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16-bit dissensus: post-retro aesthetics, hauntology, and the emergency in video games

Abstract

Santiago Zabala reveals a crisis in modern society that perceives a world dominated by oppressive neoliberal ideology as acceptable and unproblematic. He claims that today's greatest emergency is that we fail to notice other emergencies in society. To break out of this state, we need an aesthetic force to shock individuals into a new awareness. Unfortunately, while many social and global issues have recently come to widespread attention, the emergency still prevails in many forms of media. For example, the emergency in AAA video games appears in their continual push for higher resolution graphics, hyper-detail, verisimilitude, and intricate gameplay, perpetuating a hegemonic ideology. Exploitative labor practices, lack of representation beyond hetero-sexual, cis-gendered and neurotypical, and capitalist ideals are perpetuated in popular games in service of a hyper-real, high-fidelity aesthetic. One force that combats this emergency is pixel graphics and simplified gameplay, or post-retro aesthetics. While tied to the past, these aesthetics are not nostalgic but transgressively hauntological. To explore this claim, I discuss *Dys4ia* and *Undertale* as key post-retro games and reach beyond commercial indie gaming to point to hauntological work being done through DIY game making platformers such as *Bitsy*.

Keywords: Pixel graphics, post-retro, aesthetics, hauntology, dissensus, *Dys4ia*, *Undertale*

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According to Santiago Zabala (2017), the biggest crisis in modern society is an overwhelming consensus that everything is fine in the global west. This consensus involves a dominant stable and secure idea of the world, or “world picture” (Heidegger 2002b), that sidelines dissenting voices who speak against our current neoliberal status quo. What Zabala called “the emergency” was a lack of awareness and inaction toward global issues, such as the distribution of wealth, proliferation of war, and the prevalence of capitalism, which were largely ignored by the western world. During the pandemic, of course, many issues have risen to popular consciousness, as seen in the greater attention paid to #BlackLivesMatter, Canada’s treatment of First Nations, and higher taxes for the wealthy, to name a few. However, the emergency – or the perceived lack of emergencies – prevails on many micro levels and across many media, particularly video games.

The emergency appears in modern mainstream video games in the continual push for higher resolution graphics, hyper-detail, verisimilitude, and intricate gameplay that perpetuate a hegemonic ideology. In service of a hyper-real, high-fidelity aesthetic in games, large corporations are exploiting workers and producing homogenous titles marketed to hetero-sexual, cis-gendered, and neurotypical white men that perpetuate aggressive capitalist ideals and lack any kind of diversity in representation. According to Zabala, an “aesthetic force” is needed to thrust us into an awareness of today’s emergency (2017, p. 5). One such force is video games with pixel graphics and simplified gameplay, or post-retro games (Fulton & Fulton 2010). In embracing their supposed superseded graphics and control schemes, these games break through the emergency hauntologically, in an aesthetic practice that salvages elements of the past to propose a better future. In this way, post-retro games weaponize their aesthetics to produce shock (Vattimo 2010) and cause dissensus (Rancière 2015) in an act of critical transgressivity (Pötzsch 2019).

In order to explore this claim, I introduce the concept of emergency in video games and use aesthetic theory to explain how post-retro games confront the emergency through hauntology. I begin with exploring titles from 2010s, such as retro-style indie games *Dys4ia* (Anna Anthropy 2012) and *Undertale* (Toby Fox 2015), as examples of hauntological games. I conclude by problematizing commercial post-retro games and point toward the game making platform *Bitsy* (Adam LeDoux 2017) as a site for hauntological transgressivity today.

The emergency in video games

According to Santiago Zabala, there is a specific kind of crisis in the modern world, direr than oppressive and violent governments, social and political injustices, or wasteful and predatory capitalist production. The critical situation today is that among all these crises, there is a prevailing sense – in the global west mainly

– that everything is fine. Using Heidegger, Zabala claims the current lack of a sense of emergency is today's emergency. An essential aspect of this situation is the notion of a "world picture" (Heidegger 2002b): a pervading view of the world that is both immediately perceptible and governed by certain a priori of how the world already is. Supported and reproduced by dominant ideologies in modern society, the world picture is normalized to such an extent that there is no understanding or acknowledgement of alternate ways of living.

While Zabala focuses on grand socio-political issues such as war, pollution, and genocide, our current emergency also penetrates many other aspects of the industrialized world. One instance is the mainstream AAA industry and culture of video games dominated by corporations that perpetuate exploitative labor practices, work to de-politicize problematic narratives and gameplay, and are locked in endless technological progression.

AAA games are increasingly more realistic in their graphic verisimilitude and more intricate in their control mechanics. However, while they are technically progressing, their genres, themes, narratives, and gameplay have largely stayed the same. According to the NDP group, the top five selling games of 2020 were *Call of Duty: Black Ops Cold War* (Treyarch, Raven Software), *Call of Duty: Modern Warfare* (Infinity Ward 2019), *Animal Crossing: New Horizons* (Nintendo EPD), *Madden NFL 21* (EA Tiburon), and *Assassin's Creed: Valhalla* (Ubisoft Montreal). All five are entries in long-running game series, and all fit into established genres (i.e., first person shooter, farming sim/cozy game, sports simulator, and open-world adventure). Except for *Animal Crossing: New Horizons*, all entries push for top-of-the-line, cinematic graphics. This goal requires higher budgets and ever-growing development teams (Keogh 2015). With so much capital at stake, AAA games need to control risk as much as possible to ensure profit, for instance, by using presold properties from other media, "reiteration and sequelization," and "narrowing of products in line with established game genres and gameplay mechanics" (Clarke & Wang 2020, loc. 115). Often these games feature what Christopher Paul (2018) calls a "toxic meritocracy." This term refers to games that overemphasize "winning" through how well a game is performed. To describe this popular gaming landscape, Harvey and Fisher (2013) use Fron et. al.'s concept of "hegemony of play," a "systematically developed a rhetoric of play" (p. 363) that is habitualized by years of playing a certain way and by certain narrative forms and gameplay. This hegemony of play is analogous to Zabala's use of the world picture, or what Mark Fisher (2009) describes as "capitalist realism," a situation where society not only sees problematic capitalist practices as normal but cannot even imagine an alternative.

While a more extensive discussion of labor is not in the purview of this paper, it is worth noting that part of the capitalist realism in games is exploitative work

practices and rampant sexism and abuse of women and other non-heterosexual white or Japanese men (See Consalvo 2009; Harvey & Fisher, Liss-Marino 2014; Martin & Deuze 2009). While these issues are becoming more public, such as the case with Activision Blizzard (Conditt 2021), the problems persist and need more attention.

The emergency of modern games culminates in their aesthetics. While AAA games are advancing toward higher resolution, lifelike visuals, and increasingly complex control schemes, they are halted in endless, yet stagnant, progression that ignores or attacks anything outside of the hegemony of play. However, there is a way out.

An aesthetic escape

As Zabala proclaims, “[a]n aesthetic force is needed to shake us out of our tendency to ignore [the emergency]” (2017, p. 5). Heidegger’s (2002a) notion of shock (or *Stoss*) influences this idea. As described by Gianni Vattimo (2010), this shock is an immediately perceived angst in an aesthetic encounter where “the world [a person] was accustomed to seeing becomes strange, is put into crisis in its totality, because the work proposes a new general reorganization of the world” (p. 70). Thus, one is immediately affected by an aesthetic force that rattles their world picture – Heidegger’s *Stoss* pairs nicely with what Jacques Rancière (2015) calls dissensus. The opposite of consensus, dissensus is a “re-configuration of the common experience of the sensible” (p. 140). In other words, dissensus disrupts sites of consensus, such as the world picture, to present a new articulation of what is understood and what can be understood. Dissensus then disrupts consensus favoring a more just distribution of the sensible through transgressivity.

Jørgensen and Karlsen (2019) use Chris Jenks to describe transgression as events that “violate or infringe limits set by law or convention” (p. 3) while being deliberately aware and reflexive of the established norms. An individual encountering the transgression is encouraged to confront the discomfort or shock produced by transgressivity (p. 7). The use of “transgressivity” situates the notion of transgression as subjective and dependant on a specific time, place, and person or people experiencing it (Pötzsch 2019, p. 49). This notion fits my approach to post-retro games, as I do not wish to assert their effects universally but to explore their transgressive characteristics and potential. It will be also be important further on that transgression is temporary and, as described by Jørgensen, Karlsen, and Pötzsch, what is transgressive at one time can be – and often is – adopted by popular media as the new norm.

Pötzsch additionally lays out a typology of different categories of transgressivity in games. His category “critical transgressivity” applies to post-retro games. Critical transgressivity “aims at questioning and possibly subverting prevailing discourses and power relations” in games and society with “[d]esign features and play practices in this category” that are “often driven by an awareness of injustice and oppression and aim at facilitating resistance and change” (p. 53). The critical transgressivity of post-retro aesthetics makes the games I will discuss apt to confront the emergency. For Zabala, representations of reality can no longer produce truth; we need “new interpretations instead of better descriptions” (2017, p. 9). To paraphrase Zabala: you cannot find better equity and accessibility in the hyperreality of AAA, but in post-retro games that critically transgress the high-def aesthetic.

While not ideal, Fulton and Fulton’s (2010) term “post-retro” best describes my focus. Post-retro games “utilize a retro aesthetic mixed with both retro and modern gameplay elements to create a wholly new experience” (p. 474). In their guide to making a game with Flash (an accessible software for creating animation and games popular in the early 2000s), the authors lay out characteristics of post-retro such as: a retro aesthetic (i.e., graphics that looks 8-bit, 16-bit, or vector-based), hypnotic visuals, modern music, “games with play that feels retro but also feels not retro at the same time,” “no nostalgia for nostalgia’s sake,” and no remakes (p. 474). Of course, this definition is over a decade old and could not have predicted the development of retro-aesthetics beyond hypnotic visuals or the strict use of modern-sounding music beyond games like *Bit.Trip Beat* (Choice Provisions Inc., formerly Gaijin Games 2009) and *Geometry Wars* (Bizarre Creations 2003). Therefore, some more peculiar and limiting characteristics can be left behind. One of the most attractive elements of the term is the prefix “post,” a nod to post-modern, post-punk, and post-digital movements. These genres of art acknowledge what has come before while departing from it – a critical transgressive element of post-retro. Finally, post-retro’s birth out of the DIY Flash scene ties the games it defines to the creative explosion of game making that came about from the software’s accessibility and the adaptability of the simple mechanics of the classic platformer (Salter & Murray 2014). So, in short, the term “post-retro” describes games that adopt and adapt retro aesthetics (be it in visuals or gameplay), with a self-awareness of past games, yet also with a separation from straightforward nostalgia.

While they emerged from the Flash scenes, post-retro games rose to widespread commercial attention at the turn of the 2010s with games like *Braid* (Number None 2009), *Super Meat Boy* (Team Meat 2010), and *Fez* (Polytron Corporation 2013). Much of the discourse around these games evokes nostalgia. For example, Edmund McMillian, the co-creator of *Super Meat Boy*, claims he made the game

to recreate the experience of difficult platformers of the NES (Meunier 2009). In discussing nostalgia, Nadav Lipkin (2012) highlights a sense of loss felt in the present with these games. The loss here is a certain kind of game design of the past or the youths of players. While this feeling of loss resonates with post-retro games, nostalgia as a driving appeal assumes that games like these have been lost until recently. Furthermore, it implies a straight line of technological progress in gaming, privileging “legitimate” industry development and ignoring the Shadow Economies of Games – to borrow Ramon Lobato’s (2012) term – like emulation and other “underground” game making scenes, such as Flash (where the term post-retro comes from).

Nintendo and Sega might have mostly abandoned pixel graphics in the 90s, but at the same time, console emulation was gaining steam and is still strong today on home computers, emulation machines such as the *Retropie*, hacked Original Xboxes, and officially licensed plug-and-play consoles. As mentioned above, Flash spawned a DIY community in the early 2000s that created a slew of classic-style platforming games, with and without pixel graphics, through recreating old games, remixing them, or developing something new in the genre (Salter & Murray 2014). So nostalgia does not quite fit when considering these games and game-making practices. Retro aesthetics were not lost; they just continued outside of the mainstream. However, one cannot ignore that these games are tied to older games and confront a felt loss or absence in the present, which makes their appeal hauntological.

Coined by Jacques Derrida, hauntology has recently gained popularity as an overwhelmingly gloomy outlook on humanity’s future casts a shadow over a capitalist culture that constantly reiterates the same forms instead of innovating: capitalist realism (Davis 2005; Fisher 2012, 2014). In this world we live in, hauntology becomes a way to dwell in the past and make something new. I will primarily be using Marc Fisher’s take on hauntology to emphasize the practice’s confrontation with the present. Hauntology confronts what Marc Fisher (2012) calls “the failure of the future” (p. 16). This temporal failure involves the lack of cultural innovation; the only progress is moving further into capitalist realism, as is happening with AAA gaming. Hauntology short circuits this by looking to the past for what we can salvage, what we have now, and what new alternatives we can imagine. Post-retro games become hauntological through critical transgressivity in their repurposing of supposedly superseded graphics, in simplified controls, in subversion of gameplay, and in representation of and accessibility for people outside of the core demographics of AAA. These elements are perhaps best represented through indie titles, *Dys4ia* and *Undertale*.

Hauntology and post-retro games

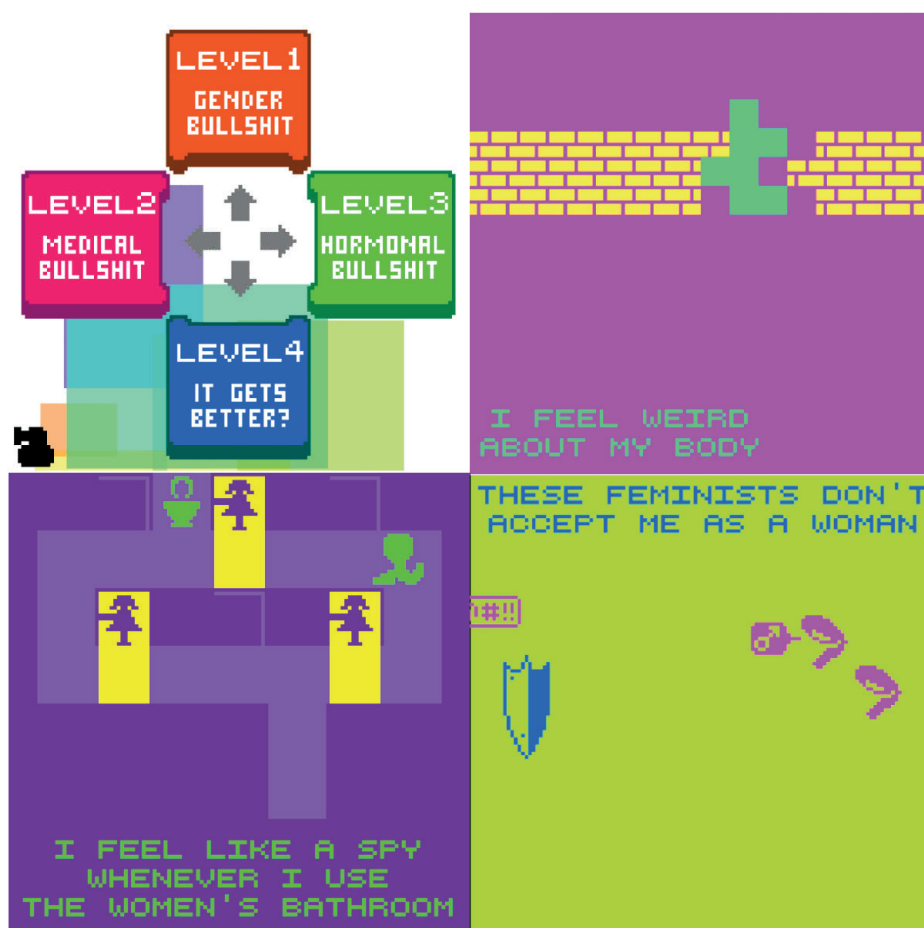


Figure 1. Examples of graphics in *Dys4ia* (Sources: <https://zkm.de>, <https://medium.com>, <https://vice.com>)

Similar to microgame collections, like the *Wario Ware* series (Nintendo, Intelligent Systems 2003–), *Dys4ia* apes the aesthetic and gameplay of classic games like *Tetris* (Alexi Pajitnov 1984), *Breakout* (Atari, Inc. 1976), and *Adventure* (Atari, Inc. 1980), to explore the developer Anna Anthropy’s experience with hormone replacement therapy (Figure 1). Using primitive graphics, *Undertale* chronicles the player character’s (PC) journey out of an underground world. In a kind of two-dimensional, isometric top-down view, the game imitates early Japanese role-playing games (JRPGs), such as *Dragon Quest* (Chunsoft 1986) and *Final Fantasy* (Square 1987), and their interface-heavy, turn-based combat (see Figure 2).

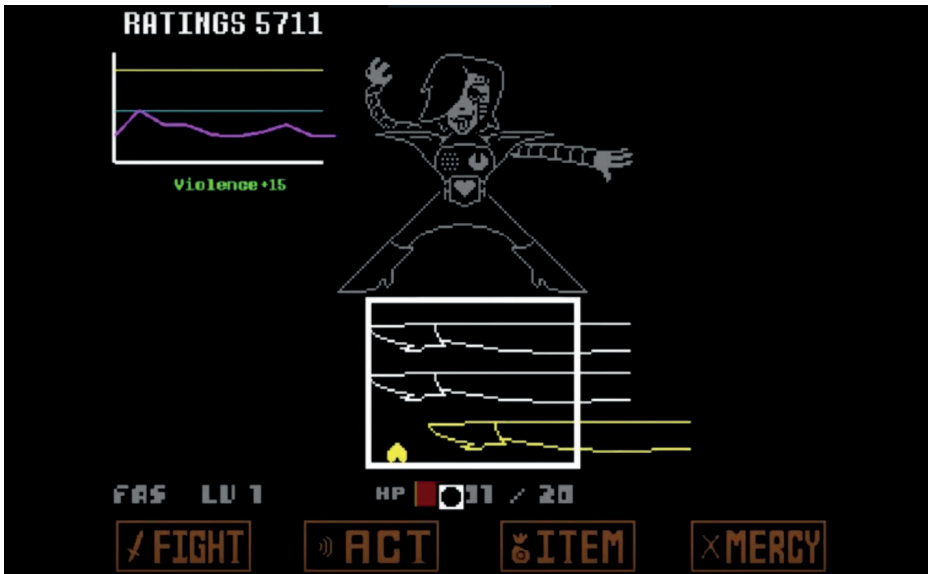


Figure 2. The boss fight with Mettaton in Undertale (Source: <https://journal.transformativeworks.org>)

Visuals

Hauntology is primarily apparent through the two games in their image, the most apparent instance of the salvaging of the past. Both titles use pixel graphics, reminiscent of the 80s and 90s. While colorful, *Dys4ia*'s graphics are abstract, similar to the visuals of the Atari 2600 console released in 1977. *Undertale*'s graphics are less abstract but simple with little on-screen detail and color, reminiscent of the capabilities of the Game Boy Color or DOS games. However, this visual style is departed from in the final boss battle that features more detailed elements and rendered photorealistic aspects. A stark contrast to realistic visuals typical in a modern AAA game, visuals are where the games produce the most overt shock; the immediately perceived angst that Vattimo claims is vital to a transformative aesthetic encounter. This aesthetic shock unsettles the uniform expectation of verisimilitude and immediately demands that gamers adjust their cognitive expectations of how game elements are represented. Among other highly detailed games, the pixelated style of these low-resolution titles stands out. Nevertheless, while they are pointing to visual styles of the past, their modern touches, such as *Dys4ia*'s vibrant and varied color and *Undertale*'s detailed final boss, reveal their pixels not as a limitation of the developers but as a deliberate stylistic transgression of AAA's verisimilitude. Of course, independent developers do not have the resources to produce graphics on the same technical level as corporate

owned studios. However, these developers are not beholden to the constraints of 8- or 16-bits in their hardware, software, or technical ability.

While critical transgressivity arises primarily in the visual shock of the games, lower-resolution graphics also allow lower computing requirements to run them. Both titles do not need up-to-date hardware such as a high-end gaming PC, Xbox Series X/S, PS5, or even Nintendo Switch. Reducing the power needed to run these titles allows those who cannot afford top-of-the-line tech to play them.

Controls

Aesthetic shock extends to an embodied aesthetic encounter in the use of stripped-down controls and subversion of gameplay expectations in post-retro games. AAA games often require controllers with ten buttons (often including two analog triggers), a digital directional pad, and two analog directional inputs, along with a habitualized, embodied knowledge of how these controllers function. *Dys4ia*, *Undertale*, and other post-retro games, on the other hand, adopt the simplified gameplay styles of older games using only four directional inputs and two action buttons, a computer mouse, or touch controls. In this way, they reject the convoluted controls of AAA titles and the need for expensive controllers. Many post-retro games that do not use mouse input or touch controls can be played using a few keys on a standard computer keyboard. For example, *Dys4ia* only requires directional inputs and the occasional action button (primarily for selecting menu options). In addition to directional buttons, *Undertale* only requires two inputs, often for accepting or cancelling actions or menu commands.

Without complex controls, these titles ape the mechanics of earlier games and are more accessible to those not habituated to the hegemony of play. Writing about *Dys4ia*, Linzi Juliano (2012) champions the stripped-down control scheme for keeping “the engagement” on the content of the game and away from a “mastery of a sophisticated controller system.” Furthermore, the control scheme “forces the player to shift her focus from an idealization of command and conquer to one that is relational and possibly more ‘feminine’” (p. 598). These simple inputs can also be easily mapped to various input devices beyond a computer keyboard and gamepad, including more accessible devices like the Xbox Adaptive Controller or the QuadLife.

Gameplay

Beyond input mechanics, many post-retro games employ gameplay that subverts common gameplay goals and narrative expectations such as “winning” a game through the honing of one’s technical skills – what Paul calls toxic meritocracy.

Using non-human shapes (such as in *Tetris* and *Breakout*), action-puzzlers of the 70s and 80s are typically impersonal titles that focus on skills and score over narrative.

Dys4ia borrows the visuals mentioned above and their gameplay but subverts classic game conceptions by removing any score or point accumulation to illustrate a challenging personal journey.

In one of the first microgames, the player is tasked with moving a *Tetris*-style shape through an opening in a brick wall (as pictured in the upper-right of Figure 1). The dimensions of both the wall and avatar make this an impossible task, but the goal is not to be successful. Instead, it represents how developer Anna Anthropy feels about her body. Other segments work similarly. In one instance, the player navigates an avatar through a women's bathroom to avoid open stall doors; in another, the player moves a shield-like avatar to dodge projectiles from pink lips (pictured in Figure 1, bottom-left and bottom-right, respectively). You are not supposed to "win" in this game, nor are you supposed to lose. Instead, these minigames only function to represent the affective experience of Anthropy's frustration, anxiety, and societal disapproval.

Undertale subverts JRPG gameplay through the player's choices within a combat encounter. In addition to attacking or using an item, typical of JRPGs, the player is allowed to "act." Selecting act over fight opens up several non-violent actions, including compliment, pet, hug, and insult, depending on the enemy encountered. The game becomes transgressive as it does not instruct the player on which actions to take but uses subtle techniques and meta-gaming to encourage moral choice.

As Frederic Seraphine (2017) states, the game "uses negative emotions like guilt or regret to create an uncanny aesthetic that makes the player ripe for thinking critically about the game, its genre, society, and more importantly themselves" (abstract). For example, many encounters in the game, such as one of the first, with the motherly and protective Toriel, explicitly evoke morals. After arriving in the underground world, the PC meets Toriel, who guides them to the safety of their home and provides them with a bedroom. In order to venture further, Toriel demands you fight her to prove you are strong enough to brave the dangers of the outside world. If you decide not to attack and eventually spare her, she hugs you and sends you on your way. Shortly after leaving, however, you encounter Flowey (a reoccurring character who looks like a scary flower) who scolds and ridicules you for your choice. If you decide to fight Toriel, you defeat her in one hit. Visibly shocked, Toriel utters (through shaky letters in a dialogue bubble), "You really hate me that much?" followed by some more heart-wrenching dialogue, finally deteriorating into an upside-down white heart. Whether you spare or defeat Toriel, the player receives dialogue to evoke negative emotions and question their actions.

Depending on the player's actions throughout the game, elements of the game's narrative change. For instance, item availability varies and spared characters reappear. Even some story threads are limited to whether the player kills everyone (referred to as a genocide run), does not kill anyone (the pacifist run), or mixes it up (the neutral run). While Seraphine argues that the game incentivizes a pacifist run, the game does not overtly favour any play style and plants seeds of doubt for all narrative choices. Unlike

the JRPG games that inspired it mechanically and visually, the game is hauntologically transgressive by deconstructing the violent hegemonic gameplay of typical 8-bit and 16-bit JRPGs.

Whether it be classic puzzlers or JRPGs, both *Dys4ia* and *Undertale* acknowledge and employ many gameplay elements of genres they belong to. However, they become hauntological and transgressive when they adapt and subvert these tropes to focus on narrative over score (*Dys4ia*) and problematize combat to question morality (*Undertale*). Their critical transgressivity is pushed further through narratives that represent identities outside of AAA's white or Japanese, heterosexual male market.

Representation and accessibility

Dys4ia provides positive representation in games for trans people and does so in a space geared toward gameplay outside hegemonic paradigms. *Dys4ia* disrupts common assumptions of score-based retro games and aesthetics for narrative purposes, mirroring developer Anthropy's clash of identity and form. Made using Flash, this early entry in Anna Anthropy's interactive oeuvre reflects her advocacy for accessible game-making tools and her call for more diverse voices in video games (Anthropy 2012). This game becomes hauntological in its retro aesthetics and its push for trans representation and accessibility. Additionally, versions of *Dys4ia* can be found online to play for free or for little money.



Figure 3. Main characters, from left to right: Toriel, Sans, Papyrus, the player character (front-center), Undyne, Dr. Alphys, and Asgore (Source: <https://bleedingcool.com>)

Undertale also features queer representation. Primarily, the pixel aesthetics are used to great advantage in creating a non-binary PC. As shown in Figure 3, the player's avatar (front-center) possesses no discernibly gendered traits. In addition, they are never referred to by gendered pronouns, and beyond naming, the player has no visual customization options. Furthermore, as Bonnie Ruberg (2018) highlights, the game world is also full of queer-coded elements "such as a poster for a gay bar hung in the background of an otherwise seemingly straight area" (section 2.2). Unlike "superficial" queer representation in AAA games, "*Undertale* partially performs the creation of its own universe by integrating coded references that signal the game's engagement with queerness" (section 2.5). Ruberg uses the encounter with Mettaton (pictured in Figure 2) as an example, commenting on its use of high-heeled boots and a disco ball in the encounter, "calling to mind a nightclub scene or a drag performance" (section 2.5).

Additionally, there is a subplot in the pacifist run where the PC facilitates a romantic pairing with Dr. Alphys and Undyne (pictured in Figure 3). This romance between two female characters is normalized in the plot, but they subvert tropes for women in video games. Undyne is introduced as a powerful, armour-clad enemy, while Alphys is a squat, anime-obsessed nerd.

With no small thanks to accessible game making and distribution, we have seen a slew of independent games that represent experiences by people largely ignored or even maligned in AAA, such as LGBTQ+, BIPOC, and those who are neurodivergent. Many games that feature stories with more diverse characters and gameplay are less based on colonial and capitalist ideologies. Instead, the focus on empathy, critical thinking, equity, or personal expression is the goal of these games. Their self-conscious use of lower resolution graphics, stripped-down control mechanics, subversion of command-and-conquer gameplay, and diverse representation are what make post-retro games both hauntological and transgressive. Yet, they also make gaming more equitable and accessible for both players and developers. In their deliberate response to AAA's high budgets and graphics, it is understandable why these games have garnered widespread attention.

Commercial indie games

While mentions of *Dys4ia* can be found on popular online press sites such as *VICE* (D'Anastasio 2015) and *The Verge* (Souppouris 2012), it remains a relatively obscure example of hauntological games compared to *Undertale*, which has significantly penetrated mainstream game culture. It featured on best games of 2015 lists, won IGN's PC game of the year, and a "best game ever" poll on GameFAQs, not to mention extensive journalistic coverage that continues today (Barnewall 2021; Richter 2021; Rodriguez 2021) and a slew of fan games (see the tag *Undertale* at <https://itch.io>) and fanart (see the tag *Undertale* at <https://www.deviantart.com/>). *Undertale's* invasion of

the mainstream market and deconstruction of the hegemony of play paved the way for future hauntological games. Examples include *Diaries of a Spaceport Janitor* (Sundae Month 2016), an “anti-adventure” about routine, discovery, and identity where the player is tasked with picking up trash and exploring a city and their place in it; and *Celeste* (EXOK, formerly Maddy Makes Games 2018), a forgiving masocore pixel platformer about climbing a mountain while struggling with mental health, with a shame-free, well-integrated “assist mode.” At the same time, the aesthetics of post-retro games have also been adopted by the commercial indie gaming industry.

As mentioned above, what is transgressive at one time is often adopted by commercial interests. This is no different with hauntological aesthetics. As Jesper Juul (2019) claims, in recent years pixel graphics have become more markers of authenticity than transgressive aesthetics. Jon Vanderhoef (2016) also points out that many commercial indie publishers and developers, like Devolver Digital, are just as profit-driven as the big publishers and continue to perpetuate toxic masculinity in their games, even if this is done in a winking, self-conscious way. *Katana Zero* (Askiisoft 2019) cleverly uses neon pixel visuals, coupled with a pumping retrowave soundtrack, 80s VHS aesthetics, and rewind mechanic to explore the PC’s struggle with trauma and memory. However, the gameplay is mainly dependent on the player deftly executing well-timed button presses to murder enemies acrobatically. *Olija* (Skeleton Crew Studio 2021) features an elastic band animation style in its pixel art but tells a colonial story of a white explorer saving natives from a monstrous threat with unproblemated orientalist elements.

There is nothing inherently wrong with transgressive works losing their transgressive power. The problem arises when post-retro aesthetics are adopted to perpetuate hegemonic ideologies, especially those rampant in the gaming industry already. While I still maintain that commercial indie games with post-retro aesthetics can be hauntological – *Ikenfell* (Happy Ray Games 2020), *Get in the Car, Loser!* (Love Conquers All Games 2021), and *She Dreams Elsewhere* (Studio Zevere, to be released) are all good examples – I cannot ignore how the market has adopted this style for profit. To get outside this, we need to get outside dominant gaming markets and for-profit production entirely. Fortunately, the hauntological spirit is still alive in DIY production.

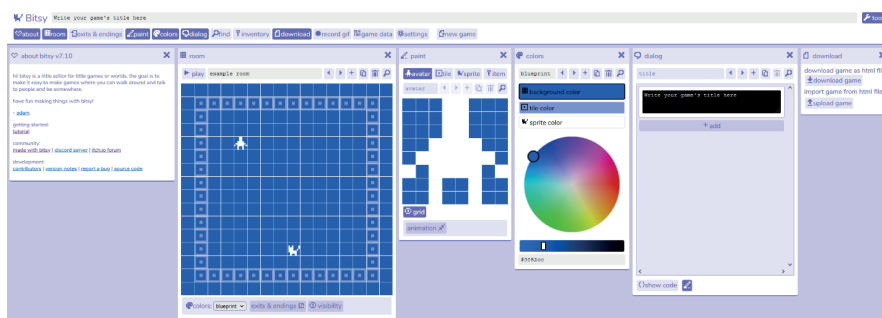


Figure 4. The starting Bitsy interface

DIY, altgames and *Bitsy*

What I am referring to as DIY games have also been called altgames. Essentially these are games made outside of capitalist modes of production, and outside the indie and AAA distinction. They are made by a broad audience of consumers and producers, using accessible game making tools and not typically made for much profit, or any at all. This kind of production can be seen across many supportive online and in-person communities at game jams, forums, and podcasts, all making and playing games, big or small (though mostly small), personal or not (though mostly personal or political). In its existence outside of the for-profit industry, DIY game making has also become a space where traditionally marginalized individuals, such as people with identities other than cis male, as well as BIPOC, LGBTQ+, and those who are neurodivergent, can not only create games, but find games that appeal to them (Keogh 2015; Young 2018; Vanderheof 2016).

A lot of DIY game making is facilitated by accessible development tools like *Twine*, *RenPy*, *RPG Maker*, and *Pico 8* and *Bitsy* for making 8-bit, post-retro games. Many of these tools are free and have extensive online support and communities devoted to supporting this style of game making. *Bitsy*, in particular, takes the hauntological aesthetics of post-retro games to encourage a kind of expressive game making that limits graphics and controls to those of the 8-bit era while providing those unfamiliar with development with an easier method to make these games. *Bitsy* works similarly to *Twine* in that it does most of the heavy lifting code-wise and presents the user with an aesthetic and design-focused interface. Additionally, *Bitsy* is political as a tool for the non-developer that privileges a particular way of creating games that focuses more on aesthetics than coding and keeps the engine freely accessible (Nicholl & Keogh 2019). *Bitsy* is locked in highly-constrained allowances (though clever tricks allow getting around constraints) of an 8-bit era that work outside dominant modes of game development. Therefore, games made in *Bitsy* become critically transgressive and hauntological through the platform.



Figure 5. From left to right: *My Face* (AshG 2019), *Under a Start Called Sun* (Cecile Richard 2020), *Starlight Motel* (cwcdarling 2021)

Whether intentionally or not, much of the extensive output of *Bitsy* features gameplay and narrative that deviate from the hegemony of play. Instead, you find games that are personal and experimental. For example, *My Face* (AshG 2019) tasks the player with exploring a pixelized image of the developer's face to learn about their insecurities. Cecile Richard has made several affective narrative games in *Bitsy*, such as *Under a Star Called Sun* (2020). In the game, the player controls a lone crew member on a ship that escaped a dying Earth. While performing their routine, the player learns of the PC's loss, grief, and loneliness. Finally, based on a real place in Massachusetts, *Starlight Motel* (cwcdarling 2021) explores the lives of individuals and families without a permanent home, living in the titular establishment.

Due to *Bitsy*'s limitations and allowances, many games are narrative-heavy, exploration-based, and short. However, their constrained mechanics and lo-fi visuals still produce a variety of personal, complex, affective, and political experiences. And all these games are made by various developers, for little to no development cost, and are made available for little to no money (many offering a pay what you want/can price scale).

Through its accessibility, its limitations and allowances locked in simple mechanics and 8-bit visuals, and output that features a vast array of voices, *Bitsy* is deeply connected to hauntology and resistance to the commercial pressures of capitalist realism and AAA games.

Conclusion

In the face of the modern video game emergency that produces corporate products which exploit workers and reproduce hegemonic ideology in skill-based gameplay, post-retro games are a transgressive aesthetic force. Games like *Dys4ia* and *Undertale* fight against capitalist realism with hauntology, as presented in their 8-bit and 16-bit aesthetics, stripped-down controls, gameplay subversion, and representation of identities outside the straight, white, and Japanese dominant AAA industries. Despite a number of titles that remain powerful examples of post-retro, though, many commercial indie publishers have been engulfed by commercial interests and lost their critical transgressivity. In this context, DIY gaming has held strong, especially in the hauntological constraints and output of *Bitsy*. This essay barely scratches the surface of the power of this 8-bit game making platform and what it can produce. However, it lays the groundwork for moving past commercial post-retro games and looking toward *Bitsy*'s transgressive and hauntological potential.

Through their deliberate use of pixel graphics and subversion of gameplay expectations, post-retro games and the platforms that facilitate them are fulfilling Zabala's wish for an aesthetic force to confront capitalist realism, as it appears in

gaming. Entwined in their resurrection of past forms, they are creating new kinds of games and stories that are not produced by the AAA industry. Nevertheless, it is essential to note that post-retro games are just one piece of a history characterized by growing production of a different kind of game pushing against AAA's hyperrealism. Many aesthetic forces are saving us from the emergency, whether it is *Twine* and interactive fiction, flatgames, and the relatively recent, very hauntologically entrenched, low-poly horror games.

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