

## Do(n't) hold your breath:

### Rules, trust, and the human at the keyboard

Abstract: The maintenance of rules within the 'black box' of code, away from human eyes, constitutes a major difference between digital games and the social history of their analog counterparts. Meanwhile, the incorporation of new types of human behavior into digital games' rulesets has placed games on the cutting edge of machine surveillance technologies. This article examines several digital games that stand in opposition to these trends, by opting out of monitoring certain aspects of player behavior, and opening social dynamics of trust and cheating that digital games have historically avoided or shut down. Chief among these examples are *Asphyx* (Droqen, circa 2012) and *With Those We Love Alive* (Porpentine, 2014), two games that incorporate player breathing into their mechanics, while forgoing any technical means of monitoring players' respiration. In place of the usual command/output logic of human-machine interaction, these games map a more intimate alternative, in which players' relationship to their avatars and in-game actions is built from a foundation of trust, shared truth, and consent between human bodies and software operations.

Keywords: Droqen; *Asphyx*; Porpentine; *With Those We Love Alive*; Christine Love; *Hate Plus*

Some lies we tell are given away by our breathing. (At least, this is what proponents of polygraph tests would have us believe.) Then there are the lies we tell about our breathing. ('It is normal to be this winded after climbing a flight of stairs.') Still other lies are told with our breathing themselves. (We play dead, holding our breath as we do so.)

This essay is concerned with a very specific instance of respiratory lies: cheating in a game, by not breathing the way it expects us to. Or, more accurately, this essay is concerned with the *possibility* of cheating in such a way—even if said cheating never takes place. This is, admittedly, a specific topic. Games that explicitly thematize a player's breathing, that oft-unconscious interstitial point between bodily process and bodily action, are few and far between, and I will ease into these rare case studies slowly. Along the way, this essay will trace a path through the

enforcement of rules in analog and digital games, player monitoring and human interface devices, and the social and ethical dimensions of cheating.

## **Rules**

The boundary between analog and digital games—that is, between the ancient human practice of play, made manifest in cards and dice, chess pieces and mancala stones, and the relatively brief history of games played with microcomputers—is frequently described in terms of *rules*.

Analog games have rules. Sometimes they have few; sometimes they have many. The rules of some games can fit on the back of a notecard, tucked into a bag of dice or deck of cards. The rules of other games require a booklet made up of thirty pages of fine print. Chess prescribes the behaviors of six different pieces across a board of sixty-four squares. In its abstraction, its ruleset is svelte, pithy. Subsequent, less abstract depictions of combat tactics have aspired toward greater simulation. In so doing, they have boasted more pieces and increasingly bloated rulesets. *Kriegsspiel*, developed in 1812 by Georg Leopold von Reisswitz as a Prussian military training tool, included hundreds of pieces and a dedicated reconfigurable table. With its grid-based movement and use of dice to temper strategy with chance, it anticipated a lineage of wargaming that continues to this day (and has included the likes of Guy Debord among its aficionados). *Kriegsspiel* also anticipated the genesis and popularization of the tabletop roleplaying game. By the end of the twentieth century, this lineage of complexity would include both *Dungeons and Dragons*, with its dice, statistics sheets, and ever-evolving rulebooks, and *Terrible Swift Sword*, an American Civil War-themed wargame in which players arrange 2000 pieces across a fifteen-square foot board.

There are, however, limits to how complex analog games can be. In some accounts, the ‘digital divide’ between analog games and computer games is described in a purely *quantitative* manner. Digital games can enforce more rules. As game designers Katie Salen and Eric Zimmerman (2004, 88) put it, since digital computers free players of ‘manipulating pieces or behaving according to explicit instructions outlined by the rules,’ they can ‘facilitate the play of games that would be too complicated in a noncomputerized context.’ Computers can perform procedures at speeds and volumes no human could ever hope to match, while keeping track of game states far more complex than any human could ever keep track of using cards and tokens. Attempt to design a ‘racing game’ bound by a human-readable ruleset, and you will end up with the children’s board game *Snail’s Pace Race*, or the slightly more complex *Camel Up*, with its cards, dice, tokens, and betting mechanics. But even provided with all of the dice and formula sheets in the world, no analog game designer could ever match something like the digital racing game *Project CARS* (Slightly Mad Studios, 2015), which simulates the friction of tires against wet pavement in real time. The sheer number of rules implemented in real time in order to prop up a reasonable facsimile of Newtonian physics is simply beyond the grasp of human players tracking game states with physical media.

This quantitative description of the digital divide is useful, but we can also tweak its emphasis. The truism ‘digital games can enforce more rules than analog games’ is indeed partly about the ‘moreness’ of the rules in play. But it is also partly about the specific matter of *enforcement*. It is not simply that computers can juggle more rules affecting a more complex game state than humans can. They are also, by their very nature, more consistent, impartial, and deterministic in how they enforce these rules for their human players. Computers don’t hedge, or fudge, or make allowance for mulligans. They determine outcomes without recourse to fuzziness.

A server for *World of Warcraft* (Blizzard Entertainment, 2005–) can account for the real-time actions and interactions of twelve thousand players, something even the most competent and obsessive expert team of *Dungeons and Dragons* game masters could never hope to achieve. This is an enormous accomplishment in quantitative terms, yes. But it is also striking in its strict, calculated impartiality. When a player strikes a lich with a sword, there is no social negotiation. There is no fumbling, or favoritism, or thumbs placed on the scales. There is only the cold calculation of damage. Agreement within a community of players disappears and is replaced by submissive deference to a machine-imposed reality.

The traditional human roles of game master and referee rely on social consensus, but the computer has a different sort of authority. It is less a game master or referee than it is a god. It holds, within its memory, an unfathomably complex state of affairs, which it illustrates for us, all the while rigidly enforcing responses to player input. The digital game is a black box. Unlike *Advanced Dungeons and Dragons 2nd Edition* (Wizards of the Coast, 1991), the official guide of which can be read by anyone, the precise rules defining the physics of Azeroth in *World of Warcraft* are hidden away in the game's code, far from prying human eyes. But the playing public allows digital games these secret rules, because we have faith that they are enforced upon everyone, impartially and immutably.

In the vast landscape of rules and game states held within the computer, the player is an unknown variable. As it tracks its game state, a digital game must be ever-waiting, always ready to accept new input from the designated human interface device, and to respond accordingly. This is the very crux, the promise, of interactive media. We are not just sitting by, silently witnessing elaborate simulations. We can intervene. We can interfere. We can act. 'There's that world space over there, this one over here,' writes David Sudnow (1983, 37) in his phenomenological

investigation of videogame involvement, ‘and we traverse the wired gap with motions that make us nonetheless feel in a balanced extending touch with things.’ Today, the term ‘wired gap’ is archaic. (We sit comfortably in the age of wireless game controllers.) But Sudnow’s basic account of ‘traversal’ still rings true. There is a meatspace where living, breathing beings dwell, and there is a world where electrons dance. Between them, there is a human interface device. This device takes the place of the traditional social negotiations of the analog game. The terms it offers are simple: If we wish to be considered by the game’s rules, we must first be accounted for. If our decisions are to have consequences, then the computer must register them. If we are to take part in these simulations, our movements—and the bodies that produce them—must be monitored. They must be tracked. They must be quantified.

The earliest forms of quantification were simple, seemingly benign. *Spacewar!* (Steve Russell, 1962) tracked player finger movement across the PDP-1 computer’s bank of eighteen switches. *Pong* (Allan Acorn, 1972) used a knob to do the same. *Adventure* (Will Crowther and Don Woods, 1976) expects its players to type out lines of text on a keyboard. From these early innovations grew a widely recognizable spectrum of videogame input devices: the joystick, associated with early-1980s Atari games and later flight simulators; the gamepad, a fixture of game consoles since Nintendo’s Famicon; the keyboard and mouse, a staple of PC gaming.

But from these meager beginnings, a raft of other options grew, more precise, more invasive, and more disciplining. One major motivator for the technological trajectory of the digital game medium has been the chase for ever-greater ‘immersion’ (however elusive and ill-defined). We start from two presumptions: first, that players want to be integrated into game worlds, and secondly, that the richness of a game world is measured by its consistent enforcement of large amounts of rules. It follows that *games should monitor player behavior as comprehensively as*

*possible, so as to enforce an ever-expanding palette of rules.* And so it was that gamers led the bleeding edge of self-quantification technologies. Long before the widespread adoption of now ordinary technologies such as FitBit and Nike+ trackers, gamers were the original ‘quant selfers,’ consenting to the disciplining gaze of dozens of flavors of machine surveillance.

Some forms of player monitoring were so wildly popular as to be epoch-defining. Twenty million *Wii Fit* (Nintendo EAD, 2007) players signed on to allow the Wii Balance Board to track their weight. Players of both *Ingress* (Niantic, 2012) and *Pokémon Go* (Niantic, 2016) willingly embraced smartphone GPS tracking as the privacy-busting entrance fee to their augmented-reality wonderlands. And although Microsoft’s Kinect peripheral is now defunct, that did not stop millions of Xbox One owners from buying a system that launched with a built-in camera sensitive enough to simultaneously track six human skeletons.

Other forms of player monitoring have been more niche and experimental, calling out to technophiles and early adopters. *Rocksmith 2014* (Ubisoft San Francisco, 2013) invites players to plug a genuine electric guitar into their game consoles so that a computer could accurately and impartially judge their musical abilities. Those who willingly set up a Tobii eye-tracking device can ditch their computer mouse, and control the perspective of first-person games such as *Deus Ex: Mankind Divided* (Eidos Montreal, 2016) with just the movement of their eyes. On the farthest edge, you find curiosities such as the EMOTIV Insight, a portable electroencephalography headset that promises software that can ‘integrate emotions’ and be ‘controlled with thoughts.’<sup>1</sup>

The history of these technologies is a history of monitoring, surveillance, and ever-growing means of rule-enforcement. But there exist alternate practices of play, with their own rich histories, that are refusing to go gently into the night. One of these, of course, is cheating.

## Trust

If the medium of the digital game is defined, in part, by its swift and certain enforcement of rules, it would be hard to imagine a more existential enemy than the figure of the cheat. Competitive multiplayer gaming, in particular, is a multi-billion dollar industry, currently striving for the status of legitimate sport. Traditional sports must be monitored by referees and steroid testers, but there are hard limits on how much a player can cheat: after all, one cannot break the physical laws of the universe. This is, however, not the case with digital games. Their rules are embedded within computer code, and that code defines the very laws of a simulated world. Any momentary lapse in rule-enforcement can have far-reaching consequences. Exceptions and exploits must be quickly shut down. Increasingly, game publishers are turning to the force of law and state-sanctioned violence to best ensure that the rules of their digital games are enforced with proper universality. Epic Games used copyright law to bring a U.S. civil suit against the makers of cheating software for their game *Fortnite* (Epic Games/People Can Fly, 2017), accusing them of stealing code (Hall 2017). Chinese mega-publisher Tencent, meanwhile, has enlisted the full power of the state to crack down on cheaters of the popular competitive multiplayer game *Playerunknown's Battlegrounds* (PUBG Corp, 2017), calling upon the Chinese police force to arrest cheaters (Chen, Nakamura, and Kim 2018).

Given the massive amount of capital flowing through these international multiplayer games, the array of powers that have lined up to ensure that their rules of reliably enforced is not the least bit surprising. Still, though, the strict criminalization of cheating ignores a rich human history of play, of practices and counter-practices that were negotiated within communities.

Cheaters were important enough that Johan Huizinga saw fit to include an analysis of them in the opening chapter of *Homo Ludens*, his early theoretical work on the human phenomenon of

play (Huizinga 1955). The cheat in fact plays a central role in defining Huizinga's famous concept of the 'magic circle.' The 'magic circle' is a socially inscribed space (usually a literal space, for instance a basketball court or a card table) within which participants agree to adhere to special rules, pursuing a goal that has no immediate consequence outside of the circle. Magic circles are, in Huizinga's language (10), 'consecrated;' they are 'temporary worlds within the ordinary world, dedicated to the performance of an act apart'.

Players who rebel against the magic circle are 'spoil-sports.' The spoil-sport breaks not only the rules, but also the mood. They rebel against the collective consensual illusion. The spoil-sport is the childish player, who leaves when doing poorly, announcing that the game is 'dumb.' The spoil-sport is the hot-headed player, who flips over the card table when they don't like a particular outcome. The spoil-sport is the long-suffering game master, who unceremoniously kills an entire *Dungeons and Dragons* party in a fit of pique.

But the cheat is not the same as the spoil-sport. The cheat breaks the rules, yes, but they do not disrupt the magic circle. Unlike the spoil-sport, the cheat values winning the game—values it enough, in fact, to do so dishonestly. The cheat in fact has a vested interest in maintaining the magic circle. The rewards they seek do not, and cannot, exist outside of it. The cheat breaks the rules of the game, but they accept its premise and values, and in so doing adhere to its basic spirit.

In laying out the phenomenon of being a cheat without being a spoil-sport, Huizinga sheds light on the social intricacies of the magic circle. Playing analog games in the company of others exposes the full gradient between good faith and bad faith, and how the two can coexist within a single word or gesture. The boundaries of the magic circle are maintained by trust, but its interior is infused with guile. Games require mutual cooperation, while at the same time being based upon hidden information, slights, or bluffs. In games from *Liar's Dice* to *Bullshit* to *Balderdash*, players



are explicitly encouraged to deceive. But even in games not built upon blatant lying, the line between honest and dishonest play is often ambiguous—either by design, or by the very properties of the physical media used to track game states. Casinos may prefer that Blackjack players not count cards. But the physical facts of handling playing cards are such that any rule against this behavior is hopelessly unenforceable. Functionally, this rule must simply mean that one should *conceal one's counting*. And if we admit that the visual facts of card-dealing render card-counting an inevitability, can't we also say (with a devilish wink) that the sartorial facts of shirt sleeves make sleights-of-hand during poker an inevitability? These ambiguities and conflicts of interests are thoroughly baked into analog games, and are typically dealt with through a mixture of 'house rules' and heated negotiation, whether the matter at hand is the origin of suspicious cards, a die that fell under the table over the course of rolling ('it was a five!'), or *Monopoly* houses displaced by an errant sneeze.

The social experience of analog games is built upon this negotiated vocabulary of trust, which is largely absent from digital games. The very construction of digital games presupposes that ambiguity is bad, and that games should fairly and unambiguously enforce their rules. In the most extreme cases, this presumption takes the form of extensive anti-cheating measures, backed by legal threat and police action. For the most part, though, this lack of ambiguity is built into the very input devices we use to interact with digital games. There is no ambiguity when it comes to pushing a button on the Nintendo Famicom's Gamepad controller: the value is either 'pressed' or 'not pressed,' 'on' or 'off,' 'true' or 'false,' '1' or '0.' And although we have witnessed an explosion in the sorts of technologies that games can use to monitor the behaviors of their players, the underlying assumption remains that players want their actions to be accurately tracked, so as to facilitate the correct enforcement of rules.

There are a growing number of exceptions to this generalization, however. Especially within the ‘indie’ gaming scene, developers have begun re-assessing the social contract between player and digital game, experimenting with varieties of trust and faith that have largely been absent from digital games since their inception. In order to accomplish this, they have broken from the surveillant tendencies of contemporary games. There are certain types of play that can only emerge in the shadowed edges of the magic circle, in those interstitial moments when play goes momentarily unmonitored, when players slip free the yoke of obsessive rule-enforcement. In order for these types of play to flourish, digital games must be willing to avert their surveilling gaze.

An early half-step in this direction can be found in *Superbrothers: Sword and Sworcery EP* (Capybera Games/Superbrothers, 2011), originally released on iOS and later ported to the Android, Mac, Windows, and Linux operating systems. In order to progress through its adventure, players of *Superbrothers* must collect woodland sprites that appear only during the full moon and the new moon. The phase of the moon in the game matches the phase of the moon in real life: *Superbrothers* gathers date and time information from the player’s iPad (or Android device, or computer), and syncs the lunar cycle of its simulated world to the lunar cycle of our own world. Beating the game, then, requires patience and diligence: players must keep track of the phases of the moon, and remember to boot the game up again on the required days.

[Figure 1 near here]

Or, they could cheat. Poke around in the settings of any operating system, and one will inevitably find a way to set the date and time manually. With a lunar calendar in-hand, clever and impatient players can easily reset their tablet, phone, or computer’s internal clock, enabling them to finish this moon-related quest in a single sitting.

*Superbrothers* allows players to do this. But there is a catch. If the player gets through the game quickly in this way, a special achievement will unlock. ‘Achievements’ are badge-like icons, unlocked by certain in-game actions, which adorn a player’s profile on their online game service of choice (for instance, Apple’s Game Center for iOS games, or Valve’s Steam platform for Windows, Mac, and Linux games). Usually, unlocking an achievement is a point of pride, providing bragging rights within the particular social milieu of online gaming platforms. This particular achievement, however, is a mark of shame. Emblazoned with the words ‘Cheating Cheater,’ it accuses the player of ‘adjust[ing their] computer’s date/time settings to access other moon phases,’ and insists that they should ‘feel profound shame.’

*Superbrothers* presents a false offer of trust. At first glance, the connection between player action and computer enforcement would seem to be momentarily severed: The game allows its players to cheat, turning its back as they fiddle with OS settings. But the wink that comes afterwards, in the form of the achievement, makes it clear that the game never really stopped monitoring its players. *Superbrothers* may, in its good humor, *tolerate* cheating. But the game’s processes are still keeping an active eye on the player, by silently and secretly connecting to the internet, and verifying the internal date settings on the player’s device with an external and impartial world clock.

Subsequent games, though, have gone beyond such half-measures. One striking example can be found in Christine Love’s visual novel *Hate Plus* (Love Conquers All Games, 2013). *Hate Plus* finds the player-character gradually developing a friendship with an artificial intelligence named \*Hyun-ae, rescued from a derelict spaceship that once housed a Korean neo-feudalist society. Although it is hundreds of years old, \*Hyun-ae’s original personality was derived from the memories of a teenaged girl. Naïve but also traumatized, \*Hyun-ae requires frequent emotional

reassurance from the game's player-character, and displays a deep nostalgia for the bodily experiences and cultural trappings of the organic life-form her memories were originally drawn from. A significant portion of *Hate Plus* is devoted to \*Hyun-ae's increasingly acute wish to be able to have sensuous, embodied experiences, connecting its current digital existence with the memories of the young woman it once was.

At one point, to celebrate the lunar new year, \*Hyun-ae asks the player-character to bake a cake for her. She lists out a recipe, and asks that we check to see if we have all of the ingredients on hand. If players click 'yes' too quickly, she scolds them, insisting that they **really** need to go to our kitchen, and take a thorough look. And suddenly it becomes clear that she is not, in fact, speaking to the *player-character*. She is speaking directly to the game's *players*. The bodily beings on the fleshy side of the screen are explicitly being asked to get up from their computer, and to go peruse their cupboards.

[Figure 2 near here]

What follows is in an extended sequence in which players are encouraged to bake \*Hyun-ae a cake, from her mother's recipe. At the culmination of this process, \*Hyun-ae poses a question. 'Please, be honest with me: did you, the player, actually go bake a cake?' The language here—the inclusion of 'the player' to modify and specify 'you'—makes it quite clear that players themselves are being treated as moral agents. The game cannot accurately track if players have baked a cake or not. There is not elaborate monitoring technology in play here: players cannot hook up their oven to the computer via a USB cable. Instead, players are being asked, simply and directly, to be honest, with the full knowledge that the game cannot detect their dishonesty. In a radical departure from the logic of surveillant enforcement that governs both the Wii Balance Board or the EMOTIV EEG headset, *Hate Plus* employs the honor system. It asks players whether they're willing to lie

to a \*Hyun-ae, a character we have consistently been invited to care about (and care for), who has been portrayed as traumatized and vulnerable, trusting, and eager to make friends. *Hate Plus* transforms the act of cheating into the act of lying to a fictional character—an ontological conundrum held together by the game's attempts to erect and maintain an ethics of care. And, unlike in *Superbrothers*, there is no winking acknowledgement if we cheat. The game is truly incapable of monitoring us in this moment.<sup>3</sup>

In both *Superbrothers* and *Hate Plus*, we witness an evolution and expansion of digital game's usual vocabulary of trust, as developers find the confidence to leave player activities unmonitored. The moments in these games I have mentioned, however, are just that: isolated moments, suspended within games that, on the whole, play by the expected rules. The subsequent sections of this essay will provide extended case studies of two games—*Asphyx* (Droquen, circa 2012) and *With Those We Love Alive* (Porpentine, 2014)—that embrace un-monitored player activity in a wider range of their base mechanics, putting matters of trust and good-faith play at the center of player experience.

Along with their greater dedication to trust-based mechanics, both *Asphyx* and *With Those We Love Alive* also pull the issue of trust into a more corporeal direction. *Hate Plus* asks its players to perform a single task, on their own time and on their own schedule, that it cannot track or measure. Both *Asphyx* and *With Those We Love Alive* ask players to monitor and control their own breathing—a request that goes beyond the issue of a computer game trusting its user. The pacts between human bodies and software operations offered up by *Asphyx* and *With Those We Love Alive* involve a two-way flow of consent. Human players agree to be honest with their machines, while also trusting that their machines aren't going to lead them into bodily harm. What emerges

is an ethical configuration between human, machine, and game developer striking in its rarity and radicality.

### **Breath**

‘You! The human at the keyboard,’ announces the first screen of *Asphyx*, a browser-based Flash game released circa 2012 by the developer Alexander ‘Droqen’ Martin.<sup>4</sup> ‘This is a game about **you**. When your avatar is underwater, **you must hold your breath**.’ Suddenly, the game’s severe end-user license agreement, which stipulates ‘If you happen to die while playing *Asphyx*, you agree to happen to not hold Droqen responsible, and also admit that you are terrible at the game,’ makes sense. *Asphyx* is a game based around players’ willingness to deprive themselves of oxygen.

[Figure 3 near here]

Generically, *Asphyx* is a 2D platformer, one of the oldest and most visually recognizable genres of the videogame medium. It is, by the current standards of the genre, a relatively short and simple affair. As I play it, I move a tiny silhouetted player-character left and right through monochrome, pixelated rendering of a cave system, using the arrow keys of my computer’s keyboard. When my player-character encounters a pit, I jump over it, by pressing my keyboard’s ‘X’ key. Unlike many platformers, these pits aren’t bottomless. My character won’t immediately die upon dropping into one. Instead, they are filled with water. When I accidentally tumble into one, my avatar—who seems to have no natural buoyancy—sinks immediately to the bottom. I freeze my diaphragm, in a conscious attempt to abide by the game’s rules. This allows a tiny glint of panic to flavor a missed jump: a ticking biological countdown stirs within my ribs as I fumble with my keyboard, trying to get back up to dry land. When I do so, I allow myself to breathe again, and

the game's field of view, which had narrowed considerably while my player-character was struggling underwater, snaps back to its usual full state.

[Figure 4 near here]

*Asphyx* is not particularly difficult. It is not fond of giving players 'game overs.' Slip-ups can usually be rectified after just a few seconds of breathless pressure. But despite its lack of overt difficulty, *Asphyx* is a game that revels in stressfulness. It likes playing dirty tricks on me. (If we are to extend my previous analogy between digital games and gods, *Asphyx* is less Yahweh than Loki.) More than once, I line up a jump that seems perfectly reasonable, only to find myself missing my landing at the last moment. The platform I was aiming for has been perfectly positioned to disrupt the arc of my jump, denying me victory by one single pixel. In my misplaced confidence, I forewent taking a breath before jumping, and so now I'm scrambling underwater, trying to enact a plan B while my brain burns through its remaining oxygen. Hubris, punished. Late in the game, platforms start collapsing beneath me, unpredictably, but with increasing regularity. Although it is far from the hardest platforming section I have ever played, few things have made me panic as much as a moment where, near the end of *Asphyx*, I successfully climbed a series of ascending platforms as the water level rose ominously, only to suddenly have the ground collapse beneath me as I neared the summit, plunging me deep into the water below, undoing all of my progress, and then some. Other games may offer exquisite frustration; *Asphyx* specializes mortal terror, as your chest reflexively squeezes in shock.

The act of playing any videogame is, for most players, thoroughly shot through with unconscious bodily movements, involuntary shifts in comportment and posture. Struck by her realization, via an impromptu phenomenological observation, that 'moving within a game is far from uncommon,' games researcher Melanie Swalwell (2008, 74) explored the phenomenon

among her research subjects, collecting stories of their own unconscious movements—for instance, ‘the way they lean when cornering in a driving simulation.’ In recent years, the expanding surveillant possibilities of game interface devices have made these previously unproductive responses newly relevant. For a player willing to submit to the gaze of a PlayStation Eye camera while playing *Gran Turismo 5* (Polyphony Digital, 2010), every dip and lean will be accompanied by a corresponding shift in the game’s onscreen viewpoint. A player who slips on a PSVR headset while playing *Gran Turismo Sport* (Polyphony Digital, 2017), meanwhile, will be subject to an even more all-encompassing mode of head tracking.

From a certain viewpoint, *Asphyx* seems to be the next logical step in this progression. If games are finding new ways to make the un-thought specificities of posture newly relevant, then why not do the same thing with a player’s breathing? Seated just above involuntary processes, breathing is the most primordial of all gestures. (Recall Luce Irigaray [1999, 163]: ‘*I breath, therefore, I am* is forgotten in Being’s *ek-sistance*.’) Just as motion controls made players newly aware of their unruly bodies, *Asphyx*’s mechanics are poised to make players newly aware of the air that passes through them. There remains, however, a considerable difference between *Ashpyx* and the orgy of technophilic excesses that characterizes the *Gran Turismo* franchise. The breath-centric control scheme of *Asphyx* is not governed by technology at all. It is, instead, governed entirely by the player’s agreement to act honestly.

In purely theoretical terms, it would not be impossible to track players’ adherence to the requested breath-holding via technological means. Researchers in the fields of medicine and computing have conclusively demonstrated that the motion-sensing camera of Microsoft’s Kinect peripheral is sensitive enough to accurately detect the breathing rates of humans positioned in front of it (Procházka, Shätz, Vyšata, and Vališ 2016). From a technological standpoint, player breathing



can in fact be monitored, meaning that the game's rules could have been strictly enforced. If he had been interested, Droqen could have abandoned the Flash platform, and remade *Asphyx* into a Kinect-dependent Xbox exclusive. But Droqen was clearly not interested in making a game in which human actions are tethered to game states via state-of-the-art technics. Droqen was instead interested in the explicit contract the game offers up, its pact of honesty between human operator and machine rule-keeper. *Asphyx* is a game about the exchange of gasses, and also about the exchange of trust.

It all begins with that early announcement, with its forthright second-person address. 'You! The human at the keyboard. This is a game about **you**. When your avatar is underwater, **you must hold your breath.**'

In many media, second-person address arrives with a distinctly modernist flavor, inherited from a lineage of Brechtian distancing. When we are confronted with the all-caps announcement 'THIS IS A FILM ABOUT YOU' in *Remedial Reading Comprehension* (George Landow, 1970), the standard mode of reception around which cinematic fictions are built is short-circuited. Our attention is instead re-routed toward the processes of meaning-making humming throughout the theater. Second-person address in digital games, however, has long been exempt from Brechtian connotations. 'You are standing at the end of a road before a small brick building,' reads the opening line of Crowther and Woods' *Adventure*, the progenitor of the text adventure game. 'Around you is a forest. A small stream flows out of the building and down a gully.' In terms of literary legacy, *Adventure* connects less to Italo Calvino's *If on a winter's night a traveler* than it does to Edward Packard's 'Choose Your Own Adventure' series.<sup>5</sup> The second-person address isn't invoked to interrogate the act of reading. It is adopted for functional reasons, to hail the reader and invite them into the decision-making process.

But even though second-person address doesn't threaten the sorts of radical destabilization in digital games it can in other media, its employment in *Asphyx* is unusually direct. Typically, when players encounter a 'you' in a text adventure game, they do so while protected by the intervening buffer of a player-character (explicit, or implied). *We* are not standing at the end of a road before a small brick building. *We* are standing at a keyboard terminal for a PDP-10 mainframe computer running this *ADVENT* program we found on ARPANET. It is *our character* who is standing at the end of the road. We guide their actions, in an act of performative role-play. The 'you' of this text addresses us, but only after it has been rerouted through this intermediary. Or, perhaps, rerouted through multiple intermediaries. Espen Aarseth (1997, 127), in his theoretical consideration of the adventure game form, lays out no fewer than six proxies that intervene between the words of the game's 'real creator' and eyes of the game's 'real user,' including such Iser-derived categories as 'implied creator,' 'implied user,' and 'intriguee'.

[Figure 5 near here]

*Asphyx* jams this linguistic release valve. Yes, visually, there is a player-character onscreen, which players control with the arrow keys on their keyboard. But just as in *Hate Plus*, the explicit wording of the game's opening makes it clear that these instructions aren't addressed to any intervening fictional/linguistic construct. They are addressed to *us*: the humans, seated at our keyboards, playing this game. The game is making an official request, in writing. It asks us that we abide by the rule that we hold our breath while our onscreen avatar is underwater.

(This is also the reason why *Asphyx* is so easily personified, and why I have been so quick to anthropomorphize it, whether accusing it of 'playing dirty tricks,' or simply crediting it with 'making official requests.' *Asphyx* calls players out, in their specific bodily being. Such an overt appeal to the 'implied user' invites reciprocity—a desire for the user to conceptualize and to

address some sort of concrete embodiment of the author function. Reporting on one's play experience, it is nearly impossible not to tear these instructions from the realm of abstraction, and to attribute them to a specific interlocutor, in the vein of Vivian Sobchack's [1992] invocation of 'film's body.')

*Asphyx*'s breathing rule is utterly unenforceable, depending entirely upon the honor system. The discomfort and panic that I reported during my playing of *Asphyx* could have been easily avoided if I decided to cheat—by, taking quick gasps of air while underwater. I also could have opted to be a complete spoil-sport, denying the game's premise entirely, and never holding my breath to begin with. I would have denied myself a richly memorable experience, but the game would never know. It would have carried on, obliviously. There is nothing stopping us from lie to the game, beyond our own sense of honesty. And, even then, what's the harm? After all, *Asphyx* is just a computer program, running in our browser. Would it be rational to feel guilty for lying to a computer program?

To the extent that critics and theorists have previously taken up the subject of *guilt* in the context of videogames, the discussion is typically centered around games' ability to pair player *choice* with *consequence*. Digital games, we are told, don't afford their players the same condition of 'viewing unseen' that Stanley Cavell (1979, 193) describes in cinema. Instead, interaction renders us visible. Our actions are monitored, and they are accounted for. We are not detached monads, peering into a universe from a disinterested remove ('screened' by the silver screen, as Cavell would have it [24]). We are, instead, moral agents. This is a point commonly made in studies of games' emotional impact—'Because players make their own choices and experience their consequences,' writes Katherine Isbister (2016, 40–41), 'game designers have unique powers to evoke emotions—such as guilt and pride—that typically cannot be accessed with other media'.

Studies of the ethics of videogames are likewise fond of dwelling upon the sorts of ‘moral choices’ that can be tracked and responded to by the game’s storytelling systems. The weaving of choice and consequence into fictional scenarios has proved enduringly popular in philosophically-informed game criticism, whether the topic behaving in accordance with the principles of truth, love, and courage in *Ultima IV: Quest for the Avatar* (Origin Systems, 1985), or choosing to spare or harvest the Little Sisters in *BioShock* (Irrational Games, 2007).<sup>6</sup>

But here is *Asphyx*, making it quite clear that it *isn’t* tracking our choices. ‘It’s up to you to follow the rules ... or to not,’ the game’s introduction explicitly states. And, in its own way, *Asphyx* turns the usual arguments about videogames’ ethical potential on their head. It is precisely because *Asphyx* doesn’t track our breathing that it allows us the opportunity to be moral agents, to make decisions we might later feel guilty about. The untracked ‘choices’ aren’t a matter of role-play. We aren’t playing with a storytelling system, to see how the game’s narrative responds. They’re not about exploring outcomes for an in-game player-character. We have reached the edge of the game’s systems. Freed of input devices, we are left to our own devices. There is only us, the humans at the keyboard. ‘In the end,’ the final screen of *Asphyx* ‘only you can judge yourself.’ *Asphyx* keeps track of what our fingers are doing, but doesn’t keep track of our lungs—or our consciences.

## **Community**

*With Those We Love Alive* is a strong distillation of the usual themes and style of its author, Porpentine Charity Heartscape, an acclaimed figure in the interactive fiction (IF) scene, particularly that subscene clustered around the IF platform Twine. Like much of Porpentine’s output, *With Those We Love Alive* is a study of domination and humiliation, peppered by allusions

to the social and bodily dimensions of trans identity. And, following her usual generic propensities, the alien qualities of the game's magical realist setting are offset by its quotidian—even boring—devotion to portraying the ritualistic minutia of daily life, labor, and emotional upkeep.

In *Those We Love Alive*, our character has been drafted into service of the Empress. Although players may regard the Empress as monstrous (in every sense—her physical features are partially in control of the player, but always tend toward the hideous, with insectoid and/or bovine features), she is treated with unqualified reverence by our character. Our job is to craft gifts for the Empress, tributes to her terrible might. These gifts are presented during festivals and celebrations, the exact schedule of which is dictated by the invisible whims of the Empress. Players will, then, spend the majority of their time with the game *biding time*, waiting anxiously for a new gift to be requested and for the plot to advance. As we wait, we guide our character around, exploring the palace grounds and surrounding city, the environmental details of which are lovingly and lavishly described in Porpentine's characteristic purple prose. Again, although we, as readers, may regard the details of this world as nightmarish and postapocalyptic, our character seems to take them in stride, fully submissive to the logic of this world. Shaped by a lifetime of terror and control, their personality has been molded into that of a submissive subject.

[Figure 6 near here]

One place that players may visit while waiting for their next assignment is an inky black lake, covered by a layer of dead leaves. Here, players can direct their player-character to meditate—one of the few moments of serenity the game allows. Upon doing so, the game offers a breathing exercise. 'Take a deep breath,' its text interface instructs. When players click on the link that reads, 'I am holding my breath,' all text disappears from the screen for a set interval. Finally, the text returns, and the game instructs players to exhale.

Given the tale of domination and submission that *With Those We Love Alive* weaves, one might immediately associate the breathing ritual presented here with the phenomenon of BDSM breath control play. Prior to *With Those We Love Alive*, Porpentine's work had already evinced a fascination with submitting to machine domination. (Her 2012 IF piece *Cyberqueen* relates a fantasy of being violently dismembered and reconstituted as a cyborg by a malevolent AI dominatrix.) Upon first glance, this mediation lake might appear to be an exercise in consensual submission to a machinic power. An especially transgressive and radical form of submission, at that: as Lisa Downing (2007) has observed, 'breath control play' represents a breaking point for the defensive rallying cry of 'safe, sane, and consensual' among the BDSM community: no matter how consensual the practice may be, it could never honestly be termed 'safe,' due to the unpredictable risks involved.

The exact details of the scene, however, refute this initial impression. There is, of course, the nontrivial matter that the dangerous aspects of breath control play have been mitigated by the game's lack of any means of physically blocking the windpipes of players. Just as in *Asphyx*, the game has no means of monitoring or physically controlling its players. It relies upon our honesty, and, in turn, it is rigorous in its pursuit of mutual consent. If players find the task of holding their breath too difficult, the game offers up alternatives. After each exhalation, *With Those We Love Alive* presents a suite of customization options: 'I need a shorter breath,' 'I need a medium breath,' and 'I need a longer breath.' This breathing exercise is communicative and consensual. Although *With Those We Love Alive* explores issues of masochism, submission, and abuse, these exercises by the lake are not themselves meant to be a site of abuse. They are, instead, as the game purports, supposed to be meditation, a relaxing and ritualistic respite from the horrors of the palace.

[Figure 7 near here]

In fact, although the game's prose depicts submission and abuse, the activities the game actually asks players to undertake are about gathering strength, about narrativizing one's past so as to make sense of trauma, and ultimately learn to live with and through it. This theme of tracing personal narrative as a means of living with trauma is made even more explicitly manifest in the second major action *With Those We Love Alive* requests of its players: to draw sigils on their skin, laying out a history of emotional milestones ('new beginnings,' 'severing,' etc.) on their own flesh.

Much like fluxus 'event scores' such as Yoko Ono's *LIGHTNING PIECE* ('Light a match and watch it till it goes out') or Jackson Mac Low's *Tree\* Movie* ('Set up and focus a movie camera so that the tree\* fills most of the picture'), *With Those We Love Alive* is a textual work of art that invites the creation of performative and visual works by those who happen to read it.<sup>8</sup> The commands issued in such written works are *interpellative*, but not in the typical Althusserian ideological sense. Natasha Lushetich (2014, 58) proposes that, in assigning 'an activity to perform,' such event scores are interpellative 'in the creative and contemplative sense of the word.' In consenting to be the addressed subject of this hailing, we adopt the role of 'percipient-interactant,' becoming 'a distinct player in the language game proposed by the score' (59).

As noted above, the second-person address of *Asphyx*, jumping over the player-character to directly address the player, likewise lassoes players into a particular language game. But the sigil-drawing of *With Those We Love Alive* represents another leap forward. It is not merely another unmonitored player action. It is also a creative act of self-expression. Breath in *With Those We Love Alive* is private, submissive, mechanical. Breath in, click a link, then wait for the machine to tell you to exhale. Sigil-drawing is public, creative, agential. It is again a bodily action, but one that leaves an expressive public mark—and one that opens up a new constellation of possible honesties and dishonesties.

‘One of these symbols I drew on my arm is a lie,’ writes Alice O’Connor (2014) of the games website *Rock, Paper, Shotgun*, in a piece that is part review of *With Those We Love Alive*, and part confessional. Rather than being illustrated by screenshots of the game, the post is illustrated with photos O’Connor took of the sigils she drew upon her own arm. ‘One icon represents something I like to think about myself, but know isn’t true,’ O’Connor continues. ‘I stared at that lie a lot the next day.’ The visual art that *With Those You Love Alive* asks its players to scrawl upon their body is a form of autobiography (a notoriously disreputable genre). *Asphyx* allows players to lie to its systems; *Hate Plus* allows players to lie to its characters. *With Those We Love Alive* allows player to lie to *themselves*, to engage in *bad faith*, in the classically Sartrean sense. (In Sartre’s [1984, 89] formulation, ‘in bad faith it is from myself that I am hiding the truth ... I must know the truth very exactly in order to conceal it more carefully.’) *With Those You Love Alive* offers players a chance to give visual form to a personal narrative of their lives, to help their player-characters live with trauma. (And, perhaps, the players themselves, if they are open to such therapeutic possibilities.) The accuracy of these narratives is up to players themselves.

And, in the end, who will be the judge? In *Ultima IV* or *BioShock*, the game’s narrative reflects players’ ethical choices, because their input has been monitored and accounted for. *Asphyx*, in its deliberate rejection of player monitoring, proposed that ‘only you can judge yourself.’ *With Those We Love Alive* offers a third possibility: the re-emergence of community.

True, *With Those We Love Alive* is a digital game. As rigorously as it pursues communication and mutual consent—as evinced by the careful adjustability of its meditation breathing exercises—it still imposes its own machine-derived reality upon its players. But the game has inspired a significant social scene. The web of trust that begins privately between player and machine during the game’s meditation exercises eventually expands outward, as players make



their bodies public, sharing their sigils and their stories, confessing feelings and experiences the game has dredged up. O'Connor's essay is an unusually high-profile example of such sharing. Most people who post photos of the sigils they drew aren't employed by a well-known gaming website. And yet, sigils are shared, through social media platforms such as Tumblr and Twitter, as players find ways to hold each other accountable, to make sure that a robust community of players are following up on the game's interpellative invitation to bare a bit of one's soul, as honestly as possible.

[Figure 8 near here]

Of course, there will always be spoil-sports. Some players will pass through *With Those We Love Alive* not having drawn a single sigil upon themselves. Despite the game's intricate attempts to adjust its meditation exercise to best fit the user's physical capacities, some players will never hold their breath by the lake, either. Some will rush through, in an attempt to get to the ending as quickly as possible, if they don't get bored first. The social intricacies of cheating—of drawing false sigils that you later regret, as in O'Connor's case, or perhaps fudging just a little bit during the meditation breathing exercises—will be lost on these players, who will reject the magic circle outright. But that is the price of a game built on trust.

### **Acknowledgements**

The writing of this article was initially made possible by three colleagues and friends: Peter Schulz, who is without peer in his ability to recommend interesting games, Patrick Jagoda, who not only encouraged me but actually enlisted me to survey the field of experimental games, and Mikki Kressbach, who volunteered to go on a *Hate Plus* adventure with me. The final shape it has taken owes much to the generous commentary of Will Carroll, Matt Hubbell, Nicole Morse,

Jordan Schonig, and Karly-Lynne Scott. I would also like to thank Jean-Thomas Tremblay for the opportunity to contribute to this special issue.

### Disclosure Statement

No potential conflict of interest is reported by the author.

### References

- Aarseth, Espen. 1997. *Cybertext: Perspectives on Ergodic Literature*. Baltimore: Johns Hopkins University Press.
- Cavell, Stanley. 1979. *The World Viewed: Reflections on the Ontology of Film*. Enlarged Edition. Cambridge, MA: Harvard University Press.
- Chen, Lulu Yilun, Yuji Nakamura, and Sam Kim. 2018. 'The World's Top-Selling Video Game Has a Cheating Problem.' *Bloomberg*, January 15. <https://www.bloomberg.com/news/articles/2018-01-16/tencent-cracks-down-on-cheats-in-world-s-top-selling-video-game>
- Downing, Lisa. 2007. 'Beyond Safety: Erotic Asphyxiation and the Limits of SM Discourse.' In *Safe, Sane and Consensual: Contemporary Perspectives on Sadomasochism*, edited by Darren Langdrige and Meg Barker, 119–132. New York: Palgrave Macmillan.
- Droqen. 2016. 'Asphyx by Droqen.' *itch.io*, November 28. <https://droqen.itch.io/asphyx>
- Hall, Charlie. 2017. 'Epic Games Suing Two Individuals Over *Fortnite* Cheats.' *Polygon*, October 12. <https://www.polygon.com/2017/10/12/16464750/epic-games-fortnite-cheater-lawsuit>
- Huizinga, Johan. 1955. *Homo Ludens*. Boston: Beacon Press.
- Irigaray, Luce. 1999. *The Forgetting of Air in Martin Heidegger*. Translated by Mary Beth Mader. London: Anthlone Press.
- Isbister, Katherine. 2016. *How Games Move Us: Emotion by Design*. Cambridge, MA: MIT Press.
- Lavelle, Stephen. 2012. 'Asphyx (Droqen).' *Free Indie Games*, November 1, <http://www.freeindiegam.es/2012/11/asphyx-droqen/>
- Luschetich, Natasha. 2014. *Fluxus: The Practice of Non-Duality*. New York: Rodopi.
- Mac Low, Jackson. 1986. *Representative Works: 1938–1985*. New York: Roof Books.
- O'Connor, Alice. 2014. 'Physically Interactive Fiction: *With Those We Love Alive*.' *Rock, Paper, Shotgun*, November 14. <https://www.rockpapershotgun.com/2014/11/14/drawing-violences-mundanity-with-those-we-love-alive/>
- Procházka, Aleš, Martin Shätz, Oldřich Vyšata, and Martin Vališ. 2016. 'Microsoft Kinect Visual and Depth Sensors for Breathing and Heart Rate Analysis.' *Sensors*, 16 (7). doi: 10.3390/s16070996
- Salen, Katie, and Eric Zimmerman. 2004. *Rules of Play: Game Design Fundamentals*. Cambridge, MA: MIT Press.

- Sartre, Jean-Paul. 1984. *Being and Nothingness: An Essay on Phenomenological Ontology*. Translated by Hazel E. Barnes. New York: Washington Square Press.
- Sicart, Miguel. 2009. *The Ethics of Computer Games*. Cambridge, MA: MIT Press.
- Sobchack, Vivian. 1992. *The Address of the Eye: A Phenomenology of Film Experience*. Princeton: Princeton University Press.
- Sudnow, David. 1983. *Pilgrim in the Microworld*. New York: Warner Books,.
- Swalwell, Melanie. 2008. 'Movement and Kinaesthetic Responsiveness: A Neglected Pleasure.' In *The Pleasures of Computer Gaming: Essays on Cultural History, Theory and Aesthetics*, edited by Melanie Swalwell and Jason Wilson. 72–93. Jefferson, NC: McFarland & Co.
- Zagal, José P. 2012. 'Encouraging Ethical Reflection with Videogames.' In *The Videogame Ethics Reader*, Revised First Edition, edited by José P. Zagal, 67–82. San Diego: Cognella.

## Notes

---

<sup>1</sup> Although the Insight currently exists as a piece of hardware, software that convincingly demonstrates its claimed abilities remains strictly in the realm of vaporware.

<sup>3</sup> There is an additional wrinkle to this set-up. Immediately following the direct questioning of the player, the game offers a photo op. Players are encouraged to pose with their cakes in front of their computer screen (on which \*Hyun-ae herself strikes a pose), and email their selfies to an address Love set up. In addition to serving as a collected record of players' involvement with her game, this email account serve as a mode of external verification: Once she has seen this photo, Love can unlock a special in-game achievement, personally affirming each player's rule-abiding good faith. (Love no longer seems to be monitoring this email address, presumably due to the game's age.)

<sup>4</sup> Pinning down the exact release year for *Asphyx* is nigh impossible. Droqen's storefront on the gaming website itch.io presents the most complete collection of his output available. *Asphyx* has been hosted on itch since 2016 (Droqen 2016), but Droqen makes it clear that he actually made the game prior to 2013: 'file says it was last modified in 2013 but i know i made this game way longer ago than that.' The earliest announcement I can find of the game's release is a November 1, 2012 mention on the website *Free Indie Games* (Levelle 2012), which contains a now-broken link to a prior build of the game in Droqen's

---

own Dropbox account. Whether late 2012 counts as ‘way longer ago’ than 2013, I do not know—hence my cautious use of ‘circa.’

<sup>5</sup> It is worth noting that the distribution of *Adventure* preceded the publication of both of these.

<sup>6</sup> These two games have proven to be broadly and enduringly popular among academic critics. Zagal (2012, 70–72) presents a representative analysis of the moral choices in *Ultima IV*. Sicart (2009, 151–63) presents a representative analysis of the moral choices in *BioShock*.

<sup>8</sup> The text of Yoko Ono’s *LIGHTNING PIECE* is reproduced in Luschetich (2014, 58). The text of Jackson Mac Low’s *Tree\* Movie* is reproduced in Mac Low (1986, 132).

### Figure Captions

1. *Superbrothers: Sword and Sworcery EP* (2011) developed by Capybera Games and Superbrothers
2. *Hate Plus* (2013) dev. Love Conquers All Games
3. *Asphyx* (c. 2012) dev. Droqen
4. *Asphyx* (c. 2012) dev. Droqen
5. Aarseth’s (1997) model of “Intrigue Communication Structure in an Adventure Game”
6. *With Those We Love Alive* (2014) dev. Porpentine
7. *With Those We Love Alive* (2014) dev. Porpentine
8. Public post by Tumblr users, displaying sigils drawn during *With Those We Love Alive*