break in the flow", resulting in a conservative outcome. It is important to remember that our aim is a radically dysfunctional aesthetic of technology, as JODI embraces the intertextuality between codes in the human-machine relationship, along with discomfort, disorder, and the fear of viruses. The user is left in a state of breakdown or looping (Donati, 1997). The pages of AIDOJ do present a certain level of strangeness, but they remain restrained and more illustrative than disruptive. For instance, the piece titled "Chaos Chess" (Figure 6), as named by the system, features a deconstructed chess game, with an endless animation suggesting the movement of the pieces — yet nothing extraordinary. One might draw a connection to iconic chess matches that have marked significant milestones in AI development, such as the famous 1997 defeat of world champion Garry Kasparov by IBM's Deep Blue supercomputer. It is also worth highlighting JODI's deconstructive approach to games, including the mentioned above Untitled Game (1998–2002), which extends to classics like "tic-tac-toe" in OXO (https://oxoxxxooo.com/; 2018), even nodding to the ongoing rivalry between humans and AI. Despite these references, "Chaos Chess" feels repetitive and overly polished — its alternating strong colours in the background come across as predictable.

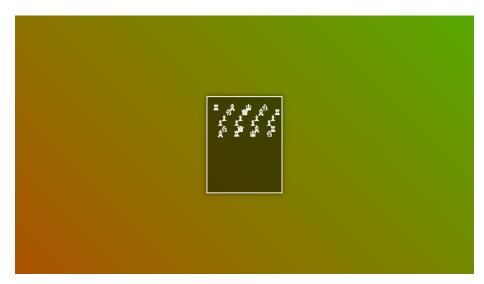


Figure 6: *"Chaos Chess" by* AIDOJ *Credits.* Fábio Oliveira Nunes

On the other hand, a notable coincidence between JODI's works and the AIDOJ pages lies in what appears to be a direct "inspiration" from one of the European duo's most iconic creations. An HTML code, the bot titled "Retro Screen Distortion" (Figure 7) generates green characters — bars, dashes, and other symbols — that appear on the screen. Upon examining the source code, it becomes evident that these characters form a composition — reminiscent of stylised ASCII art¹³ — which is then deconstructed when rendered in the browser.

¹³The term "ASCII art" refers to images created using standard computer characters. This practice historically emerged within a digital context due to the limitations of printers that could not support graphic images and during the era of exchanging messages on computer networks, where incorporating actual images was often unfeasible. Consequently, creating compositions with characters became the only means to transcend text alone. Today, despite

Just like in an encryption process — where a message remains concealed in a coded format —, access to the source code of "Retro Screen Distortion" reveals the characters on the page in a more readable form. This can be likened to one of JODI's most famous works, *wwwwwwww.jodi.org* (1995). Upon visiting their website, users are confronted with an indecipherable page filled with green characters — dashes, bars, dots, and HTML tags — seemingly displayed at random, reinforcing the impression of a sudden error or glitch in the display. However, the authors have included a surprise for more observant visitors: examining the page's source code¹⁴ reveals a sort of diagram for constructing an atomic bomb (Figure 8), serving as a metaphor for the hidden and potentially harmful aspects of the internet. This JODI work is currently accessible at http://wwwwwwww.jodi.org. Nevertheless, some antivirus software flags this address as potentially dangerous, preventing users from viewing the page. In other words, despite the historical significance of this site within the realm of net art, JODI's transgressive nature remains highly relevant today¹⁵.

the abundance of image resources available on the internet, this practice continues to thrive among enthusiasts, highlighting an aesthetic that pays tribute to the inventive history of digital culture.

 $^{14}{\rm It}$ is worth noting that in the 1990s when websites could be created using any basic text editor, experienced users often opened the "view page source code" option in browser programs upon discovering an interesting site. Consequently, JODI's proposal resonates with this context.

¹⁵The JODI duo explains the process of creating wwwwwwww.jodi.org: "we made the biggest basic code mistake on the first page of our very first website. We simply forgot to include a forward slash in the first command. If you forget this, you don't get a nice drawing. Instead of being a properly spaced diagram, the drawing was all over the place on the screen. We first thought something was wrong with our computer, but ultimately decided that the effect was quite interesting. We published the mistake online, and, as it turned out, this meant that it was endlessly reproduced. Everyone saw the exact same mistake in his or her browser, which got us quite a few angry emails. By daring to make that mistake, we made the code the subject of the piece. When you subsequently requested to view the source of that webpage in your browser, the correct version of the drawing was revealed. (...) The work included instructions on how to make an atomic bomb. That hidden layer was a very interesting way to draw attention to the code, which is inevitably behind everything" (Paesmans & Heemskerk, 2011, p. 33). "Well, if I look at our work retrospectively, the basic idea might be to get a better insight into the ways a computer system functions, or rather, how you can tell stories through all kinds of symbolic tricks. Through manipulation, you can discover how the machine is constructed; how it is trying to have you believe that something cannot be done differently. We show that it can certainly be done differently!" (Paesmans & Heemskerk, 2011, p. 34).

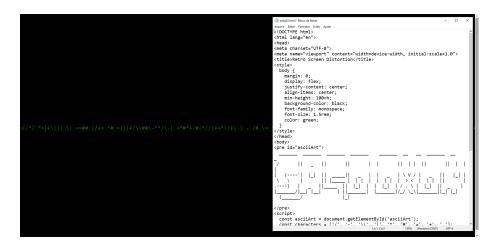


Figure 7: "Retro Screen Distortion" page and source code (right) on AIDOJ Credits. Fábio Oliveira Nunes

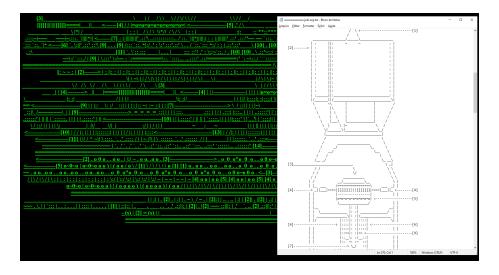


Figure 8: *Page and source code by* wwwwwww.jodi.org *Credits.* wwwwwwww.jodi.org

Revisiting *AIDOJ*, there is no concrete evidence that the AI system actually referenced wwwwwwww.jodi.org to replicate this iconic ASCII "encryption" in the source code. On the other hand, the numerous references to this work are likely included in the dataset utilised by the system. Nonetheless, the page on *AIDOJ* is far more ambiguous in its meanings, making it impossible to discern which stylised word might be revealed.

It is also important to highlight the page titled "Chaos Clicker" (Figure 9), as indicated by ChatGPT in the source code. This page features small, coloured rectangular buttons that pulse on the screen, displaying text — some buttons reading "click me" and others proclaiming "chaos!". The page offers an interactive experience, where each click changes the colours of the elements and occasionally alters the text displayed. The prominent "click me" serves as an invitation for visitors to engage with the buttons. In the 1990s, during the early days of the internet, it was considered exceptional compared to the reading culture of printed media that preceded it. However, presenting the phrase "click me" feels overly structured and conventional, which starkly contrasts with JODI's anarchic *ethos*.

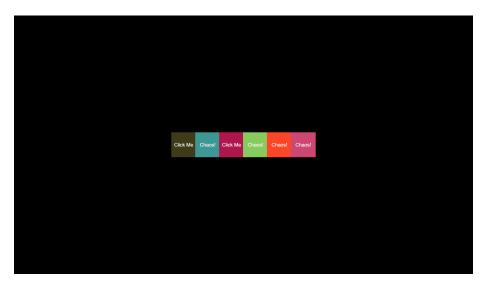


Figure 9: "Chaos Clicker" by AIDOJ Credits. Fábio Oliveira Nunes

Ironically, it seems that the bot may have taken the requests for a "chaotic" aesthetic a bit too literally. The word "chaos" indeed features prominently on the buttons of the experiment, yet, paradoxically, the overall composition is quite orderly — six rectangles are neatly aligned with only slight movement. A similar phenomenon occurs on the page titled "Noise Landscape" (Figure 10), also named by the bot, which consists of white dots arranged in a meticulously ordered grid, accompanied by the text "welcome to Noise Landscape; This is a visually chaotic environment". In reality, there is no chaos to be found at all. This striking contrast between the concept of "chaos" and the evident stability of the layout may resonate with audiences: could it be that the AI system is employing a form of sarcasm reminiscent of JODI's works?

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Figure 10: Screenshot of "Noise Landscape" by AIDOJ Credits. Fábio Oliveira Nunes

Since the inception of Eliza, the world's first chatbot, it has been established that the responses of AI systems can be influenced by the emotional expectations of their human users. Developed at the Massachusetts Institute of Technology by Joseph Weizenbaum in 1966, Eliza quickly became one of the most well-known AI programmes, emulating the role of a psychoanalyst based on Carl Rogers' principles. Despite being a relatively simple programme — where, for instance, typing "I'm BZZZ" would elicit the response "how long have you been BZZ?" — Eliza imitated psychoanalysis by modifying user statements and questions according to a predefined pattern. Although the software lacked complexity, Weizenbaum was surprised by the emotional engagement exhibited by users, particularly in brief interactions (Nunes, 2016). Eliza highlighted an intriguing phenomenon: the human inclination to anthropomorphise technological devices, interpreting behaviours and responses as reflections of "human emotion", even when these responses are merely random, repetitive, or devoid of meaning (Cleland, 2004).

Revisiting *AIDOJ*'s "Chaos Clicker" page, there is a strong possibility of interpreting the discrepancy between "concept" and "result" — "chaos" — as an intentionality, much like human artists might employ as an act of explicit sarcasm. Without intending to close this question, but with the aim of highlighting certain aspects of artistic creation in the context of AI, it is important to note that the potential of these tools resides in the open-ended nature of contemporary poetics. These poetics invite the public to interpret creative outputs, revealing a potential not exclusive to AI but one that benefits from more generous perspectives.

Conclusions

AIDOJ is a work that engages with the practice of AI systems adopting an author's artistic "style", sitting provocatively between a subversive aesthetic approach and the limitations that reflect the peculiarities of these systems. While they operate within a framework of rationality and productivity characteristic of mass technological industries, they still adhere to a conservative aesthetic direction rooted in the statistical nature of these tools. Moreover, by choosing to draw "inspiration" from internet art — art that embraces open, experimental, and fluid processes rather than just established forms — we further challenge the capacity of AI systems to grasp contemporary aesthetics.

Although ChatGPT can describe JODI's creations as "highly disruptive and challenging", known for "challenging the aesthetic and technical conventions of digital art", most of the codes generated by the system are essentially restrained, harmless, or inconclusive. In another context, they might be mistaken for sample scripts testing effects on web pages. Yet, among the dozens of outcomes from the experiment, there are a few that, when viewed through a generous lens, could hint at the incommunicability, absurdity, or unpretentiousness characteristic of JODI — though they could just as easily be attributed to the bot's limitations in grasping what it truly means to be "disruptive".

Finally, contrary to the expectation of virtuosity in AI-driven creations, *AIDOJ* is a work developed with AI that does not emphasise the technology's strengths but rather its shortcomings in grasping the essence of contemporary artistic practice. Specifically, when the GPT system is tasked with generating HTML pages inspired by JODI's work — renowned for its challenging and provocative nature — it becomes evident that the system struggles to produce source codes as provocative as those crafted by the iconic duo. A closer look reveals how the sharp, powerful, and technologically visceral nature that defines the duo's work is conceptually simplified and domesticated. The result becomes a metacommentary on the instrumentalisation of creativity, subtly framing the most subversive dimensions of artistic expression and, by extension, life itself.

At the time of writing, AIDOJ was showcased in the sixth edition of "The Wrong Biennale 2023-2024" — one of the world's largest digital art events — in the pavilions AI/AI and Net Art Died But Is Doing Well. The work was also featured in the exhibition Panorama 5, organised by the Laboratório de Poéticas Fronteiriças at the Universidade do Estado de Minas Gerais, Brazil, during the first half of 2024.

Translation: Anabela Delgado

Biographical Note

Fábio Oliveira Nunes (also known as Fabio FON) is an artist-researcher specialising in contemporary languages, with a focus on experimental art, visual poetics, and digital art. He holds a PhD in Arts from the School of Communications and Arts at the University of São Paulo and completed a postdoctoral fellowship in Arts at the Institute of Arts at São Paulo State University. Additionally, he has a master's degree in Multimedia from the State University of Campinas. He is the author of CTRL+ART+DEL: Distúrbios em Arte e Tecnologia (CTRL+ART+DEL: Disruptions in Art and Technology; Editora Perspectiva, 2010) and Mentira de Artista: Arte (e Tecnologia) que Nos Engana Para Repensarmos o Mundo (Artist's Lie: Art [and Technology] that Deceives Us into Rethinking the World; Cosmogonias Elétricas, 2016). He also serves as the editor of the website Web Arte no Brasil (https://www.fabiofon.com/webartenobrasil). FON has actively participated in congresses, meetings, festivals, and exhibitions in Brazil, Portugal, and other countries. Currently, he is a researcher with the cAt: science/art/technology group at Universidade Estadual Paulista in São Paulo, Brazil.

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