

£3

ALL FORMATS

Wireframe

LIFTING THE LID ON VIDEO GAMES

Issue 25 £3

wfmag.cc



25

9 772631 672000

SKILL VS CHANCE

Luck's pivotal role in video games

CO-OP MODE

The studios planning a world without bosses

LOW-POLY HORROR

Reviving the scares of the PSone era

HEAVY METAL

REVOLUTION SOFTWARE TAKE US BEYOND A STEEL SKY

JOIN THE PRO SQUAD!



G-MASTER™
MONITORS 4 GAMERS
by **iivama**

RED EAGLE™

GB2560HSU¹ | GB2760HSU¹ | GB2760QSU²



Panel	TN LED / 1920x1080 ¹ , TN LED / 2560x1440 ²
Response time	1 ms, 144Hz, FreeSync™
Features	OverDrive, Black Tuner, Blue Light Reducer, Predefined and Custom Gaming Modes
Inputs	DVI-D ² , HDMI, DisplayPort, USB
Audio	speakers and headphone connector
Height adjustment	13 cm
Design	edge-to-edge, height adjustable stand with PIVOT



gmaster.iivama.com

Finding the humour in Sega's retro past

W

here exactly is the comedy to be found in nineties video games? At first glance, *Columns*, *Sonic*, *Tomb Raider*, and *Alex Kidd* are pretty

low on laughs, but as a true nostalgia junkie and comedian, I find their various absurdities are ripe for humour. For the past two years, my solo tours at the Edinburgh Fringe have been based around retro gaming – how it links to my childhood on a personal level, and also its universal appeal.

The first video game I ever owned was on my Master System II when I was seven: *Alex Kidd in Miracle World* (it was actually built into the console – sorry, humblebrag). Nintendo's *Super Mario Bros.* had revolutionised gaming the year before *Alex Kidd*'s debut, and there's something hilarious in the brazenness of Sega making their very own *Mario* and not even bothering to conceal it. Even the water music is practically the same. I also enjoy how Sega didn't have the imagination to make the boss fights in *Alex Kidd* anything other than round after round of rock, paper, scissors. They dress it up with intense 8-bit music, but they're fooling nobody.

I grew up with gaming as the background to everything I did in the early nineties. My best friends as a kid were all fellow gamers, our after-school hangouts were spent gaming, at school we talked gaming, and we loved to draw our favourite computer game characters and compare notes on sketching techniques. I wrote (lengthy) Sonic fanfiction long before I knew what fanfiction was, or before the internet had revealed the terrible horrors of Sonic slash fiction and deeply unsettling Sonic fan art. Please don't search for it. Please.

As children, we're never aware of how different the art we enjoy as kids will look through our adult eyes.



SOOZ KEMPNER

Sooz is an award-winning stand-up comedian and singer with a penchant for retro gaming and *EastEnders*. Follow her on Twitter @SoozUK.

There's horror-comedy to be discovered in going back 30 years and playing *Michael Jackson's Moonwalker*, an early Mega Drive release where the premise of the game is that you're Michael Jackson and you're dance-walking around various levels kicking adults out of the way (they're meant to be gangsters but they 100 percent look like FBI agents in hindsight) and looking behind doors for children. It's the only time a computer game has doubled as a straight-up confession. Whether that's funny or not obviously depends very much on your tastes in both comedy and Kings of Pop.

I'm a bit of a connoisseur of terrible pop culture, be it music, movies, or games, and I'm fascinated with the process that led to everything from the awful US pilot of *Red Dwarf* to 'the *Citizen Kane* of bad movies' *The Room*, and what is probably the worst *Sonic* game ever made. The worst of Sonic's outings is arguably his big 15th-anniversary reboot – 2006's *Sonic the Hedgehog*. I can only imagine that the decision to make a major plot strand out of Sonic falling in love with a human woman was a direct result of the Sonic slash fiction and X-rated fan art I already urged you not to search for. By the way, yes – they do kiss. It makes you feel horrible – like the first time you watched *Audition*.

Social media is in many ways a toxic environment our brains haven't developed fast enough to handle. Then again, it can be a wonderful way to share the joy in old games, both good and bad, and the humour that lies within. For years, I thought I was the only one who was amused by the gaping plot hole that means that, when *Sonic 2*'s played with *Sonic & Knuckles*, Knuckles is flown by Tails in his aeroplane. Twitter has taught me that there are plenty of other weird kids who became weird adults who feel exactly the same.

To conclude: *please* don't search for Sonic fan art. 🙄

#25



Contents



6

Attract mode

Interface

06. Beyond A Steel Sky

Charles Cecil on the return of a dystopian sci-fi classic

10. Cris Tales

A JRPG homage steeped in Colombian culture

12. Cat Lady

A top-down rogue-lite full of purr-cedural generation

16. Incoming

Voxels, doomed planets, and bears with hammers

18. Nineties-style terror

Horror that harks back to the low-poly PlayStation era

22. Making games scary

A host of game dev legends share their favourite moments of terror

44. Worker co-ops

The rise of game studios owned by their workers

50. Compile

A Japanese studio that gave us Puyo Puyo and more



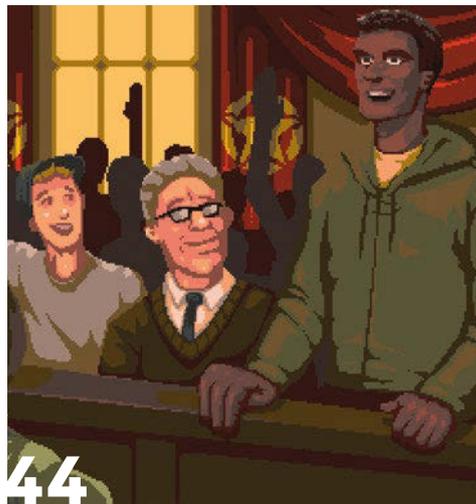
22



18



59



44

Toolbox

- 28. Design Principles**
Exploring the eternal question: can games be art?
- 30. CityCraft**
A brief history of pioneering, 8-bit urban sprawls
- 32. Skill versus chance**
The usage and balance of chance in games
- 40. Source Code**
Code your own Columns-style match-three puzzler

Rated

- 56. Borderlands 3**
The action's thrilling; the jokes are toe-curling
- 59. Untitled Goose Game**
Honk if you like stealth games about obnoxious geese
- 62. Sayonara Wild Hearts**
Simogo returns with a rhythm-action sugar rush
- 64. AI: The Somnium Files**
This anime noir crumbles under interrogation

WELCOME

Surprise is an essential part of making a scary game, obviously, which might explain just how violently *Alien: Isolation* made me jump out of my skin five years ago. As a long-time fan of the *Alien* movies (well, the good ones, at least) I thought I knew what to expect with Creative Assembly's horror spin-off. It took place in environments that recalled the seventies futurism of the original movie and its emphasis on suspense over action. With that familiarity, I thought, would come a sense of comfort that runs counter to the requirements of a horror game: to properly be terrorised as players, we surely need to be taken out of our element, and pitched into situations we've never experienced.

I thought I could enjoy *Isolation* with an air of detachment – like going on a historical battle re-enactment as opposed to a real war that threatens life and limb. It turns out I was completely wrong: *Isolation* quickly proved to be absolutely terrifying. The developer's ability to make me feel as though I was actually inhabiting those familiar spaces, and being hunted by an eight-foot creature, was palpable in a way I was completely unprepared to deal with.

As a wealth of developers suggest on page 22, video games are extraordinarily well-placed to scare the breath out of our lungs. I'd even argue that watching a horror movie – rather than playing a horror game – is by far the less stressful way of spending a dark Halloween night.

Ryan Lambie
Editor



THINGS TO COME

A quarter of a century later and the future has changed significantly – what was once predicted by the science fiction documents of the time, like the movies *A.P.E.X.* and *Abraxas, Guardian of the Universe*, now seems quaint. *Beyond a Steel Sky* is, therefore, taking a different tack. The return of this particular work of dystopian adventure game fiction arrives once again from the hands and brains of Revolution Software, headed up by Charles Cecil, and artist Dave Gibbons, who you'll remember from the original *Beneath a Steel Sky*, as well as something called *Watchmen*.

This is no 'greatest hits' package, or a studio returning to the well one too many times – *Beyond a Steel Sky* is a big, bold new adventure from Revolution. It mixes traditional adventure game mechanics of combining rubber chickens with things to win (not an accurate example), with a fully 3D engine and in-depth hacking minigames, which allow you to do some low-level programming. In short, this is far more than just a cynical rebirth of a 25-year-old series.

We spoke at length with Cecil for his thoughts and feelings on *Beyond*, *Beneath*, and plenty more.

Why did it take so long to come back to the *Steel Sky* universe?

Cecil: I first met Dave Gibbons when I was head of development at Activision in the late 1980s. I wanted to ask him about whether we could get the rights to *Watchmen*, and it turned out that we couldn't. But we stayed in touch and then wrote *Beneath a Steel Sky* together. The game has quite a cult following, and we actually planned to do another game, a sequel, pretty soon afterwards. But a lot of publishers decided that the adventure was dead. Indeed, our publisher didn't want to commission, despite the success of the first *Broken Sword* on PC and PlayStation. The general comment from publishers was that adventures were dead and the PC was dead.

To an extent, it was because the retailers were taking very, very few PC titles. Those that did took pretty obvious ones. Adventures were being very much marginalised by the big [retailers]. So, we

Revisiting a vision of the future 25 years later, in *Beyond a Steel Sky*

found ourselves in a position where we weren't actually able to write adventures for quite some time. The ideas that we discussed with Dave went by the wayside. We've kept in touch; Dave's a friend. We kept talking about new ideas, working together. A couple of years ago it felt to me like the time was right for several reasons.

First, we proved with *Broken Sword 5* that by going directly to our community, particularly for validation of our ideas, but also for a Kickstarter as well, it opened up extraordinary opportunities to be able to benefit from the input that we got from our community on every aspect of the project. Then the other reason was, with the success of *Broken Sword 5*, I was very



“We were in the very luxurious position of being able to self-fund our prototype”

keen to do something else. I loved writing *Broken Sword*, I will write new *Broken Swords* of course, but it just felt to me like I wanted to write something else. I got back in touch with Dave, and he was very, very much up for it.

So, we started coming up with some designs. If we'd been signed by a publisher, they'd obviously want to see the design and exactly what they're going to get before they sign a contract to fund it. [But] because we were in the very luxurious position of being able to self-fund our prototype, it meant that together with Dave, we could really think about what we wanted to deliver without this imperative to reach milestones, and then earn revenues to pay wages.

Have the plans changed for the sequel over the years?

I do try to avoid the word sequel because the game is quite different. The original was published 25 years ago, and we feel that we have the latitude to write a game

that very much conveys the spirit, conveys the world, but from a game-playing perspective, it's absolutely not a 320x200 [point-and-click] adventure.

But what we really wanted to do was make sure there was a balance between ensuring that fans of the series got what they wanted, but also that we could innovate. Our very first game back in 1992 was called *Lure of the Temptress*. We had a system called Virtual Theatre, and Virtual Theatre had characters walking around the world. The player could alter what they did, alter what their motivations were, talk to them, then talk to each other, overhear conversations. That was a very exciting system. People got really, really excited about how that could develop.

[For technological reasons] we actually moved away from that Virtual Theatre, and I've always felt that maybe we never really developed it to its full potential. One of the core ideas of *Beyond a Steel Sky* was to bring back Virtual Theatre within an adventure environment. The idea that characters are driven by their own motivations and they'll walk around the world and talk to each other, but you can subvert their behaviour by changing things in the world. That is one of the main pillars of the game which we prototyped, and I'm really excited about it. In the real-time 3D, it actually works a lot better because of course, you can move the camera wherever you want. Rather than the 2D rooms that we would have in the classic adventure, what we instead have is like arenas; areas which are big enough for a number of Virtual Theatre characters to inhabit and for interesting things to evolve and merge from the way that the player subverts the world. ➔



The real world has encroached on some dystopian elements – mass surveillance, AI, etc; has that informed the tone of the game? Is it hard to inject humour into something that's a bit... well, scary?

When I first founded Revolution back in 1990, our idea right from the very beginning was to write serious stories with humorous dialogue and in the way that, you know, *1984* was such a wonderful book and a wonderful film. But *Brazil* does exactly that. *Brazil* captures the essence of *1984*, but in this ludicrous environment, and the humanity comes from the situations that evolve quite naturally within that world that seems ludicrous to us.

That is the humanity we have in [the protagonist] Foster, who is an outsider, coming into this world. The humour comes from the juxtaposition of his normality, which of course, as an audience we share, and the ludicrous situations that have evolved within this city. Certainly, what I was very keen to do was reflect some of the elements that are important to us today – mass surveillance, the social credit system in China, identity theft – in the way that the original *Beneath the Steel Sky* back in 1994 was very much reflecting the idea of social change, of Margaret Thatcher talking about society not existing anymore, and so on. All of those things which seem very alien now, but at the time felt very profound and very impactful – they were very impactful, in some ways for good, in some ways for bad. I guess in the way that, again referring to *1984*, which to me

“Beneath the Steel Sky back in 1994 was very much reflecting the idea of social change”

is a profoundly important book, it was important for when it was written to reflect the rise of the Soviet Union. In a way, what I think is really exciting, is to write futuristic, slightly [cyberpunk sci-fi]. I have to be a little bit careful because clearly, we're not going for the [tone] of *Blade Runner* – rather, this idea of [reflecting] the present, rather than [making a prediction of] the future.

Revolution is in the unique position of being almost a one-genre studio. How much of a positive impact does that have on your development?

We are a one-genre studio, and that's because I've been writing adventure games for 40 years. I love playing adventure

▲ It's immediately apparent Union City isn't quite the City Of The Future it presents itself as.

games. I'm particularly excited that the genre is flourishing at the moment – I don't know if you've played *What Remains of Edith Finch*, which was a great adventure game, or *[Return of the] Obra Dinn*, another great adventure game, although a little bit difficult, or *Her Story*. This sort of renaissance has come from the fact that clearly adventure games are niche, and they were too niche for retail, but they're a massive niche, so there are huge opportunities for people writing in this area. To be honest with you, it's just a wonderful genre. Obviously, there are advantages in that we hopefully build on our expertise both creatively and technically. It's hard to think of disadvantages. If we were a big publisher, we'd want some sort of portfolio, but we're not, we're a small studio, so we focus on what we think we're good at.

How small a studio are you? How does that function on a day-to-day basis?

We have a small studio in York, and in the studio, we just have 16 people. We have another five or six who are working full-time on the project for Revolution. Then we have a lot of subcontractors and outsourcers working on art and animation.

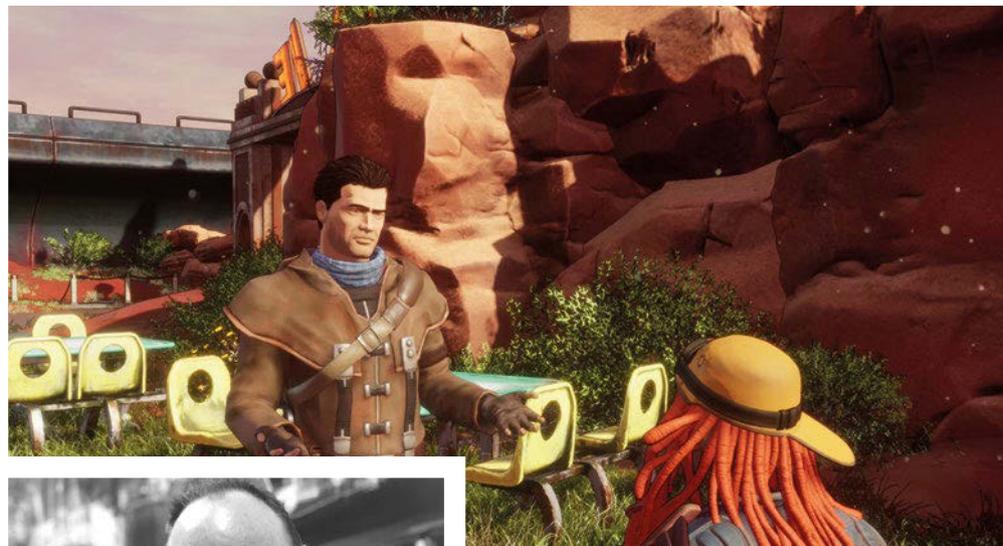


The way that we structure is that the story; I'm very jealous with the story document, I keep control of that and then work with people on elements of design, and all of that is kept very much in-house. Obviously, the producer is in-house as well, and from this hub in York, we then work with people all over the world. It's a fantastic way of working, it's very efficient, but it means that we can scale up and work with very talented people, and we're not constrained by a geographical location.

Beneath a Steel Sky was made for around £80,000 in 2019 money. Does that figure seem quaint in today's climate, or do you reckon you could still make a game for that price?

£80,000? That's wonderful. The answer is absolutely one can. Of course, there are wonderful games that are produced for a few tens of thousands of pounds or dollars. I really admire people who do that, and they can be very successful. In an adventure game like *Beyond the Steel Sky*, we have so much in terms of assets relating to background, textures, animations, and character modelling, as well as the core technology. We're using Unreal Engine, which is great. But, it would be utterly impossible to write an adventure game for a contemporary audience to the quality that a contemporary audience would expect for £80,000.

▼ **Characters have their own schedules and activities to stick to - how you interact with them is as much about that as it is speaking.**



▲ **Lead character Foster returns, both literally and figuratively.**



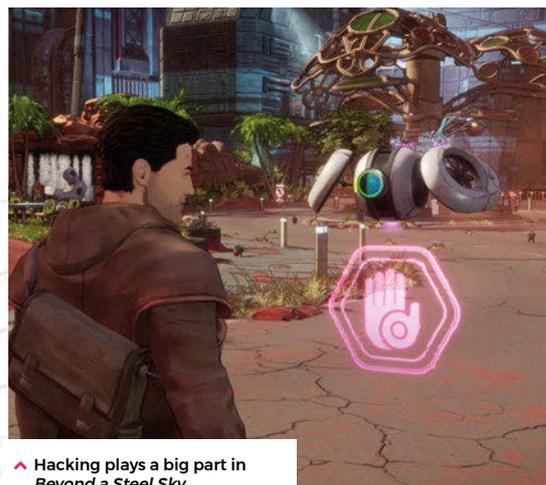
▲ **Charles Cecil is an expert in the field of adventure games.**

Now, that's not to say that there aren't some people around the world creating adventure games and they're doing it relatively cheaply, but that's over a long period of time with a great deal of passion, where a lot of people are presumably not actually paying themselves. So, yeah, I mean I do laugh at the idea of £80,000. The games that we write cost considerably more than that.

Finally, do you have any advice for up-and-coming adventure game developers?

You don't know what the future is. When things are going well, you need a lot of people [and when they aren't, you don't]. Wherever possible, build strong alliances and work with people on a freelance basis or a subcontracting basis rather than employing them. [While doing that], treat people the way you would expect to be treated, because if you have a good relationship with tons of people, then you will want to work with them again, and more crucially, they'll want to work with you. ☺

***Beyond a Steel Sky* releases soon on Apple Arcade and PC.**



▲ **Hacking plays a big part in *Beyond a Steel Sky*.**

IN COLDER BLOOD?

Sometimes, you just have to ask someone: what's next, and is it *In Cold Blood 2*? Cecil was, fortunately, open for the brief discussion of what Sony once touted as a *Metal Gear Solid*-killing series: "Honestly, the great thing about being a small studio with a low overhead is that we have a great deal of freedom," he says. "The next game might be a new *Broken Sword*, or it might be an original game. I did love the idea, at one point, of going back to *In Cold Blood* and we did a lot of work on it, to be honest. It kind of fizzled out.

"We're exploring a number of options... But as always, there are lots of ideas bubbling under, and I guess at some point we're going to have to work it out, but at the moment it's not set in stone." So not *In Cold Blood 2*, then.

Attract Mode

Early Access



Crismas Time

A love letter to JRPGs, *Cris Tales* has time for a few ideas of its own

Info

GENRE
RPG

FORMAT

PC / Switch / PS4
/ XBO

DEVELOPER

Dreams
Uncorporated /
SYCK

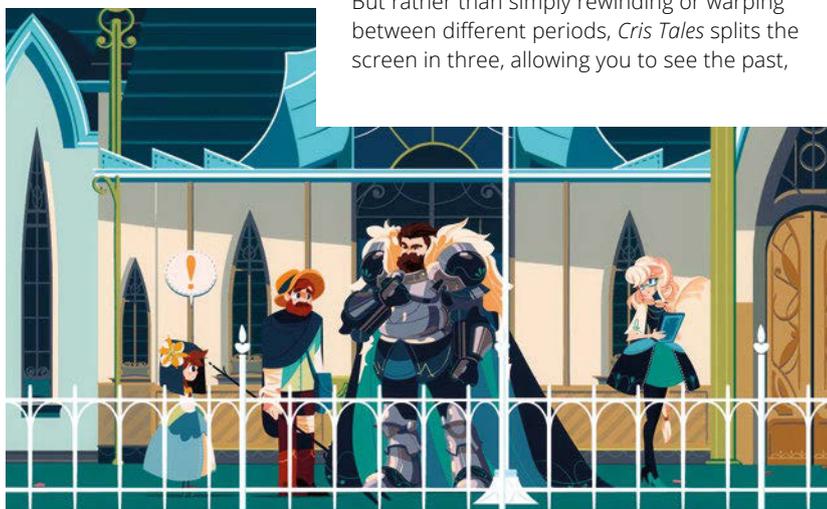
PUBLISHER

Modus Games

RELEASE

2020

▼ *Cris Tales* establishes its lore early on. The people worship a goddess referred to as The Lady, and the mayor is kitted out in fancy armour.



Just playing through the opening turn-based battle of *Cris Tales*, it's evident that it borrows elements from many a great JRPG. There's the battle timeline at the top displaying character turns, like *Octopath Traveler*; the turn-based combat takes a leaf from *Paper Mario*, where a well-timed button tap will increase your attack or defence; even the stylish battle menu is straight out of *Persona 5*.

But as much as developer Dreams Uncorporated are happy to wear their influences on their sleeves, *Cris Tales* isn't just a JRPG homage, but one that hopes to add new ideas to the genre's established structure.

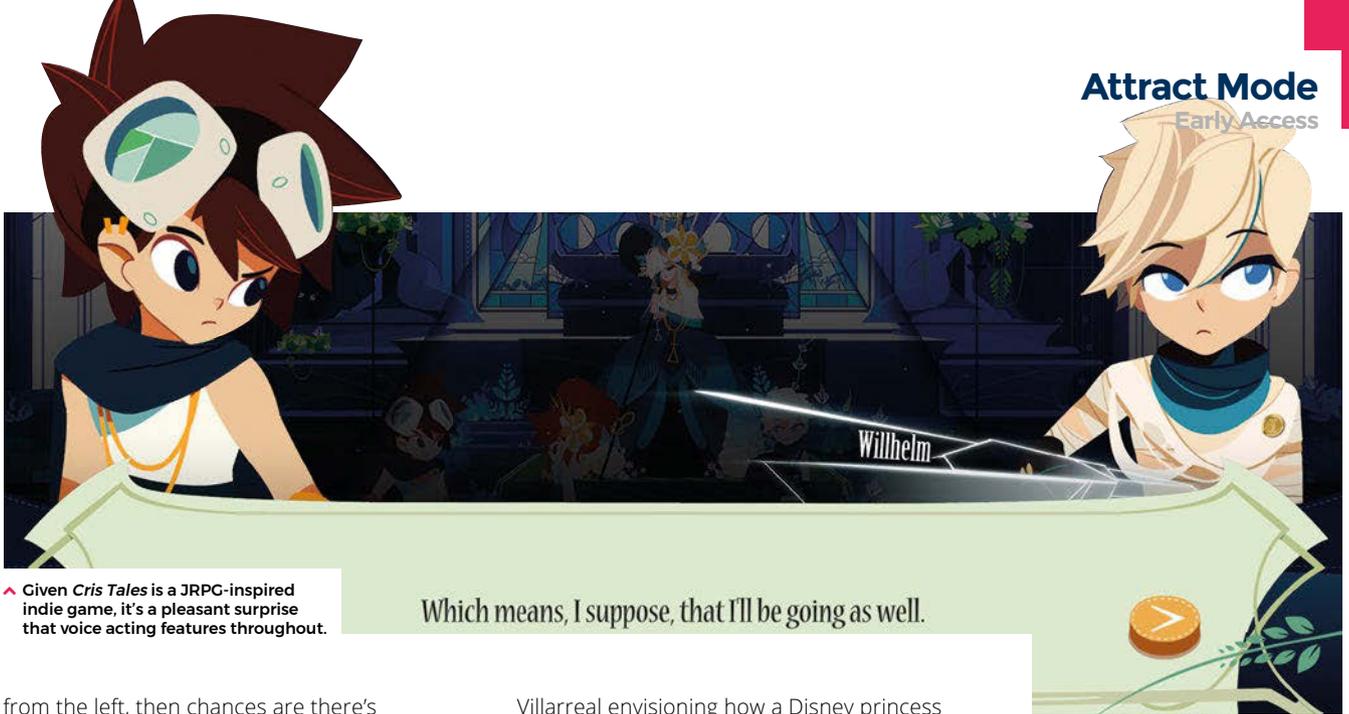
Its big party trick is time, a popular theme and mechanic in games such as *Chrono Trigger* and *The Legend of Zelda* series (for my money, the Timeshift Stones in *Skyward Sword* were genius). But rather than simply rewinding or warping between different periods, *Cris Tales* splits the screen in three, allowing you to see the past,

present, and future simultaneously, with each era denoted by its own distinct palette.

This was, in fact, the starting point for the game, as Dreams Uncorporated CEO Carlos Rocha Silva explains. "We thought it would be really interesting to see different 'times' on the same screen," he says. "So we started thinking about what type of game would it work on, eventually settling on RPGs. Ultimately, it was a lot of experimenting with the combat system, but that made us fall in love with it."

It takes extra ingenuity to make turn-based combat dynamic, whether it's being able to interrupt enemy attacks on the timeline, as in *Octopath Traveler*, or the Active Time Battle gauge used in many classic *Final Fantasy* games, but *Cris Tales* gets even cleverer, turning its battles into puzzles. By invoking time crystals, you can send your enemies to the past or future, which affects their abilities. For instance, sending a goblin into the past turns it into an infant that's too weak to put a scratch on you. More fascinating is a boss duo who combine their shields, making them impenetrable. But apply some water magic and send them to the future, and voilà: the shield goes rusty.

These powers also come into effect outside of combat. Plant a seed in the present, and if you forward in time, you'll see that, in the future, it's grown into a tree bearing a rare fruit, or you might see a townspeople's decaying house that you can fix by preventing its rot in the present. Such a presentation isn't without its limitations, namely, that the past and future visions are always presented to the left and right of the screen, respectively. This may also be a blessing, though, because if you can only view something



^ Given *Cris Tales* is a JRPG-inspired indie game, it's a pleasant surprise that voice acting features throughout.

Which means, I suppose, that I'll be going as well.

from the left, then chances are there's something in the past worth exploring.

Cris Tales also stands out from a visual standpoint, neither leaning on predictable pixel art or anime styles, but instead opting for a unique and strikingly beautiful hand-drawn 2D look that's animated frame by frame.

Even though there are clear influences from classic and modern JRPGs – there are genre staples like magical girls and a pint-sized sidekick with a knack for running its mouth – Colombia-based Dreams Incorporated is keen to celebrate

its country's own identity. It's a refreshing break from the usual negative stereotypes. "We actually want to create something called 'Colombian Fantasy,'" Silva explains. "A new style of magical world and the creatures within it, focused on Colombia as our main inspiration. Hopefully, it will motivate lots of people to learn more about our roots."

Indeed, the game frequently references its country of origin: the town of Narim with its cathedral in the centre is directly inspired by Nariño, home to a beautiful Gothic basilica called Las Lajas Sanctuary. The protagonist Crisbell was the result of art director Sebastian

Villarreal envisioning how a Disney princess would look if she was from Colombia (and could fight with a really big sword).

"For *Cris Tales*, we created our own look and feel, based on Sebastian's background as an artist, and combined that with many art styles, as well as references to our country," says Silva. "The way people dress, the way the environments look, and even the architecture is inspired by Colombia and its culture."

There are still a few genre elements the studio has purposely kept in *Cris Tales*, so you can expect

the final game to include random encounters, dungeon crawling, and minigames. Right now, though, the team is still focused on perfecting the core aspects of the game, which are still under wraps.

Before embarking on *Cris Tales*, its dev team was called Below The Game, and cut its teeth on kid-friendly, fairytale games for mobile, so taking on an ambitious RPG like this is a considerable evolution for the studio. With its release several months away, there's still more work to do. You might not be able to peer into the future, but if you're impatient to try the game out, the opening demo is available on Steam. 🌐

"Even the architecture is inspired by Colombia and its culture"



^ With three eras displayed simultaneously, you'll see some NPCs at different ages, though it gets disturbing when you see nobody at all.

> Sending this enemy into the future makes it too old and frail to wield its axe, so it resorts to magic attacks instead.



WHAT'S IN A NAME

Aside from the title, a wordplay on the Spanish spelling of crystals, it's also no coincidence that the protagonist is called Crisbell, while another companion who joins you early on is named Christopher – and it's likely not the last character you'll meet whose name begins with Cris. Silva teases that there's a tremendous significance for this in the game's lore, though of course, he doesn't want to spoil anything here.

CAT LADY™



Raiding the kitty

Feline like we should use more puns with Cat Lady

Info

GENRE
Twin-stick shooter /
Rogue-lite

FORMAT
PC

DEVELOPER
Rose City Games

PUBLISHER
VIZ Media

RELEASE
Out now (Early Access)

The name might throw you off a bit – while *Cat Lady* does indeed feature a lady who likes cats, it's also not some cutesy romp through... whatever it is you might expect it to be a romp through. Unless you expected said romp to be of the cutesy variety and through a twin-stick shooter/rogue-lite, then you'd be bang on. You'd probably also be co-founder of Rose City Games and *Cat Lady* director, Will Lewis.

"Myself and our artist, Jake Fleming, started from the idea of cute-meets-spooky exploring a domestic household," he explains. "We both grew up having close relationships with our respective grandmas, being at grandma's house, being a little creeped out by old estates and antiques. We also have similar tastes in cute-meets-weird games. Starting out with some exploration mechanics, the concepted style and perspective led to something that felt more top-down combat in nature, and we went in that

direction after leaning more into games that the team members are fans of."

That direction took on a more rogue-lite form as progress was made, and with the genre comes the expectation – founded or unfounded – of the 'git gud' mentality. It might look adorable, but *Cat Lady* can challenge even the most hardcore of players – you know, the ones who *actually* refer to themselves as 'hardcore'. All the same, difficulty has been considered from day one, and the team is making a big effort to make sure there's something for all comers, even if your hand-eye coordination is on a par with an actual cat.

"We want to reward players with more challenging situations, no matter their skill level," Lewis says. "In our testing, entry areas are a great place to explore and learn the ropes, but can also feel really rewarding to blast right through if you're a skilled rogue-lite player. As the game continues on, we want to really ramp up that challenge to make sure fans of the genre are challenged, while players who are new to the genre can have access to lots of upgrades that enable them to choose how they progress and how they want to approach tougher situations."

There have been other changes in development too, as you might expect, with earlier plans factoring in an increased sense of exploration, for example. But the vision was whittled down to a far purer, less broad form: the twin-stick shooter. A twin-stick shooter in which you take control of Ally and harness the magical powers of a selection of different kitties, in order to take down an army of ghosts which have invaded your grandma's mansion, across a

♥ Would cats be this co-operative and helpful if they could talk?



series of random levels made up of handcrafted individual pieces. Naturally. But even with that design choice, the cats weren't always your firearms. "We originally wanted to consider using cats like *Pikmin*," Lewis says, "Throwing them to manage enemies' paths and work on destroying elements of the environment, but giving the player more agency and providing less stress towards managing your cats won out." Cats as weapons, then.

A focus on testing has been a key aspect of *Cat Lady's* development, with its recent move to Steam's Early Access program another move in bringing the game to the community to help test it out along its development path. With balance so key to a game like this, it's definitely a smart move to broaden the range of people who are actually playing it, even before *Cat Lady* is finished. "We kind of lucked out in that the Basement, the first area of Grandma's mansion, tested well at a mid-level of difficulty for a vast majority of our early players," Lewis explains. "So we've been able to tune up from there. But: throw in permanent upgrades that enhance the abilities of Ally and her cats, work up some starkly new enemy behaviours, and play a bit with player rewards, and things can change in an instant."

A boon to *Cat Lady* is, of course, its bold and beautiful visual style from aforementioned artist Jake Fleming, a long-time friend of Lewis. "His style is something he's been developing in stills

"We both grew up having close relationships with our respective grandmas"

and animation for a while now, and it worked out well to develop into the low-colour, hard-lined style that shines in what he's doing in *Cat Lady*," says Lewis. "He's always been a fan of limited colour palettes since playing NES and Game Boy games growing up. The mixed 'cute and weird' aesthetics of games like *Kirby*, *River City Ransom*, *Super Mario Bros. 3*, and the possibly lesser-known game, *Stinger*, are all easy childhood references explaining his current work. Oh, and he loves cats."

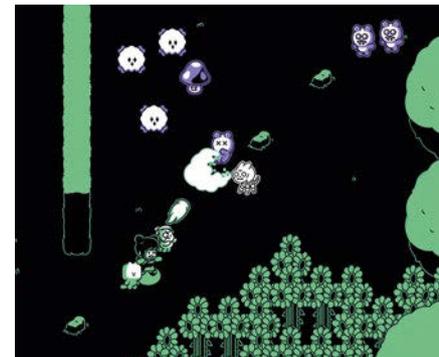
Finally, and because we have to spoil the party every now and then, we have to ask: isn't the term 'cat lady' a pejorative? To our delight, Lewis and the team have already considered the point and offer a robust rebuttal. "It can be," he says. "But instead of harking back to the old trope of the 'crazy cat lady', we wanted to instead celebrate the updated mentality we see and hear today: cats are cute and cool, we can't get enough of them, and we want everyone to know! We hope the cute designs and personalities of Grandma and Ally's cats will shine and get everyone else feeling the same way too."

Ohhhh, 'Ally Cat' – we just got that. 🐾

✔ Naturally, boss fights make an appearance, and are just as adorable as everything else in the game. Only more difficultly adorable.

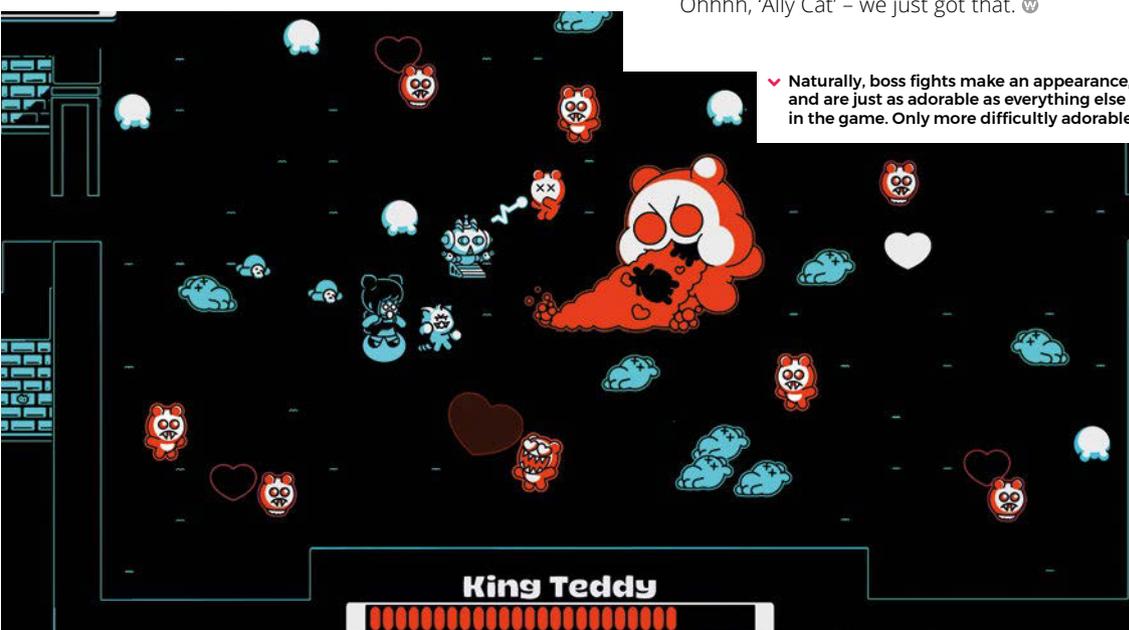


✔ The cats are used as magical weapons, fitting given they are some of nature's most brutal killers. Really, they are. Any cat owner will agree.



✔ Visuals are minimalist, but bold at the same time.

✔ A randomised shopping experience means you won't be able to rely on the same purchases every playthrough.



Headlines

from the virtual front



01. Blizzard of controversy

Taiwanese *Hearthstone* player Ng Wai 'Blitzchung' Chung has been banned from participating in tournaments for the game in the next six months, with his original penalty of a 12-month ban and being stripped of his winnings dropped. Apparently, Blizzard doesn't like it when competitors playing its games say "Liberate Hong Kong – revolution of our time" during post-match interviews.

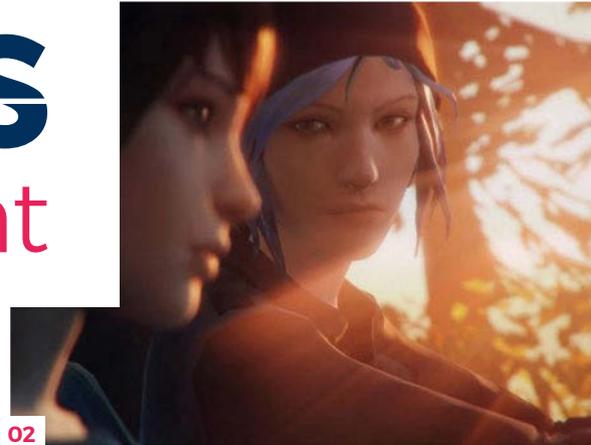
The two casters interviewing Chung were fired after the fact, though each was reinstated and slapped with a six-month ban later. *Hearthstone* casters quit, Blizzard employees staged walkouts in protest of the perceived censorship, and everyone's gone 'a bit political' over it all, with boycotts of the publisher doing the rounds. Makes a stark change from the usual 'keep politics out of our games' nonsense that gets bleated around.

02. Life Is issues

Life Is Strange has never shied away from covering the personal and political – tackling those harder subjects, yes, but also making sure to take a stand on showing what its creators believe is right and wrong. Would you believe it, the game's director at developer DONTNOD, Michel Koch, *does it on purpose*.

"I don't want to spend three years of my life working on a project without trying to talk about subjects that are important to me," he told GIBiz. "I'm really happy our publisher allows us to talk about tough subjects. We could be afraid of representation or talking about those heavy subjects and important themes, because the choices we make when talking about these subjects can be divisive. It shouldn't be, but it is.

"There are a lot of different characters that I think are not represented enough, and it's not just about minorities. Sometimes it's about emotions, or state of mind, or the way they're thinking."



03. VCS happy, VCS sad

Atari's upcoming new bit of hardware, the VCS, has welcomed classic game streaming service Antstream into the fold, with a special version of the subscription-based system set to be available on the console. Should it ever release, that is. It was originally set to launch in December 2017, and at the time of writing that launch is set for March 2020.

In less fun news, the VCS's lead designer, Rob Wyatt, quit the project earlier in October, claiming Atari had failed to pay him for six months. The former architect on the original Xbox said his company was lucky to have survived as long as it did without the cash coming in. The resignation has brought big doubts into view as to whether the VCS will actually be able to release in March 2020 as planned, or if we'll see yet another delay.



Far Cry: Blood Dragon to get animated series

PSVR turns three; still no *Lawnmower Man* tie-in



04

All these stories
and more
(we have more space
on the internet)
can be found over on
wfmag.cc



04. Timing is everything

Sony released details of the PlayStation 5 – haptic feedback on controllers! – on the same day dozens of employees in the London-based EU branch of the company were told their roles were either being made redundant, or that they would have to re-interview for their existing positions. The joy of the corporate world.

While the timing can't be said to be intentional, it does make that taste in the mouth extra sour, especially for those impacted by the reportedly unilateral decision made by the ever-more-powerful US wing of Sony Interactive Entertainment. As reported on Video Games Chronicle, the North American branch has increasingly consolidated power since Sony announced the beginning of layoffs in April 2018, and this move has hammered that home even more.



05

05. Clean break

Bungie's break from Activision has seemingly energised the studio, with CEO Pete Parsons explaining to IGN there are some bold aims in the company's five-year plan. Unlike mine, which involves 'maintaining manageable levels of debt'. "Our vision ultimately through 2025 is to become one of the world's best entertainment companies," he explained.

This involves 'transforming' *Destiny* through the years, bringing to the fore a vision of a single evolving world for the franchise – but also bringing in new franchises to the marketplace. This will involve, Parsons said, plans to "introduce new worlds that people care a lot about." Hopefully, that'll mean new worlds – maybe moons – with wizards on them. We can but dream.



06

06. Compulsive

A lawsuit in Canada accuses *Fortnite's* creators, Epic, of wilfully designing the game to be addictive – going so far as to compare the impact of the game to that of smoking.

"Epic Games, when they created *Fortnite*, for years and years, hired psychologists – they really dug into the human brain and really made the effort to make it as addictive as possible," said Calex Légal lawyer, Alessandra Esposito Chartrand. "They knowingly put on the market a very, very addictive game which was also geared toward youth."

Well, you know it's serious if someone uses 'very' twice in a row. Doubles the impact, you see.

How the case will be impacted following the launch of *Fortnite Chapter 2*, we're not sure. Safe to say, a lot of eyes were turned back to Epic's product after its 'the game has gone' stunt.

IO hiring for new project.
Freedom Fighters 2, plstxh



Xbox VP Mike Ybarra to leave
after 20 years with company

Incinerator



Buildings Have Feelings Too! ↑

It's sometimes said that older buildings have character – well, in Blackstaff Games' oddball management sim, this is literally true. You're tasked with growing a city of sentient buildings that can walk around and chatter about their anxieties. Fail to reverse the city's decline, though, and the demolition crew will come and flatten your talkative butcher's shop.



Moon ↑

Headed up by Yoshiro Kimura, Onion Games previously brought us the charming shoot-'em-up, *Black Bird*, and now it's reviving *Moon* – a cult 1997 PlayStation game that, until now, never got a localised release outside Japan. Written by Kimura, it's an RPG that pokes affectionate fun at its own genre trappings. The Switch edition of *Moon* will be out in Japan by the time you read this; the English-language version will reportedly be coming "very soon".



Unholy ↑

You live in a benighted city on a doomed planet, where disease runs rampant and monsters lurk around every corner. To make matters worse, your baby's vanished, so you're understandably keen to rescue your missing progeny. There are *Deus Ex*-style opportunities for murder, subterfuge, and stealth, but it's *Unholy's* visuals that really catch our eye: if the rest of the game can match the Gothic madness on display in its trailers, *Unholy* could emerge as one of 2020's most atmospheric horror outings.

Hollow Knight: Silksong ↓

Of the recent wave of Metroidvanias, *Hollow Knight* was among our very favourites, and so it's inevitable that we're keenly awaiting its sequel, *Silksong*. Focusing on Hornet – who briefly appeared in the first game – *Silksong* will take place in a new location that, according to developer Team Cherry, will be much larger than *Hollow Knight's*. We can't wait.





Disintegration ↗

How do you make something as complex as a real-time strategy title work effectively with a controller rather than a keyboard and mouse? Plenty of developers have attempted to answer that question in the past, but newcomer V1 Interactive may have come up with a cunning solution of its own. You fly above the battlefield in a high-tech craft called a grav-cycle; from this remote viewpoint, you can blast away at enemies yourself, or essentially fire commands

to the armoured units trundling around beneath you. There'll be a single-player campaign and a five-on-five competitive mode, and the game as a whole looks really slick and solidly realised from what we've seen so far. That V1 Interactive was founded by Marcus Lehto – the co-creator of *Halo* – only raises our anticipation levels further. With Lehto at the helm, *Disintegration* promises to give us a satisfying balance of sci-fi, action, and tactics.

Vulpine ↘

Are you sick of having things like arms and opposable thumbs? Then allow *Vulpine* to make all your mammalian fantasies come true. Assuming the form of a four-legged creature – a fox, rabbit, and wolf are among the options – you can roam a low-poly world, uncovering mysteries and fighting other creatures. But because you don't have hands, you'll carry swords and other weapons in your mouth. However the game turns out, we're quite taken by the sight of a bear doing a spin attack while clenching a massive hammer between its teeth.



Teardown ↘

Like *Disintegration*, *Teardown* is a game designed to tax brains as well as reflexes. The objective: barge your way into a series of secure buildings and steal the keycards hiding within. With each building defended by an alarm system that will despatch a deadly security team when triggered, *Teardown* breaks down into two phases. In the first, you stalk the area, working out where the keycards are, and forging an efficient path through the level by knocking down voxel doors and walls to make shortcuts. The second phase begins when you grab a keycard – from here, you have a minute to run and jump around the stage, getting the rest of the cards before the security team appears. In short, it's part physics-based sandbox, part action-packed race against time – which sounds like a heady cocktail to us.



FRIGHT-TEEN -NINETY-NINE

The horror games harking back to the PSone era

WRITTEN BY NATALIE CLAYTON

We meet the developers who've applied the low-poly look of the PlayStation era to their horror games

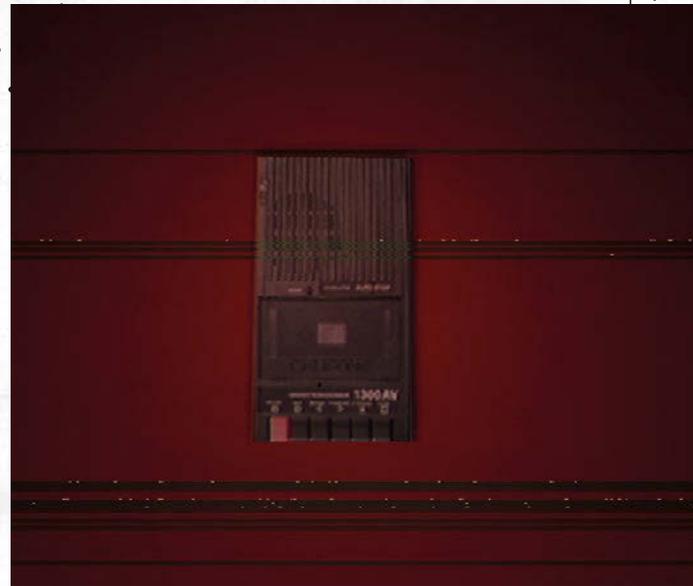
Something's moving in the dark. You stalk forwards, slowly, trying to get a better look, but your senses aren't quite working right. The shape in the distance remains motionless as you approach; all you can hear is an ominous scraping sound. Then, before you can run or let out a scream, the shape's bearing down on you: a terrifying assault of teeth and shrieks.

The lights turn on. You switch off the console, and sit ashen-faced in front of the screen. It's the end of the 1990s – and with the dawn of 3D, video games have become more terrifying than ever before. It's the era of *Resident Evil*, *Silent Hill*, and countless other tense and horrifying games that have turned the medium into a war on the senses. Twenty years on, and those nineties kids who cowered in front of their televisions are now all grown-up – and some of them are making games.

Today's generation of indies probably didn't grow up on the 2D titans of the eighties. We've played the early *Sonic* and *Super Mario* games, sure, but for many of today's creators, there's a growing nostalgia for shimmering polygons, grainy textures, angular corridors, and the kind of thick fog you'd expect to see filling a laser-tag arena. The late nineties was a time when 3D graphics were on the march, but developers were only just getting to grips with ways of using them to terrify us.

"There are more people moving towards the low-res style, more people moving towards PlayStation and N64 nostalgia," says Breogán Hackett, Irish indie developer and founder of the Haunted PS1 game jam community. "There's a whole load of horror games being made, but very little community around it."

Hackett has been running Haunted PS1 since March 2018, where it grew from a handful of hand-picked developers to a community



▲ Clockwise from bottom right: *Anatomy*, *Groaning Steel, OK/NORMAL*, *Paratopic*, *Anatomy*.

of hundreds. Based on Discord and itch.io, Haunted PS1 regularly brings indie developers together for month-long jams to create low-poly horror games. Of course, much of this is down to accessibility: it's much easier for solo creators to make the jump to 3D when textures don't need 4K resolutions, and character models are counted in the dozens of polygons, not thousands.

But there's more to it than that. Early 3D games were often experimental. The push against technological limitations of the time led to jerkiness and strange quirks that, whether they were intended to or not, combined to create a uniquely unsettling mood. No creator's catalogue embodies this strangeness more than Kitty Horrorshow. For almost a decade now, the pseudonymous creator has built a library of short and sinister lo-fi experiences, funded largely by support on Patreon.

Favouring an atmosphere of growing dread over jump scares, Horrorshow's games could be described as the gaming equivalent of found-footage movies, with their fuzzy imagery and

gritty suspense. With *Anatomy*, released in 2016, Horrorshow builds a wholly terrifying experience that feels less like reliving a nineties game, and more like picking up a kid's homemade video recording of one. While all of Horrorshow's games use a striking, retro look to amplify their tension, *Anatomy* feels the most like a game out of time.

Horrorshow isn't alone, either. An increasing number of developers are using the nineties 3D look to make horror games. Hackett's community began experimenting with it in jam projects like *Broken Paradox*, which kicked off its run of tiny horror titles. "Everything is a little less well-defined, so it's hard to tell exactly what you're looking at," explains Hackett. "Especially PlayStation graphics, where there are jittery vertices and the textures are warping – it feels like the game can be falling apart at times. It's really unsettling and unnerving."

EMBRYONIC STATES

That's an opinion furthered by designer Jess Harvey. One of the three minds behind ▶

DEADLY DEMAKES

While most of the creators we spoke to are bringing old ideas into the present, there's something captivating about seeing modern games deconstructed. Toni Kortelahti, the developer behind the 98DEMAKE YouTube channel, has been doing just that. His low-res demakes of games like *Minecraft*, *Grand Theft Auto*, and *Dark Souls* might not be as explicitly horror-centric as his later games, *September 1999* and *OK/NORMAL*, but they're hauntingly empty and decidedly eerie when placed next to their modern counterparts.



▲ *Lost in the Backrooms* by Jam is a procedurally generated take on modern internet folklore.



- ▲ Something tells me this man isn't your friend. It's the highly unsettling *Paratopic*.
- ▼ Bucher's *Two Atmospheric Atrocities* uses grainy photographs as backdrops.



Arbitrary Metric's 2018 fever dream *Paratopic*, she describes how the inherent "jankiness" and the industry's embryonic state combined to create what she describes as "hauntological emotive connections for anyone that got to see a glimpse of things back then."

Like Hackett and Horrorshow, Harvey also made her start creating smaller projects that explored where she could take the low-poly style. "I'd got a bunch of nineties-looking retro 3D jank experiments I'd been regularly revisiting," she explains. "Nothing particularly spectacular, just exploratory work – what you can do with grime, how to drive things in an impressionist direction, experiments with composition, and so on. What Doc brought me felt like an opportunity to put into practice what I'd been itching to try out with this."

That's writer and game designer Doc Burford, who pitched the idea of an 'anti-walking sim' to Harvey in late 2017. Together with eventual IGF winner Chris I Brown, the three pitched *Paratopic* as an episodic series before focusing the project into a single release.

The pair pointed me towards Psygnosis' PSone thriller *Sentient*'s freaky faces and the boundary-pushing visuals of *The Terminator: Future Shock* as key pieces of inspiration when making the game. But while *Paratopic*'s visuals might hark back to the PlayStation's prime, its design is a straight reaction to more recent trends. Arbitrary Metric chose to use a retro aesthetic to frame a particularly sharp take on walking simulators – non-violent first-person games that forgo mechanics to focus on narrative.

"Ages ago," says Burford, "I [told a friend] I didn't enjoy walking sims, who challenged me to play some more. That got me thinking about why walking sims don't appeal to me, and how I'd design a walking sim [that did]."

Filtering *Paratopic* through a retro 3D lens wasn't just a personal preference, either. With unsettled lines and blurred textures, games of this kind feel as detached from time and space as the desolate locales that surround Burford and Harvey in the United States.

"From an outsider perspective, these parts of the States are existentially uncomfortable," explains Harvey, who moved to the US five years ago. "Especially coming from the UK, a world where continuity gets taken for granted. People and events just flit through without leaving any kind of mark or permanence."

Burford, who lives in Kansas, agrees. "Getting that sense of space, of going to a gas station at 3 am and talking to a guy who's lonely and bored and desperate for company. Knowing a serial killer and understanding that the reason I came to know him was because he was scoping me and my family out." (See the boxout bottom left for more on this startling incident.)

MEETING A MURDERER

In an interview with *Into The Spine*, Doc Burford elaborated further on his encounter with a serial killer, which took place around the year 2003. "There was this one time where animal control came to the house," Burford told the website. "He told us that people had been calling because we were abusing our chickens. Of course, we weren't, as he was quick to point out, but he had to stop by. He was friendly and outgoing, but he had to stop by every few weeks 'cause someone was making calls. Dad and Mom liked him because he was a church-going Boy Scout leader. Seemed like a great guy." As it turned out, the visitor was Dennis Rader, better known as the BTK Killer, who'd murdered ten people in Kansas between 1974 and 1991 before his eventual arrest in 2005. "BTK had been telling people he had his sights on a new target," Burford said. "I was told later that it was my family, which is why he'd been finding excuses to visit." The incident would eventually inform several moments in *Paratopic*.

POINT OF VIEW

You might have noticed a trend in the games mentioned so far. Almost without exception, Horrorshow, Hackett, Harvey, and Burford are largely working in the first-person horror mode popularised by more recent games like *Amnesia* and *Outlast*. First-person games weren't unheard of in the PlayStation era, but the most seminal titles of the nineties were viewed from a third-person perspective: *Resident Evil* and *Silent Hill* pulled off their scares with a controlled approach to camera placement. This summer's industrial horror-themed Haunted PS1 jam is packed with games that go for a similarly remote viewpoint. Some, like redactionary's



Lynnwood, forgo *Resident Evil*-style pre-rendered backgrounds to simply follow the character through a real-time 3D world. The second of Bryce Bucher's *Two Atmospheric Atrocities* takes a wholly opposite approach, with static backgrounds composed of grainy photographs taken in their own backyard.

Elsewhere, *Sleep Cycles*, developed by creator kurethedeat, explores *Resident Evil*-style puzzle-solving and storytelling mechanics while eschewing its fixed third-person cameras. It's a *Tomb Raider*-style platforming adventure, but one where Lara Croft took a wrong turn into a realm of horror. Other games, meanwhile, pull the camera even further back, and replace slow-build scares with speed and gore. Modus Interactive's *Groaning Steel* is a particularly gruesome racing game – it's *Carmageddon* meets *Tony Hawk's Pro Skater* as blood-and-bone-covered cars race through fleshy hellscape.

Hackett explains that the diversity of creation in this field doesn't stop at genre. Everyone has differing levels of ability, experience, and familiarity with the nineties aesthetic. Part of the appeal of making games in this style, after all, is the ease of creating textures, models, sounds, and stages without the stratospheric expectations of 2019's mainstream games. "Some people [just add] a pixelation filter to whatever assets they have to hand," says Hackett. "They'll play with some of the modern technology but keep the feel of an older game through that and the gameplay. But I've also seen people go all-out with low-res textures, low-poly models. I've even gone as far as to fake lighting effects, so it feels less like a modern game with a pixelation filter over it."

While the growth of the games industry could be described as a constant race for the highest frame rate, the sharpest resolution, or the fanciest lighting, Harvey likens the use of late-nineties design techniques to a filmmaker

leaning on the established principles of cinema. "If this was a film, you'd most likely choose a grainy film stock," Harvey says of making a typical Haunted PS1 game. "Perhaps [it could be in] black and white."

It's easy to see attempts to reimagine the past as simple nostalgia, but in essence, what these developers are really doing is tapping into a rich library of audiovisual tones. Growing communities like Haunted PS1 are building on foundations laid 20 years ago; developers like Arbitrary Metric are using familiar visuals to drive new and unsettling experiences.

Who knows what the next decade will bring? We've already seen classic twists on modern horror, and dark homages to PlayStation classics. As the medium matures, we're sure to see developers continue to mine the past in order to terrorise gamers in the present. Until then, I'm happy to sit in the dark and wait for the next monster. 🗿

"FROM AN OUTSIDER PERSPECTIVE, THESE PARTS OF THE STATES ARE EXISTENTIALLY UNCOMFORTABLE"

^ Even the entertainment hardware's retro in the eerie *Paratopic*.

^ Hackett's first retro horror game was the dark and moody *Broken Paradox*.



SPOOKT

LOOKING AT THE WHATS AND HOWS OF GAMING'S GREATEST HORROR MOMENTS

WRITTEN BY IAN DRANSFIELD

It's the spookiest time of year! Unless you're reading this feature some time other than October, in which case you'll have to do a bit of role-play to get into the mood. Anyway, it *is* the spookiest time of year, so we figured we'd look at some of gaming's super-spookiest moments, because for all the arguments of what they are and aren't good at, one thing is certain: games can do horror very well indeed.

But rather than just carry on with our own interminable waffle about the dogs jumping through the windows in *Resident Evil*, or whatever, we put the questions to some of gaming's great horror designers to find out their favourite scary moments, and just how it is people can successfully create scary moments of their own that could well make players totally spook out. To the max. 🗨



SERAPHIM ONISHCHENKO

ROLE: Narrative Designer, Frogwares

HORROR CREDENTIALS: *The Sinking City*

THE MOMENT: To this day, I still remember meeting the first victims of the sand plague

in *Pathologic*. By this point in the game, the weird and cryptic intros had scrambled my brain on what to expect. The NPCs I'd met in The Town are all extremely odd and eccentric, so I knew something was properly off about the world, but I still didn't know why. Then examining the house of the Haruspex's missing father, I heard a horrible moan behind. I turned around and there they were – his patients, victims of the plague, coming slowly towards me.

THE ADVICE: I often think build-up and suspense, along with clues that something horrible is coming, are the 'secret ingredients' to making a really impactful horror moment stick. If you get the player in a state where they expect something terrifying but they're not sure what it is, their mind will frantically start trying to put together the trail of crumbs you've left to overcome this. And you can get devilishly creative with these clues. Some are real. Others are for misdirection. A bit of level and audio design tricks here and there, maybe a shadowy creature with a subtly off animation, a slight change in the music etc.

The worst fear is the fear of the unknown, but making the player hyper-aware of the fact that they don't know what is coming, is all the more terrifying.



ACULAR



MASACHIKA KAWATA

ROLE: Senior producer, Capcom

HORROR CREDENTIALS: *Resident Evil* series, *Dino Crisis* series

THE MOMENT: The first chapter of the

Higurashi When They Cry series was terrifying. It is a text-based indie adventure developed by a small team, and the quality of its graphics and sound was not particularly outstanding. However, it caused a sensation online because of the story depicting madness in day-to-day life and many intriguing mysteries which are not unravelled in the first chapter. It reached a mass audience later on through various adaptations including an anime, but the first chapter still feels especially scary with its story depicting a breakdown of communication between friends.

From major titles, *Dead Space* was also impressive with its unique interpretation of aliens and the well-realised isolation of the space environment. Its intensity reminded me of the first *Resident Evil*. The boldest horror moment was the dismemberment when the player is killed, which showed – instantly – that you were dead. Unfortunately, such dismemberment could not be removed to comply with

strict rules set by the Japanese ratings board, which made it impossible to officially release the game in Japan. Still, many Japanese horror game fans did import the game to experience it.

THE ADVICE: The sequence of 'unique situation', 'unexpected surprise', and 'the need for players to escape' seems to be the key to creating a good horror moment, which I think is the case with the two titles above. Players won't be afraid of dying as long as they are chilled out, and there won't be any surprise if they are able to make decisions calmly. That's why I think it's important to make extraordinary environments to get rid of the emotional ease and reassurance of players.



BARBARA KCIUK

ROLE: Narrative designer, Bloober Team

HORROR CREDENTIALS: *Blair Witch*

THE MOMENT: Moments such as your first encounter with Pyramid Head in *Silent Hill 2* or sudden appearances of Scissorman in *Clock Tower* are still as adrenaline-inducing as ever, but for me, the most memorable was the way *Eternal Darkness: Sanity's Requiem* messed with the player. The way it crosses the fourth wall in order to scare you – who wouldn't be terrified if the game suddenly erased all your save files or unplugged your controller in the middle of the fight? It remains both unique and terrifying, even today.

THE ADVICE: The secret is... that there's no universal recipe. There are no universal tricks that always work. Creating horror relies heavily on surprising a player – with a well-paced jump scare, eerie atmosphere, sudden change of tone, or some small, seemingly inconsequential detail that just rubs the player [up] the wrong way. As a creator, you must always be one step ahead of the player, and that's exactly why there's no easy answer to 'how'. Always be creative, experiment a lot, and trust your intuition, because if you start following the rules, you're not going to scare anybody.



JORDAN THOMAS

ROLE: Writer / designer, *Question*

HORROR CREDENTIALS: *The Blackout Club*, *BioShock 2*, *Fort Frolic (BioShock)*, *Robbing the Cradle (Thief: Deadly Shadows)*

THE MOMENT: The one I remember scaring me the most was probably, by most folks' standards, mundane. In *Fatal Frame II*, you have a twin sister that you're exploring a haunted, abandoned Japanese village with. You get used to her tagging along everywhere, and they brilliantly make you scared for her as you would never be for yourself, trying to capture first-person photos of ghosts as they loom up behind her, and she doesn't see it coming.

But the moment that worked on me was far simpler – at some point, my sister simply wasn't there with me. I thought, "OK, bad AI," and started looking for her. I saw her, frozen, through a door frame, looking at something I couldn't see. It was brilliant. I don't even remember what it was she was

looking at, or if I just misinterpreted something that wasn't even technically scripted. And honestly – I don't care. It grabbed my brain stem hard and made a real memory, regardless.

THE ADVICE: In *The Blackout Club*, we try to build a design vocabulary out of systems that behave predictably, and empower you to start speaking their language. You close your in-game eyes to perceive certain information that the arguably supernatural presences in the game have hidden from you. You play a kid, so your reality is already malleable. In closing your eyes, you shut yourself off to the presence of nearby threats in the material world, but you're able to see a hulking figure called the Angel who moves around in ways you'd expect an old-school Shadow archetype or slasher villain to do.

Even with the sound cues, it's often on the floor just above you, seeking you, or even right next to you. It feels like a cinematic scare, but we're not cheating by manipulating your camera – you've got all the tools. Some folks are more scared of seeing their friends harmed, so along the lines of that *Fatal Frame* moment, they see the Angel right behind a co-op buddy and flip out.



JON CHEY

ROLE: Programmer / designer, *Blue Manchu*

HORROR CREDENTIALS: *System Shock 2*, *BioShock*, *SWAT 4 (yes, really)*

THE MOMENT: For me, real video game horror comes from losing progress. *Demon's Souls* was super-scary because of its incredibly harsh save system. I was also pretty scared when I played through *System Shock 2*, just after we sent the game off for mastering and saw the level progressing bug that our QA team had just found. That was a traumatising experience that I still haven't fully recovered from.

THE ADVICE: In my opinion, horror and tension are very hard to create successfully and are often confused with gross-out shocks. Tension relies on what you don't see or can't know. Once the monster has been revealed, whatever it is, the horror tends to evaporate. That's a tough problem for video games since you usually end up fighting the monster (and beating it).

I think successfully scary levels introduce the tension gradually and ramp it up over time. If you sense the monster or hear about it but don't know what it is and can't see it, your imagination will create something scary for you. The encounter with Steinman in the Medical level of *BioShock* is a good example. Or if you slowly put together a picture of something terrible based on environmental cues, the effect is stronger than if you're directly told about it – like in the Fairfax Residence from *SWAT 4*.





STEVE BRISTOW

ROLE: Assistant head of design, Rebellion
HORROR CREDENTIALS: *Manhunt 2*, *Zombie Army* series

THE MOMENT: The telephone call in the school in *Silent Hill*. I expect that's a common answer but there's a reason for that. I was playing it in the dark, on my own like you're supposed to. The timing, the atmosphere, the jump scare of the phone ringing and then the kid's voice saying "Daddy?". Gives me goosebumps just thinking about it. I hadn't played anything like it before. It felt like real, serious, grown-up horror at the time.

THE ADVICE: You've got to get the player's full attention; get them immersed in the moment or fully empathising with your character. You want them leaning in. That's one of the reasons VR is so uniquely powerful for horror. You can literally put your player in the scene where whatever's going to happen will happen to *them*, not their character. Audio is crucial and often made more potent by its absence. Then the rest of it is timing and finding a way to tap into the weird things we've all got dragging their nails around inside our skulls. We were looking at a character in *Zombie Army 4* and it has an element about its design that gives me the proper creeps... it genuinely makes me uncomfortable to look at because it's got a long finger like an aye-aye (Madagascan lemur), a creature I find absolutely repellent. I'm intrigued by those odd, personal horrors beyond the common fears we all share. Though in this case, everyone should be scared of aye-ayes – they are just obviously horrible.



KAZUNORI KADOI

ROLE: Director / designer, Capcom
HORROR CREDENTIALS: *Resident Evil* series, *Resident Evil 2* remake (director)

THE MOMENT: This is from Capcom games actually, but the scariest moment in recent years that made my heart stand still was in *Resident Evil 7* played with VR, the moment when Mia disappeared momentarily and then suddenly appeared near me and grabbed my arm. Since VR enables you to feel that something is really 'close' to you, it was a very effective method to make an enemy suddenly appear near players out of their eyesight.

THE ADVICE: It is a golden rule that you don't show the feared object first – make players sense its presence only by sound, change of situation etc., and then make it appear at the most effective and unexpected moment. But we need to always question how we can evolve this method by [using] new ideas and technology.



—Daddy—where are you—?



THOMAS GRIP

ROLE: Creative director, Frictional Games
HORROR CREDENTIALS: *Penumbra* series, *Amnesia* series, *Soma*

THE MOMENT: There are many favourites, but the one that has always stuck with me is the start of *Silent Hill* (the first one). This is when you lose track of your daughter and enter this spooky alley. The way the tension builds up as the alley just gets creepier and creepier blew me away. The music, the camera angles, and the imagery was something I had never seen before.

THE ADVICE: I think the mistake many make is to just focus on the basic scariness. Rather, I think the most important part is to think about the narrative. So instead of just having a spooky forest, you want to build up a story around it. You want to give the forest some mysterious background and construct a scenario where it makes sense for the player to be there. Player motivation is especially important as that grounds the player to the scene and makes it possible for them to relate to the happenings. Then you want to have fed just enough information for the player to have their mind running wild on the horrible things they might encounter. Once that is all set up, you can focus on making a spooky forest with creepy sounds and visuals. But if you lack the narrative foundation, the whole scenario will just come off as shallow and not be nearly as frightening as it could be. 🍷

Oral Tradition: Don't Underestimate Bards



LOTTIE BEVAN

Lottie's a producer and co-founder of award-winning narrative microstudio Weather Factory, best known for *Cultist Simulator*. She's one of the youngest female founders in the industry, a current BAFTA Breakthrough Brit, and founder of Coven Club, a women in games support network. She produces, markets, bizzes and arts, and previously worked on *Fallen London*, *Sunless Sea*, *Zubmariner*, and *Sunless Skies* as producer at Failbetter Games.

"These narratives propagate rapidly and change to suit the context and audience of their telling"

There's a concept in literature of the 'oral tradition', where stories spread by word of mouth rather than being written down. The upside is these narratives propagate rapidly and change to suit the context and audience of their telling. The downside is there's no definitive version, only a tessellation of reflections loosely revolving around the same names, events, and themes. It's human and organic, but there's neither author nor authority.

Nowadays, we value both of those things. We often buy games because they're a Devolver game, or because Hideo Kojima's involved, or because *Wireframe* gave it a number higher than 65. We used to see things like *Sid Meier's Pirates!*, and though the naming-trend is now unusual, the rise of influencers over the last decade shows how powerful individual authority still is. But games themselves are less and less tangible: what once came on a collection of hefty floppy disks and played on room-dominating desktop set-ups became trim CDs in laminated boxes, then formless bits of digital pseudo-stuff you can refund after playing for one hour and fifty-nine minutes. This is mirrored by the increasing intangibility of gaming platforms: hefty PC towers to under-TV consoles to handhelds tucked in bags to cloud gaming. It's interesting that while literature has gone from the ephemeral to the concrete – try 'retelling' Margaret Atwood's *Testaments* and see how long it takes the lawyer's letter to reach you – games seem to be going the other way.

The oral tradition put a lot of power in the mouth of the narrator, but for games, the narrator is what, our CPU? Wonderful though computer science and game design are, neither have yet cracked a fully responsive game experience that tailors itself to the unique player before them. Part of this is because games don't necessarily *want* a unique, tailor-made experience. Yes, we have hard mode and character customisation and branching narrative, but *God of War* is framed in a seamless, perfect one-shot experience, while *BioShock* relies on telling Jack's story exactly the way it was written.

Games ship infinite digital copies of themselves to give the same curated experience to as many players as they can. People are free to respond to it individually, but the content itself remains the same.

This is why, I think, I'm increasingly a fan of abstract games, or games that leave space for the player to breathe. *The Stanley Parable* had a lot to say about agency, the modern world, and corporate America, but because it relied on repetitive and increasingly meaningless actions, it didn't really matter how you actually played. *INSIDE* seemed another meditation on individualism, agency, and surveillance until its infamous denouement, which has no 'official' meaning at all. There is a definite drive towards narrative excellence in our industry, but at least for me, it's the stories that have faith in their players' intelligence – the stories that want you to connect the dots, rather than rendering gorgeous and definitive dots for you – that really lead the pack. They're storytellers responding to their audience, not recitals of canonical text. Long may their audience listen. 🗨

▼ **INSIDE: a game of mystery, intrigue, individualism, and surveillance. At least until its perplexing conclusion.**



Toolbox

The art, theory, and production of video games

28. Design Principles

Howard Scott Warshaw tackles an age-old question

30. CityCraft

A brief history of the 8-bit metropolis

32. Skill versus chance

The pivotal role of chance in game design

38. Making Anew #9

The ways you can grow as an indie developer

40. Source Code

Create a *Columns*-style tile-matching puzzler

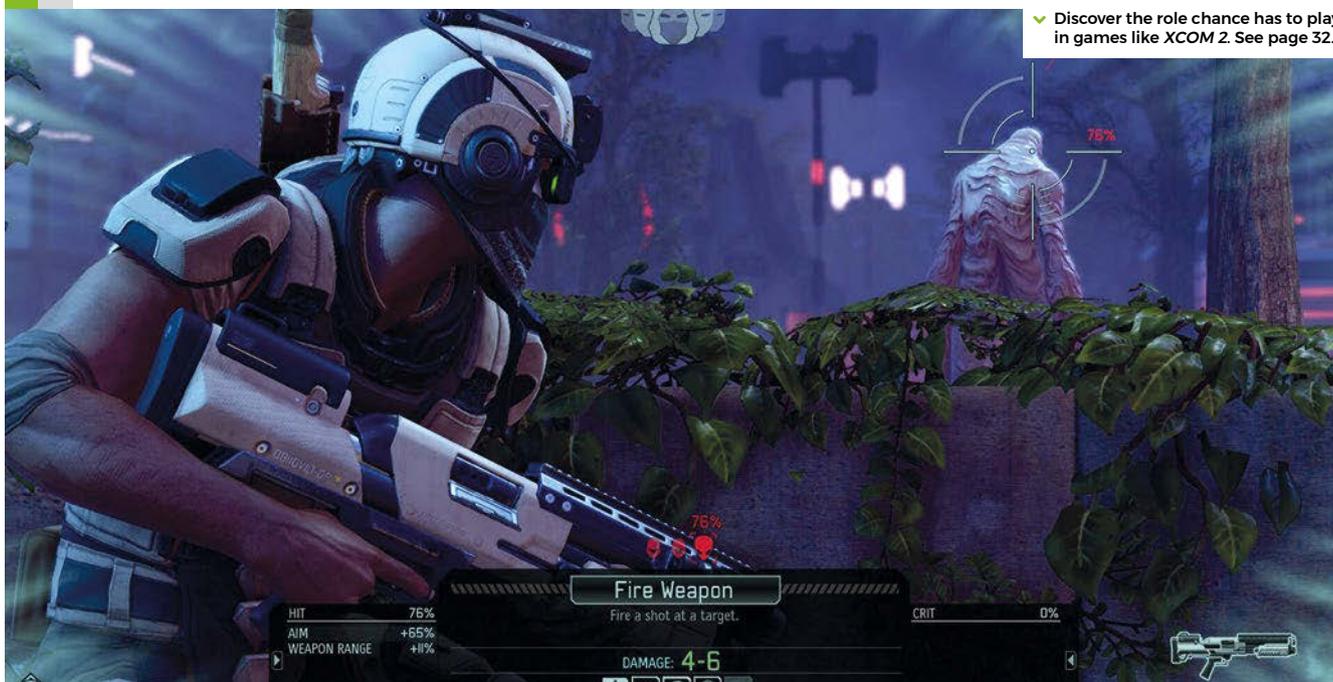
42. Directory

Readers get free tickets to a talk on game audio



^ The 8-bit era's simplified, abstract cities managed to capture hints of grit and grime. Find out how on page 30.

^ Discover the role chance has to play in games like *XCOM 2*. See page 32.



The principles of game design

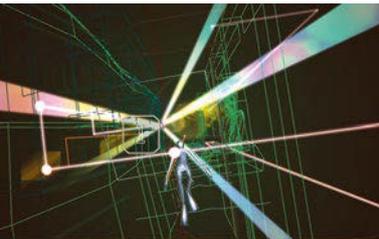
Sometimes they're fun, sometimes they're garbage, but games can also be art, Howard writes



AUTHOR
HOWARD SCOTT WARSHAW

Howard is a video game pioneer who authored several of Atari's most famous and infamous titles. onceuponatari.com

▼ Part shooter, part explosion in a glow stick factory, *Rez* is one of the most striking action games ever made.



Art is an integral part of video games, and there's certainly an art to making video games, but are video games art? This long-standing question was brought

back to the surface a few years ago when the film critic Roger Ebert proclaimed that video games could never be art.

This is an absurd thing to say. Specifically, the claim that video games can never be art is neither a bit absurd nor largely absurd. It is medium absurd. I say this because video games are a medium, like oil painting or music or sculpture. No medium *is* art, but any medium can *host* art. I want to distinguish art from craft here. Craft is realising some design or concept in a medium. Art is the expression of an idea in a medium. Art is achieved when my work of craft rises to a level beyond function and becomes a communication.

What's more, the expression in the medium needs to be brand new, while the concept being expressed needs to be a fundamental truth of humanity that everyone recognises. Great art has both.

There's a process to creating art. The first step is reaching into your brain and pulling out a significant feeling or concept, because it all starts with actually having something to say. The next step is about whittling this concept down to a coherent and expressible idea, at least linguistically. This enables the artist to be more intentional and focused when making the choices necessary to execute the final step: choosing a medium and finding the elegance or eloquence in the medium to convey your idea fully.

How will I express my concept in this medium? Will the medium host my concept in a way that feels smooth, natural, and clean? If I answer these questions successfully, when I show my work to people, they'll likely say, "Oh, of course. I know that." Well, yes you do, because it's speaking to a fundamental truth. Art is, on its face, a contrivance. It's a made-up thing from the beginning. There's nothing organic about art; it's the specific, intentional rearranging of things to create a specific result. But that result can speak to an organic human truth immediately recognisable by those experiencing it. Now that's art.

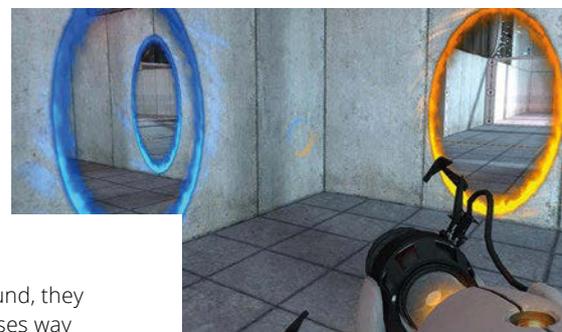
Pablo Picasso probably put it best when he said, "Art is not truth. Art is a lie that makes us realise truth." Art evokes reactions and communicates ideas. The more accurate the communication speaks to our common

▼ Directed by Thatgamecompany's Jenova Chen, *Flower* was intended as an "interactive poem" about nature.





▲ *Journey*: We didn't blub when we got to the end. Honest. Nobody can prove a thing.



▲ Whether you regard it as art or not, there's no denying *Portal's* design ingenuity or sheer impact on the industry.

experience, the more recognisable it becomes. Art is the process of putting new faces on old truths.

There are various levels on which art may succeed or fail. For starters, there's first impressions. The piece needs to draw an audience. It must be cool enough for people to want to engage with it in some way. Then there's the fact that the message embodied within the communication has to be both clear and relevant. This will make the message recognisable.

The truth is, a lot of art becomes dated after a while, because the truth it expresses is current and transient. This is pop art. The truth of one era is not necessarily the truth of all time. But great art forms take it to the ultimate level: timelessness. Fundamental truths about our relationships or our world transcend time and geography; they remain true across generations and cultures. Many say the plays of Shakespeare rise to this level. They never seem to go out of style because they reveal our humanity so honestly. That's why great art continues to appreciate, whereas pop art winds up in close-out sales and nostalgia fests.

A NEW CANVAS

That's all well and good, Howard, but how do video games fit into this jaunty bit of whimsy? A fair question. Video games represent another medium. As developers, the video game is our craft. A new canvas, a new opportunity for art... or crap. We have a process for conceiving, designing, and implementing our games. The results vary from effort to effort. Sometimes they're fun, sometimes they're great, and sometimes they're flat-out garbage. But sometimes they rise to the level of art.

Sometimes our games are so profound, they end up inspiring attention and responses way beyond the video gaming scene. It may be lovely or ugly, but it creates something that goes far beyond the console and enters the realm of social awareness or cultural significance. *Pac-Man* is universally identifiable – it has significant meaning to people who don't even play games. *Pong* is so iconic, it's practically code for the 1970s. Some games don't just come and go, they occupy the social discourse for periods longer than their shelf life.

ALL CHANGE

The *Mass Effect* series generated tremendous attention for redefining how games approached storytelling and world-building. *Grand Theft Auto 3* redefined how much parents can complain about the moral turpitude to which their children may be subjected when playing games. Concept games like *Rez*, *Flower*, and *Portal* redefined our sense of what a game is, and what objectives of play might be. And *WoW* is just... wow! It's created entire financial markets for in-game currency, items, and accolades.

For decades now, we've all enjoyed the relatively new profession of video game developer. But now there are also professional video game *players*. That is a societal change, brought about by a few select games which have been able to manufacture both the venue and the desire for people to generate income by using their gaming skills. I believe games which lead to modifications in resource flow within the economy are achieving a level of artistry in their craft.

Picasso's insight is interesting here. We learn about the world and ourselves by playing games. I wonder what truths they reveal to you? Do you approach your games as a craft? Does your game development aspire to artistic heights? One thing's for sure: games are not truth; games are a lie, crafted by artists. ☹

**“No medium is art,
but any medium
can host art”**

Jenova's Witness

With such acclaimed, poetic games as *Flower* and *Journey* behind him, designer Jenova Chen undoubtedly approaches the medium from an artistic angle. And unsurprisingly, he has some thoughts on what games can do as an art form. “I think ‘artistic’ simply means there's more of the creator in the thing,” Chen told Interviewwithanartist.net. “Whether it's a painting or song or movie or game, the creator puts more of themselves into the piece, so when the audience sees them, they feel something real, they feel something human, they feel something that's like a person. So to me, art is essentially a way to make people connect with another human being. In many ways, art is the better part of the artist who created them, because every human is flawed. But when they create something, they put the best part of their humanity in those pieces.”

A brief history of 8-bit virtual cities

It all began with chunky pixels, text adventures, and monochrome 3D cityscapes



AUTHOR
KONSTANTINOS DIMOPOULOS

Konstantinos Dimopoulos is a game urbanist and designer, combining a PhD in urban planning with video games. He is the author of the forthcoming *Virtual Cities* atlas, designs game cities, and consults on their creation. game-cities.com

Urban Perspectives

Despite the limitations of then-available tech, the 8-bit era provided us with most of the perspectives that we still see in games today. First-person and third-person 3D, bird's-eye views, side-scrolling 2D backgrounds, and more besides, were all employed to serve different gameplay, narrative, and atmospheric needs. Getting game cities right has, after all, always involved getting the framing correct – thus hiding omissions and unavoidable gaps.

Cities have long been filled with storytelling potential. Classical tragedies, contemporary TV dramas, crime thrillers, science fiction, horror, and fantasy stories have all used urban settings. One of the most famous works of early cinema, Fritz Lang's *Metropolis*, was all about its urbanism. Unsurprisingly, cities also form a major part of video gaming's history.

Inevitably, the earliest game cities were simple ones, but gaming quickly evolved to allow for a unique and fascinating take on urbanism. The medium's interactivity added unprecedented depth to its cities; for the first time, players could explore and directly experience these imaginary places.

This article is the first in a short series that will briefly summarise the history of interactive cities

– mainly by exploring distinct, seminal locations from some of the most important (though not necessarily famous) games.

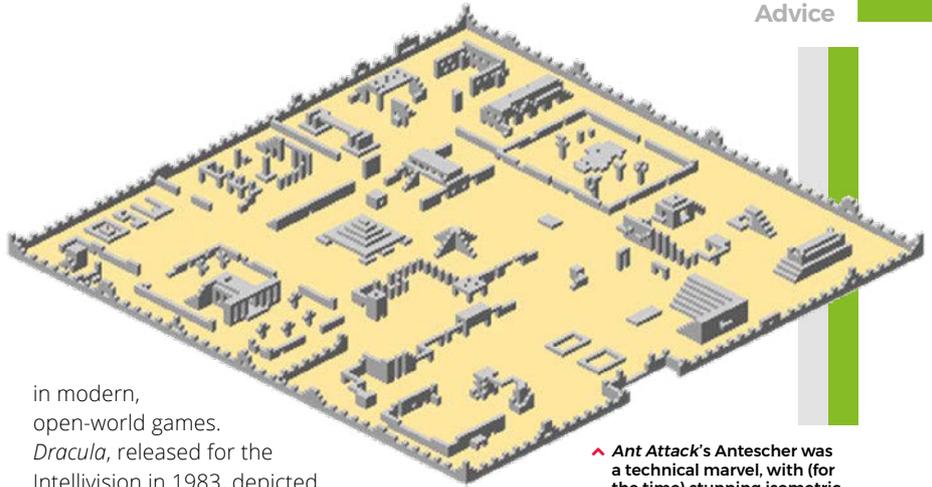
THE EARLIEST ATTEMPTS

It was during the 8-bit years that the first game cities came to life. Spanning the long era between the late 1970s and early 1990s, and appearing on a multitude of platforms including arcade machines, the NES, Apple II, Commodore 64, and ZX Spectrum, these cities constructed their illusions with minuscule amounts of memory, low resolutions, paltry colour palettes, and painfully slow CPUs.

The most visually impressive 8-bit cities were commonly seen in side-scrolling beat-'em-ups. These games made up for their lack of depth with often stunning visuals, frantic action, and colourful depictions of dilapidated metropolitan downtowns. Essentially consisting of a series of 2D backgrounds and a variety of thugs to pulverise, these ideologically charged depictions of urbanism matched the demonisation of inner cities that was rampant in the early eighties. *Renegade*, its sequel *Target: Renegade*, *River City Ransom*, *Final Fight*, and *Double Dragon* were all characteristic examples of the genre, all featuring cities built around violence and social malaise.

Though not as anti-urban in their bias, offerings such as Atari's *Rampage* and 1988's *The Muncher* (based on an advert for the British sweet brand, Chewits) cast players as giant monsters tasked with smashing up single-screen cities. It was only in Epyx's largely forgotten *The Movie Monster Game*, released in 1986,





that players actually got to explore: the game featured relatively realistic pseudo-3D cities, as well as recognisable landmarks like London's Big Ben and New York's Empire State Building.

The most immersive, believable cities of the era, meanwhile, could be found in text adventures – or interactive fiction, as the genre's now more widely known. Philip Mitchell's *Sherlock* and Trevor Lever's *Hampstead*, both released in 1984, were just two of many. *A Mind Forever Voyaging*, designed by Steve Meretzky and published by Infocom in 1985, was even more ambitious; its setting, Rockvil, brought a dynamic, evolving future city to our monitors. It was a place players could visit in ten-year intervals, and experience its descent from a pleasant US city to a post-apocalyptic wasteland.

LOW-TECH IMMERSION

The complexities of real-world cities are tricky to replicate in video games, even with today's technology, which is why designers often find it easier to use ruins as game locations instead. Designer Sandy White's *Ant Attack*, released in 1983, was one of the earliest games to do this, and it was glorious. It was the first isometric, fully rotatable, free-roaming 3D game on the ZX Spectrum, and its patented SoftSolid engine rendered a cohesive world: the walled ruins of a lost civilisation infested with killer giant ants. *Antescher* was a fully formed and eerie space, incorporating historical buildings and distinct landmarks to help players navigate their way around.

Other games, released before and after *Ant Attack*, also experimented with some of the design elements we now take for granted

in modern, open-world games.

Dracula, released for the Intellivision in 1983, depicted colourful urban neighbourhoods and an innovative day-night cycle. Detective adventure *Contact Sam Cruise* added a bigger, more detailed scrolling cityscape to the formula, and provided players with the freedom to explore, solve puzzles, answer phone calls, enter buildings, and even turn lights on and off.

RPGs like 1985's *The Bard's Tale* and its fantasy town of Skara Brae, famous for its size, locations, and guilds, brought even more complexity, while 1988's *Neuromancer* ambitiously layered a cyber city on top of a physical one. Its cyberpunk metropolis was packed with PAX machines – a cross between an ATM and a cyberspace entry point – while its small yet cleverly designed and lively world felt far larger than it actually was.

Dun Darach, also released in 1985, was a

personal favourite. It took place in the mystical town of the same name, and was supported by its lore, built around a sacred oak; it was a beautiful,

strange place with outlandish customs and imposing buildings. With its innovative use of modular elements, *Dun Darach* crafted a large, quasi-3D environment that could be rotated in 90-degree increments, and scrolled in 2D. With its specialised districts, economy, rounded non-player characters, and torches that lit up at night, *Dun Darach* felt real. It offered a pioneering and slightly confusing open world that demanded to be solved.

Turbo Esprit, released for the Amstrad CPC, ZX Spectrum, and Commodore 64 in 1986, somehow crammed four whole virtual cities onto a single cassette. Those open worlds were in perpetual motion, and came complete with working traffic lights, zebra crossings, traffic jams, and roadworks.

While computer-controlled drivers respected laws and speed limits, players drove around like maniacs in pursuit of roaming drug lords. All this in a game created a full decade before the seminal *Grand Theft Auto*. 🗺

▲ *Ant Attack's Antescher* was a technical marvel, with (for the time) stunning isometric graphics. It remains a fascinatingly eerie place to this day.

▼ *Turbo Esprit* managed to pack four open-world, 3D cities onto 8-bit computers, including the C64 version pictured here.



“Gaming evolved to allow for a fascinating take on urbanism”



▼ Though not exclusively an 8-bit title, *Neuromancer* showed that simulating a living urban world was actually possible back in 1988.

Sporting Postcards

The eighties were famous for their 'urban' takes on sports, and video games were eager to capitalise on the era's sense of cool. Games like *Streets Sports Basketball* took place in downtown alleys; *California Games'* footbag minigame played out in front of the Golden Gate Bridge; 720° had players skateboarding across isometric cityscapes. What's most interesting about such offerings, though – and there were many – is that their urban environments were nothing more than window dressing. But even as flat backdrops, city imagery helped to imbue these games with their uniquely urban flavour.

Skill versus chance: using luck in games

Most games include some element of chance, but how you use it can have a major impact on your audience



AUTHOR
STUART MAINE

Stuart Maine has been a designer for 22 years, across PC, console, and mobile. He helped set up Well Played Games, and is currently working on Warhammer Combat Cards.

Understanding the role of chance is a key design skill, because the same game can appeal to wildly different audiences with just a slight shift in how chance is used, displayed, and managed. But before we go any further, let's talk about why we'll be looking at 'chance' instead of 'luck'.

This article will cover chance, risk, probability, and statistics (don't worry, those last two aren't as dry as they sound), but I'm not really going to cover luck. That's for the simple reason that you – as a game designer – can influence the role of chance in your game, but you can't do much about luck.

'Chance' literally means 'the chances of something happening', so you have a one in six chance of rolling a four on a standard dice, or a 50/50 chance of calling heads or tails on a coin flip. As game creators, we can work with chance, deciding how, when, and where to use it and whether to expose it to our players.

Luck, on the other hand, is when that die you rolled pings across the room, never to be seen again, or when the tossed coin lands on its edge and refuses to be either heads or tails. For a more concrete example, you can work out the exact chance that your *Hearthstone* opponent will draw the perfect hand of cards they need, but luck dictates whether they make a mistake and deploy the wrong one.

CHANCE AFFECTS AUDIENCE

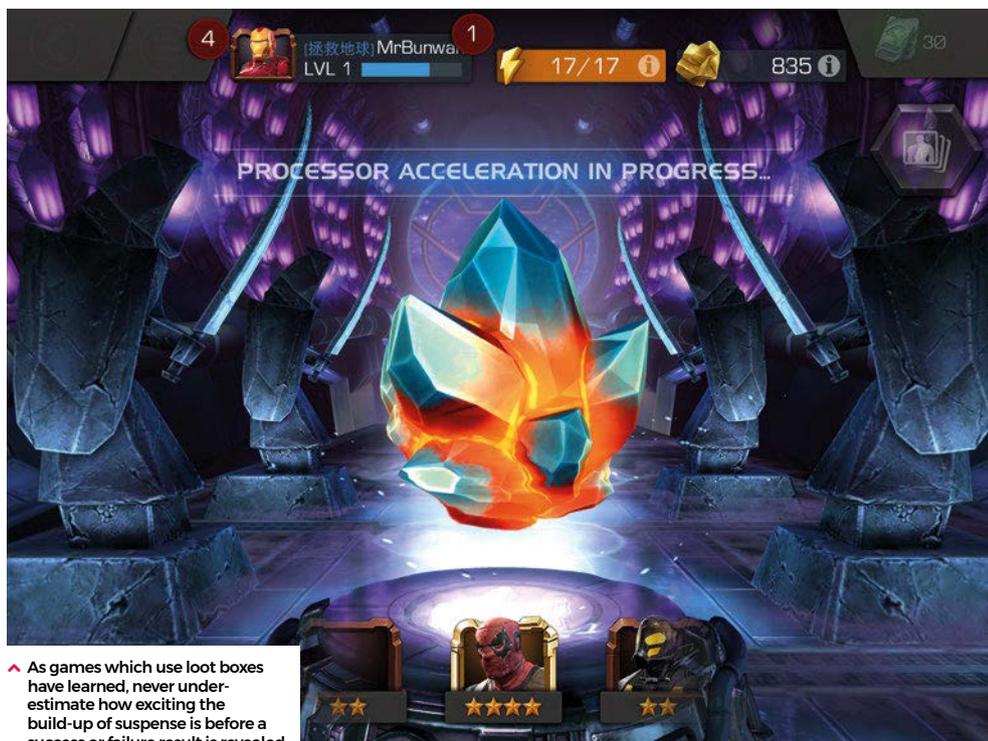
Every game can be placed on a spectrum from pure chance, where you basically have no say (snakes and ladders, roulette) to pure skill, with the outcome solely determined by who plays best (chess, most rhythm games).

Where your game sits on this spectrum has a big impact on who's likely to play and enjoy it, so it's important to think about this and make sure you match your skill/chance balance to your intended audience. It's also important to remember that neither side is better or worse – it purely comes down to who you want to play your game.

Pure skill games can be extremely intimidating, because they leave nowhere for

▼ 'Serious' fighting games use clear feedback to show that everything that happens is down to player skill, and not the result of chance.





▲ As games which use loot boxes have learned, never underestimate how exciting the build-up of suspense is before a success or failure result is revealed.

▼ Some games, like *Betrayal at House on the Hill*, revolve around using layers of chance to give themselves variety and surprise, sacrificing player skill to try and tell a cool story.



players to hide. If you lose, it's because you simply didn't play as well as your opponent. This will spur competitive players on to learn and do better, but in general, it's nice for our ego to be able to assign at least some of the blame for the loss to bad luck. Pure skill games also require players to learn, think, and focus, making them tiring to play – sometimes it's fun to just bash some buttons with your friends!

Weirdly, games of pure chance tend to have two extremely distinct audiences: gamblers and kids. Presumably, the gamblers enjoy their success coming down to forces outside of their control (even though they may try to alter the odds with superstitions and gut feeling – more on this later). On the other hand, kids' games use luck because their audience may not yet have developed the ability to make valid tactical choices, plus luck-based games can go on forever, suiting kids who are 'time-rich' (see *Fireball Island*, *Frustration*, and more besides).

DO YOU FEEL LUCKY?

Relatively few games are 100% skill- or chance-based, with most blending skill with some elements of chance, for the reasons listed above. Including elements of chance also adds

the fun of 'risk mitigation' to the things you have to think about, so let's talk about 'risk' versus chance.

If chance is the likelihood of a given thing happening (70% chance that this shot will hit its target), then risk is that chance balanced against what you stand to gain if it succeeds, or lose if it fails. In short, risk is where games get interesting.

Let's say a shot by one of your *XCOM* snipers does have a 70% chance of hitting. That's fine, it's fairly likely, so why not go ahead and tell them to fire? But what if you know that the success or failure of an entire hour-long ➔

“Relatively few games are 100% skill- or chance-based”



LUCKY LAYERS

Something I've noticed is that players can tolerate one 'layer' of chance, but more than that makes a game seem too random and arbitrary. For example, imagine a game where dice are rolled to see if your units can attack. Or another game where you get to choose whether to attack, but dice are rolled to judge the success of those attacks. Either of those options is fine, but a game using both means chance determines if the event happens and if that event succeeds or fails, which is incredibly random.

◀ A complaint levelled at kids' games is that they're too random, but strong chance elements are ideal for their 'time-rich' audience. (Image by Druyts.t.)

Toolbox

Skill versus chance: using luck in games



▲ Look up the 'Monte Carlo fallacy' to see what happens when people fail to understand how true randomness works. (Image by Af Ralf Roletschek.)

SMOOTH EMBRACE

This article can only explore the elements of chance that can be built into a game's systems, but of course, any game you play against another human automatically includes luck. At a base level, your opponent might be better or worse than you, but they may also be distracted or on top of their game, all of which can be lucky or unlucky for you. As a designer, your job is to work out whether to mitigate and try to smooth out the randomness of other players (*Street Fighter*) or embrace it (*Smash Bros.*).

mission depends on this single shot landing? You still have that same chance of the shot hitting, but suddenly there's something at stake, and now we have palm-sweating, should-I-or-shouldn't-I risk. With such a lot at stake, you might start thinking about ways you can increase the chances of the shot hitting, or whether you should move other troops up in case it misses, and so on.

As you can see, using risk effectively can transform a game's decisions by giving them real weight. However, there are some things to consider:

- Do you expose the chance numbers to players, helping them clearly evaluate whether to take that risk, or keep the game's pace up by forcing them to rely on quick guesses?
- If the reward is too low, then players won't get invested in the decision because there's nothing at stake.
- And if the probability of success is too high, then players will automatically take it. In which case, why bother making it a random chance at all?
- The higher the reward, the more players will want to take the risk, but they're going to look for ways to increase the odds in their favour. Giving players those options will lower frustration from missed shots, but could slow the pace of the gameplay down.
- Finally, the higher the reward, the more frustration players will feel if the 'roll' doesn't go in their favour, but that leads us on to our next subject: fixed versus true randomness.

RANDOM AND RANDOM

I find this easiest to break down using real-world examples: dice versus cards.

Dice are 'true random', in that no matter how many times you roll a die, the last roll has absolutely no effect on the next roll. If you roll a six, you haven't changed the odds of your next roll also being a six (or any other number). However, humans don't tend to think like this, and our instinct is to assume that a die will balance itself – that is, if you roll an unlucky one, you now have a higher chance of rolling the other numbers. While this may be true over the lifespan of the universe, it's not guaranteed in any particular game. It's possible – albeit unlikely – to keep rolling a die and have it come up with a one every single time.



▲ Games Workshop's *Blood Bowl* uses relatively few dice rolls, causing 'spiky' gameplay where most of your choices revolve around mitigating risk.

TUMBLING DICE

Virtual 'dice' are an interesting problem for video games, because while players will accept incredible swings of chance from real, tangible dice, they'll always be suspicious of virtual ones. No matter how much you reassure players that your game's dice-rolling is completely random, they'll never believe you. As a result, I tend to favour using artificially balanced randomness, as it leads to 'fairer' gameplay, and players naturally assume that's what's happening anyway.

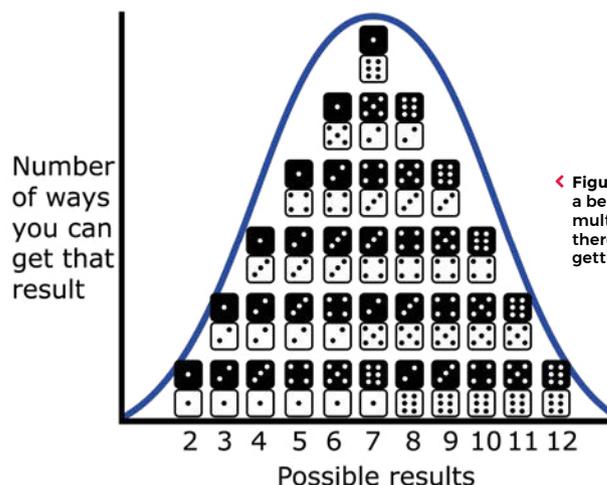
Because they're truly random, dice can heavily influence who wins – some players can just be luckier than others – which can be frustrating if you're aiming more towards skill-based gameplay.

One way to mitigate this effect is to use multiple dice in each roll, because the more you roll and add together, the more they will average out (called a 'bell curve' – see **Figure 1**). Alternatively, you can use dice with more sides – like Dungeons & Dragons' d20 – so there's more granularity to the possible results.

As opposed to the true randomness of dice, a pack of playing cards can be considered 'balanced randomness', because each time you draw a card, you remove it from the deck. As a result, you're increasing the chances of drawing each of the other cards, meaning an unlucky draw will sooner or later be balanced by a good draw (because if you draw enough cards, you eventually get through the entire deck).

You see balanced randomness in video games when they increase the odds of something good happening every time you get a bad result, until eventually you're guaranteed the good result. For instance, games with loot packs can increase the likelihood of you drawing a legendary prize each time a pack fails to give you one.

In short, going for a pure random system can lead to harsh results – if the game rolls virtual dice to see if an attack hits, it could theoretically miss every single time. Some players consider balanced randomness to be cheating, but from a creator's perspective, it helps games play 'fairly' by increasing the chance of a hit for each miss (the recent *XCOM* games do this, for example).



◀ **Figure 1:** Named after its shape, a bell curve reflects that adding multiple dice together means there's a higher chance of getting an average result.

STATISTICS VERSUS PROBABILITY

OK, we've covered luck, chance, risk, and both forms of randomness, so let's wrap up with the differences between probability and statistics. To the Maths Cave!

In an oversimplification that'll cause a mathematician to burst into indignant flames, I class probability as looking into the future, and statistics as looking at the past. You use them

in different circumstances, but they're both useful in trying to work out the numbers you should plug into your game.

If statistics involve looking at collected data to see what's happened in the past (either in your game – called analytics – or in similar situations to yours), then probability is using calculations to work out the likelihood of something that hasn't happened yet. ➔

“Going for a pure random system can lead to harsh results”

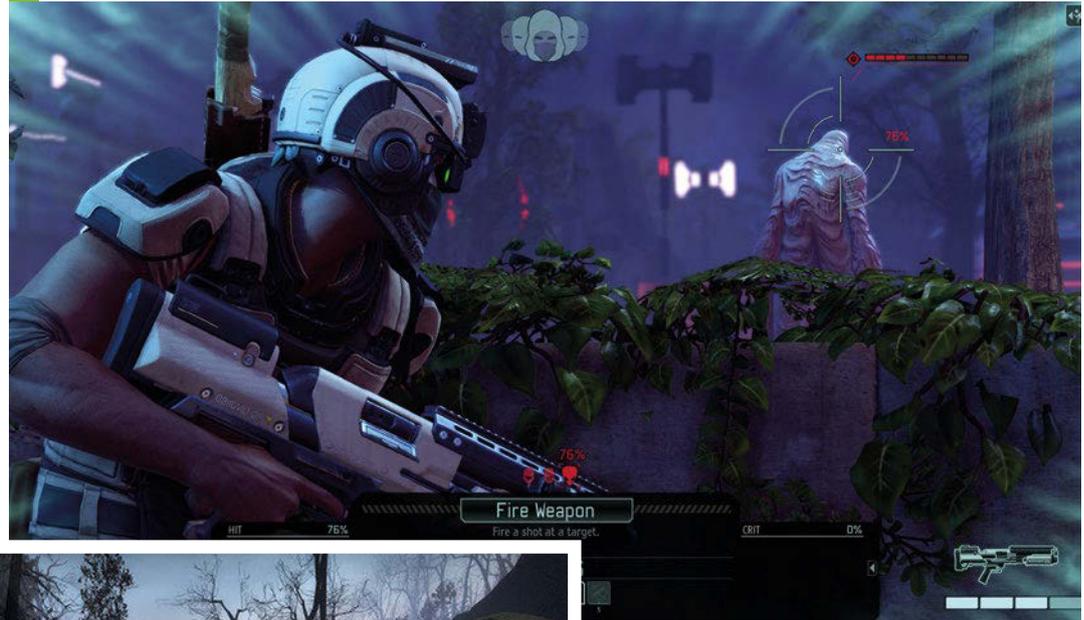
✓ **Games with no elements of chance at all, like *Into the Breach*, feel like puzzle games, with each setup begging to be solved in the optimum way.**



Toolbox

Skill versus chance: using luck in games

- > In games with elements of chance, like *XCOM 2*, a big part of the gameplay revolves around how players can stack the odds in their favour.
- ✓ The AI director in *Left 4 Dead* can be seen as an evolution of 'fixed randomness', as it ensures every play session is exciting, well-paced, and fair.



ROLL WITH IT

If you're interested in heavily basing a game on chance, then I highly recommend studying board games, because they're great at exposing where they use chance (rather than the way video games make it hard to see the 'dice rolls' going on behind the scenes). You can also tweak elements of board games to watch how your changes minimise or exaggerate the effect of chance. Games like *Las Vegas*, *Liar's Dice*, *6 Nimmt!*, and *No Thanks!* all have risk as their key gameplay element.

For example, rolling one six-sided die gives me a 50% chance of getting a four or more, but rolling and adding two dice increases that to 75% (not to 100%, which is the sort of probability trap people fall into. More on this in a moment).

If you roll thousands of dice and count the results then you're using statistics, but if you do the calculations upfront then that's probability. In general – and assuming you have someone confident with these sort of calculations – it's easier to work out probabilities than look up X many thousand results to see the trends.

However, statistics can still be useful for things that are extremely difficult to work out in advance. Here's an example: Say you're making

a turn-based, tactical football game, where clever play is key, but you still want some elements of chance. But where to apply that chance? Should the chances of a goal being scored be primarily dictated by each football player's skill, or perhaps positioning should be more important?

One way to find out would be to place a player at position 'X' on the pitch and tell the computer to have that player make 1000 shots at goal (which shouldn't take it too long, as it doesn't need to draw the graphics, just tell you the results). That'll give you a baseline of the chances of a player with that skill scoring from that position.

Now you can move position X, change the player's skill values, and later maybe introduce a goalkeeper. By changing only one thing at a time and running the test over and over, you work out how much of an effect each of those elements has on the chances of scoring, and decide if that's how you want chance in your game to work. All of which would be awkward to work out by calculating probabilities.

One final point about probability is that people are good at making quick, very rough guesses (called 'going with our gut'), but bad at working out precise odds. We're also easily overwhelmed by too many choices and tend to over-value things we already have, compared to any better potential rewards we might get. In short, this



◀ Cards represent 'fixed random', meaning all possible results are guaranteed in time, whereas dice are 'true random' and may never balance out.

whole area is very closely tied to psychology, so if you'd like to find out more, check out books such as Dan Ariely's *Predictably Irrational*.

MAKING YOUR OWN LUCK

This article was a bit of a skim of a deep subject, but hopefully, I've at least demonstrated that, more or less, chance doesn't make a game better or worse – it simply means it will appeal to different audiences.

As previously mentioned, knowing your game's intended audience means you can work out the right balance of skill versus chance. If you're making a retro platformer to appeal to hardcore speedrunners, then the more success comes from skill, the better those players can get at your game, encouraging them to practice and show off their tricks. But if you're making a slower game where players have time to think through decisions, a little chance will stop them from being able to 'solve' your game and force them to think about risk versus reward.

A final note on why I always favour including at least a little chance: having such elements

FIND OUT MORE

An article of this length can only introduce some of the elements of luck, so here's some further reading if you'd like to dig deeper:

- *GameTek* by Geoff Engelstein is a collection of short essays on luck and mathematics, written by a board game designer.
- **Anydice.com** is a useful site that provides the chances of each result you can get by rolling different numbers and types of dice.
- *A Theory of Fun for Game Design* by Raph Koster is a seminal video game design book which digs into player psychology and why risk grabs us.

will occasionally cause swings of luck to happen, leaving the way open for sudden turnarounds. For instance, in a first-person shooter, causing a gun's bullets to spray out in a cone may mean a shot on target actually misses, or maybe guns have a slim chance of backfiring in your face. Annoying or lucky? That's for you to decide. 🎲



▲ Programmers: get up to speed on art processes to maximise the appeal of your characters and worlds.



AUTHOR
JEFF SPOONHOWER

Jeff Spoonhower is a developer, artist, and college professor who's been working on triple-A and indie games for over 17 years.
anewthegame.com

Indie reflections: Making Anew Part 9

Developer Jeff Spoonhower offers advice on ways to grow as a developer

Very few game developers holistically understand each facet of game development or master every skill needed to complete a game on their own. Through dedication, practice, and professional experience, the majority of developers become proficient in specific areas of development, such as art, programming, design, or production. In order to finish a game as a member of a small indie team, however, you'll inevitably need to step outside your comfort zone and learn a host of new skills, processes, and techniques.

THE SPIRIT OF ADVENTURE

When you're making games on an indie budget, you'll need to be skilled in a variety of disciplines, many of which will be completely new to you. Before working on *Anew: The Distant Light*, I spent twelve years as an animator, cinematic artist, lighting artist, sound designer, and video editor, working on a variety of triple-A studio games. As the sole 'creative' on *Anew*, I've had to quickly learn and become proficient in many other areas of production such as modelling, texturing, visual effects, environmental and gameplay design, cinematic scripting, and many technical

aspects of in-engine work in Unity, to name just a few. Learning to master these disciplines over the course of a hectic production schedule has been a difficult, but necessary process – one that you will likely need to undertake, no matter what your area of expertise is.

In order to learn these new disciplines, you'll need to adopt what I like to call the 'spirit of adventure'. Like an explorer venturing out into the wild unknown, you'll need to say "yes" to many new challenges and dive in head-first, not really knowing clearly what lies ahead. My development partner, Steve Copeland, and I have jokingly asked each other many times throughout production if we would have even started working on *Anew* having known ahead of time how challenging the development process would be. As we near the launch of our game, and the light at the end of the tunnel is visible, we are finally responding "yes" to this question. As you begin to work on your own game and inevitably learn new processes and techniques, stay strong and positive. You will emerge as a leaner, meaner, and much more experienced developer with a wider skill set. Let's discuss a few things you can do to help prepare yourself for this period of growth and learning.

✓ To expand your game development knowledge and skills, you must become an explorer, venturing into unknown lands.



PERSONAL EVOLUTION

"If there's one thing the history of evolution has taught us, it's that life will not be contained. Life breaks free, it expands to new territories, and crashes through barriers painfully, maybe even dangerously." So said Dr. Ian Malcolm in *Jurassic Park*. Personal growth and change are forms of evolution, and you'll need to "expand to new territories" as a developer in order to finish your game.

If you're the artist on your team, expect to explore less familiar territories such as game design and the technical aspects of implementation and scripting in your game engine. If you've worked at a studio in the past, you may have only been responsible for creating art assets such as models, textures, or animations, while another team member handled actual game implementation.

On a small indie team, you'll need to become intimately familiar with both of these important parts of the pipeline. Spend time learning how your assets actually work and interact with other components and systems in your game. Learn best practices for model and texture optimisation, as well as the ways in which animations seamlessly blend from one state to another with minimal player control interruption. If you plan to have 'on-rails' or cinematic story moments in your game, explore the tools and techniques of how these moments will be scripted and executed using triggers and animation state trees.

You'll likely need to pitch in on the design front as well, so play lots of games with strong enemy and puzzle design, combat scenarios, environment layout, and overall gameplay direction/feedback so you can implement these tactics into your own project when your designer asks for help. Any experience you can acquire with coding languages such as C#, C++, or Java, will be extremely helpful as well, especially when (not if) your programmer is swamped and needs help debugging a script.

If you're the programmer on your team, learn more about the creative aspects of production. How are 3D models created? What types of character animations look smooth and feel responsive to the player? How does lighting and colour help to direct the player through your environments? Gaining a general

"As an indie, you'll need to be skilled in a variety of disciplines"



▲ The road to knowledge, especially in the realm of game development, is never-ending.

understanding of the foundational concepts of visual design, such as colour, contrast, line, form, composition, and framing will be invaluable as you create tools and scripts for your artists to use. A high-level understanding of the modelling, UV layout, and texturing process will help you to conceptualise and design characters, weapons, and environments that not only look interesting, but also perform well within your game's memory budget. An excellent documentary to check out on the history of cinematography, *Visions of Light*, will help you to understand how design concepts come together to help tell a story visually. Spend some time watching movies and playing games with strong sound design and take notes on how certain moments affect you emotionally. Study the specific type of music you plan to use in your game – be it

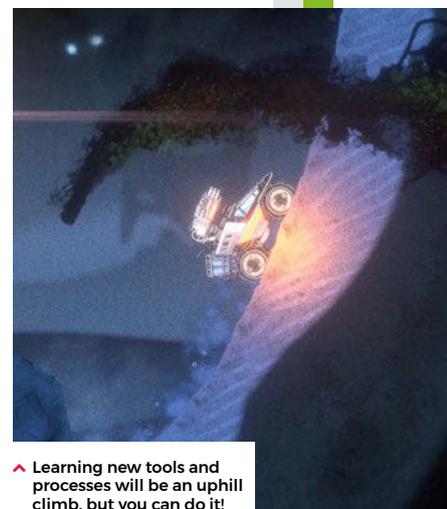
classical, electronic, rock, or jazz-influenced – and listen to some example tracks and learn about the composers who wrote the music.

Speaking of sound and music, it's important for the sound designer and composer on your team to learn as much as possible about the overall development process. The sonic environments in a game play a crucial role in guiding the player's understanding of the story and gameplay mechanics. On several occasions, our fantastic composer, Wilbert Roget, II offered suggestions and feedback on *Anew's* story, player controls, and level design. His comments were spot-on and very helpful.

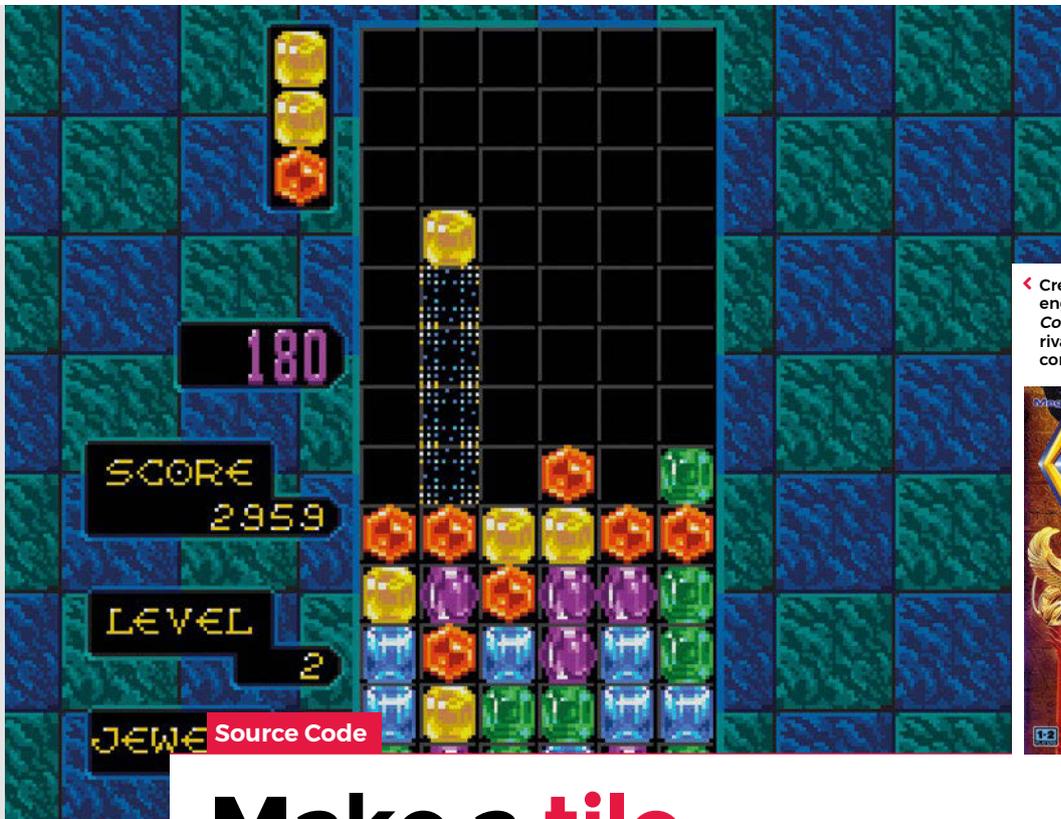
This concept of personal evolution extends to all members of your team, including designers, project managers, development directors, and social media managers as well. The more holistic each person's understanding of the game development process is, the better the end product of your collective efforts will be. Say "yes" to the challenge of growth and learn as much as you can before, during, and after the production of your game! 🎮

Ongoing education

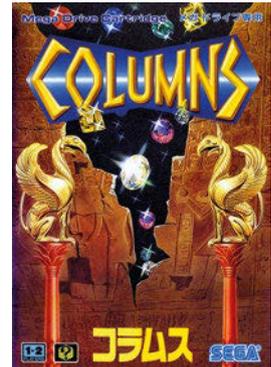
Whether you're a seasoned developer or completely new to game design, continue to grow and learn. These books are excellent resources for game designers seeking inspiration and new ways to approach their craft: *Chris Crawford on Interactive Storytelling* (Crawford), *Challenges for Game Designers* (Brathwaite, Schreiber), *Level Up!* (Rogers), and *The Art of Game Design: A Book of Lenses* (Schell).



▲ Learning new tools and processes will be an uphill climb, but you can do it!



◀ Created by Hewlett-Packard engineer Jay Geertsens, *Columns* was Sega's sparkly rival to Nintendo's all-conquering *Tetris*.



Make a tile-matching game

Rik shows you how to code your own Columns-style tile-matching puzzler



AUTHOR
RIK CROSS

Tile-matching games began with *Tetris* in 1984 and the less famous *Chain Shot!* the following year. The genre gradually evolved through games like *Dr. Mario*, *Columns*, *Puyo Puyo*, and *Candy Crush Saga*. Although their mechanics differ, the goals are the same: to organise a board of different-coloured tiles by moving them around until they match.

Here, I'll show how you can create a simple tile-matching game using Python and Pygame. In it, any tile can be swapped with the tile to its right, with the aim being to make matches of three or more tiles of the same colour. Making a match causes the tiles to disappear from the board, with tiles dropping down to fill in the gaps.

At the start of a new game, a board of randomly generated tiles is created. This is made as an (initially empty) two-dimensional array, whose size is determined by the values of `rows`

and `columns`. A specific tile on the board is referenced by its row and column number.

We want to start with a truly random board, but we also want to avoid having any matching tiles. Random tiles are added to each board position, therefore, but replaced if a tile is the same as the one above or to its left (if such a tile exists).

In our game, two tiles are 'selected' at any one time, with the player pressing the arrow keys to change those tiles. A `selected` variable keeps track of the row and column of the left-most selected tile, with the other tile being one column to the right of the left-most tile. Pressing **SPACE** swaps the two selected tiles, checks for matches, clears any matched tiles, and fills any gaps with new tiles.

A basic 'match-three' algorithm would simply check whether any tiles on the board have a matching colour tile on either side, horizontally or vertically. I've opted for something a little more convoluted, though,

as it allows us to check for matches on any length, as well as track multiple, separate matches. A `currentmatch` list keeps track of the (x,y) positions of a set of matching tiles. Whenever this list is empty, the next tile to check is added to the list, and this process is repeated until the next tile is a different colour. If the `currentmatch` list contains three or more tiles at this point, then the list is added to the overall `matches` list (a list of lists of matches!) and the `currentmatch` list is reset. To clear matched tiles, the matched tile positions are set to `None`, which indicates the absence of a tile at that position. To fill the board, tiles in each column are moved down by one row whenever an empty board position is found, with a new tile being added to the top row of the board.

The code provided here is just a starting point, and there are lots of ways to develop the game, including a scoring system and animation to liven up your tiles. 🎮

Download
the code
from GitHub:
[wfmag.cc/
wfmag25](https://wfmag.cc/wfmag25)

Match-three in Python

Here's Rik's code snippet, which creates a simple match-three game in Python. To get it running on your system, you'll first need to install Pygame Zero – you can find full instructions at wfmag.cc/pgzero

```

from random import randint

WHITE = 255,255,255

boardx = 40
boardy = 40
tilesize = 40
columns = 8
rows = 12
numberoftiles = 9

WIDTH = (boardx * 2) + (tilesize * columns)
HEIGHT = (boardy * 2) + (tilesize * rows)

tiles = [[1] * columns for j in range(rows)]
for r in range(rows):
    for c in range(columns):
        tiles[r][c] = randint(1, numberoftiles-1)
        while (r>0 and tiles[r][c] == tiles[r - 1][c]) or (c > 0
and tiles[r][c] == tiles[r][c - 1]):
            tiles[r][c] = randint(1, numberoftiles - 1)

selected = [0,0]

def checkmatches():
    matches = []
    for c in range(columns):
        currentmatch = []
        for r in range(rows):

            if currentmatch == [] or tiles[r][c] == tiles[r - 1][c]:
                currentmatch.append((r,c))
            else:
                if len(currentmatch) >= 3:
                    matches.append(currentmatch)
                    currentmatch = [(r,c)]
                if len(currentmatch) >= 3:
                    matches.append(currentmatch)
    for r in range(rows):
        currentmatch = []
        for c in range(columns):
            if currentmatch == [] or tiles[r][c] == tiles[r][c - 1]:
                currentmatch.append((r,c))
            else:
                if len(currentmatch) >= 3:
                    matches.append(currentmatch)
                    currentmatch = [(r,c)]
                if len(currentmatch) >= 3:
                    matches.append(currentmatch)

    return matches

```

```

def clearmatches(matches):
    for match in matches:
        for position in match:
            tiles[position[0]][position[1]] = None

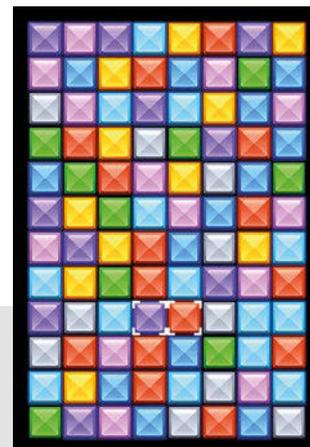
def fillboard():
    for c in range(columns):
        for r in range(rows):
            if tiles[r][c] == None:
                for rr in range(r,0,-1):
                    tiles[rr][c] = tiles[rr - 1][c]
                tiles[0][c] = randint(1, numberoftiles - 1)
                while tiles[0][c] == tiles[1][c] or (c > 0 and
tiles[0][c] == tiles[0][c-1]) or (c<columns-1 and tiles[0][c]
== tiles[0][c+1]):
                    tiles[0][c] = randint(1, numberoftiles - 1)

def on_key_up(key):
    if key == keys.LEFT:
        selected[0] = max(0,selected[0] - 1)
    if key == keys.RIGHT:
        selected[0] = min(selected[0] + 1,columns - 2)
    if key == keys.UP:
        selected[1] = max(0,selected[1] - 1)
    if key == keys.DOWN:
        selected[1] = min(selected[1] + 1,rows - 1)
    if key == keys.SPACE:
        tiles[selected[1]][selected[0]], tiles[selected[1]]
[selected[0] + 1] = tiles[selected[1]][selected[0] + 1],
tiles[selected[1]][selected[0]]
        matches = checkmatches()
        clearmatches(matches)
        fillboard()

def draw():
    screen.clear()
    for r in range(rows):
        for c in range(columns):
            screen.
            blit(str(tiles[r][c]),
(boardx + (c * tilesize),
boardy + (r * tilesize)))
            screen.
            blit('selected', (boardx+
(selected[0] * tilesize),
boardy + (selected[1] *
tilesize)))

```

➤ A board consisting of 12 rows and 8 columns of tiles. Pressing SPACE will swap the 2 selected tiles (outlined in white), and in this case, create a match of red tiles vertically.



Directory

From beep to boom: a talk on **game audio**

Find out more about the secrets of game audio with industry expert and author Simon N Goodwin this December

GET INVOLVED

Do you have an online tutorial you'd like to share with readers? Have you created an online resource that other game developers might find useful? Maybe you have a local code club you're keen to promote? If you have something you'd like to see featured in the Directory, get in touch with us at wfmag.cc/hello

What is it?

In his lively talk, industry expert Simon N Goodwin will drill open the black box of game audio runtime systems, identifying the objects in Object Audio and how they're built and managed from psychoacoustic and signal-processing principles. Detailed explanations will be grounded with practical advice and anecdotes, and he'll even answer some questions at the end – which could prove as interesting as the talk itself...

Who's running it?

Simon N Goodwin has been making games and audio tech for almost 40 years, with firms including Codemasters, Electronic Arts, Intel, Motorola, and Sega. These days, he's an interactive audio technology consultant based

in Warwick. He's pioneered the use of seemingly dead-end 1970s British tech like Ambisonics in VR and games like *Grand Theft Auto*; helped get six games to number one in the chart; picked up five patents and a couple of BAFTAs; and written a book, *Beep to Boom*, which came out earlier this year.

Where and when is it on?

Palmerston Lecture Theatre,
Solent University, Southampton
Wednesday 4 December 2019, 6pm for 6:30pm

Free for Wireframe readers

Readers of this fine publication can attend the talk for free. To find out more details, and book tickets, visit wfmag.cc/beep-boom



Simon N Goodwin: audio tech guru, author, and Wireframe contributor.



Crack open the black box of game audio with the sound expert behind Codemasters' *Race Driver: GRID*, *Colin McRae Rally*, *DiRT Rally*, and lots more.



The UK's
BRAND NEW
FILM MAGAZINE

TRY
THREE ISSUES
FOR £9.99
with the code 'RASPBERRY'

THE LATEST RELEASES REVIEWED

FILM STORIES

A NEW FILM MAGAZINE, FROM THE CREATOR OF DEN OF GEEK

JACK & SARAH REVISITING AN OVERLOOKED 90S BRITISH HIT

CONFESSIONS OF A MOVIE PR REP

UNDERRATED MOVIE APOCALYPSES

PLUS ANNA SMITH DEBBIE MOON HOPE DICKSON LEACH ROMESH RANGANATHAN SIMON BREW

THE LATEST RELEASES REVIEWED

FILM STORIES

A NEW FILM MAGAZINE, FROM THE CREATOR OF DEN OF GEEK

EAST IS EAST, WILD WEST & REPRESENTATION

CONFESSIONS OF A CINEMA MANAGER

THE INCREDIBLE, OVERLOOKED BOX OFFICE RUN OF BETTE MIDLER

AUTISM IN THE MOVIES

FEATURING ROMESH RANGANATHAN DEBBIE MOON HOPE DICKSON LEACH ANNA SMITH

ISSUE 3

FILM STORIES

HAS CINEMA GOT ITS FUNNYBONE BACK?

ILLNESS: ITS IMPACT ON HOW WE FEEL ABOUT FILMS

FIGHTING TALK

STEPHEN MERCHANT

REMI

2017

Interface

A world without bosses?



A WORLD WITHOUT BOSSES?

THE RISE OF THE WORKER CO-OP

WRITTEN BY: PAUL WALKER-EMIG



How an embryonic movement of worker-owned video game co-ops are striking back at an often exploitative industry

In recent years, it's become clear that the working conditions for game developers are often pretty bad. In October 2018, Rockstar co-founder Dan Houser came under fire after he appeared to brag about his team working back-breaking 100-hour weeks to complete *Red Dead Redemption 2* on time. This was only the latest controversy surrounding a practice so common in the industry that it has its own name: crunch. In February 2019, Activision Blizzard laid off 800 employees right after announcing a bumper \$7.2 billion quarter. The following month, 350 EA employees were let go – yet another cohort of unfortunate workers bearing the brunt of the industry's whims.

In that context, the picture that developers Ted Anderson and Wren Farren paint of their experience working in video games is hardly surprising. Anderson references “diminishing

benefits, stagnant wages, and worsening working hours” and recalls such phrases as, “Do you have the *passion* to come in and work this weekend?”. Similarly, Farren recalls “A lot of issues with hierarchy, layoffs, and just bad management,” in her previous industry job. “I was feeling super-disenfranchised with the games industry and the structure that seemed to be inherent with it,” she says.

Wouldn't it be great if we could jettison all those toxic practices? The expectation of working insane hours at the expense of family life and mental health; the zero-hour contracts doled out to poorly treated Quality Assurance workers; the profit-over-people motive that allows a company raking in piles of cash to discard the workers that helped make them that money on a whim. Hell, why not just get rid of the bosses that enforce all this stuff in the first place? That might sound like a fantasy, but this ▶

PIXELS AND POLITICS

"I think everyone expresses their politics in their actions and what they create, even if they're not meaning to, says Pixel Pushers Union 512's Ted Anderson. "This is a departure from the common belief that some things can be apolitical if they pass by as the norm. We believe that that norm *is* political, and that people shouldn't be too surprised if there's a leftist game that is unapologetic about its politics, as every other form of media has its own politics already, even if those politics are quiet or incidental."



▲ Ted Anderson [second from right] hanging out with Pixel Pushers Union 512 and publisher New Blood Interactive.



is precisely how people like Anderson and Farren have responded to their negative experiences. In 2015, Anderson formed the worker co-operative Pixel Pushers Union 512, while Farren co-founded The Glory Society in early 2019.

TAKING CONTROL

"A worker co-op is a business that's democratically owned and operated and controlled by its workers," explains Scott Benson, who co-founded The Glory Society with Farren and Bethany Hockenberry. "There's a lot to it, but it comes down to the fact that we talk things out and communicate, and are accountable to each other in ways that aren't really possible in a top-down business. Also, voting happens."

"To pick one example that might seem unique for people who aren't familiar with these types

▲ *Tonight We Riot's* tale of the exploited versus the exploiters is clearly trying to tap into experiences that many of its players will have had in their working lives.

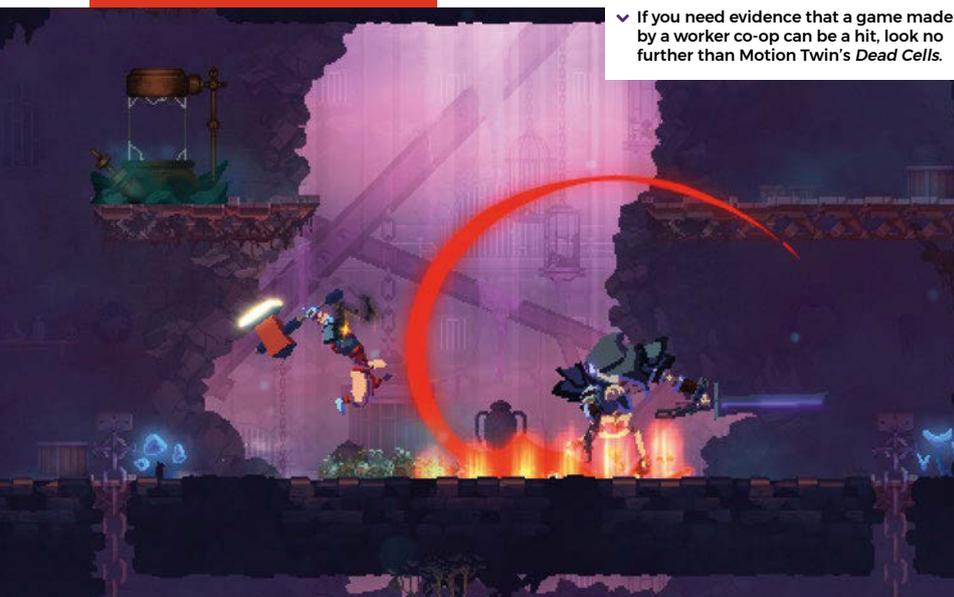
of setups – we vote on things that affect the studio, our expenditures, our salaries, etc. It doesn't mean we have a big group vote on every creative decision – we all have our expertise and collaborate accordingly. But it does mean there isn't one boss or stratum of decision-makers above us that determine all those things for us, and who ultimately own the work we make."

With no bosses above their heads, The Glory Society and Pixel Pushers free themselves from many of the worst excesses of the video game industry. There's no management to force members into brutal periods of crunch; no imbalance of power that allows a hierarchy to question their 'passion' for the industry if they complain about their conditions; no one is going to exploit them to line their own pockets and boost profits for shareholders; and the co-op members aren't going to vote to lay themselves off as part of a boom and bust hiring cycle.

"I've been laid off before, and I've been a part of a hiring binge before," says Anderson. "It's an untenable system that puts the weight of production on the shoulders of the workers without them having much say in how things rattle out."

"I believe that co-ops can help reverse the lost wages and 'churn' of layoffs and hiring that happens in our line of work, just as it has in other industries," he continues. "I think they are definitely a better solution than the current method of production in many industries, and in games, it's no different. We're an industry like any other, where workers produce goods or services and are given a wage for that labour. However, the surplus value of that labour lands in the pockets of the owners and management of those

▼ If you need evidence that a game made by a worker co-op can be a hit, look no further than Motion Twin's *Dead Cells*.





SMASHING THE SYSTEM IN TONIGHT WE RIOT



You lead a mob controlling the character waving a flag, but if they fall, another worker will step into the breach and take up the flag.

Molotov cocktails, a veritable classic in the storied history of civil unrest, are just one of the many weapons you can pick up in *Tonight We Riot*.

As you progress through levels, you will reach workplaces that can be liberated, swelling your ranks with new rioting workers.

Riot police, mechs, and gigantic bosses, all doing the will of the evil Chet Whippleton III, will be trying to stop your revolution.

studios. This isn't controversial, that's just how the system operates, so it's curious to me that examining it causes people to get upset."

Farren points out that worker co-ops also offer creative benefits for their members. "We can all bring ideas and thoughts to the table and feel like we will be heard," he says. "We're able to have discussions on an equal level that ultimately get us to a stronger place than if we had one person calling all the shots."

A CHANGING TIDE

The Glory Society and Pixel Pushers aren't the only video game worker co-ops out there – *Dead Cells* developer Motion Twin is another example – but they're both small fish in a big pond, each composed of only a handful of members. It's possible, however, for worker co-ops to scale up. Cooperative Home Care Associates, America's biggest worker co-op, employs 2300 people; and a third of the GDP of the Emilia-Romagna region in Italy is produced

**"WE CAN ALL BRING
IDEAS AND THOUGHTS
TO THE TABLE AND
FEEL LIKE WE WILL
BE HEARD"**

by co-ops. This nascent movement feels like it's part of a changing tide, rising in response to an ever-greater awareness about poor conditions in the industry, that could grow to become something far more significant. "There is definitely a greater awareness of this exploitative situation among developers these days," says Anderson, pointing to the growing unionisation movement in the industry as another example →





of how this is manifesting. "Groups like Game Workers Unite are a fine example of a turning tide in the conversation about workplace organisation and the power of workers to enact real change in their industry."

"We're aware of where we're at in history," says Benson. "It's not like every worker co-operative that's formed is made up of people who see it as an anti-capitalist act, and many just see it as a better, more egalitarian way to run a business. For us, though, it has a strong political component because we're aware of the times we're in and the industry we're part of. It's kind of inescapable. We're conscious of what the concept of a worker co-op means in the current space and choosing to do this was definitely a way of putting our convictions about capitalism and production and collaboration into practice."

"Really, though, you don't have to be cool anti-capitalists like us to start one of these," he jokes. "No one, like, checks your socialism card when you set one up. But I mean, it's 2019. Look around."

We don't yet know what The Glory Society are working on, but in some fashion, it will reflect the political awareness that's reflected in the studio's structure. Hockenberry and Benson's previous game, *Night in the Woods*, threads commentary on a changing economic landscape and its effects on a small town, based on Hockenberry and Benson's experiences, into protagonist Mae's personal story of struggles with mental health. "As a writer, *Night in the Woods* and any games we'll probably make in the future are very much based on personal experiences, and those experiences are very much based on politics and capitalism, so it would be really hard for me to separate those out or not to think of them," Hockenberry explains. "For this same reason, it



"WE REALISE THAT WITHOUT LEVITY, IT CAN QUICKLY BECOME OVERWROUGHT AND MORE OF A MORALISING LESSON"



would be hard for me to have the opportunity to start a business and not want to address a lot of the issues I came across as a worker in my past jobs."

Pixel Pushers' politics are unashamedly being expressed in their upcoming game, *Tonight We Riot*, a brawler where you control a crowd of workers liberating comrades on the way to overthrowing the forces of capitalism. If that all sounds very serious, it's worth noting that the game does also have a sense of fun.

"*Tonight We Riot* isn't a manifesto," Anderson clarifies. "It's a tongue-in-cheek take on how you have to fight for your rights (sometimes against giant mech suits). While the politics of the game are a serious matter that we feel need representation in the world of games, we also realise that without a bit of levity it can quickly become overwrought and more of a moralising lesson than a fun gameplay experience, so we've done our very best to ride that line carefully. We want to make sure the player has a good time, but also hope that they walk away with some class consciousness as well."

✓ Bethany Hockenberry and Scott Benson were threading political themes into their games before forming The Glory Society.



OFFICE POLITICS

The way that the politics of these studios' organisational structures are reflected in their games, and vice versa, are important. There's been a general and welcome trend towards



Pixel Pushers Union 512 isn't shy about representing its politics in its games.



Readers of blueprints: unite!

This game proves, once and for all, that only a broad-base revolutionary force can truly defeat the Kraken.

exploring a greater breadth of subjects and representing a broader range of perspectives in games of late. We've seen economics explored in everything from *BioShock* to *Cart Life*, games about mental health such as *Hellblade: Senua's Sacrifice* and *Depression Quest*, games that represent gay relationships like *Gone Home* and *The Last of Us: Left Behind*, and greater diversity when it comes to the characters we can play as. This is fantastic, but it's important to recognise the ways in which these developments can be limited. That *Apex Legends* features lots of cool female and culturally diverse characters is a welcome step in the right direction, but the question that must be asked is: to what extent is this diversity replicated in the studio that made it? What does it mean if the politics that are being expressed in games aren't being reflected in the way they're being made?

This is an issue The Glory Society is acutely aware of. "It's really easy, trivially easy, to just make slightly woker games and to master the language and etiquette of progressiveness," Benson argues. "In this space, there's a lot of big talk about what needs to change culturally, but the way games are produced goes largely untouched. We're in a place right now where more and more people, especially younger people, are wondering why that is. The way something is produced, who profits from it,

who owns it, the tools it was made with, and who controls what happens with all of it – these are the questions that start shaking long-undisturbed architecture. We've got such a theory of change in the industry that's centred around pledges, conferences, hashtags, diversity initiatives, and so on. But we organise our entire lives around work, around the production of things. If we're lucky enough to find full-time work, we spend five out of seven days of almost every week of our adult lives there. Our workplaces need to change."

The Glory Society recognises that worker co-ops aren't, in Farren's words, "a magic solution." Hockenberry points out that they "come with challenges" and are "just one solution of many out there." Clearly, though, they offer an exciting approach to dealing with many of the issues workers in the games industry, and even society at large, face today. These studios might offer a glimpse at a future we could all one day inhabit. At the very least, they should help us extend the debates we're already having in the realm of culture into the workplace, so that the important conversations that need to be had about how the industry needs to change can continue happening. There's no guarantee that these studios will serve as a template that will give us a boss-free future, or even that they will spark a shake-up in the relatively narrow confines of their own industry. But as Hockenberry points out, "It's better than what most of us have, so why not try?" 🗨

The Glory Society founders' previous game, *Night in the Woods*, was a well-received and thoughtful title – though it was eventually consumed by a different sort of political discussion.



Developer Profile

Compile

Through the eighties and nineties, this Japanese company quietly produced some absolute gems

This autumn's launch of the Mega Drive Mini may have brought Sega's peak years back to the fore, but it's worth remembering that some of the console's best third-party games were created by a lesser-known studio named Compile. In fact, while the Hiroshima-based developer was never a particularly huge name – unlike other outfits from the country, like Capcom or Konami – Compile was still one of the most prolific and talented studios of its day.

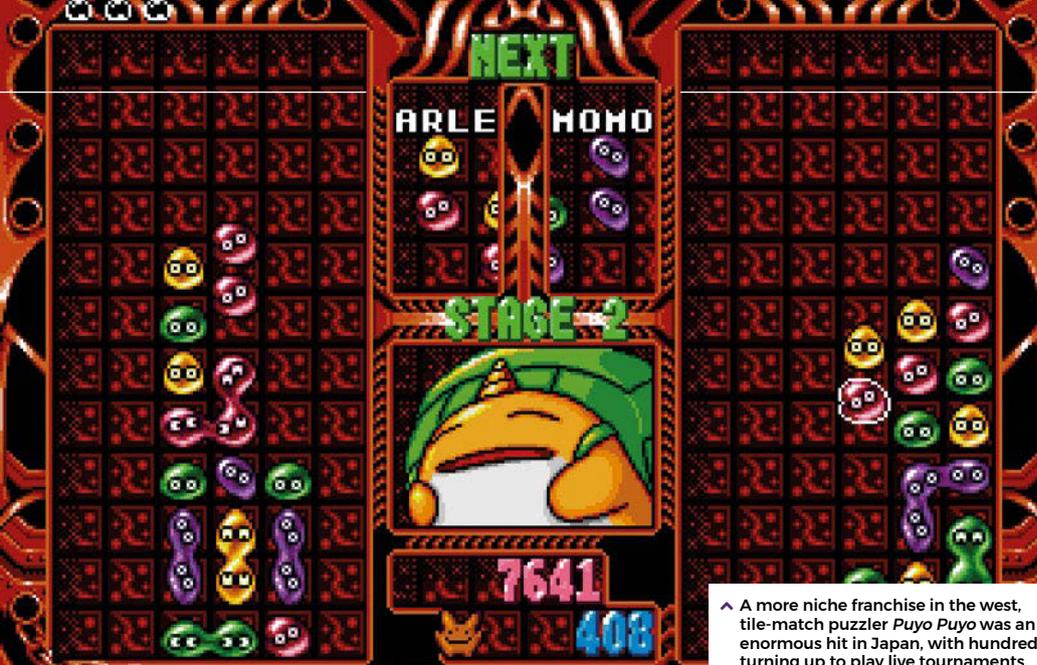
Before all that, though, there was the somewhat less interesting phase of Compile's existence. Founded in 1982 by Masamitsu Niitani (often known by his nickname, 'Moo'), Compile began life as Programmers-3, Inc. – a company dedicated to producing business software rather than fast, challenging video games. Sales of its office management software were worryingly slow, however, so Niitani – who'd dabbled in game development a bit in the past – kept the fledgling

company ticking over by porting Namco's *Galaxian* to the Apple II. While copies of Niitani's business software flatly refused to budge, the *Galaxian* port sold several hundred copies – the first sign that the company's future might lie down a more colourful path. From here, Programmers-3 began porting several of Sega's early-eighties arcade titles to its Japan-only console, the SG-1000 (titles barely heard of in the west, such as *Borderline*, *Safari Hunting*, and *Hustle Chummy*), which began a working relationship between the two firms that would persist right up until the new millennium.

It was in the mid-eighties, when Programmers-3 changed its name to Compile, that the studio really began to find its own identity. After a couple of years spent porting arcade games like *Lode Runner* and *Choplifter* to the MSX, Compile came out with a game that established its signature style. Horizontal shooter *Zanac*, designed by Niitani and programmers Koji Teramoto and Takayuki Hirono, unleashed a barrage of bullets and enemies on unsuspecting players; despite the limitations of the MSX, the computer on which it first appeared, the game had the pace and difficulty of a proper arcade title. Aside from its unusually complex power-up system – which Compile would return to and refine in its later games – *Zanac*'s difficulty also shifted depending on the player's skill; the more efficiently the player collected power-ups and slaughtered enemies, the more brutally the game would respond. The NES port, released one year after



^ Compile co-founder Masamitsu 'Moo' Niitani, pictured on a rare day out of the office.



^ A more niche franchise in the west, tile-match puzzler *Puyo Puyo* was an enormous hit in Japan, with hundreds turning up to play live tournaments.

the MSX version emerged in 1986, was among the best shooters available for the system – a blistering demonstration of what Compile could do on hardware that wasn't exactly known for its ability to throw dozens of fast-moving sprites around the screen.

BEYOND SHOOTERS

For fans of shoot-'em-ups, it was the start of a spectacular run of form. In 1988 came *Aleste* for the Sega Master System and MSX, which marked the beginning of a cult franchise; *Gunhed* (released in the west as *Blazing Lasers*) for the PC Engine in 1989, and in 1990, what might be its finest entry in the genre: *Musha Aleste* for the Sega Mega Drive. Released in America as *M.U.S.H.A.*, it offered an audio-visual blitzkrieg of synth-metal music, relentless 2D action, and some seriously cool enemies: a gigantic tank disguised as a medieval Japanese fortress; a flying vehicle bristling with laser guns and capped with a smiling Noh theatre mask, to name

but two. It was heady, nerve-jangling stuff, and Compile's status as a maker of cult action classics would have been assured if it had simply stuck to the shooter genre.

It would be remiss, though, not to point out just how diverse and imaginative Compile's output was in its heyday. There was *The Guardian Legend*

“Despite the success of the *Puyo Puyo* series, trouble began to loom”

(1988), a hybrid of shooter and top-down action-adventure that was, for its time, a novel collision of game styles. There were the slick pinball games that it made for other companies, often without fanfare; a licensed *Ghostbusters* spin-off for the Mega Drive, which Compile worked into a jaunty platformer; and *Madou Monogatari*, a light-hearted RPG series. The latter was barely heard of outside Japan, but slivers of the series

did make it to the west in one form; in 1991, Compile took some of the characters from *Madou Monogatari* and used them to decorate their tile-match puzzler, *Puyo Puyo*. First released in 1991 for the MSX2 and NES, *Puyo Puyo* was arguably Compile's biggest mainstream hit; the studio's answer to the likes of *Columns* and Nintendo's *Dr. Mario*, the later ports' two-player competitive mode proved to be a masterstroke, with the arcade version's popularity attracting hundreds of players to live tournaments in Japan. Designed by Niitani himself, *Puyo Puyo* received a slew of sequels, and emerged in the west under a variety of guises – the Mega Drive version was reworked as the *Sonic*-themed *Dr. Robotnik's Mean Bean Machine*.

BACK TO BUSINESS

Despite the continued success of the *Puyo Puyo* series, however, trouble began to loom for Compile as the nineties wore on. Several key members of staff left the company earlier in the decade, while a greater blow came when a piece of business software called Power Acty was given an expensive launch in 1998. Despite the presence of a few cute faces from *Puyo Puyo*, the software failed to sell, forcing Compile to restructure and, in the process, sell the rights for *Puyo Puyo* to Sega. Within five years, Compile would go bankrupt. It was a bitter irony, really, that Compile ended as it had begun – trying to sell business software that few particularly wanted to buy. For well over a decade, though, Compile focused on games – and when it did, the results were imaginative, technically dazzling, and thrillingly diverse. As Niitani once put it, “Back then, we didn't have any kind of agenda. We just enjoyed making stuff.” ☺

Disc Station

When Compile finished work on a little horizontal shooter called *Aleste* in 1988, it was left in a bit of a quandary: the game easily fit on a single MSX2 floppy disk, so what else could they do to make use of the space? After a few calls to other studios, Disc Station was born: a magazine-software hybrid that soon became a major part of Compile's history. Published between 1988 and 2000, Disc Station crammed an assortment of games, demos, and music onto a disk (or, later on, a CD). Some of Compile's more famous names began life here; aside from *Aleste*, the long-running *Madou Monogatari* debuted on Disc Station in 1989. Despite the latter edition's high price – around \$40 – it was a big seller, according to Niitani.



^ The first edition of Disc Station, released in 1988 and featuring the first appearance of cult shoot-'em-up, *Aleste*.

Speed of Sound

A compilation of 10 Compile corkers

Fifteen years of games united by their speed and spectacular music



01
Zanic

NES / MSX – 1986

Although built for 8-bit home systems, *Zanic* at least felt like it could have come straight from an eighties arcade: the quality of its music and frankly ludicrous turn of speed set it apart from other 2D shooters available on the NES and MSX at the time. Its enemy AI – which became more aggressive depending on the player's skill – also made it frighteningly tough.



02
The Guardian Legend

NES – 1988

A hybrid of top-down, free-scrolling action-adventure and *Zanic*-style vertical shooter, *The Guardian Legend* took chunks of already popular games – not least the open-ended format of *The Legend of Zelda* and *Metroid* – and turned them into a stylish and challenging sci-fi opus that required careful mapping of its labyrinths, and strategic use of your secondary weapons.



03
Aleste/Power Strike

Sega Master System / MSX2 – 1988

A sequel to *Zanic* in all but name, *Aleste* shared the same relentless difficulty and fearsome turn of speed, while the studio's affection for complex weapon systems – and showers of tiny upgrade capsules – really began to take shape here. Thundering along to an angst-ridden soundtrack, this and its sequel were among the best shooters ever made for the Master System.



04
Musha Aleste

Sega Mega Drive – 1990

Yes, it's another vertical shooter, but this one arguably sees Compile at the top of its powers. *Musha Aleste* unfolds as a baroque, relentless, and faintly manic collision of high-tech mecha and Japanese medieval architecture, and the action here pushes the console's hardware to its limits. Yet again, the soundtrack – Toshiaki Sakoda's 'Edo Metal' – is a classic.



05
Gunhed/Blazing Lazars

PC Engine – 1989

Essentially an unofficial entry in the *Aleste* series, *Gunhed* (loosely based on a movie released in Japan that year) brought Compile's fast scrolling and sweaty-palmed tension to NEC's console. The levels are unfathomably long for some reason, but the weapons are absurdly over the top (there are ten or so different kinds), and the soundtrack's an absolute stunner.





06
GG Aleste

Sega Game Gear – 1991

It was never as popular as the Game Boy, but Sega's handheld still got one of the best handheld shooters of the nineties in *GG Aleste*: far from a lazy port of the Master System version, this was an all-new entry with its own level designs, soundtrack, and more of the surreal boss designs that enlivened Compile's earlier entry, *Musha Aleste*.



07
Ghostbusters

Sega Mega Drive – 1990

Compile went uncredited on the title screen, but this was one of several games the studio developed for Sega in the eighties and nineties. It's a simple yet fun platformer, and the ghost-busting mechanic (you have to zap larger spooks and suck them into your Ghost Trap) makes this one of the better games based on the movie.



08
Puyo Puyo

Various – 1991

Although far from the first tile-matching game, *Puyo Puyo*'s two-player competitive mode proved irresistible in Japan, as opponents vied to pull off combos and fill the neighbouring play area with 'garbage' blocks. With sequels and spin-offs released almost every year since 1991, *Puyo Puyo* is Compile's most lasting contribution to gaming.



09
Zanic X Zanic

PlayStation – 2001

The 2D shoot-'em-up was already on the wane by the 2000s – and so too were Compile, sadly – but this late PSONE compilation of the original game and a modern sequel, *Zanic Neo*, was a welcome throwback to the company's past, with pre-rendered graphics and the now-familiar fast-paced action. Time had marched on, but Compile's lasers were still blazing.



10
Guru Logi Champ

Game Boy Advance – 2001

Compile's last commercial release saw the studio pack away the fast-scrolling and explosions for a surprisingly sweet-natured puzzler that involves firing blocks at a grid to make simple shapes. It's a little like *Picross*, but with the pace of *Puzzle Bobble*. The cutscenes – featuring a society of cartoon ducks – are unbearably cute.

Subscribe today



SAVE 49%

wfmag.cc/subscribe

13 issues for just £20

Subscriber benefits

- > **Free delivery**
Get it fast and for free
- > **Exclusive offers**
Great gifts, offers, and discounts
- > **Great savings**
Save up to 49% compared to stores

Introductory offer

Rolling monthly sub

- > **Low initial cost** (from £4)
- > **Cancel at any time**
- > **Free delivery to your door**
- > **Available worldwide**

Subscribe for 12 months

Receive all 26 issues

£40 (UK) **£75** (USA)
£65 (EU) **£75** (RoW)

Offers and prices are subject to change at any time



Digital subscriptions from

£1.99



Visit wfmag.cc/subscribe or call **01293 312192** to order

Subscription queries: wireframe@subscriptionhelpline.co.uk

Info

GENRE
FPS

FORMAT
PS4 (tested) /
XBO / PC

DEVELOPER
Gearbox
Software

PUBLISHER
2K Games

PRICE
£49.99

RELEASE
Out now

REVIEWED BY
Richard Wakeling

HIGHLIGHT

Borderlands 3 always manages to elicit a dopamine rush after you've killed a boss and a downpour of loot rains from the sky. Seeing the golden tinge of a legendary weapon is doubly exciting, especially when you realise it's a souped-up version of your weapon of choice.

Borderlands 3

Looting and shooting and muting the dialogue

Whether or not you enjoy *Borderlands 3* will largely depend on how effectively you can endure its humour before wanting to jab a screwdriver through your ears. That might sound like hyperbole in a game that's all about shooting things, but the humour in Gearbox's latest is so frequent and plentiful that it's almost impossible to ignore. Sure, some decent jokes manage to squeeze through the cracks due to the sheer volume of rapid-fire gags, but *Borderlands 3* mostly consists of dire juvenile humour that bites into the lowest hanging fruit as though it were malnourished, relying on bad dick jokes, dated references, and utterly obnoxious characters. It's uniformly terrible and one-note, which is a shame, because the series' core mechanical loop of looting and shooting is still intrinsically satisfying, even if *Borderlands 3* is distinctly retrograde in its sensibilities.

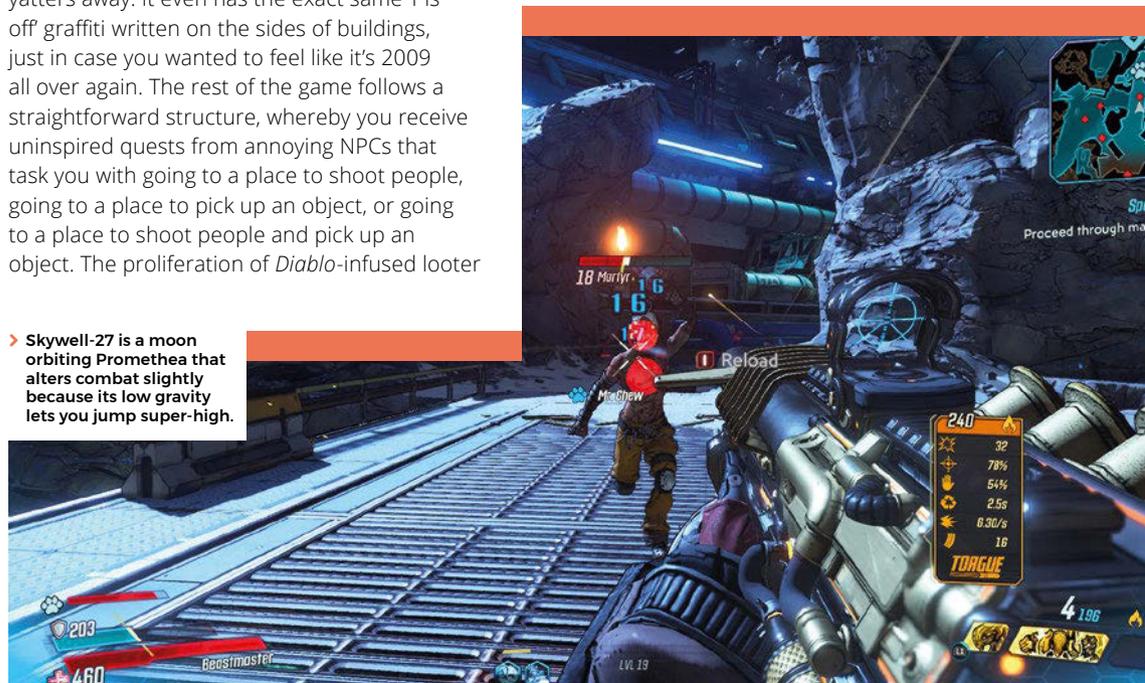
You'd be forgiven for thinking you've played it all before when the game opens up on the drab wasteland planet of Pandora as Claptrap yatters away. It even has the exact same 'Pis off' graffiti written on the sides of buildings, just in case you wanted to feel like it's 2009 all over again. The rest of the game follows a straightforward structure, whereby you receive uninspired quests from annoying NPCs that task you with going to a place to shoot people, going to a place to pick up an object, or going to a place to shoot people and pick up an object. The proliferation of *Diablo*-infused looter

shooters in the years since *Borderlands 2* means the draw of the series' core conceit isn't as strong as it once was. The easiest way to know whether you'll enjoy playing *Borderlands 3* is to go and play one of its predecessors.

There are a few new traversal moves that you'll forget exist after 20 minutes, but otherwise, *Borderlands 3* is essentially more of the same. This isn't necessarily a bad thing, mainly because shooting folks in the head with a wide array of eccentric weaponry is still inherently gratifying. You might use the meaty punch of a Jakobs shotgun to launch enemies into the air so you can juggle them with a few extra shots, discover a Tediore SMG that you can chuck at an enemy's skull once the clip runs dry, or shoot a gun that literally shoots guns. *Borderlands 3*'s weapons are the stars of the show, and the pace of progression means you'll always have some kind of new armament to experiment with every half hour or so.

There's a decent variety of enemies, too, though their tactics, or lack thereof, never really

► Skywell-27 is a moon orbiting Promethea that alters combat slightly because its low gravity lets you jump super-high.





< **Borderlands 3** has a habit of giving you AI companions. They're not noticeable during combat, but you will have to wait for them to open doors.

encourage you to break away from the tried and true method of shooting onrushing foes in the head, throwing grenades, and using your class' Action Skill the second it recharges. It's mindless fun, full of DPS numbers and big red 'Critical' visuals preceding every well-placed shot.

The variety of guns and the random attributes associated with them prop up the repetitive action to a point where you can play the entire 30-hour campaign without losing much interest. The diverse selection of planets you visit over the course of the story certainly helps with this, too. The dystopian metropolis of Promethea is an aesthetic far cry from the vivid mountaintop temples of Athenas or the swampy jungles of Eden-6, even if nothing about their level design encourages you to alter your play style in any way.

The narrative, meanwhile, relies on your excitement for seeing returning characters show up, deliver bad one-liners, and then disappear with zero fanfare. The overarching plot predictably revolves around finding vault keys to open vaults, as out of touch parodies of YouTubers called the Calypso Twins settle into their roles as the main villains. The evil twins show up every now and then to remind you to "Like, follow, and obey." It's all very "How do you do, fellow kids?", and neglects to offer any social commentary on the negative effect actual YouTubers can have on their fans. Instead, it opts to paint them as over-the-top, cynical monsters. They're a far cry from the depth and excellence of Handsome Jack.

Part of the reason *Borderlands 3's* humour grates so much is because it follows Telltale's brilliant *Tales from the Borderlands*. That episodic adventure was both funny, and created multilayered characters that were complex and interesting. Take Rhys and Vaughn as prime examples; fascinating characters that appear in *Borderlands 3* with almost no personality at all, they're simply one-dimensional vehicles for bad jokes. Rhys's entire arc is about his moustache,

while all Vaughn can talk about are his abs and underwear. Beyond this, jokes boil down to a guy doing a Tommy Wiseau impression for 20 minutes, or seeing characters called Wick and Warty, where the entire joke is understanding a reference. There's one mission where a character talks endlessly about a guy's small penis, and another where you have to listen to a woman making ape mating noises – which basically just involves lots of shrieking – for the entirety of a combat encounter. *Borderlands 3* is a lesson in how to annoy the player through audio alone, taking a gag that could've been 30 seconds long and extending it over ten minutes. There's even a reference to the USB stick related to a recently

dismissed lawsuit brought against Gearbox CEO Randy Pitchford, just in case you were getting comfortable in separating the art from the artist.

There's so much downtime where you're forced to listen to characters talk at you. The relief when you finally get back to shooting guns with ludicrous attributes that turn everyone into a crimson mist is palpable. *Borderlands 3* excels in this one area: providing you with a consistent stream of guns with which to cause mayhem and destruction. The vapid story and irritating voice work just get in the way. Still, at least there's a mute button. 🗣️

“The vapid story and irritating voice work just get in the way”

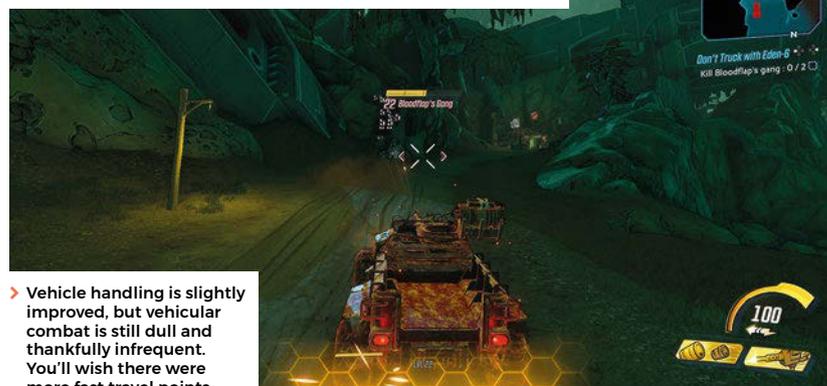
✓ A prime example of *Borderlands 3's* uninspired design is this VR mission that just adds a blue filter and replays a previous location.



VERDICT

Borderlands 3 offers the best and worst parts of the series, along with very little that's actually new.

60%



> **Vehicle handling is slightly improved, but vehicular combat is still dull and thankfully infrequent. You'll wish there were more fast travel points.**

Rated
Review

HIGHLIGHT

Atmosphere is understated yet thick in *Overland*, presenting a world of enigmatic and unknowable truths. Why the aliens are there, what happened to everyone – questions on those lines are left unanswered. But it does help create an enveloping ambience that – outside of the main game bits – you can happily lose yourself in.



Review

Overland

Underland, Overland, Wombling free

There's every chance you'll grow attached to your survivors. Especially the dog contingent.

Info

GENRE
Survival

FORMAT
Switch (tested)
/ PC / PS4 /
XBO

DEVELOPER
Finji

PUBLISHER
Finji

PRICE
£19.49

RELEASE
Out now

REVIEWED BY
Ian Dransfield

VERDICT

Gorgeous and enigmatic, hugely let down by a clunky, unfair core game.

45%

There's a line – one that, thanks to some excellent design in recent hard games, has seemed increasingly less obvious. It's a demarcation between the realm of 'difficult' and that of 'unfair'. *Overland* never even saw the line in its quest to become a challenging survival title, veering wildly off the road and ending upside-down in a ditch, on fire, and screaming at you to "do better".

Alright, that's an exaggeration. This isn't the kind of game that would ever scream. No, *Overland* is cool and calm; it would speak to you in a low, husky whisper and you'd get lost in its drawl. It is stylish and atmospheric, creating a real sense of place in this post-apocalyptic world overrun with blind (but great at hearing) alien beasts. Just hanging out at a hastily constructed campfire with your small band of survivors – and dog – planning the next move west across the United States is genuinely fantastic. It draws you in and holds you tight, forcing you to live through this nightmare with the people you pick up, lose, and abandon along the way. If there were a good game attached to the presentation, *Overland* would be a classic.

It's not the case, though. No, *Overland* drunkenly stumbles into unfair territory and blindly expects you to just get on with it. Each level is, essentially, a turn-based puzzle. Contained in a small (beautiful) diorama, you walk or drive in, assess the situation, and figure

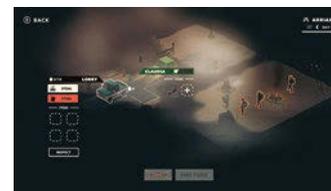
out what you want to do. There's fuel to the side – do you want to risk going out to get it? There are some supplies to loot – is it worth switching your half-broken thwocking stick for a less-broken one? You make these decisions, come up with a plan, and execute it. Sometimes the plan is to ignore things and move on, risking running out of fuel but saving your survivors from an alien encounter. Most of the time the plan is to get out of the vehicle (a choice you don't have sans car, of course), and that's where it falls apart.

Puzzles need to be logical. *Overland* is not a standard turn-based strategy game – every character dies in two hits without armour, no questions asked. It's not a stand-up fight – you have to distract and diffuse, move thoughtfully and execute those plans you made. But enemies, items, placement of obstacles –

it's all randomly generated. Random placement does not lend itself to good puzzle design, and it means in nearly every single playthrough you will encounter an impossible situation through no fault of your own. Overpowered and outnumbered, you'll attempt to retreat to your vehicle, friends will die, dogs will be lost, and your efforts will all be in vain. Don't get me wrong: this can be fun, and stories can arise from it. But for the most part, *Overland* just slaps you in the face, takes a dump on your efforts, and leaves you to die in the post-apocalyptic sun. It's not a challenge, it's genuinely unfair. And despite the game's good looks, it's not a good look. 🙄

WHERE SHOULD WE GO NEXT?

Other survivors might be unfriendly. And even if they aren't, you can still rob them like a psychopath.





HIGHLIGHT

For all its less-than-serious attitude, *Untitled Goose Game* is home to a seriously characterful goose. This little honker waddles with purpose, flaps its wings in a non-threatening could-be threat, and honks to the beat of your thumb. I might not be entirely sold on the game, but I do want more of the goose.

▲ Locals don't take kindly to your mischief, though the threat they pose is limited to ushering you away.

Review

Untitled Goose Game

Driving everyone quackers. Wait, no: 'honkers'

Some games just honk right in your face and demand you have a gander, and *Untitled Goose Game* hit its stride both pre- and post-launch with a two-pronged attack. First, by looking rather spiffy. Second, by setting sections of the internet ablaze with frothy-mouthed praise for this mixture of stealth, puzzling, and mischief. If I were to describe it as *Hitman*, but with a goose, I'd be a liar – but you'd have a better idea of what's going on here.

Untitled Goose Game has you controlling a goose, see, on its way to do something – yes, I am avoiding spoilers in a game about a goose. Along the way, you encounter various obstacles which require you hassle and harass the local populace of an idyllic British countryside village to circumvent. Steal a gardener's rake, lock a child in a phone box, appear on television, that kind of thing. It's objective-based mischief requiring you figure out just how to make things happen.

And that's... fun? Fun, I guess. I'm not wholly sold on *Untitled Goose Game*, but more on that in a second. When you pick this up for the first time, it's hard not to be beaming from ear to ear as you waddle around honking like a goose possessed, nicking carrots and throwing rakes in lakes.

Messing with people – irritating them – is funny, and there's a palpable sense of being *naughty* while you're toying with the emotions of these non-honking bipedal apes. It's uplifting, silly, and initially very appealing. But the feeling wears off.

Untitled Goose Game's main problem comes about because it's a puzzle game that has puzzles you don't always feel smart for having solved. Vague clues often lead to just trying anything and seeing what happens – that's very much in the spirit of the game, absolutely, but it doesn't make for a satisfying experience over the long run. A goose causing chaos in Middle England is inherently funny. Adding a layer of defined goals on top of that chaos is necessary to make this more than just a *Goat Simulator*. But the balance isn't quite there, and too often I was left sneering at the game for its vague logical paths, rather than delighting in a gorgeous honkfest.

That said, *Untitled Goose Game* doesn't outstay its welcome, and as such this lack of development as things progress is limited, thanks to the fact the amount of game there is to *play* is limited. Speedrunners are already blasting through in minutes, while us regular people will take a couple of hours to get through the main chunk of game – there's extra mischief to honk your way through after the fact, too. I can see why the internet has (in part) come unglued for *Untitled Goose Game* – it's characterful, funny, and gorgeous; it captures a part of British life few other games have even bothered trying to represent. Stripped back to its mechanics, though, it's limited and – importantly – not *that* much fun. 🐾

Info

GENRE

Honkin' puzzler

FORMAT

PC (tested) / Switch

DEVELOPER

House House

PUBLISHER

Panic Inc.

PRICE

£17.99

RELEASE

Out now

REVIEWED BY

Ian Dransfield

VERDICT

Excellent presented and brimming with charisma, *Untitled Goose Game* is nonetheless let down by the trudgery of its puzzles.

62%



Rated Review



HIGHLIGHT

It's really easy to be swept up by the ambition of *GreedFall*. The scale of everything, from the vistas of Teer Fradee to the backstories of your companions, is almost overwhelming. When creeping through a forest or delving into a friend's past, the frequent rough patches that are found elsewhere feel very, very distant.

Review

GreedFall

▲ Don't bring fangs to a flintlock pistol fight, buddy.

Info

GENRE

RPG

FORMAT

PC (tested) /
XBO / PS4

DEVELOPER

Spiders

PUBLISHER

Focus Home
Interactive

PRICE

£43.99

RELEASE

Out now

REVIEWED BY

Joe Parlock

VERDICT

Inching closer to the bar of quality Spiders clearly wants to hit, *Greedfall* nonetheless falls short.

67%

Greedfall is a very Spiders game. As a studio, it is the embodiment of ambition over execution. All its previous titles (*Of Orcs and Men*, *Mars: War Logs*, *The Technomancer* etc) are as defined by their amazing ideas and detailed settings as they are by their underbaked systems and almost non-existent polish. There's a constant hope the next Spiders will be 'the one' – the game that will finally see the tech side of things be at the same quality as the obvious passion the developer has for its projects. Yes, *GreedFall* is a very Spiders game, but it falls short of the mark by a much smaller margin than any of the games that came before it.

Set in a 17th-century-inspired fantasy world hellbent on colonising the newly discovered island of Teer Fradee, *GreedFall* puts you in the thick leather boots of De Sardet, an important diplomat new to the island. Said island is home to an indigenous people whose connection with the land grants them control over hulking plant monsters, for a good hit of the supernatural, and it is your job to not only maintain balance between the factions vying for control of the 'new land, but to also find a cure for the disease back home, plaguing the main continent.

With its transparent allegory for the colonisation of the Americas, *GreedFall* doesn't shy away from the theme of colonialism. While I'm hesitant to judge if it tackles that discussion successfully or respectfully, it's impressive to see the depth of culture the indigenous people are given. They're not just Primitive Magical Elves who are the passive victims of colonialism that need saving,

they're a powerful faction, complete with their own language, accent, culture, and history that is teased throughout De Sardet's dealings with them.

For all the work put into the wonderful world, characters, and scenarios, playing *GreedFall* can be best described as 'serviceable'. Mechanically, there's more than a bit of the pre-*Anthem* BioWare – more specifically, *Dragon Age: Origins* – in *GreedFall*. Branching dialogue and a reputation system, recruitable NPC companions with their own storylines, and an active-pause combat function letting you pick between real-time combat and stopping to make larger tactical decisions are all here.

The problem is it's all just *fine*, rather than matching its subject matter's quality. It's a perfectly acceptable delivery method for the best bits of *GreedFall*, but nothing to write home about in its own regard. There's a resounding lack of polish that highlights this was a mid-budget game with full-budget ambition. Between the constantly repeating voice lines, poor animations, major spelling errors in the subtitles, weirdly designed UI, dodgy voice acting, limited character creation, weirdly paced quests, and rough AI, it's easy to see *GreedFall* as a game whose ambition is hamstrung heavily by its budget.

As a dense, engrossing, original RPG, *GreedFall* is the closest thing to a mainstream hit Spiders has produced so far, and it's absolutely worth heading into, provided you can put up with a higher-than-normal level of jank. If you wanted a highly polished game to replace something like *The Witcher 3*, though, then you may be severely disappointed. 🗣️



Review

HIGHLIGHT

The Great Perhaps breaks up its general bleakness with some interstitial banter between the cosmonaut and his sarcastic AI companion, L9. Both voice actors do an OK job at relaying their awkward relationship, but not having L9 perform audio cues to point out puzzle tips feels like a missed opportunity.

▲ Is that a *Doctor Who* reference scrawled on the wall?

The Great Perhaps

A puzzle-infused space oddity with a lot of heart

The flirtatious relationship between games and time travel has always been cause for inventive game design. Proving this once again, albeit in more stripped-down form, is the debut title from Moscow-based developer Caligari Games. That's because, despite letting you flitter between past and present at will, *The Great Perhaps* is one of those rare puzzle games uninterested in dumbfounding you and more concerned with guiding you on a melancholic journey filled with deep sci-fi themes. Its core time-hopping gimmick is merely the quirk with which to hook you onto this thoughtful tale, being relatively successful for the most part, despite a short length.

The first thing you'll notice about *The Great Perhaps* is its lovely hand-drawn art style, which sees it sit somewhere between the aesthetic of 2014's *Valiant Hearts* and cult CITV show *Grizzly Tales for Gruesome Kids* – complete with a Soviet twist. As a fan of both, this drew me in instantly, especially since it makes the tonal dissonance between thriving society and post-apocalypse even more unsettling. Part of the fun in jumping from one time to the other is picking out the environmental detail found in both; it kept me engaged and made up for the basic mechanics.

You play as a lowly cosmonaut who's been left floating in space for 100 years, eventually touching back down to Earth to discover what has caused a cataclysmic natural disaster. Getting to

the core of this issue involves working your way through a series of puzzle-filled levels, using a mysterious lamp artefact to bamf between past and present. What you do in one era affects elements in the other as you'd expect, but a nice touch is the ability to shine the lamp's cone of light into the past or future ahead of a jump, to see what lies ahead. This comes in particularly handy when wanting to avoid a patrolling guard in the past or mutated creature in the run-down present.

The settings in all 14 chapters have a good variety, but there is just a tad too much 'grab this

key from this time to unlock a door from the other' in each. The game's unwillingness to move beyond such simple tasks is where *The Great Perhaps* really reveals itself as the studio's first title, as does

its insistence on introducing new tweaks to the time-bending conceit only to have them disappear later. One section has a rift pass up and down the environment to unwittingly force you between past and present. Here, I had to think on my feet rather than at the typical leisurely pace, but it's clear that applying this type of pressure isn't what *The Great Perhaps* is interested in.

For as rudimentary as *The Great Perhaps'* puzzles might be, I still found myself charmed by this thoughtful two-hour sci-fi adventure. Its sketched art style and sombre tone combine to deliver a personal story about lost time and the lengths someone will go to try and get it back. Beautiful! 🐾

“One of those rare puzzle games uninterested in dumbfounding you”

Info

- GENRE**
2D adventure, puzzle game
- FORMAT**
PC (tested)
- DEVELOPER**
Caligari Games
- PUBLISHER**
Daedalic Entertainment
- PRICE**
£8.99
- RELEASE**
Out now

REVIEWED BY
Aaron Potter

VERDICT

A charming, if simple, puzzle game unafraid to ask life's big questions through the prism of time travel.

64%

HIGHLIGHT

You can't talk about *Sayonara Wild Hearts* without mentioning its infectious soundtrack, composed by long-time Simogo collaborators Daniel Olsén and Jonathan Eng, with vocals from Linnea Olsson. On its own, it's a strong contender for album of the year, matching Swedish pop contemporaries Robyn and Lykke Li – even the soundtrack was available to download and stream the same day the game launched.

➤ Collecting hearts is crucial for racking up your score, though you'll need to nab the elusive diamonds to get that sweet Gold Rank.

Review

Sayonara Wild Hearts

Play it again, Simogo

Info

GENRE

Pop / Arcade
/ Rhythm

FORMAT

Switch (tested)
/ PS4 / iOS /
Apple Arcade

DEVELOPER

Simogo

PUBLISHER

Annapurna
Interactive

PRICE

£10.99

RELEASE

Out now

REVIEWED BY

Alan Wen

VERDICT

An exquisite sugar-rush of arcade and pop, *Sayonara Wild Hearts* will steal your heart.

89%

For the past decade, Swedish developer Simogo has escaped simple categorisation, not settling on any specific genre while making the most of mobile to create unusual and innovative experiences. *Sayonara Wild Hearts* is yet another dazzling title to add to its distinct repertoire. Essentially a playable pop album that would take a heart of stone not to be swept up in its neon dream euphoria, as it carries you through big emotions and heartbreak, as all great pop songs should. But *Sayonara Wild Hearts* also unabashedly celebrates video games in their purest form.

Sure, its controls are mostly limited to movement with occasional moments of pretty lenient rhythm-based QTEs, but you're also on a wild kaleidoscopic tour of arcade gaming's greatest hits. Your course may be on rails, yet the journey is never short on ideas, which is fitting for your masked heroine who takes on The Fool, a tarot arcana that represents infinite potential.

By the hour or so of its duration, you'll have sped down narrow alleys on your motorbike, taken part in a street fight against a girl gang, pursued a duo shifting you between different planes of reality at the click of their fingers, been sucked into first-person VR that transforms into a slowed-down bullet hell, while also paying homage to Tetsuya Mizuguchi's synaesthetic *Rez* by turning into a lock-on rail shooter towards the end. And that's just a few examples, as it breathlessly executes one thing after another with more joyous abandon than a *Mario* game and with the rollercoaster rush of a *Sonic* level.

All of this, bolstered by a dynamic camera that does as much dizzying choreography as the balletic characters, is enough to make you forget that the game asks little of you in terms of inputs, including even the shooting sections.

It's ultimately more about the experience than getting good, though high-score chasers can also tap into feel-good factors for every tricky heart piece collected or perfectly timed rhythm tap, which add an extra flourish to The Fool's animations. If there is a wrinkle, it's that getting hit by an attack or crashing into an obstacle rewinds you back a few seconds, which is meant to be a generous way of letting you retry without penalty, but also ends up disrupting the song's wondrous flow – fail too many times and you're given a choice to skip the level, though I strongly recommend switching this off if you don't want to deprive yourself of any part of the excellent soundtrack.

Naturally, this is a short experience, albeit still longer than a typical LP, though beating it once lets you play the whole album uninterrupted, while completionists can aim for nailing the Gold Ranks for each song and some rather cryptic achievements. In truth, these extras are hardly necessary, because, just like any catchy pop record, *Sayonara Wild Hearts* simply begs to be played again and again. 🎧

➤ It's difficult for a screenshot to do justice to a game that's so beautiful in motion. At least characters occasionally stop to strike a pose.



You were ten.

You were moving through the woods with your dog near your side, harassing rabbits and squirrels.

"Here, boy! Come on, Alfie!"

"Here, girl! Come on, Gizmo!"



Review

HIGHLIGHT

Though scattered and spare, Abigail's personal, emotional journeys through memory can be quite affecting. There's an uneasy tone and stark griminess to her personal tragedy and failure that at times helps elevate the ponderous political narrative to something more than incomplete parable.

▲ The simple but personally profound choice of naming a beloved family dog is one of the 'apolitical' choices woven into this narrative.

American Election

Unable to escape its own political misery

American Election opens with a choice about where Abigail's grandmother is from: Shanghai, Nairobi, Rio, or Warsaw. The choice doesn't matter.

There was a war, she came to America looking for a new life. She had your mother. The game is making a point here – a point about choice and xenophobia. Because, your father points out, he is a true American. Your mother can't be. She's the child of an immigrant.

It's 2016 when *American Election* picks up, and we have a memory of a second-generation immigrant mother being dunked on by a proud, white, American father. That's when the cop pulls you over. And playing this in 2019, well, it feels a bit on the nose.

It's a story Abigail is telling her boss, presidential hopeful, Truman Glass (a transparent stand-in for US President, Donald Trump). Abigail wants to get him elected, believes he's good for the country. Over the next several chapters, it unfolds towards the inevitable conclusion – a facsimile of our current world state. There are choices, but their impact on the story's trajectory is slight.

Greg Buchanan's *American Election* is a train with no brakes. A ceaselessly nihilistic tone poem about the inevitability of the Trump presidency, the arbitrary nature of choice, and the limitations of the individual. Truman Glass will get elected at the end. Abigail will continue to be a struggling third-generation wreck of a lesbian with no real answers. The only answer *American Election* can provide is "This horror is inevitable."

As a brown, queer woman living in America, I get it. Believe me, I do. All of my friends are exhausted and sick from this perpetual nightmare. It's why I can't help but feel *American Election* stumbles. Having run through the game multiple times, seeing what changes and what doesn't, I kept walking away asking myself, "What is the point?"

Truman Glass is the kind of villain you'd expect to find in a political thriller novel abandoned on an airport terminal seat. There are moments of tension in *American Election*, underlined by shaking text (which can be turned off), but this isn't a Tom Clancy novel. The game strives for significance, but it can't see the full scope of the political monstrosity.

As writer and critic Colin Spacetwinks has said, "Political writing as a genre tends to be split entirely between comedy and taut thriller, not understanding that they are both at the same time, and it is boring, terrifying, absurd, and exhausting all at once."

An early choice allows players to call the future president, 'Orange'. It's a cheap, greasy move, and the dividends refuse to pay out. Along with other narrative and thematic decisions, it siphons what vitality the game could have.

The game's best moments of genuine, personal pathos – Abigail's remembrances of her ex-girlfriend, her divestment from herself and her life, a beloved childhood dog – are undercut by Buchanan's restless need to drive home his political messaging. As overwhelming as politics can be in our lives, *American Election* stumbles in replicating this constant dread. 🗳️

Info

- GENRE**
Interactive fiction
- FORMAT**
Browser-based
- DEVELOPER**
Greg Buchanan
- PUBLISHER**
Self-published, itch.io
- PRICE**
Free
- RELEASE**
Out now

REVIEWED BY
Dia Lacina

VERDICT

While taut and tense at times, *American Election* is an exhausting experience that lacks real imagination or the willingness to grapple with the complex banality of American politics.

40%



- There are some intriguing relationships between characters wrapped up in sci-fi clichés.
- ▼ Sometimes, the sexual innuendo can be amusingly wild, but maybe it's just lost in translation.

HIGHLIGHT

It doesn't take long to reach an ending, but that doesn't necessarily mean you've found the killer. Each 'somnia' has a choice of outcomes that influences the narrative, leading you down branching pathways – it'll take multiple playthroughs to see the full story.

Review



AI: The Somnium Files

File this one under criminal misogyny

Info

GENRE
Adventure

FORMAT
Switch (tested)
/ PS4

DEVELOPER
Spike
Chunsoft

PUBLISHER
Numskull
Games

PRICE
£49.99

RELEASE
Out now

REVIEWED BY
Ed Nightingale

VERDICT

Japanese eccentricity can't make up for a lack of things to do and some distracting misogyny.

47%

It's a good time for anime cops on the Switch, even if Spike Chunsoft's *AI: The Somnium Files* doesn't have *Astral Chain*'s flashy combat or litter-picking.

This latest title is, however, as bizarre as they come. You play as Date, who works in a special branch of the police called ABIS – Advanced Brain Investigation Squad. Not only can he explore the inner minds of characters by “psyncing” with them, but he also has an AI eyeball (called Aiba) that can leap out of his face to morph into a transparent Cyclops teddy bear. It also takes a female form in each ‘somnia’ mind world he visits. Sure.

These somniums are the meat of the game. Taking direct control of Date's AI partner, you solve puzzles by interacting with certain objects in the correct manner to break mental locks, delving deeper into the character's psyche in order to, say, uncover evidence or tease out a confession. You have a limited time in each world, though, leading to trial and error until you hit the correct sequence of events.

Otherwise, this is a narrative-heavy game that sees Date travelling to different locations and instigating plenty of long-winded conversations to uncover the culprit behind a series of murder cases, all the while flirting with his AI companion. There are plenty of other characters he meets along the way, including his cop boss, an idol

singer (both of whom, like Date's AI partner, fulfil the ‘sexy’ anime stereotype), an ‘old hag’, and a gender-fluid bar owner who is, contemptibly, played for laughs.

The story is preposterous, but it occasionally touches on serious themes of family and parenthood (Date is also the guardian of a young girl), as well as the importance of human intuition compared to an AI when judging a situation. Ironically, the plot requires some

major leaps in judgement, while we as players are mostly robots scrolling through the story with minimal interaction.

With so few things to actually do, there's a much

greater emphasis on story and character, but it's difficult to empathise with a womanising lead character who's so horribly misogynistic. While some innuendo in the script is at least laughable, Date frequently comments on the breast size of characters (he's literally described as a “tit man”), makes jokes about pornography, and on occasion veers dangerously close to hitting on much younger girls. This kind of behaviour is sadly too frequent in Japanese games, but here, it's particularly distracting.

There remains some charm to *AI: The Somnium Files* though, both for its eccentricity and a few heartwarming moments. This is an anime noir that wants to be taken seriously, but ultimately, it just makes a boob out of itself. 🍑

“It's difficult to empathise with a lead character who's so horribly misogynistic”



Definitely Definitive

Struggling to Switch off Divinity: Original Sin 2

Well, I did say I'd be talking more about *Divinity: Original Sin 2: Definitive Edition* on Switch, because it's absolutely magnificent and hard to put down. On Nintendo's handheld hybrid, that statement can be made literally, too – once picked up, it is a struggle to turn off, to do anything else, to re-enter regular life. The dog looks on forlorn, as once again she has to wait the extra ten minutes, 20 minutes, an hour before I remember she needs a walk. Dinner gets pushed later and later into the evening. Sleep – something I relearned to love through the magic of 'getting older' – once again became something I could do when dead. I'm worried this might be an addiction.

At the same time, I'm not upset. It's been a while since a game has wholeheartedly dragged me in and not let up. Addiction is a horrible word to use as a compliment towards a game's ability to keep you sat (or stood) in front of it – I'll always remember Sports Interactive's Miles

Jacobson telling me he avoided using the word when talking about *Football Manager's* similarly compulsive hold over players. It's a harmful condition, not a helpful one, and it shouldn't be thrown around with abandon when talking about something that is – in large part – as facile as video games. With that clause firmly in mind, I do think I'm addicted to *Original Sin 2*, and I can't shake the feeling of oh-so-slight happiness about the fact.

Because you *want* games to pull you in and not let go. You *want* the experience to be all-consuming, for it to make whatever the game is something you want to play – the *only* thing you want to play. Lollygagging around the world of gaming for (pushing) four decades does take some of the lustre off the whole thought of giving yourself over entirely to a game, and the ravages of millennial angst running hand in hand with the impact of depressive episodes does exacerbate the feeling that you *have* fallen out of love with the medium. Maybe it's time to move on, to go do something else more 'grown-up' with your time? Chase that joy. Find it. It'll be somewhere else, surely.

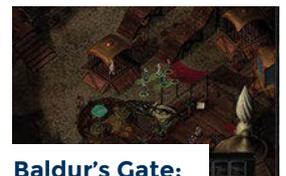
Larian's superb CRPG (on a hybrid handheld) snapped me out of a stupor, frankly. My praise of it might be skirting with being over the top, I'm well aware, but the personal experience is never something you can discount from a person's opinion of... well, anything. But in this case, a game about dragons and that. *Original Sin 2* is refreshing and invigorating; it walked in and snapped its fingers, and in that moment, I was enthralled. Turns out, a new addiction is just what I needed. 🐉

“Original Sin 2 is refreshing and invigorating”



Now playing
Definitely Definitive

Wireframe Recommends



Baldur's Gate: Enhanced Edition

PC, SWITCH, MULTI

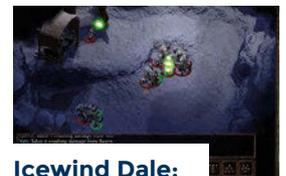
I don't think this batch of legends appearing on Nintendo's format will have the same impact as *Original Sin 2*, in all honesty. That ship has sailed.



Planescape: Torment: Enhanced Edition

PC, SWITCH, MULTI

All the same, and from a less Inside My Own Head perspective, it's a thrill to see Beamdog's collection on the Switch – and other consoles, of course.



Icewind Dale: Enhanced Edition

PC, SWITCH, MULTI

They're deep and fun and smart and *interesting*, and just the sort of thing you want to lose yourself in on a long train journey. Maybe it will become another addiction, who knows?



Peggle

A simple placeholder becomes an ode to joy
(also, it literally is Ode To Joy)

POPCAP / 2007 / PC, MAC, MULTI

That's the moment it changes for everyone. PopCap's casual mix of luck, dexterity, and puzzles might have offered some vague amusement the first time you played it, but it's not until the end of a level that it hits you. In *Peggle*, you have to fire a ball and hit all of the pegs in a level – and that's about it. It's simple, straightforward, and fun. You fire the last ball, the camera zooms in, and the action slows as it approaches the final peg, a drumroll, it hits... and suddenly Beethoven's *Ode to Joy* blares out as the celebratory pyrotechnics unleash.

It's in this moment that *Peggle* moves from being just another puzzle game you'll put a bit of time into before forgetting it into the territory of true greats. It knows damn well that you want to be rewarded for your achievements, even if said achievements do read 'completing the first three levels'. So the game makes a fanfare of it, and really makes you feel like you've accomplished a lot more than just plomping a ball at some targets in a vague mix of pinball and pachinko. It makes every end-of-level occasion special. And to think, the only reason *Ode to Joy* was in the game in the first place was because its designers needed a placeholder to tide them over

before choosing the 'real' congratulatory track to go in there. How different the world might have been.

Things progress in the game, of course, and elements are introduced to show that under its simplistic surface, *Peggle* is a game of real depth and considerate design. It's one of those rare games that manages to balance its reliance on luck and skill near-perfectly, no doubt one of the main reasons the game still holds up so well to this day. Side note: go play *Peggle*, thank us later.

**"The more you play *Peggle*,
the more you crave the
recognition PopCap (and
Ludwig) throws your way"**

But you'd think after hundreds of levels played and twelve years (crikey, time creeps up on you) the whole shtick would wear thin. Nope. If anything, the more you play *Peggle*, the more you crave the recognition PopCap (and Ludwig) throws your way. Those of a more cynical mind might actually accuse PopCap of employing a certain 'first one's free' method in how it doles out that congratulatory symphony – they come by so easily in the early stages, to the point where you think this is the way it's going to be forever. But soon enough the difficulty ramps up, the failures mount, and you're genuinely craving to be put out of your misery by a hearing-impaired pianist who died almost 200 years ago. Ah, video games – is there anything they can't do? 🎮

Next Issue

ON SALE 7 NOV

THE FIRST ANNIVERSARY EDITION

We look back at our favourite
games of the past 12 months



Don't
miss out!
Subscribe
PG 54

Also

- ▶ Modern games made with retro sensibilities
- ▶ Eternal Cylinder: the weirdest survival game so far?
- ▶ The secret life of the video game writer
- ▶ A smarter way of using tutorials in games

Editorial

Editor

Ryan Lambie

Email ryan.lambie@raspberrypi.org

Features Editor

Ian Dransfield

Email ian.dransfield@raspberrypi.org

Sub-Editors

David Higgs & Vel Ilic

Design

criticalmedia.co.uk

Head of Design

Lee Allen

Designer

Harriet Knight

Contributors

Lottie Bevan, Natalie Clayton, Rik Cross, Konstantinos Dimopoulos, Sooz Kempner, Dia Lacinia, Ed Nightingale, Joe Parlock, Aaron Potter, Stuart Maine, Jeff Spoonhower, Richard Wakeling, Paul Walker-Emig, Howard Scott Warshaw, Alan Wen

Publishing

Publishing Director

Russell Barnes

Email russell@raspberrypi.org

Director of Communications

Liz Upton

CEO

Eben Upton

Advertising

Commercial Manager

Charlie Milligan

Email charlotte.milligan@raspberrypi.org

Tel +44 (0)7725 368887

Distribution

Seymour Distribution Ltd

2 East Poultry Ave, London EC1A 9PT

Tel +44 (0)207 429 4000

Subscriptions

Unit 6, The Enterprise Centre, Kelvin Lane, Manor Royal, Crawley, West Sussex, RH10 9PE

To subscribe

Call 01293 312192 or visit wfmag.cc/subscribe

Subscription queries

wireframe@subscriptionhelpline.co.uk



This magazine is printed on paper sourced from sustainable forests and the printer operates an environmental management system which has been assessed as conforming to ISO 14001.

Wireframe magazine is published by Raspberry Pi (Trading) Ltd, Maurice Wilkes Building, St. John's Innovation Park, Cowley Road, Cambridge, CB4 0DS. The publisher, editor, and contributors accept no responsibility in respect of any omissions or errors relating to goods, products or services referred to or advertised in the magazine. Except where otherwise noted, content in this magazine is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported (CC BY-NC-SA 3.0) license. ISSN: 2631-6722 (print), 2631-6730 (online).





CQ32G1
2560X1440

144 HZ	FreeSync	1 ^{ms}
	Curved	QHD

BEND YOUR REALITY

Available at:



ebuyer.com



aocgaming.com



[@aoc_gaming](https://twitter.com/aoc_gaming)



[@aocgaming](https://www.instagram.com/aocgaming)



[@aocgaming](https://www.facebook.com/aocgaming)