Wireframe

LIFTING THE LID ON VIDEO GAMES



PLANET OF LANA

AN OFF-EARTH ODYSSEY

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Where will retro-inspired developers turn next?

In the early 2010s – a time of mainstream popularity and growth in the indie game development scene – a number of titles came out that revelled in the 'retro' era. *Shovel Knight* charmed everyone with its diligent attention to the NES palette and old-school sensibilities, *Super Meat Boy* channelled Nintendo's 'hardcore' platforming level design (and even borrowed its use of "Super"), and *Volgarr The Viking* was an arcade-style love letter to classic beat-'em-ups. For a while, 1980s and 1990s game design was jumping into a renaissance, thanks in no small part to developers who were raised in the familiarity and nostalgia of these eras having developed the skills to channel it in their own work. In the late 2010s, we also saw N64-like titles jump into the ring, with games like *Yooka-Laylee* and *A Hat In Time* bringing polygonal platformers back in big ways.

Thanks to the linear progression of time, though, I feel like I've only noticed this 'nostalgia window' gradually creeping forward through indie spheres, as new developers rise up the ranks and game development becomes a more accessible medium to emerging creatives.

Today, more than ever, this 'retro renaissance' has started honing in on the Dreamcast and PSone era of games, with communities like the Haunted PS1 community revelling in the uncanny valley aesthetics of Sony's first console, games like *Szrot* channelling *Gran Turismo* with a European twist, and the *Bloodborne PSX* demakes by LWMedia being... well, PSone demakes of modern titles. If you grew up in the late 1990s and early 2000s (like myself), there's truly no better time to be watching indie games. But what is maybe even more interesting to me than all this channelling of old-school values is where they take it from here.

The PlayStation 2 had no shortage of wacky and interesting experiences that I can see indie devs wanting to emulate, and with indie development being where it is right now, it's likely we'll see more compact but polished experiences like GameCube games in the works soon (if not already!). In the post-PS2/GameCube era, however, game development really starts getting wild, for better or for worse.



DEVON WIERSMA

Devon Wiersma is a level designer by profession and solo game developer by hobby, having shipped titles from *Far Cry 6* to *Bombing!!: A Graffiti Sandbox*.

Triple-A games chase intense (and expensive) realistic graphics more than the stylised experiences of yore, and as a result, everything also gets noticeably more grungy and brownish-grey. I really can't help but wonder if we're going to see smaller developers start attempting to emulate the bigger-budget experiences as this nostalgia window moves. Will we see *Gears of War* or *Uncharted*-alikes coming out from smaller indie teams on shoestring budgets? Will software be accessible and user-friendly enough to empower devs to replicate these experiences themselves?

Tech has already unlocked the potential for small creators to create from basically nothing. Nowadays, it's entirely possible to record mocap sessions by using an iPhone camera, or photoscan real objects to get a quick 3D base, while software like Houdini has made it possible to generate entire cities with the click of a few buttons. A decade ago, none of this was remotely possible, even if you were operating with a multi-million dollar budget. Today you can do it all, and for a relatively small sum of money.

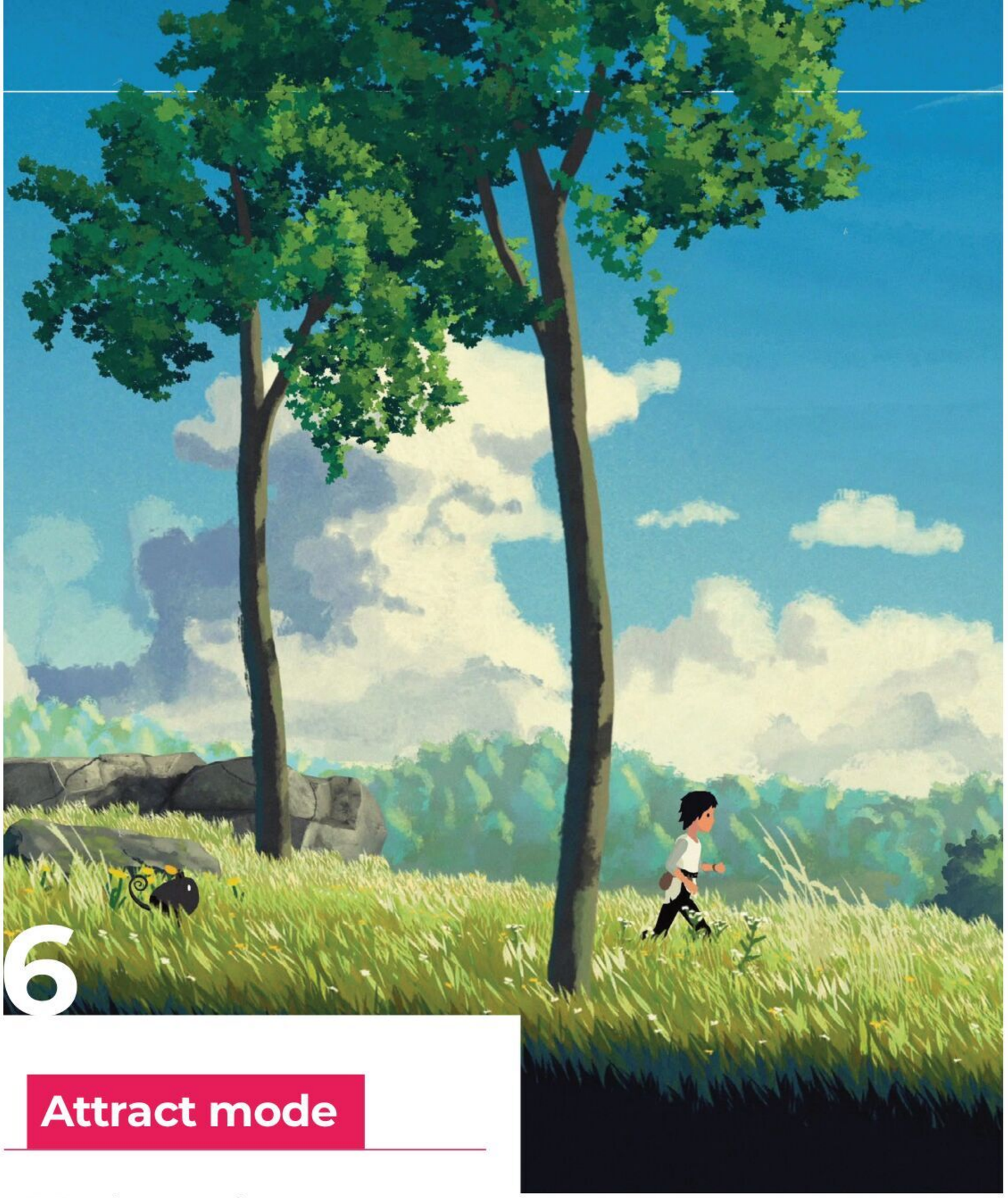
Or, failing the adoption of big-budget design approaches, will these nostalgia titles start getting more cyclical? Will devs start to channel the vibes of older XBLA titles such as *Trials HD*, or the disposable nature of downloadable, first-party PlayStation 3 titles like *Trash Panic*? I can certainly see a future where everything wraps around on itself and the devs who grew up playing *Shovel Knight* start making *Shovel Knight*-alikes, and so the cycle repeats over again. After all, what makes a 'retro' title retro if not drawing inspiration from those that came before it? We already see this pattern in the triple-A space, where remakes of older titles are repeatedly raised from the dead, and even slightly older digital media, such as movies, have no fear in putting out new spins on old classics every couple of decades or so – I see no reason why it might not start happening to indie games, too.

Unfortunately, I can't say I have any idea where these retro-inspired games are going to end up, but I do know that I'm super-excited to stick around and find out.

#69



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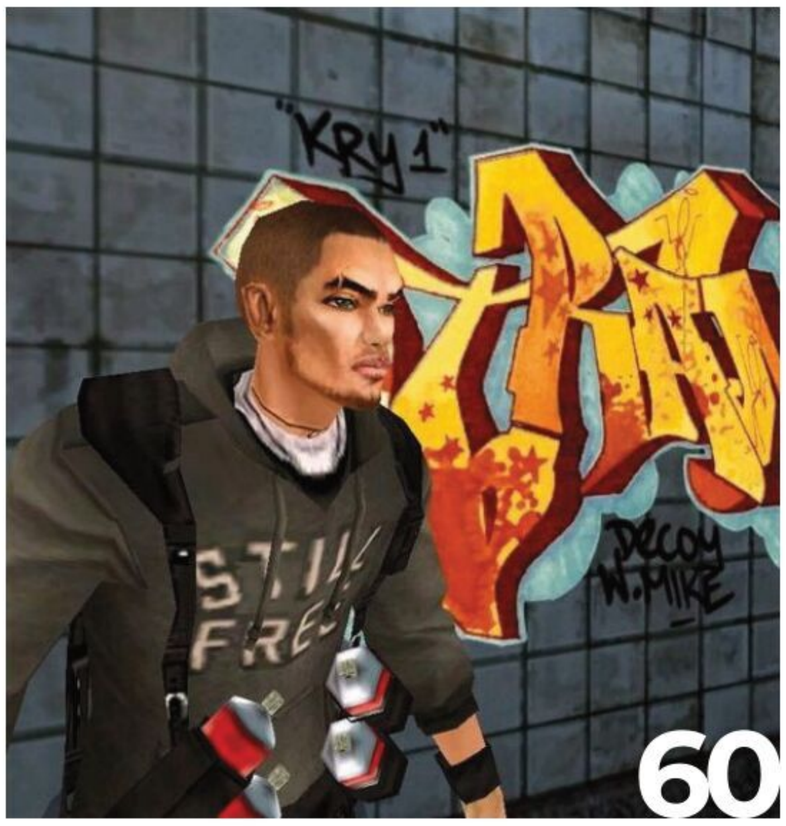
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WELCOME

In his 2013 TV special, *How Videogames Changed the World*, writer and broadcaster Charlie Brooker put Twitter at the top of his list of world-changing games. He argued that Twitter is more than just a social app – the thrill of getting retweets and followers, Brooker said, creates an addictive loop much like a video game. If you agree with the argument, then it certainly feels, at the time of writing, as though Twitter's nearing some sort of endgame, much like an MMO in its last months before shutdown.

As Twitter flounders under its new multi-billionaire management, another unfeasibly wealthy person, Mark Zuckerberg, is having issues of his own. Because, whether he admits it or not, Zuckerberg has gone from social media pioneer to game developer with his much-vaunted Metaverse. Sure, its advocates may shout that it's 'more than a game!' and closer to a true virtual world where we can immerse ourselves in work and leisure, but that's something game developers have been pursuing for years. Zuckerberg's Metaverse has already been compared (often unfavourably) with *Second Life* and Sony's long-defunct *PlayStation Home*.

The main point of difference between a typical game and the Metaverse is the scale of expenditure; the venture has racked up a reported $36bn in R&D to date, which puts even Rockstar North's priciest games in the shade. The spending is so vast that it's badly affected Meta's stock value. And with tech as a whole in financial freefall and mass layoffs reported at Facebook and Twitter, it feels as though social media is at an inflection point. Will it survive and become the game to end all games, or continue to falter? Whatever the outcome, the result could affect how millions of us interact for years to come.

Enjoy the new issue!

Ryan Lambie
Editor



OUT OF THIS WORLD



It's a puzzle-platformer some five years in the making.
We uncover the story behind next year's stunning-looking
Planet of Lana



It all began with one artist and a single image. About five years ago, Swedish artist and developer Adam Stjärnljus opened Photoshop and began working on what would eventually become *Planet of Lana*'s key art. It depicted a solitary young girl dwarfed by a lush alien landscape, a small, canine-looking creature standing loyally by her side. For over a year, Stjärnljus kept working on that germ of an idea, about a girl on a quest to rescue her sister from invaders with Mui, her animal companion, helping her traverse the treacherous landscape.

From there, it would be another two years before Stjärnljus' fledgling studio, Wishfully, could get the funding it needed to finally get the game into production. But throughout, that initial piece of artwork has remained the team's "guiding star" – a constant source of inspiration for the hand-painted story the studio's aiming to tell. It's also inspired investors to lend their support for the project, and even prompted composer Takeshi Furukawa (*The Last Guardian*) to get in touch and offer his services.

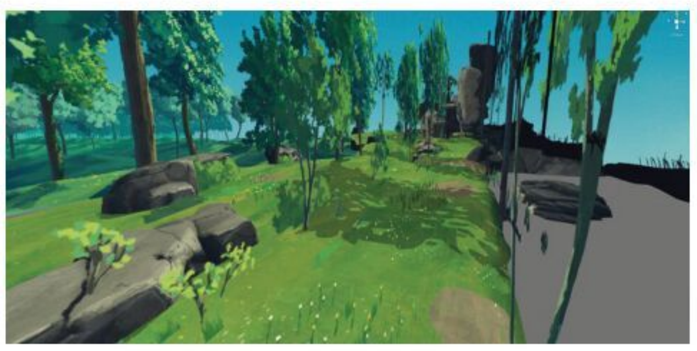
Playing *Planet of Lana* for ourselves, we can see why the game's become one of next year's most anticipated indie releases. It's a puzzle-platformer in the cinematic vein of *Another World* or Playdead's *Limbo*, but with the co-operative elements and melancholic atmosphere of Fumito Ueda's *Ico* or *The Last Guardian*. Its visuals are captivating, its puzzles deftly woven into the landscape; at one point, we're able to use a giant creature's fascination with our furry sidekick to lure it into a position where we can use its bulk as a platform. Then there's its story: a few untranslated lines of alien dialogue aside, it's told entirely through those painterly visuals, and soon goes to some unexpectedly dark places. *Planet of Lana* may not look as nightmarish as Playdead's output, but as we discovered, brutal deaths are far from uncommon on Novo, the alien world that provides the game's backdrop.

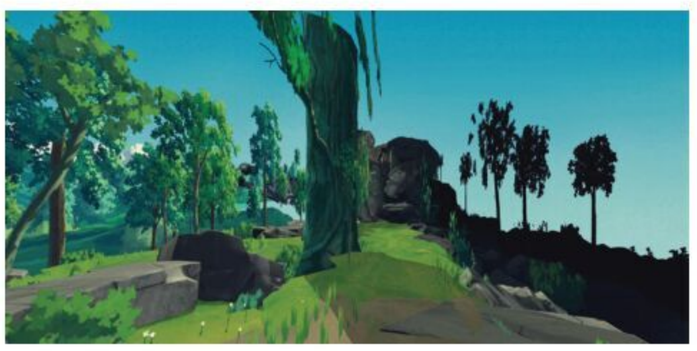
Amid the bustle and din of Gamescom, we met Stjärnljus to find out about *Planet of Lana*'s beginnings, the role a red-top newspaper played in securing Furukawa's music, and how much work goes into designing those environmental puzzles... ➔



Anatomy of a scene: these exclusive, behind-the-scenes images provide an idea of how many layers go into creating the game's sense of depth. Rocks are 3D assets, but these are interspersed with multiple 2D layers of grass, trees, clouds, and distant mountains to make up Novo's lush natural landscape.







ANIMAL INTELLIGENCE

Given that Mui's your loyal companion throughout *Planet of Lana*, and that her movements are key not only to solving puzzles but also your immersion in the unfolding story, getting her AI spot-on has been a particular challenge for Stjärnljus and his team. "We've worked continuously on Mui since the start of the project and have spent a massive amount of time on getting the AI right for her," he explains. "It's so much more complicated than we thought from the start. We tried a lot of different routes for the AI but landed on a behaviour where Mui feels alive but also responsive, where you as a player feel that she listens to your commands in a very direct manner. It's a delicate balance between making Mui feel like her own creature that has her own will and personality, and creating a fun game where you feel that Mui is an asset and not an annoying companion."

***Planet of Lana*'s been in development for a long time. Can you talk about what it was like back in its early stages?**

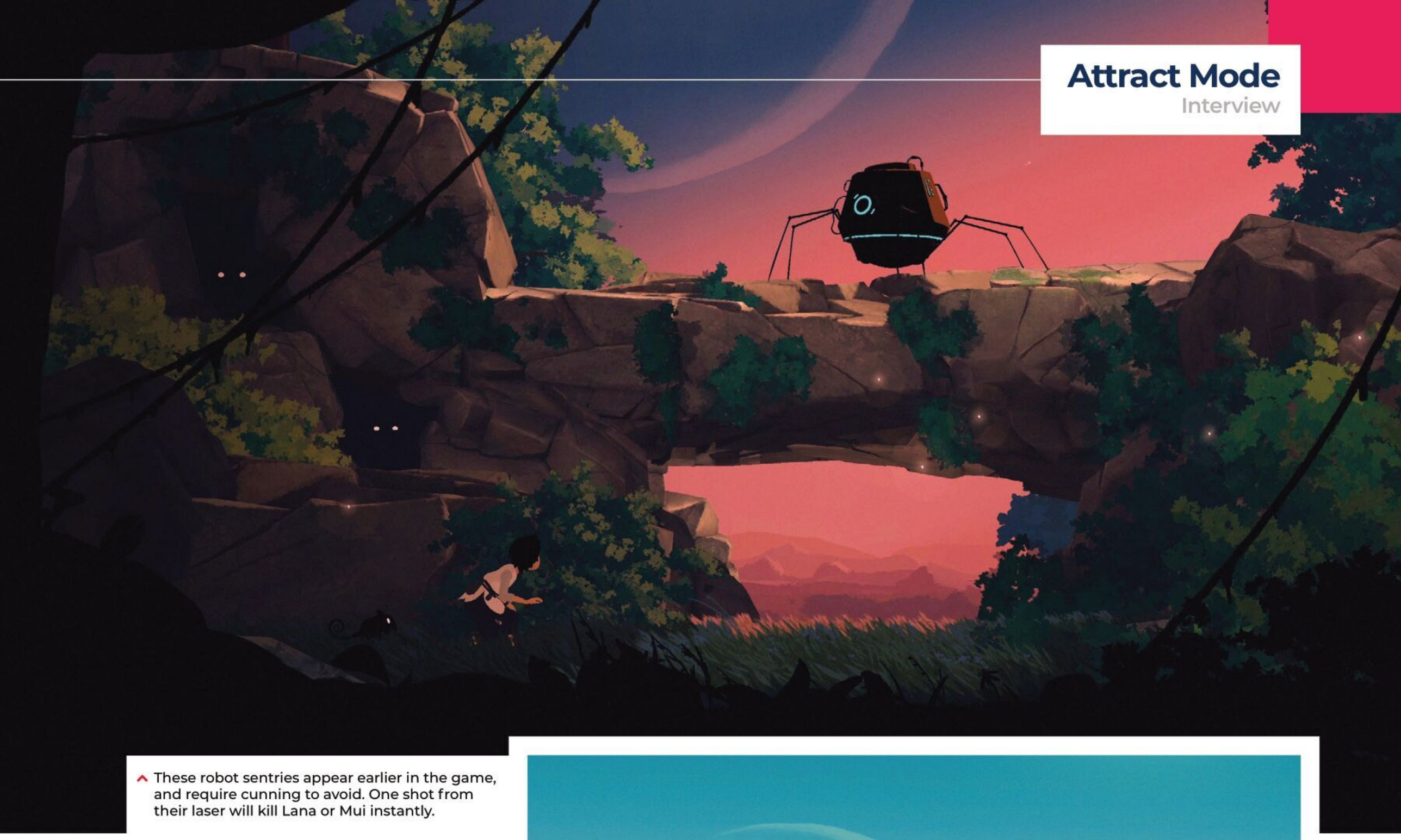
I worked on the game for a year by myself, and then we started the studio four years ago. Then it took us two years to find funding, but in retrospect, that was really, really good. If we'd had been an established studio, we couldn't have had such a long pre-production. But since we had that pre-production, we could really find both the game design and figure out how the game could work with the companion. It took so much work to make that feel good.

Also, the visual style actually started more flat and more retro-inspired, like *Another World* or *Prince of Persia* – games that I grew up with. So it was frame-by-frame animation and 2D – flat. But then we realised that the vision we have for the game – this epic, cinematic, immersive experience – wasn't going to work in 2D. So then we went for this mix of 3D and 2D, while still keeping that hand-painted look that the concept originated from. It's been a process of iterations – a lot of iterations and work to make it happen. I'm very happy with where we're at now. There's a lot of depth in the world, but it still has this hand-painted style.

What was the process of simulating that hand-painted feel in Unity like?

All the 3D rocks and stuff like that combine with sprites, and all the lighting is hand-painted. So the light is painted and then it's a mix of real tangible [3D assets]. It still reminds me of those classic games like *Flashback* and *Another World* – I love those games. It's very inspired by those, and obviously *Inside* and *Limbo*. But also *The Last Guardian* – except they had a bit bigger budget than us!

We actually use the same composer – the same guy who made the music for *The Last Guardian*, [Takeshi Furukawa]. It's quite a fun story, how we got him. It was right at the beginning – the first conference we went to, after about one and a half years working on the game. We'd just started the studio and had worked on the game for about five months. And we took the concept to the conference, and then The Daily



These robot sentries appear earlier in the game, and require cunning to avoid. One shot from their laser will kill Lana or Mui instantly.

Mirror wrote an article about the game. [Furukawa] saw that, saw the images, and then contacted us. I thought it was a hoax, because I actually pitched the game as, '*Inside* plus *The Last Guardian*'. So then we started talking with him. And we clicked creatively and then signed with him after two years. It's just been amazing to have him on board. We actually recorded the music in Budapest with a full orchestra – like, 70 people. He said to me when I met him recently, that he'd never before nor after contacted a studio in the way that he did with us. We're a small indie studio, but he saw something in it that inspired him.

Did he say specifically what he saw that inspired him?

It was the concept art, and by then we had a few other [pieces]. There was something that struck him in that. I think that image has done that a lot of times, and that's why we've kept going, even when it's been tough, because we've had so much good feedback. It just evokes emotion, this story about a little girl and her companion. It raises a lot of questions, like, 'Why are they there?'.

I mean, there's been a lot of challenges, to be honest. It's our first game as a studio, so it was challenging, convincing people that we can do this. But a lot of us at the studio come from an animation and film background. So we have experience running a company, and we have experience in storytelling and animation and art and all that stuff, but not a lot in actually creating a game. So that's been a journey.



Planet of Lana's mix of 2D and 3D assets means the camera can pull right back to create cinematic moments such as this.

Also, it's a very ambitious game. We were never interested in doing a small game. But, as I said before, we had that long pre-production that really enabled us to [iterate]. We pitched it first and didn't get a yes. And then we got feedback, really valuable feedback, and we just kept working on it.

Would you say that the tone of the game changes as you progress? Does it get darker?

It does. We want to tell the story through playing the game, so you get to explore a lot of different [environments]. There's a lot of focus on variation and this very rich backstory. You get to this old shipwreck ➔



You set off on a rescue mission to find your kidnapped sister, but who are the robot invaders? What do they want with your planet? Such are the mysteries that spur your progress through the game.

Mui can jump higher than Lana, fit through tight spaces, and bite through cables. Certain natural elements in the environment also react to Mui, allowing her to create organic platforms for Lana to cross.

that you get to explore, it's quite dark... there are scary creatures and stuff like that. So we have this tranquil, lush environment, but you'll definitely explore darker places. And this epic story will unfold as you play the game.

We really wanted to make a fun game at its core, that's good to play and has the right balance of challenging puzzles, that's not too easy, not too hard, and still quite approachable for a broad audience. Obviously, the first chapter you're playing is an introduction to how you play with Mui and Lana. And then we'll ramp it up as you go along. We also have this hypnotic ability that you'll unlock later in the game. Mui can hypnotise creatures so you can control them. It opens up a lot of variation of the abilities and how you can solve puzzles and interact with the world.

How big a part will those hypnosis abilities play later in the game? Will there be a difference between who or what Lana can hypnotise versus Mui?
Lana doesn't have a hypnotic ability, but she gains a different special ability that opens up a lot of variation and fun mechanics to the puzzle-solving and interaction with the world. But we don't want to spoil exactly what that ability is at this time. Mui's hypnosis will play a substantial part in the game – it becomes a link between Lana and the creatures of Novo and is essential to harness if Lana and Mui are to make it through their adventure.

You've mentioned Studio Ghibli as an influence on this. I think they're such an inspiration for so many artists and game designers. What makes them special to you?
The film *Spirited Away* left such an impression on me. I think I saw it when I was 19 or something like that. It's just something about how it lets you into these worlds and how you see it through the eyes of a child. There's something very special about it. In *Spirited Away*, I loved how you got to see this weird bathhouse for ghosts, but there's still people doing the dishes and smoking out the window. There's all this attention to detail in the world-building and still this tonality of an emotional, dramatic story, but it also has its quirkiness and fun things. There's just something about that mix that's unique. The tonality of that storytelling and world-building has also been a guiding star for us.

Would you say the game has an ecological theme? That's a common thing in Studio Ghibli movies.
Yeah, but it's in the background. The planet isn't Earth, but it's still very reminiscent of Earth, and that's a very conscious decision, because we wanted to kind of evoke the same emotions that you have yourself when you've been out in nature, been in fields, walked through the grass. Obviously, the creatures are very different from the creatures on Earth, but in the sense that you to get to appreciate being in nature, definitely.

So how much do you have left to do on the game?
We are in polish mode right now, and it takes so much time shaping up the last 10% of the game. But in a game like this,

where the immersion is such a big part, that 10% will make all the difference in creating the magical experience that [we envision].

How do you come up with the puzzles? Do you sketch them out first?
It's so hard creating puzzles that balance the right difficulty, that invoke the feeling of being smart, logical and fun. Our technical animator, Dan Faxe, wasn't part of the puzzle creation in the beginning, but when he came into the process, it quickly became apparent that he had the right brain for the task. We have a game design group of four people in the team that work on the general puzzle ideas, then Dan takes those ideas, sketches them out, and presents for feedback. Then we have that process back and forth until we feel a puzzle can go into the prototype phase. We then have the whole game, but only the puzzles, in a very rudimentary form without any animation or visual flair. After that, Christian Enfors, one of the game designers, can prototype puzzles quickly with visual scripting, and we can test to verify the puzzles before implementing them in the real game. This whole process is without any involvement of the programmers, which relieves a lot of unnecessary work since we can be sure that a puzzle works before spending valuable programmer time on it.

***Planet of Lana* is due for release in spring 2023 for PC, XBO, and XB X/S**

SOLO ONLY

That *Planet of Lana*'s puzzles require cooperation might imply that the game as a whole would be ideal for a two-player mode, or at least the ability for a single player to switch control between Lana and Mui. For Stjärnljus, though, there's a good reason why Mui had to remain strictly outside a player's input: "As soon as you or someone else can control Mui as their own character, the sense of Mui as her own creature that you form a relationship with disappears. It's really part of the core idea to have Mui as her own sentient creature that you befriend."



The attention to detail in the animation means that Lana's youth and vulnerability is always apparent, whether she's struggling to jump over a chasm or move a heavy wooden barrier.



Who or what is Mui? "I can't say much about Mui's origins," says Stjärnljus, "but I can tell you that if you're a player who pays attention to details, you will get answers."



Welcome to the family

Sumo Digital discusses its multiplayer spin on the Texas Chain Saw Massacre and why there's more to it than just Leatherface

Info

GENRE
Asymmetrical horror

FORMAT
PC / PS4 / PS5 / XBO / XB X/S

DEVELOPER
Sumo Digital

PUBLISHER
Gun Interactive

RELEASE
2023

SOCIAL
@TXChainSawGame

We're well familiar with the ingredients needed to achieve an asymmetrical multiplayer horror hit by this point. Take a fan-favourite slasher series (usually from the 1970s or 1980s), pit four friends together against its iconic killer within a singular location, and have them try to survive or escape the grisly scenario while completing rudimentary objectives before the time runs out. Simple, right? Except in Sumo Digital's faithful interpretation of 1974's *The Texas Chain Saw Massacre* movie, it's anything but. The Nottingham-based studio is instead taking special care to ensure that its twist on the tried and tested genre is made up of more than just Leatherface. Now it's a family matter.

"If you've seen the original film, he's all about family," explains lead designer Kelvin Moore. "Fair enough, he's got a chainsaw, but he's still this human character underneath. He can't survive on his own. He needs his family." While it might initially seem strange to have a figure as recognisable as Leatherface share the spotlight with peripheral characters from the film, this was the angle Sumo Digital used as an in. It was a unique opportunity to use an established horror franchise for a more terrifying four-versus-three setup as opposed to the conventional four-versus-one. No longer will people playing as survivors have numbers on their side.

Of course, this more balanced arrangement requires two extra playable villains, and the biggest challenge comes from making each just as interesting as Leatherface. "They all need each other to stop these victims from going away," Moore continues. Emphasising this is each family member's unique abilities and skills that help prevent survivors from escaping the house. "Leatherface obviously has his chainsaw... he can destroy things. Then you've got The Cook who's better at hearing things. He can help track where the victims are and guide his brothers where to go. And then you've got The Hitchhiker, who's more nimble and agile. He can [slip] through cracks in the walls like the victims can. So they have to work together."

As much as Sumo Digital sees the game as a good opportunity to expand on the movie's lore, by fleshing out aforementioned characters like The Cook and The Hitchhiker, equally as essential is staying authentic to the original film. True, *The*



It's not just the inside of the house survivors must navigate to escape, but those famous wheat-fields, too.



Leatherface will appear sporting his classic look from the 1974 movie. Sumo Digital stay tight-lipped on whether more costumes will eventually be added.

The original Slaughter family home has been faithfully recreated in painstaking detail.

Texas Chain Saw Massacre is a horror series that's seen more prequels, reboots, and reimaginings than most, and although asymmetrical horror games of this style have sought to pay respect to all the incarnations of its franchise, that's not the case here. Rather than running before they can walk, the team at Sumo Nottingham views director Tobe Hooper's movie as its sole inspiration and the game's foundation. Sorry, Jessica Biel fans...

"This game is 100 percent authentically driven from the first film," says senior executive producer Darren Campion. "It's set in that period of a couple of months or years just before, and the exposition gives all these [victims] a story. Why are they here? What are they trying to escape? They've gone to that house for a reason. This gives both ourselves as a dev team, and also players, more purpose and it makes those characters more real. They aren't just random – they've been written with a backstory in mind."

RIGHT STUFF

It doesn't matter how successful or popular your licensed game becomes; time has regularly proven that such projects are always at the mercy of the IP holder. This is something *Texas Chainsaw* publisher Gun Interactive knows all too well. Having helped to kick-start the asymmetrical horror trend back in 2017 when working with developer IllFonic on *Friday the 13th: The Game*, confusion over who owned the rights led to the game losing further support after just three years, despite continued player interest. But lessons have apparently been learnt, and no such issues are expected to affect Sumo Digital's genre take.

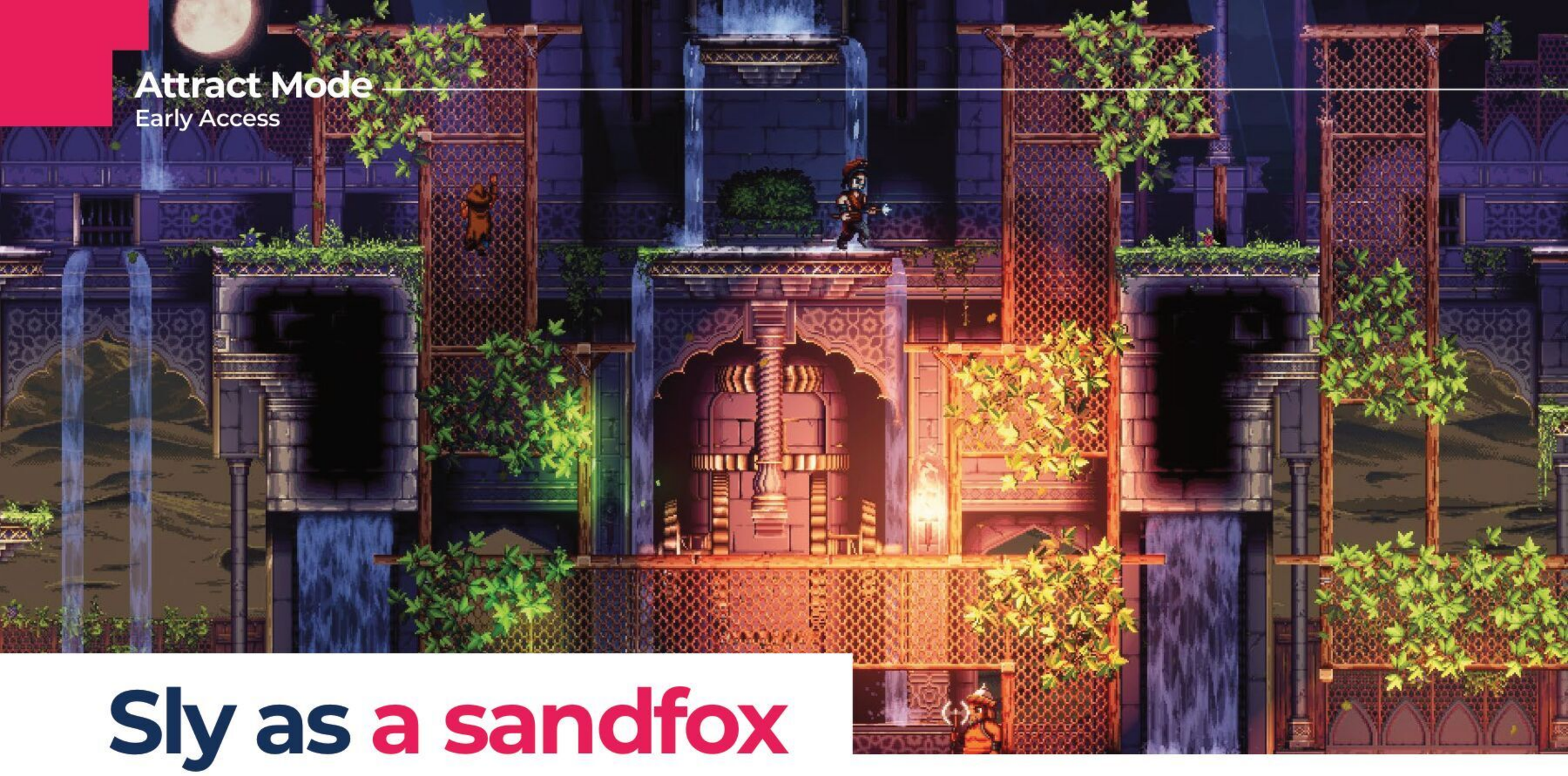
"We don't see any IP issues at all," says Campion. "It was actually the IP holder that went to Gun [Interactive]. Because of that, it's going to be a continued game for the foreseeable future with none of those problems that they had before." Better yet, these negotiations were all agreed on before Sumo Digital was selected as developer. "They came to us and we started talking to them because they wanted experience in the triple-A market. They wanted to see how they could really step up their games and take the experience from a developer like us."

Kim Henkel, the film's screenwriter, is even acting as a producer on the game, reinforcing each party's intent to not only co-operate, but also create something special that *Texas Chain Saw* fans new and old can appreciate.

So far, *The Texas Chain Saw Massacre* has all the makings of a decent multiplayer platform that can keep slasher enthusiasts engaged. The four-versus-three setup helps separate it from other asymmetrical offerings based on a horror IP, and the licence-holder being so deeply involved bodes well for the experience's ability to adapt and evolve, should it prove as popular as Sumo Digital hope. Most notably, though, for the first time ever in this franchise, the inclusion of Leatherface's extended family ensures there's more than just a chainsaw to fear.

Horror house

The main map *The Texas Chain Saw Massacre* will feature at launch is none other than the Slaughter family home. It's multilayered and will feature rooms not previously portrayed in the movie, though, so both sides will need to get familiar with its layout if they hope to win. "You've really got to pay attention to the surroundings," says Kelvin Moore. "It's not about just running around aimlessly, trying to get to a door. There are different ways to escape, different routes to take. You can be a lone wolf, you can act as a team, and that's as a victim and the family."



Sly as a sandfox

Cardboard Sword's Olly Bennett tells us why The Siege and The Sandfox will be the sneakiest indie Metroidvania yet

Info

GAME
Metroidvania

FORMAT
PC / PS4 / XBO Mac / Switch

DEVELOPER
Cardboard Sword

PUBLISHER
PLAION

RELEASE
2023

SOCIAL
@siegeandsandfox

Whereas most 2D Metroidvanias have players digging down in search of an adventure, *The Siege and The Sandfox* sets itself apart by forcing its titular, ill-fated protagonist to set their sights upwards. Cast out into the caverns below after being falsely accused of assassinating the ancient city's king, proving your innocence means clambering up through the labyrinthine depths, evading enemy patrols, and mastering a generous suite of smooth parkour abilities. It's also one of the dustiest genre entries we've seen from the indie scene yet, not only contributing to the game's overall aesthetic, but also reinforcing the developer's intention to prioritise stealth over combat. You are an assassin, after all.

"There's no killing," says Olly Bennett, chief executive officer at Cardboard Sword, in reference to the palace guards you'll regularly be confronted with. "You can knock out some enemies. But if they're encountered by their friends, they'll wake them back up again. There are certain environmental scenes and situations where you can remove threats through these options, and there are also some enemies that are not necessarily fully alive, that can be removed through other sources and are encountered later on in the game's story."

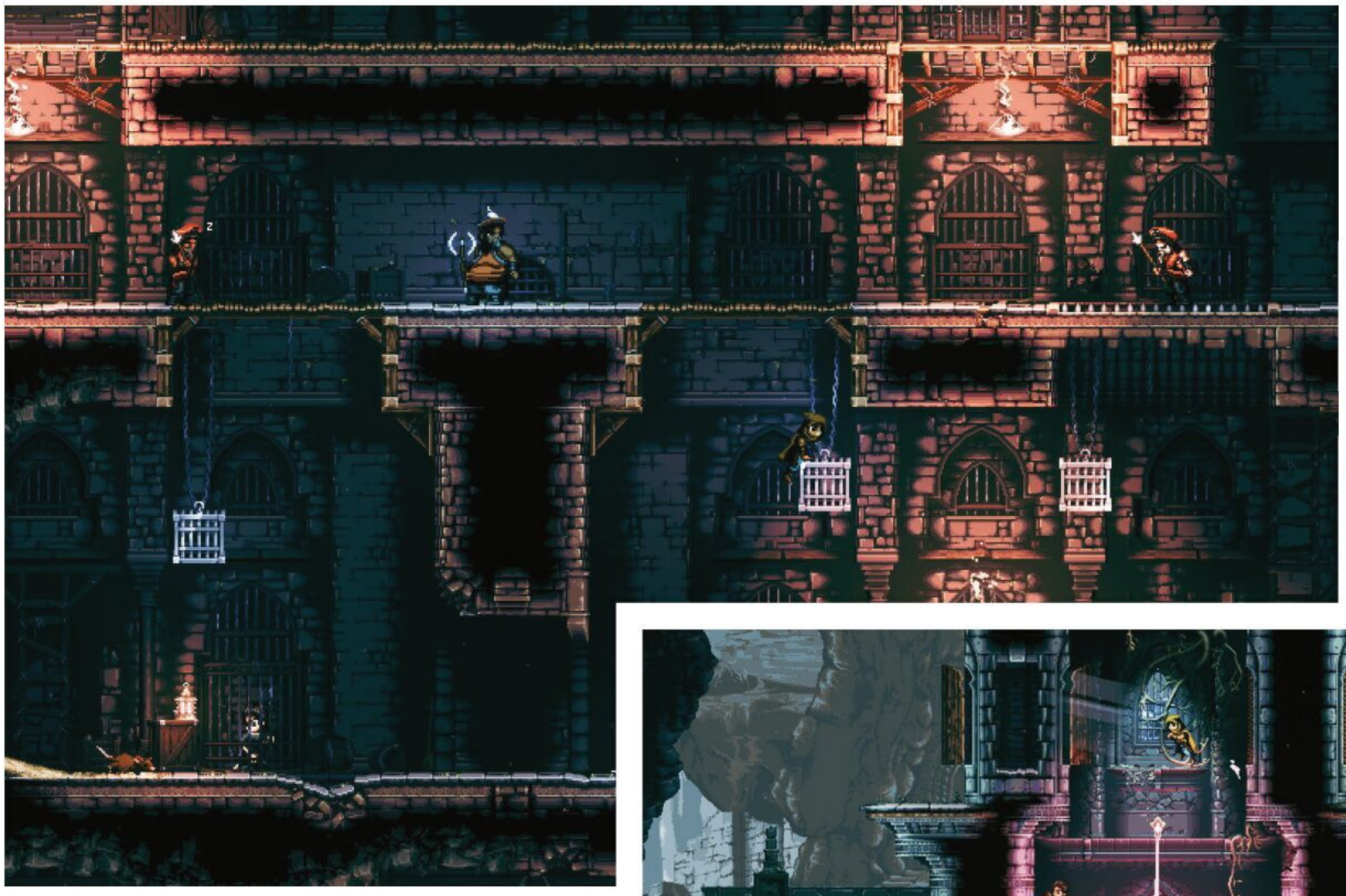
Doing away with combat entirely feels perfectly in keeping with the rules of this fictional world based around princes and paupers, as it encourages players to calculate their decisions in a more subtle manner. The Sandfox isn't equipped with any lethal weapons, for instance, while enemies (supernatural and otherwise) frequently are. You're constantly kept on the back foot as a result, have to use smarter tools like wall running, smoke-bombs, and sliding to outwit your foes. So committed to making this the ultimate stealth Metroidvania experience is Cardboard Sword, the game has been designed to be completable from start to finish with absolutely no kills.

"It's our intention to do what we call 'ghosting'," Bennett explains. "It's literally going through the game without anyone knowing that you were ever there. In 2D it's very difficult to get that because you're so restricted by dimensions. But we want the player to feel like they're this sneaky-sneaky Batman assassin." Getting through scenarios unseen, of course, becomes

▲ It's not just the Sandfox that can wall-run to quickly escape. Later, enemies will use the ability to give chase to you.

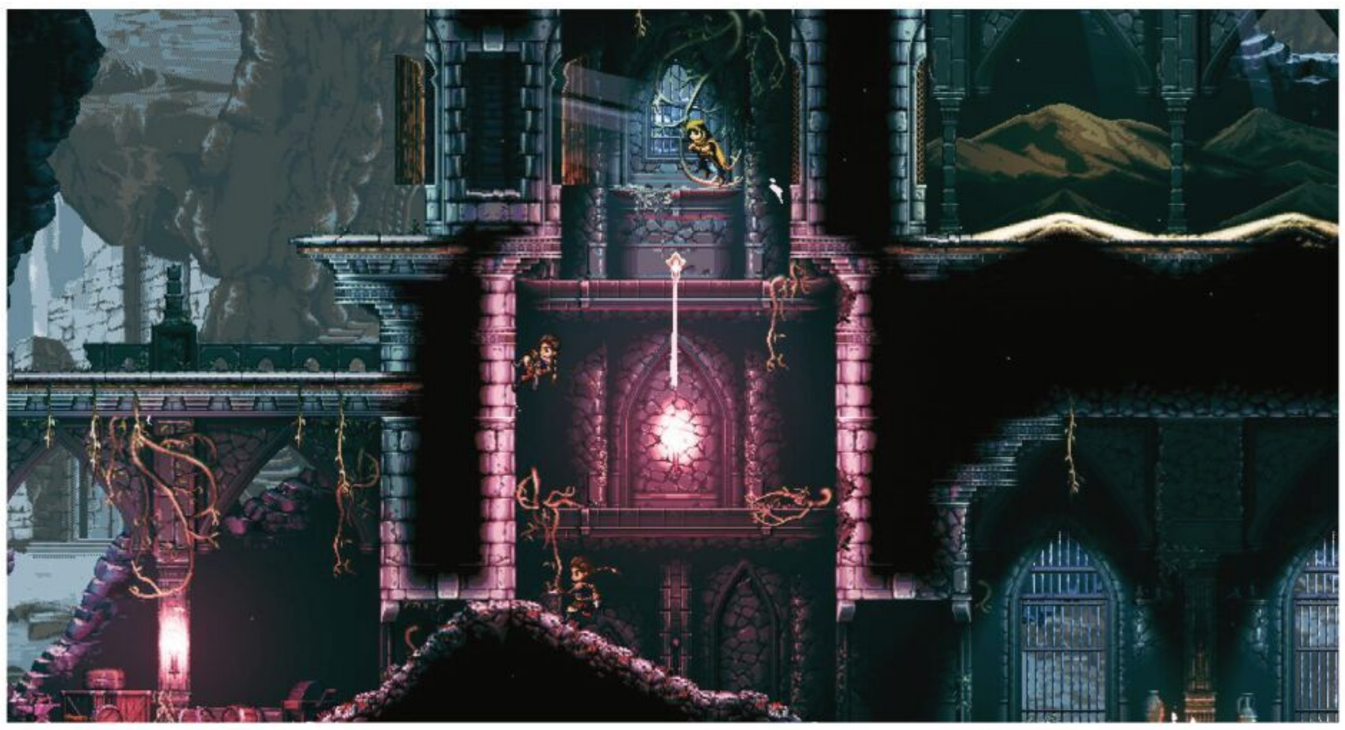
▼ Following a short prologue sequence that sets up the Sandfox's tricky situation, your journey upwards begins after breaking out of prison.





The Siege and The Sandfox doesn't let its 2D aesthetic hold back just how atmospheric and moody its lighting engine can be.

Climbing up to a point where you can catch enemies off-guard always proves useful, if only as a method to sneakily knock them out.



easier the more abilities you gain, yet it's still a challenge reserved only for the most committed. Fortunately, as the environments and areas you explore grow more complex, so will the various 'stealthvania' opportunities given to you.

Pulling you into the world is an attractive 16-bit art style and dimly lit colour palette, both of which recall old-school *Prince of Persia*. It's even more impressive when you consider that this is Cardboard Sword's first-ever pixelated game, having started out as a hobbyist project for one of the studio's recently hired artists. "Before they joined us and started working on this, they were making spaceships in *Elite Dangerous*, but they always wanted to make a pixel art game," Bennett reveals. "We saw the art and said, 'This is stunning'." Lighting proved equally as important to the game's overall vibe, too, again requiring extra effort as the usual automatic solutions weren't providing decent enough results. "We literally hand-painted all of the tiles, so it's been given that extra layer of quality," says Bennett. "It's really rich and useful."

Said detail is hoped to make moving through this world a delight. Because although there's a distinct absence of traditional conflict, *The Siege and The Sandfox* retains a lot of the genre's typical hallmarks – including a certain degree of backtracking. Getting to and traversing newly opened areas need never feel like a chore, though, thanks to the Sandfox's silky smooth moveset. Most of which players will already be well-versed with due to how vital a role they play in avoiding and evading patrolling enemies.

"You'll notice there's a range of movement mechanics and they're quite unorthodox," admits Bennett. "But once you get used to it and become familiar with the game, everything becomes a lot smoother. You start to notice places that you sort of wrote off thinking you couldn't get to before, but then you realise, 'Oh, actually, I could have got there, I just didn't realise I could do that'. So that is part of the Metroidvania loop, backtracking and finding other routes back into locations where you've previously been."

So, the cavernous undercity of *The Siege and The Sandfox* offers more than enough style, substance, and intrigue to get Metroidvania fans excited, despite a sharp emphasis on stealth and the fact you'll be traversing up rather than down. Not to mention how the prospect of completing a no-kill, unspotted "ghosting" run should prove all too tempting for the most hardcore. As Bennett concedes: "The idea of doing a 2D stealth game hasn't been done much." Why not, therefore, try and flesh the concept out fully?

Arabian Nights

The city and story depicted in *The Siege and The Sandfox* might be entirely fictional, but Cardboard Sword still hopes to evoke the look and feel of Middle Eastern folk-tales, primarily through the dust-swept visuals and atmospheric lighting, in addition to the way in which the story is told. "We specifically wanted it to sound [as if] it was being read out by a narrator, like a *One Thousand and One Nights* or an *Arabian Nights*-style story," reveals Bennett. "So we never lock a player in place. Even though the dialogue is going on, players are free to move."



Old mech Donald

Harvesting wheat in a giant robot? Swedish developer FRAME BREAK introduces its twist on the farming sim, Lightyear Frontier

Info

GENRE
Mech farming

FORMAT
PC / XBO / XB X/S

DEVELOPER
FRAME BREAK

PUBLISHER
Amplifier
Game Invest

RELEASE
Spring 2023

SOCIAL
@ltyear_frontier

You could call it *Chekhov's Mech*: if there's a giant robot in a game, you can guarantee that it'll punch or shoot something eventually. Not so in *Lightyear Frontier*, though, where the hulking staple of Japanese anime is well and truly tamed: instead of giant swords or laser rifles, your mech is the farming equivalent of a Swiss Army knife. With you at the helm, it can plant seeds, water them, harvest the resulting crops, and even build other bits of tech and equipment to help your growing farm run more efficiently.

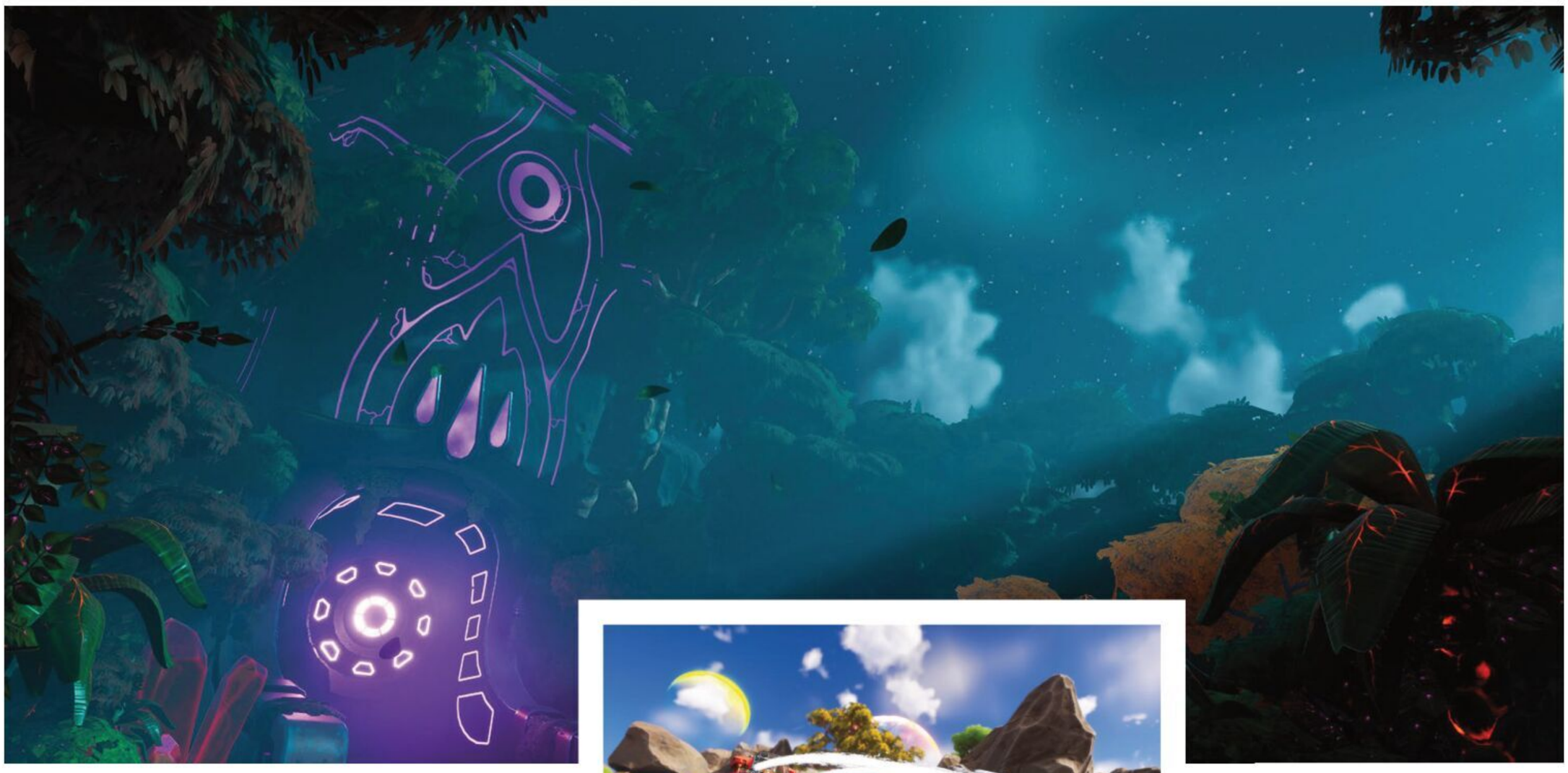
It's the distant future, and you're a pioneer striking out on a lush alien world. As *Lightyear Frontier* begins, there's just you, your shiny red mech (which you can customise, naturally), and your crashed spaceship, which doubles as your sleeping quarters, garage, and research centre. Starting off with a handful of terrestrial seeds, it's up to you to explore the landscape, gather resources, and gradually build up your off-world farm, one raised bed and grain silo at a time. For FRAME BREAK CEO Joakim Hedström, *Lightyear Frontier* fills a yawning gap in the farming sim market: between the light, top-down types like *Stardew Valley* or its ancestor *Harvest Moon*, and the straight-laced realism of, say, *Farming Simulator 22*. "It felt like there's [somewhere] in between where you can have these large, 3D spaces, and not use that grid-based gameplay [of games like *Stardew Valley*]," says Hedström. "We basically decided we wanted to explore the farming genre, so how can we fuse those two worlds to make something interesting?"

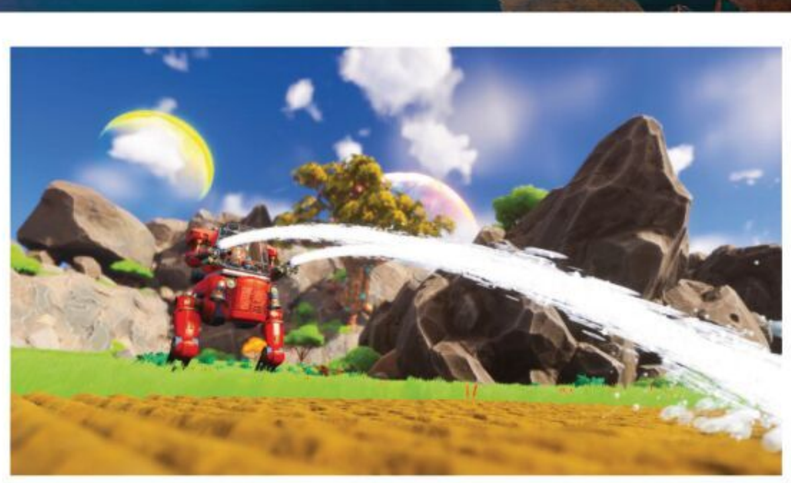
It was then, back in 2020, that Hedström and his small team came up with the mech idea. A few months earlier, they'd made a prototype of an entirely different game that featured robots, but the concept soon withered on the vine. "We put that on ice because it wasn't going to work out," Hedström recalls. "And that's when we thought, 'We really liked the robots, so... what if we put a mech on a farm? What does it do? How does it plant seeds?' Well, obviously it shoots them in the ground. So that gave us the inspiration to make the game."

The mech concept immediately makes sense once you go hands-on. Far from a glorified tractor, it comes with a wealth of tools that you can switch between at the press of a button. Among those we sampled are built-in hoses which you can use to water your crops; a vacuum cleaner-like device



Now and again, a merchant ship will touch down. Here you'll be able to sell crops and resources and buy upgrades and other handy materials.





These mysterious alien structures provide an added reason to explore the planet, and help tell the sci-fi story that underpins the whole game.

The mech's dual hoses greatly speed up the process of watering your crops.

for harvesting and gathering resources; and a drill attachment for destroying rocks and uncovering minerals. When you aren't tending to your farm, there's the game's other pillar to be getting on with: exploration. Out in the open world, it's wise to take advantage of your mech's transforming ability, where its plodding legs can be folded away, turning it into a much faster, tank-like vehicle which can also take to the skies, albeit briefly, just by jabbing a boost button. Faster travel means you'll burn through more fuel, but your reserves can be replenished by extracting precious energy from certain rocks.

Aside from finding more exotic resources than the ones growing on your farm, there's another reason to explore: uncovering more of the game's sci-fi narrative. Orbiting above you is Piper, an artificially intelligent satellite that offers advice early on, before encouraging you to explore the alien ruins strewn across the planet. What secrets do these crumbling structures hold? It's a closely guarded mystery for now, though Hedström points out that the game won't force you to seek out these ruins at every turn. "We don't want it to be stressful or to distract from the farming," he says. "You can explore them whenever – they aren't going anywhere."

It's an ethos that extends to the game as a whole; accidentally trample on your crops, and they'll revert to seeds which can be planted again. Fall off a cliff or bellyflop into a lake, and you won't die horribly – you'll simply respawn somewhere safe with a bit less fuel in your mech's tank. "We keep basing our design decisions on, 'It needs to be relaxing and forgiving'," says Hedström. "So there are small things that say, 'Hey, don't do that', but there's no game over state."

We spent about half an hour playing *Lightyear Frontier*, happily planting crops, harvesting them, selling them for cash, and spending that cash on upgrades for our nascent farm. We trundled across the alien landscape, studying the plant life and collecting unusual seeds. But it's clear there are big things afoot for the game – a four-player co-op mode, for one, and the ability to befriend the local wildlife, take them back to your farm, and cross-breed them to make your own hybrid pets. *Lightyear Frontier* is "a scalable game", Hedström points out, and it's clear that there are all kinds of ways the concept could be extended after its planned launch in 2023.

One thing we definitely won't see, he insists, is mechs waving giant guns about. "We get suggestions of all kinds for the game, but we had to put down some limits," says Hedström. "We had requests for combat, but that's not in our plans. We had an early concept where we tried combat, and we found that it distracts from the farming experience. It creates these stress factors where all you're thinking about is the next battle."

With all the turmoil going on in the real world, maybe we need more relaxing games, we suggest. "There are enough combat games out there," Hedström nods. "We definitely don't need to add to that pile."

Brave New World

The part of the planet we explored was fairly Earth-like, with its expanses of green grass and bodies of clear blue water. But Hedström says new zones will gradually open up as the player progresses. "Later on, we'll be adding more alien areas that up the otherworldliness of the planet," he says. "We wanted something familiar for the player to start with, so they can get their bearings. Then, as they get more experienced, they get to go through these advanced areas." One thing about *Lightyear Frontier*'s planet is worth pointing out: although resources are randomly placed, everything else in the landscape has been crafted and placed by hand.

That was the month that was


03

01




02

01. Green Switch engage

The world may be in the grip of an energy crisis, but Nintendo at least has an eye on a greener, more power-efficient future. Case in point: the revised OLED Switch, released in 2021, uses half as much energy as its predecessor. Where the first-gen Switch used 12 W, the OLED version uses just 6 W – an impressive saving, given the latter's screen is also crisper and brighter than that earlier machine. The info came from Nintendo's second quarter financial results, which also talk about the big N's plans to improve efficiency in everything from manufacturing to the amount of packaging each console uses. All steps in the right direction.

02. Blockchain's comin' home

In May 2022, FIFA announced it was ending its partnership with EA and would be making football games elsewhere. In November, the body's first post-EA games were announced – and great news! They're all blockchain-based. What this means, from an end user's standpoint, is that they're all experiences designed to get you spending real-world cash. There's *Matchday*, where you collect digital cards emblazoned with the images of real-life footballers. There's *AI League*, where the player can't directly control anything but *can* buy and sell players. There's *UplandMe*, which allows you to visit a stadium and – you guessed it – buy virtual items. FIFA's chief business officer, Romy Gai, calls these ventures "hugely exciting". We heartily disagree.

03. Dust-up Elysium

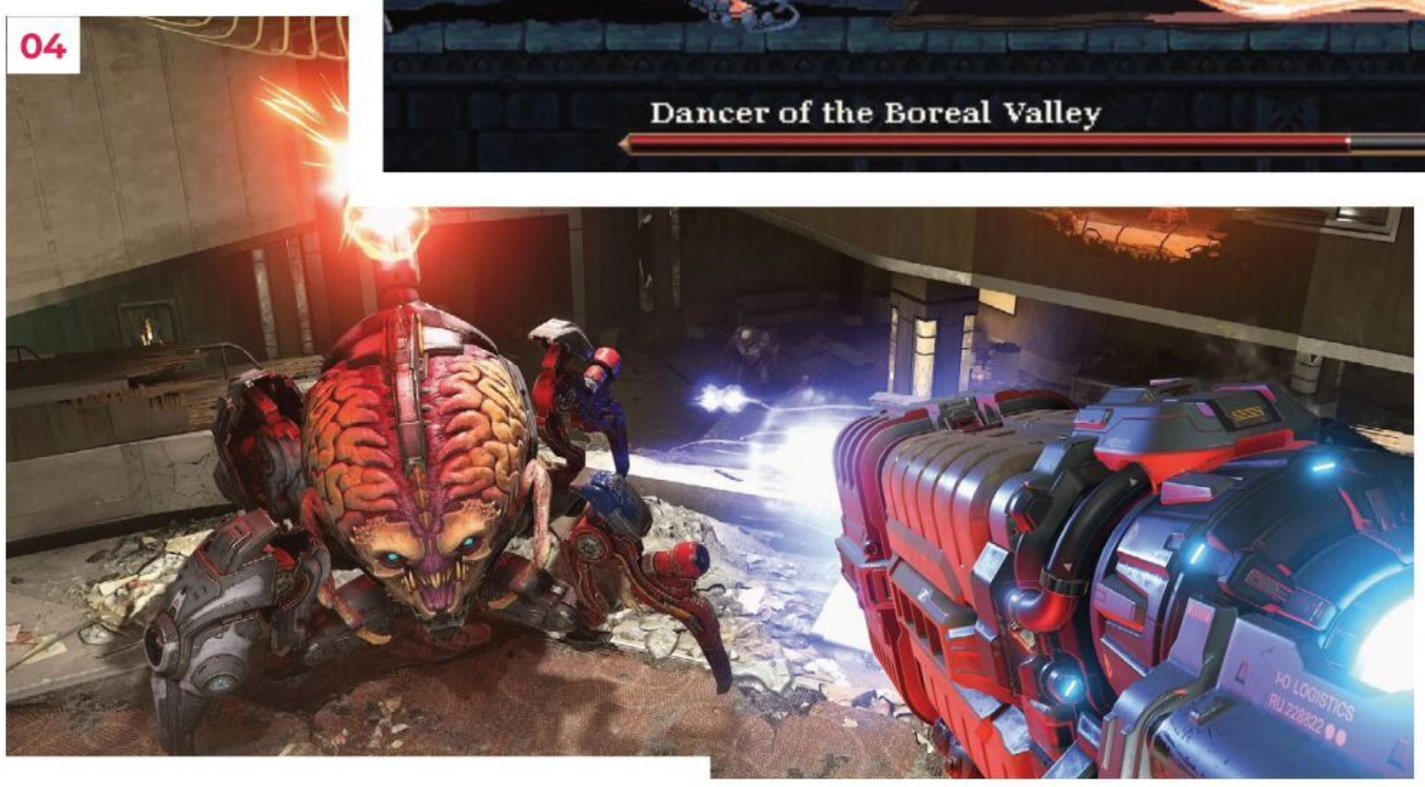
Disco Elysium is among the most acclaimed games of recent years, but all is far from well at its studio, ZA/UM. Signs of trouble surfaced in October when studio founder Martin Luiga revealed that three key personnel – director Robert Kurvitz, art director Aleksander Rostov, and writer Helen Hindpere – had left "involuntarily". The following month, things got even murkier, as an Estonian newspaper alleged that Kurvitz and another big player at the company were guilty of creating a "toxic environment" at ZA/UM and planned to "steal" the *Disco* IP. Then Kurvitz and Rostov published an open letter alleging that the studio had been acquired through fraud. Whatever the truth behind the allegations is, we can confidently make one prediction: *Disco Elysium 2* won't be happening anytime soon.



Dave Bautista wants to do a *Gears of War* film, poses in armour

Stadia dead, Google giving customers refunds for purchases



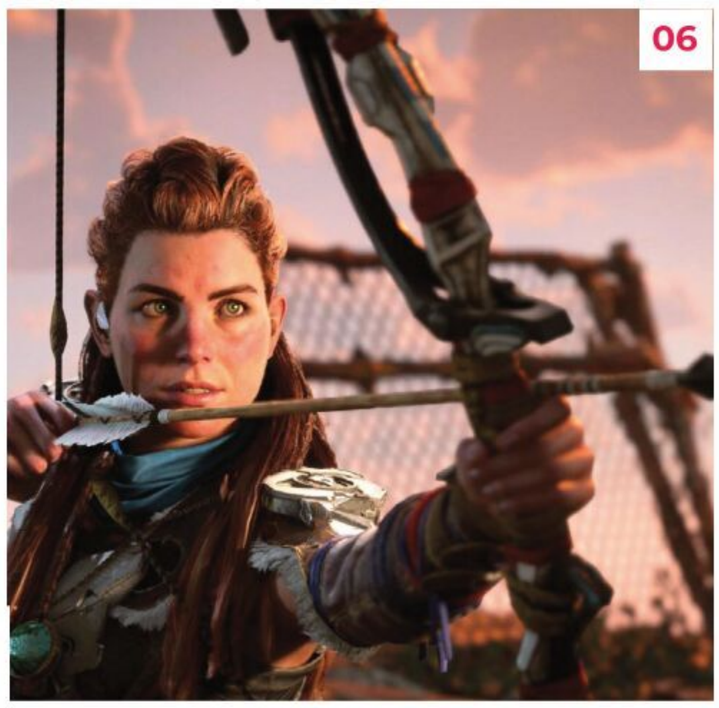


04. DOOM Internal

In an autumn partly characterised by game industry figures airing their frustrations in public, November saw composer Mick Gordon make a lengthy statement about his work for id Software's *DOOM Eternal*. In an exhaustive post on Medium, Gordon wrote about his experience of creating *Eternal*'s music, and refuted an earlier allegation by its director, Marty Stratton, that Gordon was to blame for a delayed and much-maligned soundtrack released in 2020. Gordon described working on the game as a "nightmare" and alleged that he'd been offered a "six-figure sum" to keep quiet about the soundtrack's mishandled release. The full scenario's too lengthy to relate here, but you can read Gordon's statement at **wfmag.cc/internal**.

05. Flat Souls

Two-dimensional demakes of major games are usually the preserve of small-scale indie devs, but the *Dark Souls* series nearly had an official one. The news comes from pixel artist Thomas Feichtmeir, who revealed on Twitter that he'd worked on the visuals for a 2D take on *Dark Souls 3* some six years ago, only for it to be rejected by publisher Bandai Namco. Feichtmeir's tweet was joined by a first glimpse of the defunct project, which showed a stylish pixel art rendition of *Dark Souls 3* boss, Dancer of the Boreal Valley. While we can only imagine what might have been, slivers of its inspiration remain in 2019's *Blasphemous*, a Feichtmeir-illustrated Metroidvania that has a dash of *Dark Souls* grimness to it.



06. Horizonline

Until now, the *Horizon* games have focused on single-player antics, but if recent reports are to be believed, there's an online take on the burgeoning franchise on the way. According to Korean outlet MTN, Sony and NCSoft are partnering up for an MMO spin on the open-world action RPG IP, with the latter recruiting for the project under the working name 'Project H'. NCSoft isn't confirming anything at the time of writing, but the story certainly tallies with Sony's earlier announcement that it wants to launch ten live service games over the next four years. A massively multiplayer *Horizon* could potentially be among them.



Kirby and the Forgotten Land officially biggest-selling Kirby game ever

Animal Crossing: New Horizons **officially Japan's biggest-selling *game* ever**


07


08


09

07. Steady or not

For reasons undisclosed at the time of writing, co-founders Sefton Hill and Jamie Walker have left Rocksteady Games, the studio best-known for the hit *Batman: Arkham* series. The move is particularly significant because Hill and Walker were so hands-on with the games the firm made – Hill worked as director on both those *Arkham* titles as well as the upcoming *Suicide Squad: Kill the Justice League*. Of their departure, the pair wrote in a joint statement that they were ready "to start a new adventure together in games". Rocksteady's *Suicide Squad* was originally due for launch in 2022, but is now scheduled for release in 2023.

08. Hideo Coy-jima

Far from slowing down as he passes 35 years in the games industry, Hideo Kojima appears to be upping his workload, with at least two currently unannounced projects in the pipeline. One's a horror opus rumoured to be called *Overdose*, according to assorted leaks, while another is an exclusive Xbox game that may or may not be a sequel to 2019's *Death Stranding*. Of the latter, Kojima said in a recent interview with The Guardian that "it's almost like a new medium". He added: "If this succeeds, it will turn things around, not just in the game industry, but in the movie industry as well." Is Kojima working on an FMV experience akin to *Her Story* or, er, *Night Trap*? True to form, he's keeping specifics firmly under wraps.

09. Control Deux

Swedish developer Remedy is going to be very busy over the next few years, going by the number of projects it's announced in recent weeks. According to a Remedy press release, there are five games currently in development there, with *Alan Wake 2* being in full production and remakes of the first two *Max Payne* games currently in the offing. The one that really caught our eye, though, is *Control 2*, a sequel to the darkly engrossing 2019 action-adventure. It'll be co-developed and published by 505 Games, and will have a "bigger budget" than its predecessor, according to Remedy's CEO, Tero Virtala.



Ex-Spice Girl Geri Halliwell-Horner to star in *Gran Turismo* movie. Er, yay?

Prince of Persia remake pre-orders cancelled. Game still happening, though, Ubisoft insists







10. Micro$oft

It's no secret that (Nintendo aside) console manufacturers often make a loss on each system they sell. What's less common is for a company to quantify exactly how much they lose, which is something Xbox's Phil Spencer did in early November. Speaking at a Wall Street Journal live event, Spencer revealed that Microsoft loses between $100 and $200 on every Xbox Series S or Series X system it makes. That's a lot of cash, though the wisdom holds that purchasers will later put money back into Microsoft through things like Game Pass subscriptions and extra controllers.

11. Three Marvels

Back in September, EA Motive – the studio behind the upcoming *Dead Space* remake – announced that it was making a video game based on Marvel's Iron Man. That action-adventure isn't the only Marvel-based project in the works at EA, either, as the two titans of entertainment signed a deal announced in early November that will see the publisher put out two further comic book adaptations in the near future. It's not yet clear whether those extra games will be sequels to EA Motive's *Iron Man* or if they'll be based on other Marvel characters. Maybe it's time Squirrel Girl got her own video game? Just a thought.

12. Critical Mass

To mark its annual N7 Day celebrations, BioWare got its fans into a lather with some concept art and cryptic sound clips, all teasing the next entry in the *Mass Effect* franchise. Artwork showed what looked like a half-built Mass Relay orbiting a planet, while cunning fans managed to dig up a panicked message by series regular, Liara T'Soni. We don't yet know much about the fifth main entry in the series, but its director, Mike Gamble, has promised that "many years of fun, adventures, and characters you'll fall in love with are still ahead". Given that it's already more than five years since *Mass Effect: Andromeda*, that sequel really can't come soon enough.

A sad farewell to Kevin Conroy, the voice of Batman in TV, games, film. RIP



No *Callisto Protocol* for Japan, ratings board trouble to blame

GAMING HISTORY with Mr Biffo

Point, click, it's all in the mind



MR BIFFO
Mr Biffo, better known as Paul Rose, was the creator of the legendary Digitiser. Check him out on **wfmag.cc/digitiser**

Take a journey to where the point-and-click adventure began 70 years ago...

Many gamers of a certain vintage will no doubt be familiar with Beam Software's *The Hobbit* – released by Beam's UK publishing outfit, Melbourne House. For many of us, this 1982 adventure was not only our introduction to Middle-earth – not least because a copy of Tolkien's book was shoved in with every game – but also the very concept of adventure games themselves.

Though it began life as a ZX Spectrum title, pretty much every home system ended up with a version of *The Hobbit* eventually. It was, in its own way, as ubiquitous to early eighties gaming as *Jet Set Willy* or playground piracy, ultimately selling a robust million copies.

What made it stand out was how different it felt from most games at the time. Not because it was an adventure game – there were plenty of those already. But where most game worlds were built solely to bend to the presence of the player, the Middle-earth of *The Hobbit* carried on around you regardless. Non-player characters would wander in and out of scenes, or start singing needlessly about gold, even if you did nothing.

This genius approach to a typically static genre was the notion of one Veronika Megler, a University of Melbourne computer science student, who landed a part-time job at Beam to help pay her way through her senior year. She was assigned the task of programming *The Hobbit*, bringing her friend Philip Mitchell along for the unexpected journey.

It wasn't exactly a dream job; no hardcore gamer herself, Megler had found the few earlier adventure games she'd played rather boring, in part because of how lifeless their worlds seemed. But this was something she sought to fix, giving every character in *The Hobbit* their own independence and agency. When left to their own, unpredictable, devices, *The Hobbit*'s non-player cast could even get themselves killed – an unexpected consequence of programming routines that the blood-thirsty Megler saw no reason to change.

This was *The Hobbit*'s main innovation – extremely slow-loading graphics aside – that set it apart in an already crowded text adventure market. Megler now works for Amazon Web Services, and *The Hobbit* remains the only gaming credit to her name.

Will Crowther's *Adventure* (also known as *Colossal Cave Adventure*) had breathed life into the text adventure lungs in 1975, providing inspiration to *Zork*, *Mystery House*, and Warren Robinett's *Adventure* for the Atari 2600. The latter was, by Robinett's own admission, an attempt at a purely graphical version of Crowther's earlier game. Without it, we wouldn't have had the *Zelda* series, it was a key component of the *Ready Player One* book and movie, and even featured the first in-game Easter egg.

Robinett wouldn't be the last games designer to try and reimagine what an adventure game

"As ubiquitous to early eighties gaming as *Jet Set Willy* or playground piracy"







could be, but the next real innovation in the genre came with the advent of the point-and-click. However, before players would be able to point and click, somebody needed to invent something for them to point and click with, otherwise it'd be like inventing the horse-drawn cart before the wheel.

MICKEY-TAKING MICE

Like so much scientific advancement, the mouse was a product of war. The forebear of the computer mouse was the track-ball (then called the roller ball), invented in 1946 by British scientist Ralph Benjamin. It was used as an interface for an analogue radar plotting system, used to predict and calculate the future position of enemy aircraft.

The invention of the first real computer mouse, as we know it, happened over 20 years later in 1967, when engineer and inventor Douglas Carl Engelbart applied for a patent for a wooden casing incorporating two internal metal wheels. In the words of the patent, it was an "X-Y position indicator for a display system".

He coined the nickname "mouse" due to the way the connecting wire looked like a mouse's tail. He also referred to the on-screen cursor as a "bug" – a term which never became widely adopted, and ended up having very different connotations – and the rather more appropriate CAT. Though why didn't they go with "cheese" is anyone's guess.

Engelbart later licensed his invention to Apple for around $40,000, though never received a cent in royalties. Interestingly, Engelbart also foresaw a future in which computing would be collaborative and networked. His views were considered unfashionable at the time, clashing with younger programmers who were suspicious of any kind of centralised computing power.

Around the same time that Engelbart was working on his mouse, a similar project was underway at German radio and TV hardware company AEG-Telefunken. The company had evolved an earlier track-ball device used with the SIG-100 vector graphics terminal.

Alas, unlike Engelbart, AEG failed to get its invention patented.

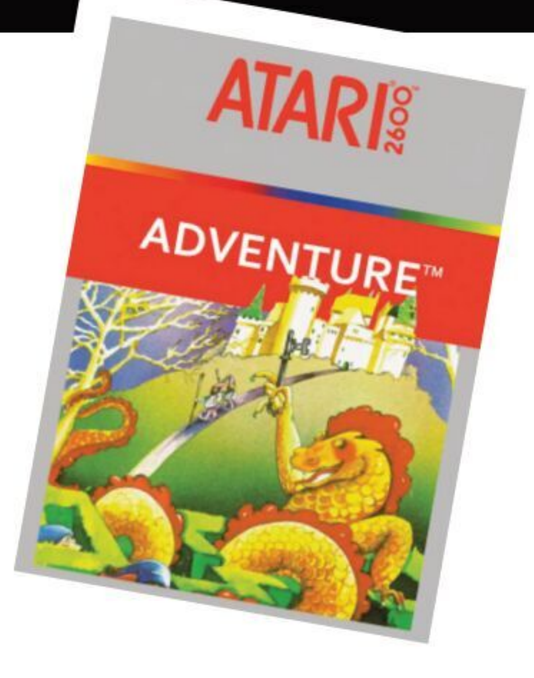
The long-forgotten Xerox Alto, released in 1973, was the first commercially available computer to use a mouse. The system itself may not have reached the ubiquity of the later Mac, but the new style of hardware interface was considered an immediate success.

By 1982, computer mice were becoming more common among high-end systems, and pretty much all of them were made by one company: The Mouse House. The company's founder Jack Hawley – who once described himself, not entirely seriously, as "a great inventor" – had been making computer mice since 1975. The peripheral remained far from widespread, however, costing upwards of $400 – and on more than one occasion, Hawley took a call from a confused buyer looking to purchase live mice.

It was 1984's Macintosh 128K which took mice mainstream. Apple had already released a mouse for its Apple Lisa, but the 128K Mac's success as a computer for desktop publishing made the mouse an essential component. The following year, both the Amiga 1000 and Atari ST were released with mice of their own.

It was on the Macintosh that the first bona fide point-and-click adventure game would be released; Silicon Beach Software's *Enchanted Scepters* (sic) in 1985. Though adhering to the genre's well-trodden fantasy roots as far as story and setting goes, it remained a way off the complexity of *Broken Sword* – or even *Leisure Suit Larry*. Interaction was controlled through a series of drop-down menus to access commands and a player's inventory.

The same year, ICOM's *Déjà Vu* – a tongue-in-cheeky detective noir tale – moved the point-and-click genre further forward still, using a drag-and-drop interface, which allowed for interaction with the graphics window. This was the dawn of the point-and-click as we know it.



Already seen?

Déjà Vu may have been released in 1985, but so well does its gameplay and story hold up that it has become one of the most adapted games ever. To date, it has been ported to the Atari ST, Amiga, Commodore 64, PC, Game Boy Color, PC-9800, Pocket PC, NES, PS4, and Xbox One.

incoming

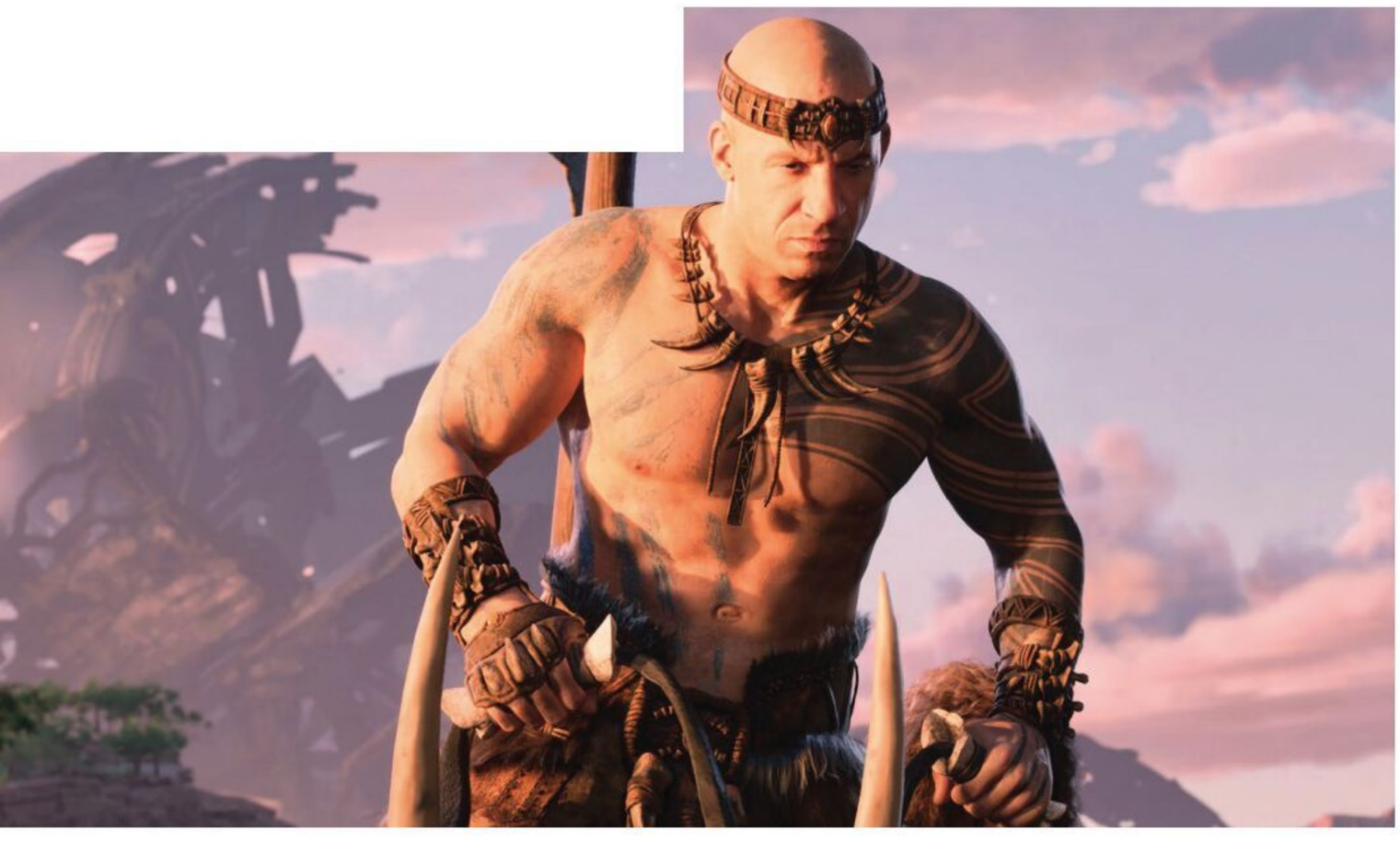


Stranded: Alien Dawn

Made by Haemimont Games, this one's a survival strategy sim set on a lush yet deadly alien world. The tasks you'd expect to find in the genre can be found here – farming, hunting, managing resources, expanding bases, and researching new tech – but it's the detail on the planet itself that has us intrigued. Changing weather patterns, and great plains where buffalo-like beasts roam in packs all hint at a living place that existed long before we came along to tinker with it. More on *Stranded: Alien Dawn* in a future edition.

ARK 2

It seemed like an eternity since Studio Wildcard announced its survival sandbox sequel, but then we looked it up and discovered it was two years ago – not that long, really, in major game development terms. The good news is that the successor to *Survival Evolved* is due out in 2023, which means we'll soon get to see Vin Diesel – the franchise's growly new star – punch a dinosaur squarely in the face.





Cocoon

No, not the 1985 film starring Don Ameche (what do you mean you've never seen it?), but rather the next game from Jeppe Carlsen, the gameplay designer behind *Limbo* and *Inside*. It's a third-person puzzler where you move between worlds with the help of mysterious orbs. The premise looks enthralling and mind-warping in equal measure.



Wild Hearts

Developed by Omega Force and published by EA, *Wild Hearts* is set in a fantasy world where you're a hunter of monsters – a concept that might recall a similar series made by Capcom, but we're sure it's just a coincidence. Familiarity aside, Wild Hearts has a solid pedigree behind it – Omega Force previously brought us the *Dynasty Warriors* series, *Warriors Orochi*, *Hyrule Warriors*, and lots of other things with the word 'Warriors' in the title. In short, Omega Force knows a thing or two about making hack-and-slash games, so we should be in for some of the most solid monster-hunting we'll find outside, well, the *Monster Hunter* franchise. The finished game's out in February 2023.



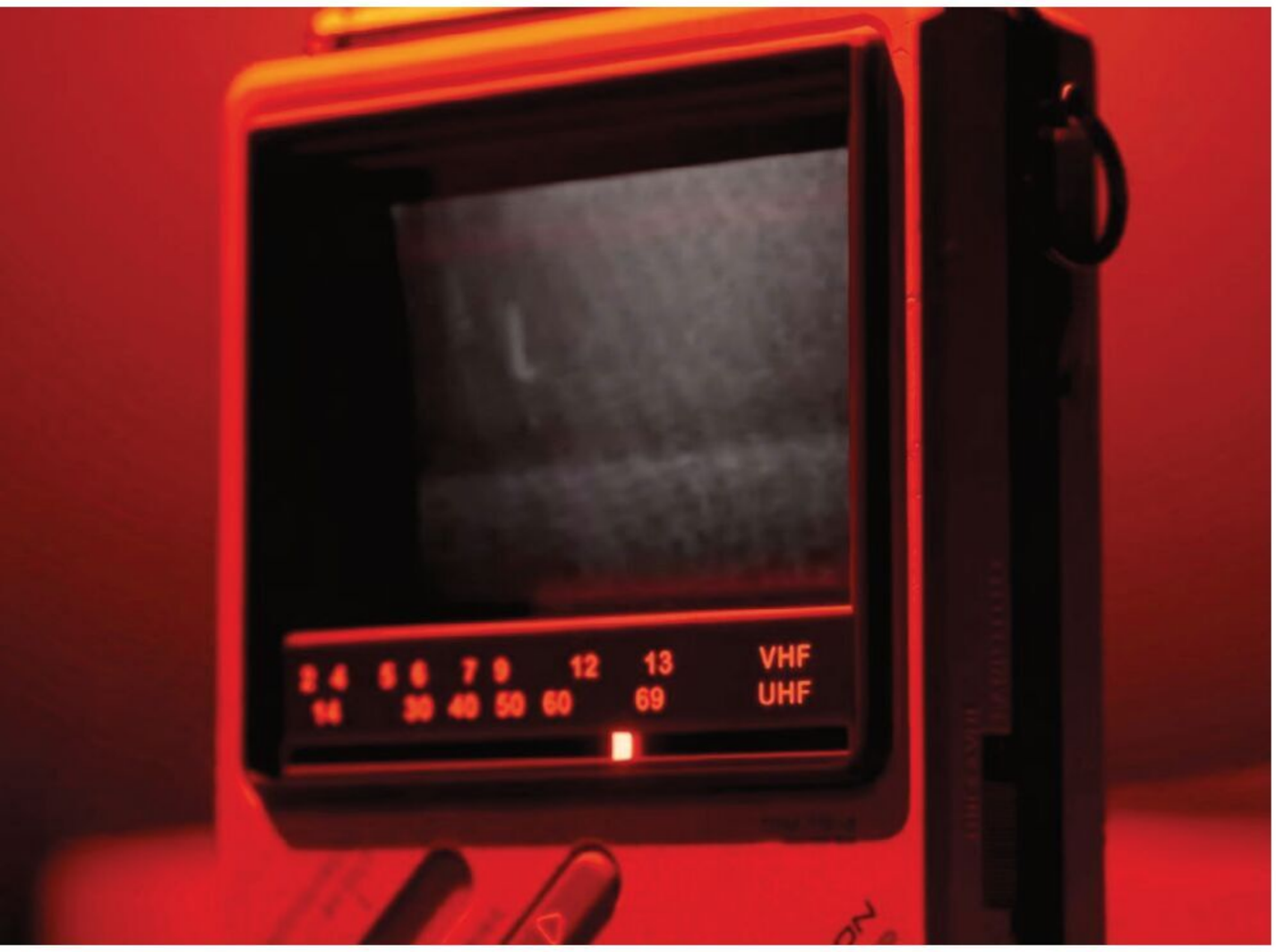
Resident Evil 4 Remake

While there's an argument that it's difficult to improve on a classic, the word from those lucky enough to get hands-on time with the upcoming, refurbished *Resident Evil 4* is that it's still the terrifying Spanish-set experience we all remember, but with some welcome creature comforts like destructible environments and revamped attack skills. Speaking of which, fear not – Leon still has the same floppy fringe, and the same line in likeably awkward one-liners. Altogether now: "Where's everyone going? Bingo?"



Wo Long: Fallen Dynasty

It doesn't look as though we'll be getting a new *Ninja Gaiden* entry anytime soon, but Team Ninja's keeping its combat skills sharp with this action-RPG in the vein of its *Nioh* titles; it's a dark historical fantasy that thrives on precisely timed attacks, huge area bosses, and copious lashings of gore.



Silent Hill: Townfall

Konami got all excited and announced a slew of upcoming *Silent Hill* titles in late October (and a new movie). Among them there's Bloober Team's remake of *Silent Hill 2*, and *Silent Hill: Ascension*, a cross-platform "mix of streaming show and video game" where viewers get to decide what happens next. For us, the most intriguing announcement of the lot had to be *Silent Hill: Townfall*, which has been secretly in development at Scottish studio No Code for some time now (for more on them, check out our profile in issue 67). Little is known about *Townfall*'s specifics as yet, but its reveal trailer's lingering shot of an eighties-looking portable TV (clearly modelled on the Game Boy) implies that it'll explore the same fascination with retro hardware the studio previously displayed in the absolutely corking *Stories Untold* anthology. Seriously, if you haven't played any of those yet, clear a few hours out of your schedule, turn the lights off, and give *The House Abandon* (the anthology's first chapter) a play. It's scary stuff, and should prepare you for the delights of *Silent Hill: Townfall*.

Exploring the towns of Monkey Island

Towns and settlements have long been key to the Monkey Island series' storytelling. We talk to some of its key artists and designers to find out more

AUTHOR
KONSTANTINOS DIMOPOULOS

The *Monkey Island* games have spanned over three decades; their stories, characters, and visuals expanded on by five distinct development teams. Since director Ron Gilbert's 1990 original, the series has defined adventure game design, and, despite its piratical theme, has contained some of the medium's most striking towns and cities. The *Monkey Island* games know how to use their locations to tell stories, add character, and provide a basis for puzzles. They know how to imply a world that expands far beyond the screen.

Towns are pivotal to the *Monkey Island* series' storytelling. Indeed, Gilbert argues that, as a designer, it "makes sense to get people into a town as soon as possible, because you're setting up the goals of the game through dialogue with people, as opposed to stuff in the environment". Meanwhile, *Return to Monkey Island* art director Rex Crowle points out that "cities are great because they give players a flow and contrast that they understand. They go from exterior to interior a lot," while keeping those places connected to each other.

Here, then, is a selection of the *Monkey Island* series' most memorable settlements, with commentary from their creators – and a healthy dose of spoilers...

THE SECRET OF MONKEY ISLAND (1990)

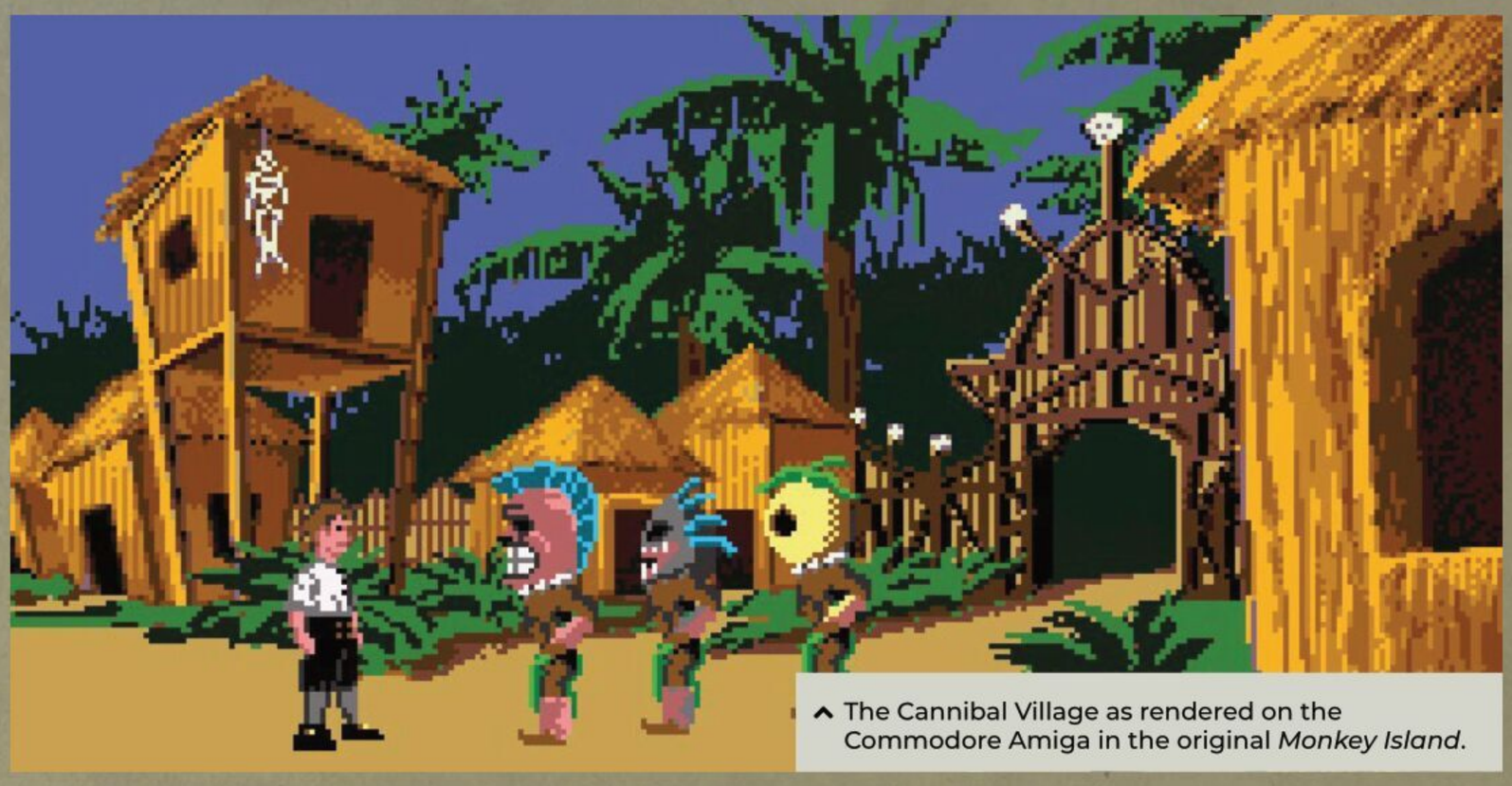
The Secret of Monkey Island starts right outside the town of Mêlée Island, and quickly introduces players to a fantasy world of voodoo, monkeys, pirates, undead, and undead pirates – all clustered in and around Mêlée Town. It's a fully realised place, given life through the EGA pixel art of Mark Ferrari. The town is "rendered during twilight and at night, because the strongest part of the EGA palette is its blues", Ferrari explains. With four different shades of blue, and lots of dithering, Mêlée looks wonderfully atmospheric.

The cartoony architecture of buildings that narrow at the bottom was also born of a technical necessity, Ferrari explains. "Ron Gilbert loved inventive camera angles and weird perspectives, but we couldn't make multiple versions of animations. Buildings were carefully distorted to *feel* in forced perspective without requiring actual shifts in line tilt as the background scrolled." On the architectural style itself, Gilbert adds that the brief given to Ferrari was to replicate the style and feeling of the beginning of Disney's *Pirates of the Caribbean* ride, itself modelled after the Louisiana bayou.

Entering Mêlée Town for the first time, protagonist Guybrush Threepwood walks down a coastal cliff and past the harbour to visit the SCUMM Bar. There, the Pirate Leaders tell Guybrush how to become a pirate. Players will soon find out about governor and eventual love interest Elaine Marley, visit the church, the docks, the prison, and a handy hardware store. They'll steal from the governor's mansion, and explore its lively environs to discover a circus and a voodoo establishment, as well as Stan's Previously Owned Vessels.

The town itself is effectively linear. Past the harbour lie two more scrolling screens depicting the walled core with its brightly lit windows. The settlement is bookended by the lookout point, and the governor's mansion, safely situated inland. To maintain the necessary illusion of constant activity, the lights of Mêlée Town's windows go periodically on and off, and non-interactable characters walk around using the town's many doors.

As for the titular *Monkey Island*, its giant monkey head and fabled secret aside, it's home to the game's other settlement, the colourful Cannibal Village: a gruesome collection of huts constructed from wood, straws, and skulls. It's inhabited by a tribe of cannibals who dress in fruity masks and avoid red meat. The village was another semi-realistic addition that fitted and enriched the game's consistent world. "This world has rules," Ferrari says, "and those rules are consistent enough that the world seems believable in itself."



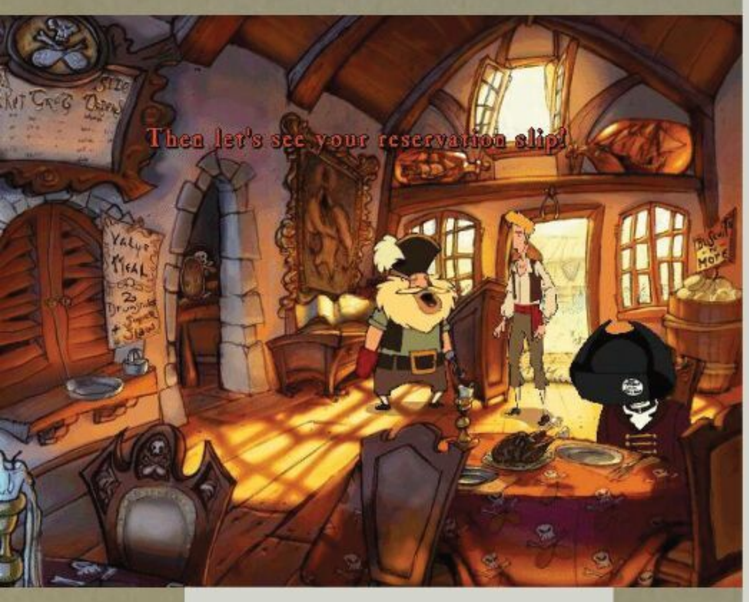
The Cannibal Village as rendered on the Commodore Amiga in the original *Monkey Island*.

PUERTO POLLO UNREALISED

Budget allowing, Bill Tiller "would have added more people walking around, and more ships on the docks and in the harbour, to make Puerto Pollo feel more populated." Also, he "would have liked to have added more hues to the buildings, but had to limit the variety of hues due to having a restricted palette of only 240 colours". He would have liked to add moving clouds, seagulls, swaying trees, and undulating reflections on the water, too, as well as more smoke coming off the battle-damaged fort. Oh, and more monkeys, naturally.







With a logo reminiscent of the old KFC one, Blondbeard's Chicken Shop is famous throughout Puerto Pollo for its deep-fried fun.

MONKEY ISLAND 2: LECHUCK'S REVENGE (1991)

Despite launching only a year after the original, *Monkey Island 2: LeChuck's Revenge* is probably the richest and deepest *Monkey Island* to date, and features three major towns on three islands, while also allowing players a brief, surreal visit to a Mêlée Town alley. Phatt City, with its picturesque harbour and medieval-style stone buildings, feels like an almost traditional port town with its library, jail, corrupt governor, and criminal activity. The much simpler, French-influenced Booty Island Town, on the other hand, acts mostly as a way to group together a few shops (including Stan's Previously Owned Coffins).

Most impressive of all, however, is the town of Woodtick on Scabb Island, which once served as a quarantine station for those with skin diseases. The town is a complex web of piers, jetties, and platforms, and was built by salvaging and combining wrecked and occasionally still-floating ships. It also houses Wally's Cartographer's Hut, Woody the Woodsmith's Woodtick Woodshop, The Bloody Lip Bar and Grill, and the Swamp Rot Inn. Mad Marty's stranded laundry ship, meanwhile, provides clean clothes and acts as a landmark of sorts.

"A lot of the original inspiration came from the Peter Pan movie *Hook*, which Steven Spielberg had done," says Gilbert. "That was either happening while the game was being made or had just come out, and there was a town made up of a bunch of old abandoned ships in it."

THE CURSE OF MONKEY ISLAND (1997)

The Curse of Monkey Island, the first *Monkey Island* game following Gilbert's departure from LucasArts, surpassed expectations and quickly became a classic. Featuring higher resolution, cartoon graphics, and full voice acting, it featured one of the series' most ambitious towns: Puerto Pollo, the capital of Plunder Island.

Lead artist Bill Tiller reveals that Plunder Island was partially inspired by Martinique – his favourite island from the Caribbean cruises his grandparents took him on. "Martinique is hilly, lush, has several dormant volcanoes, a small harbour, and a hillside town," he says. "It was to me the quintessential Caribbean island. Take a look at Puerto Pollo, and then photos of Martinique and Fort-de-France, and you should be able to see the similarities."

Puerto Pollo's fort, meanwhile, was roughly modelled on the one from *Pirates of the Caribbean*.

The game opens with a battle between said fort and LeChuck's pirate ship. It was a crucial scene for setting the tone, and, as co-project leader Larry Ahern notes, by having a large fort on the island, "it felt like there should be more things, more places for the characters to visit". The Barbery Coast barbershop was one of the first such places to be added. Ahern ran into the Barbery Coast during his research, and immediately thought it sounded like a barbershop. "In the US, if you're opening a barbershop, the name of the place has to be a bad hair-related pun," he explains.

As Ahern says, however, you couldn't just have a fort and a barbershop. An established town would be needed to support them, and the team started building on that.

"A lot of the design structure came out of the puzzles and scenarios we wanted to have," he recalls. The town overlooks a tropical bay, is home to most of the businesses on the island, and is dominated by an odd clock tower in its main square. Why odd? As Tiller explains, the "clock



The governmental mansion of Mêlée as seen in *Escape From Monkey Island*.

tower was combined with the theatre to save space", meaning that a really loud bell rang every hour to annoy actors and disrupt any performances.

The theatre was the answer to the question, "What are some funny things we could have pirates do?", according to Ahern. "What civilised things could be trying to establish a foothold, and then fail miserably as the pirates aren't really interested?" The theatre owner wants to do Shakespeare, but is forced to call his vaudeville medley 'Spear' in the hope that it suggests violence. As for the Brimstone Beach Country Club and Smorgy, a part of the Leisure Lubber's Planned Community for Retired Pirates, it is, Ahern explains, the town's exclusive enclave; a country club for "wealthy pirates, with its snobby, preppy cabaña boy".

Tiller's love of history made him intent on making the architecture accurate. "In the myriad books I read about the Caribbean," he says, "it struck me how often islands changed hands between the natives, the British, the Spanish, the French, and the Dutch. The buildings in Puerto Pollo were designed to reflect that."

To this end, the quay is based on a London warehouse and crane, the lemonade stand building is Italian, the watermill Dutch, the barbershop Spanish, and the theatre a mix of a Maltese building and a tower from Disney World. "The rest was kind of made up, though I used red roof tiles that are typically seen in the Mediterranean," Tiller adds. *The Little Mermaid* movie provided the idea for the waterfall and the bridge across it.

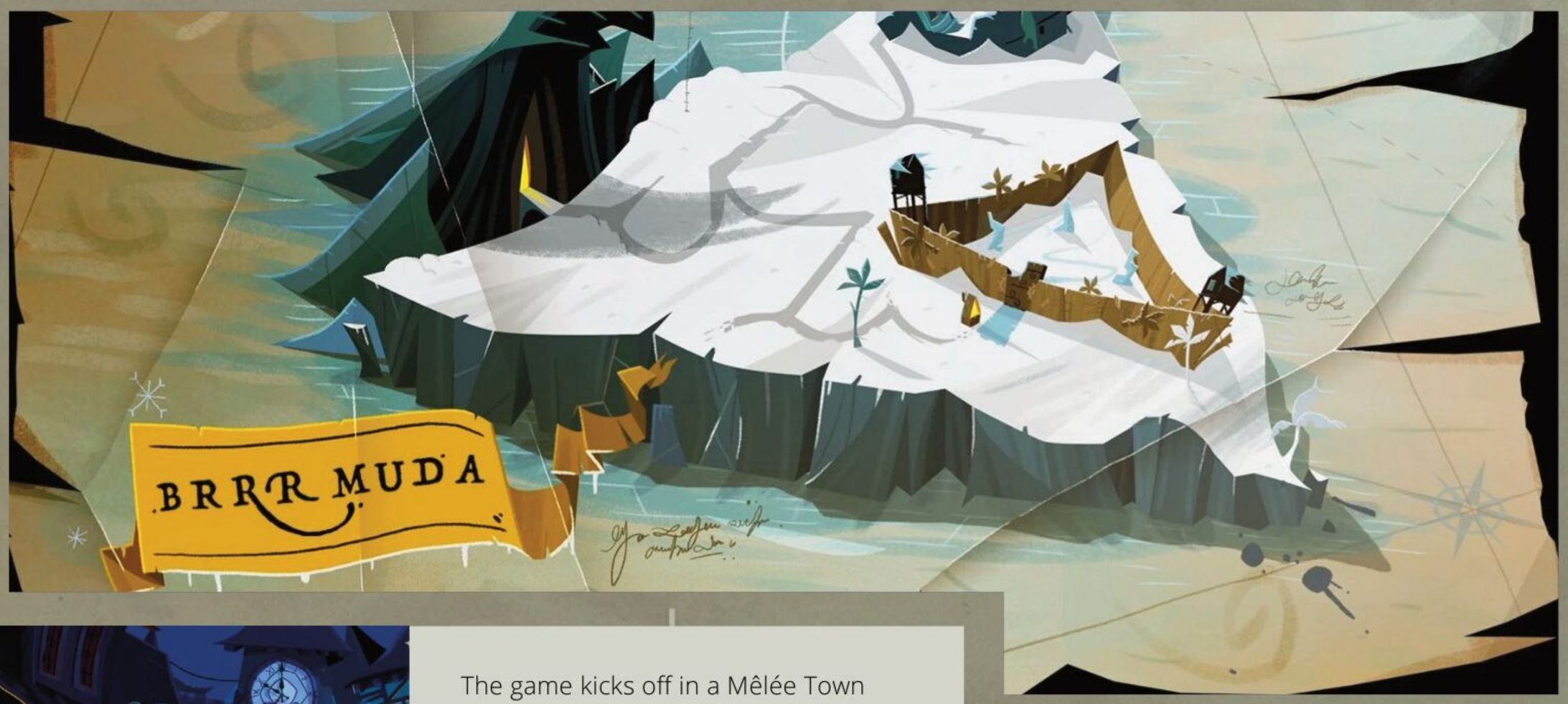
Finally, Ahern reveals that the Puerto Pollo name came out of the time he and co-designer Jonathan Ackley visited Hawaii. "All the chicken coops were busted up in a hurricane, and the chickens got loose. Ten years later, there were just feral chickens all over the island. We thought this was the funniest thing." Hence the town was called Puerto Pollo, or Port Chicken in Spanish. Its sister city was Vacaville – Cow Town.

ESCAPE FROM MONKEY ISLAND (2000)

Taking the series into 3D, *Escape from Monkey Island* also took care to introduce several new islands, and revisit Mêlée, albeit in a slightly tweaked form. Sean Clark, who co-wrote and co-designed the game, explains: "In general, we thought it would be a funny, if not subtle, twist for the world to have become more fake-pirate than Guybrush was in the earlier games. He comes back from his long honeymoon basically the same, but now he's more of a real pirate than most of the characters. The architecture and design of the islands largely reflect that, with the contrast of places like Knuttin Atoll, which is the refuge for real pirates who got sick of the gentrification. It was the contrast to the new world and an anchor point for the piratey past."

The harbour of Phatt City in *Monkey Island 2* is home to the town library, as well as being a popular fishing spot.







▲ The new Mêlée Town in *Return to Monkey Island* has evolved, but retains the colours and atmosphere of the original.

The game kicks off in a Mêlée Town that loosely retains its original geography. Elaine's declared legally dead and her mansion is being demolished, and the SCUMM Bar has become the Lua Bar in a clever nod to the change of scripting languages used during development. Lucre Town on Lucre Island, on the other hand, was brand-new. It was designed to feel like a Caribbean commercial centre and thriving business area, explains Clark. "We wanted it to feel well-manicured and inviting. This is where all the ill-gotten pirate booty got laundered, and the banks, lawyers, etc. became a thriving society. While it looks bright, shiny, and happy, to Mike [Stemmle, co-director] and I, it was more of a cynical statement about 'professional pirates'. We used images from tropical seaports and a lot of organic shapes and brighter colours. The idea wasn't necessarily that it was an amazing paradise, but it wanted to look like one."

In a similar spirit, Jambalaya Island was reserved for tourists, with its Planet Threepwood and Stan's Time Share Emporium. It's also a place that looks more deliberately planned. There are "rectangular buildings squared against each other, and thematic pirate decor everywhere," Clark says. "Even the overview of the map makes the town layout look a bit like a ship. We thought of this island like a roadside attraction complete with all the things a tourist could do and spend money on, with the pirate theme being what the businesses use to lure customers."

TALES OF MONKEY ISLAND (2009)

Designed by Mike Stemmle, directed by Dave Grossman, and developed at Telltale Games by a team including many LucasArts alumni, the episodic *Tales of Monkey Island* brought the series back to its initial, darker themes. Satire was toned down, and its voodoo vibes were intensified. As is customary, it opened up in a (mostly dispersed) town on Flotsam Island, which remains an important location throughout the episodes, and is effectively the game's only major settlement. The minimal, beautiful Merfolk, a small town rising out of the sea inhabited by, unsurprisingly, merfolk, is the only other notable settlement on the Gulf of Melange.

On Flotsam Island, players visit Stan's Courtroom Souvenir Emporium, see the town docks, get tried in the Courthouse, and have a drink at Club 41. Blood Island Volcano shots, Phatt Island Phuzzy Nostril, and, of course, grog are served. And then there's the offices of Flotsam Keelhauler Gazette, home of quality pirate journalism.

RETURN TO MONKEY ISLAND (2022)

The latest entry in the series, *Return to Monkey Island* saw Ron Gilbert return as director, while Dave Grossman served as co-designer and co-writer. "For this game," Gilbert says, "we wanted to start you off



in Mêlée just because the first game started there, and the story is kind of about Guybrush going back to unfinished business. It made sense to start there."

Grossman adds that the plot is about "starting an expedition, so we figured going to Mêlée and talking to the pirate leaders is how pirates do this".

As in real life, time has also passed in the *Monkey Island* universe. Mêlée Town has once again changed, and nowadays even the Voodoo Lady has to compete with the new-fangled Dark Magic. Stan's in jail and several shops seem to have been driven out of business, while the church where LeChuck almost married Elaine has been boarded up. As Grossman notes, "the place is in trouble. They're having economic issues".

It's all intended to be "symbolic of trying to return to this nostalgic polished version of your past and finding that the reality is not quite so sparkling as you remember it", Grossman says. However, new things have also appeared, including a fish-shop, a locksmith (opposite the jail, rather appropriately), and even a museum chronicling the older games.

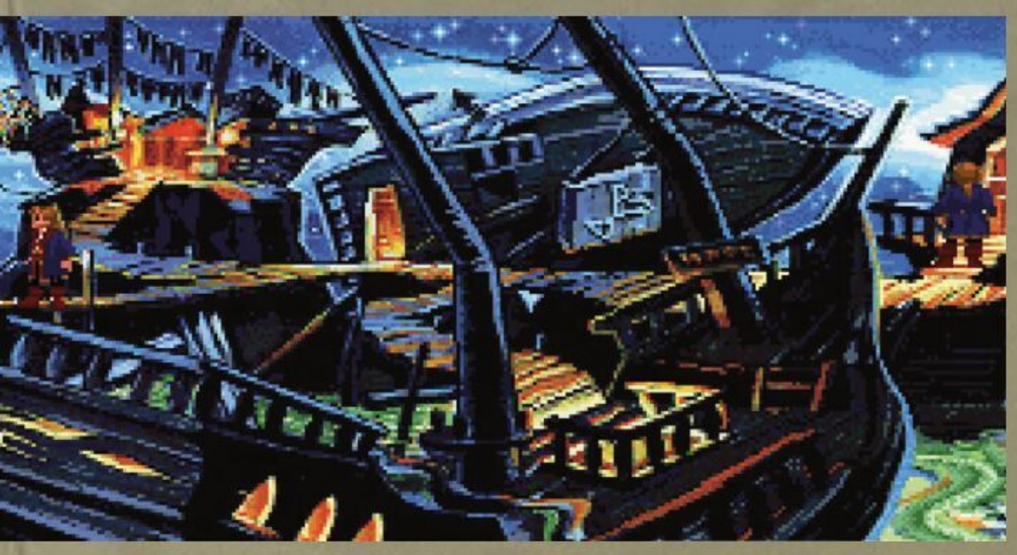
Uniquely, the town dramatically changes as the game progresses, following a magical earthquake Guybrush causes. The SCUMM Bar collapses, the Voodoo Shop suffers extensive damage, and debris litters the streets. Changes within an adventure game's timeframe are a rare sight. Crowle explains that this is "because [adventure] backgrounds are giant paintings, and if you change them, you need another giant painting". Lead programmer David Fox explains that two different techniques were used to achieve these changes: "The one we used in most places, like Low Street, the Dock, and the Shipyard, was to have additional large objects we could turn on or off. They were restricted to only portions of the screen. In the Voodoo Shop, however, we just created a new room, and I implemented it." Apparently, a "standard question during the daily art stand-up meetings on environments was: 'Does this have to have earthquake damage in it too?'," says Grossman.

The game also introduces several new islands. There's Scurvy Island, with its lime groves, the aptly named Terror Island, and the minuscule Barebones Island. The only new significant settlement, however, is on Brrr Muda. It's a tiny place with a courthouse and a town hall being the only visitable locations. The rest of this frozen island includes an ice quarry and an equally chilly castle. Of the island, Gilbert says: "We wanted to send Guybrush to a place that was very different from the normal Caribbean type of places." Brrr Muda is snowed in, and a far cry from the rest of the sunny, lush game world. Besides, "the joke of the 19th parallel and having this northern Caribbean that is all snowy was a funny thing to riff on", Gilbert adds, before explaining that "In my mind, it was modelled after very northern towns, like little towns in Alaska which tend to be very small, and snowed-in".

Crowle confirms the Nordic inspirations of the local architecture, but notes that the "twist we had was that Ron and Dave had specified that the island would still have palm trees on it. We had to think: if they're building this settlement on the island then they're going to have to use the palm trees. So you'll see a lot of the wooden structures, like the perimeter wall of the jail is actually made up of palm trees. We figured that this would make the architecture more interesting".

THANK YOU!

A huge thank you to the amazing people who agreed to be interviewed, and shared their memories and insights for this article. So, respect to: Ron Gilbert, Dave Grossman, David Fox, Rex Crowle, Mark Ferrari, Larry Ahern, Bill Tiller, and Sean Clark.



Some simple shops on the coast of Flotsam island in *Tales of Monkey Island*.

Monkey Island 2's Woodtick in all its 256-colour VGA glory; one of the most beautiful and memorable 2D virtual cities in gaming.

GAME
Solium Infernum

ARTIST
League of Geeks

RELEASE
2023

WEBSITE
soliuminfernum.com

Much like the original, the new *Solium Infernum* has been designed to fit into players' busy lives. Gameplay can be broken up into 5- to 15-minute bursts over days or weeks.

Solium Infernum allows you to play as one of eight main Archfiends. And if Astaroth, Belial, and Lilith's bestial designs are anything to go by, all are sure to be intimidating.



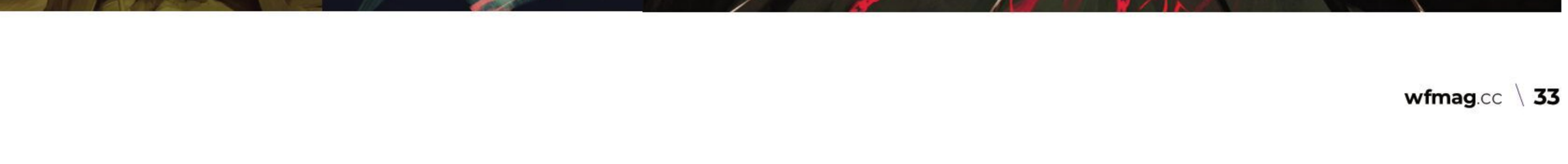
Solium Infernum

Nobody's more excited about the prospect of reimagining *Solium Infernum* – a cult classic PC grand strategy game from 2009 inspired by poet John Milton's epic vision of Hell – than Trent Kusters. Co-founder and director at League of Geeks, he demonstrates an early build to us, positively beaming about all the demonic possibilities available when vying for the infernal throne. The man (appropriately) has fire in his eyes. And looking at the significant step up in scope and art direction here compared to the quaint original, it's easy to see why.

"It's essentially a game of politics, treachery, and Machiavellian antics," explains Kusters. "The premise is that Lucifer has disappeared. No one knows where he's gone or whether the Dark Prince is coming back, and it's in that power vacuum that the Archfiends all conspire and plot." As a fallen Archfiend yourself, securing victory means fending off your rivals and taking decisive action to capture Pandemonium, Hell's capital city. "You're dealing with these folks through a robust suite of diplomatic actions," says Kusters. "It's much deeper in that sense than, say, a *Civilization*."

League of Geeks interprets this hellish story of scheming using over 150 individual dark paintings and a deep colour palette of reds, blacks, and oranges, making the smallest of choices in *Solium Infernum* suddenly feel like playing through a chaotic canvas in motion. As such, even classic enemies have a revised form and function. "The Devourer is one of about ten titans from the previous game that we've chosen to make these huge, epic, unique legions in the new game," says Kusters.

This modern reimagining purposely goes one step further to mimic the Hell depicted in Milton's *Paradise Lost*, rendering epic visions of creatures and the underworld using hand-painted art.



Interface

Job Simulators

Magic in the mundane

With the job simulator genre booming, we speak to the studios that have perfected the art of letting players be their own boss

Written by
Aaron Potter

Washing cars. Building wardrobes. Cleaning up rubbish. It turns out all the jobs we used to do to earn pocket money as kids are now big business in video games, especially when they've been gamified to the extent that it's sometimes hard to stop doing them. Yes, after what feels like years of being held back by niche budget restraints, this year has seen the job simulation genre explode into the mainstream.

Because while doing chores in real life can be a grind, in the digital realm, factors like effort, exhaustion, and (most importantly) mundanity seldom apply. Video games are instead able to imbue everyday tasks with an almost therapeutic quality, and it's this feeling that the best job simulators have managed to perfect.

One of 2022's biggest breakout successes arguably proved this point: *PowerWash Simulator* from FuturLab. In it, players are presented with a generous list of dirty scenarios which they must blast, spray, and mist their way through using – you guessed it – a power washer. Cleaning up the mud-laden surfaces of, say, a park, van, or garden patio is satisfying enough in its own right, but combined with the feeling of power flowing through your hands, simulated by your controller's rumble motor? The development team knew they couldn't go far wrong.

"Power-washing has an inherently mesmerising and satisfying charm to it," says the game's lead designer, Dan Chequer. "The act of cleaning is very visual and direct, so the clear feedback loop is effortless to communicate both to new players and to others who may be interested in the game. The experience is defined by the process rather than the subject matter or the player's role, allowing for a lot of variety in the jobs, because with power-washing, we can clean anything we choose."

UNDER PRESSURE

After putting together a basic prototype and releasing a demo on itch.io in early 2020, FuturLab quickly garnered some great feedback from those who played it. This gave the studio the confidence it needed to expand its quirky concept into a full release. As gratifying as

An eye for grime

FuturLab knew early on that asking players to blast away every inch of dirt in a *PowerWash Simulator* level could quickly feel like a chore, were it not for the highlight feature. Just a tap of the button is all it takes to highlight any remaining filth and see where to clean next. "It came very early on," Dan Chequer reveals, "as it became apparent that dirt could become hard to spot when partially washed off, especially at longer ranges. While useful, it is something that I'd have liked to have found a more elegant and in-world solution for, but it's hard to imagine the game without it now."

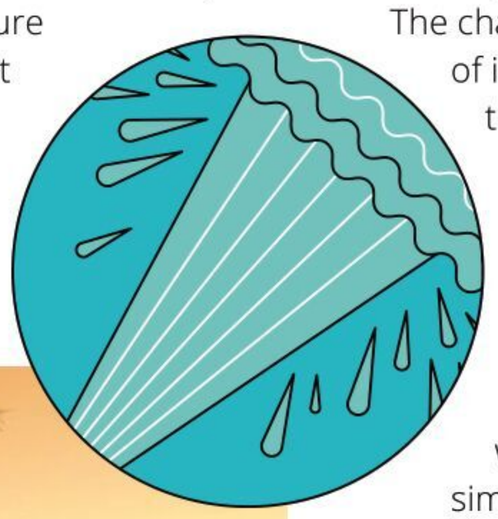
endlessly cleaning surfaces could be, however, it was important for the team to accurately mimic the sensation of using a power washer. After all, cleaning your mum or dad's car with a sponge and bucket isn't a particularly exciting task, but conversely, the same job is made instantly more enjoyable if you're using a power washer.

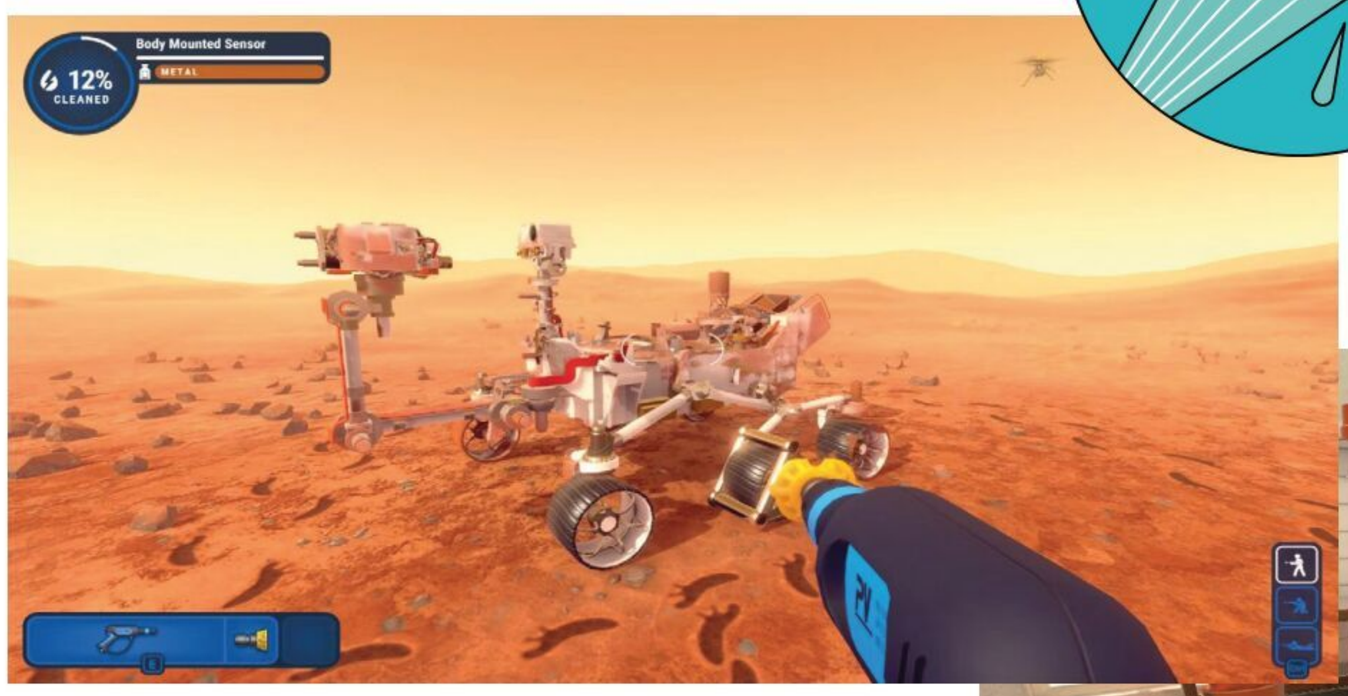
"The main challenge was to retain an authentic power-washing experience, yet exaggerate it enough to be able to tackle the wide range of vehicles and large locations we had planned," says Chequer. "We made the cleaning equipment authentic, but removed any elements of the experience that you wouldn't particularly enjoy in real life."

PowerWash Simulator thankfully does away with the tool's usual cord restrictions, for example. "This approach also had the advantage of being easier to implement," Chequer adds.

Reality's rules were also diverged from in other ways, all to help make the process of power-washing more fun. "The things that you get to clean became the focus for where the variety was going to be, so we made sure that the jobs went beyond what you would realistically expect to power-wash in real life."

A quick trip in space to clean the Mars Rover, anyone?





The Mars Rover represents just one of the cleaning jobs found within *PowerWash Simulator*'s 'Specials' mode. Here, the laws of reality and time go out the window.

TO THE MOON

Also setting its sights on the stars, playing fast and loose with what the "simulation" half of a job simulation game can actually mean, is *Hardspace: Shipbreaker*. It differs from most genre entries in that, by nature of it being set in a fictional, spacefaring future, it's able to invent its own rules. We can all imagine what it'd be like to drive a bus or a train for a living, but nobody really knows what it'd be like to work as a blue-collar spaceship salvager slicing up vessels for scrap. A purely fictional 'job' can still prove equally as fulfilling, though, when treated with appropriate depth and believability.

"We wanted to challenge ourselves to make a game about skilled labour in the future," says game director Elliot Hudson of *Hardspace: Shipbreaker*'s humble origins. "Really, there's nothing mundane about floating in zero gravity with powerful and destructive tools that you're about to use to tear ships apart in the most efficient way possible. For us, that sounded just as exciting as racing a car or shooting a gun.

The challenge is to figure out a combination of interactions, sound, visuals, and physics that make each step of the process fun the first time you're doing it, as well as the hundredth time you're doing it."

As is evident, then, just because Blackbird Interactive's game has the appeal of being set in space, the distinct lack of rules that comes with that (in terms of the job being simulated) isn't without its own obstacles. Some people might even call into question whether the likes of *Hardspace: Shipbreaker*



PowerWash Simulator quickly acclimatises players with how the titular tool works, starting you out in a garage just spraying down simple vehicles.



› Much of the joy in *House Flipper* comes from seeing an utterly disgusting pit of a household and transforming it into someone's dream home.

› *House Flipper* offers players plenty of opportunities to not just enjoy therapeutic cleaning, but moments of destruction where they can let out anger.



could be called a job simulator game at all, even though it meets the genre's typical criteria of requiring players to be painfully methodical in their approach. For example, just one slip of your plasma cutter could cost you an inordinate amount of income, which, in-universe, you must earn in order to pay your billion-credit debt back to the faceless LYNX corp. Just like *PowerWash Simulator*, the biggest reward comes from a job well done.

"We put a lot of effort into making it satisfying and enjoyable to make a cut through the hull of a ship every single time," Hudson explains. "But on top of that, there's the joy that comes from learning the intricacies of each different ship type, the way a mechanic might master the nuances of certain car models over time."

This parallel with racing games is one that Hudson and his team regularly returned to, not just in the hope of achieving some semblance of groundedness but also as a reminder that it's OK to take risks within a genre's typical boundaries.

"It's hard to make any task engaging and fun for players," says Hudson. "There are so many racing games out there, for instance, that you'd think creating a racing game is a solved problem, but it still takes so much care, time, and creativity to make it all sing."

HOME TRUTHS

If *PowerWash Simulator* makes the real-life act of cleaning even more satisfying, and *Hardspace: Shipbreaker*'s hook for players lies in its depiction of a career future generations might pursue, surely it'd be impossible to make house development – often a source of stress for many – equally as fun and therapeutic? 2018's *House Flipper* more than proved the contrary, though. It's a job simulator that casts you as a one-person renovation crew, buying houses, giving them a much-needed bit of refurbishment, and then "flipping" them for a tidy profit.

Earning the most income possible is another mainstay of the job sim genre, even if it's treated more as a means to an end rather than what the entire experience should be about.

"Honestly, it wasn't important for us at all," says Empyrean's Patryk "Roumyan" Przybyła, on including profit as a core driver in *House Flipper*. "It just felt natural, as people like to have some kind of goals to achieve, but this game is definitely all about the process itself. Most of our players would be happy with a house-renovating sandbox, where they can paint walls for hours, but there are some people trying to accumulate as much cash as possible, so this mechanic definitely made it easier for us to expand our community. But yeah – simulation games usually have some kind of profit-based mechanic implemented, and it seems to be one of the rules in this genre."

Empyrean found itself in the fortunate situation of not having to wrestle with the same level of monotony other job sim developers ➔

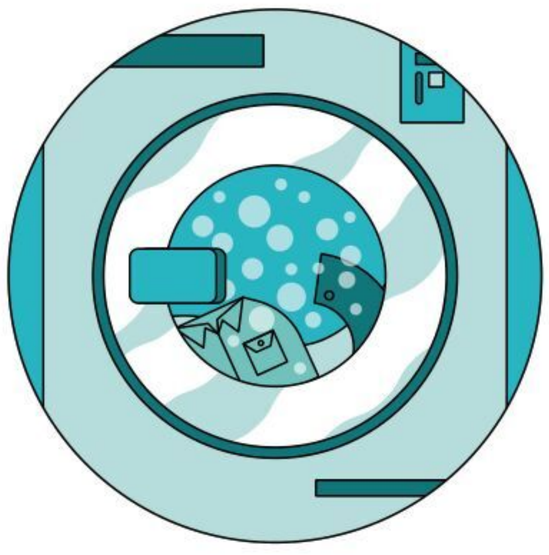


First-person mode

Although alternate viewpoints in some job simulator games do exist, most genre entries present the main act of cleaning, cutting, or driving from a first-person perspective. After all, it's the only way to let players occupy themselves in any given career in the most convincing way possible. "I don't think making the game with a third-person camera was even on the table when we first started working on *House Flipper*," says Patryk Przybyła. "We just wanted to do it in the old-fashioned way, because it's more immersive. Well, I think I can share our little secret with you – the player's character is just a pair of levitating hands. It has no legs, no head, and no body."



▲ The player's time in *Arcade Paradise* is a balancing act between playing fictional coin-op throwbacks and washing people's laundry out front. Which would you prefer?



face, simply because *House Flipper* rarely has you repeatedly perform the same act. Flipping a house means knocking through walls, sweeping the floors, shining up surfaces, and rewiring electrical circuits. The game's scope is more ambitious compared to titles that choose to focus on one specific action or niche, but the result is a slightly more varied suite of tasks.

Even post-release, the studio didn't shy away from offering avid flippers more ways to indulge in the art of renovation, as evidenced by several expansion packs relating to gardens, farms, and pets. "We felt so attached to the game that we didn't want to abandon it," Przybyła says. "The most difficult thing is to find a balance between engaging and real content. Most of our players enjoy cleaning the most. So what makes flippers so keen on swiping the mop left to right? It's all about constant feedback – they can see how the space changes with every move they make, and it's definitely satisfying, but it's not real – we had to exaggerate this part a little."

OUT TO DRY

The acts of cleaning and change are also a constant in the more exuberant *Arcade Paradise*. Set in a launderette where you must balance your daily tasks between handling people's laundry and running a pop-up arcade in the back, the game differs from other popular job sims in that it offers an endless push-and-pull-

▲ Question: When is a launderette not a launderette? Answer: When there's a secret arcade situated out the back.

style tussle for your attention – it never lets you focus on a single discipline. In fact, developer Nosebleed Interactive has been quite clear on its hope for players to eventually reach a point where they make more money from the arcade's popularity, relying less on having to dry clothes, scrape chewing gum, and pick up rubbish. So focused was the studio on having the arcade side as the main focus that *Arcade Paradise* wasn't initially set in a laundrette at all.

"Originally, it was going to be a video shop, like a Blockbuster," reveals Nosebleed managing director, Andreas Firnigl. "For a teenager in the 1990s, working in a video shop was quite glamorous – it was an aspirational job.

"Some of the ideas were that we'd have loads of fake video tapes, [and] you'd have to rewind them for people. What I originally wanted as well was to get a bunch of out-of-copyright movies, like old black-and-white [films], and you could watch them and give the player a trophy or an achievement for watching.

"But that would have been a stupid amount of work, from an art perspective, doing hundreds of different video cases… "

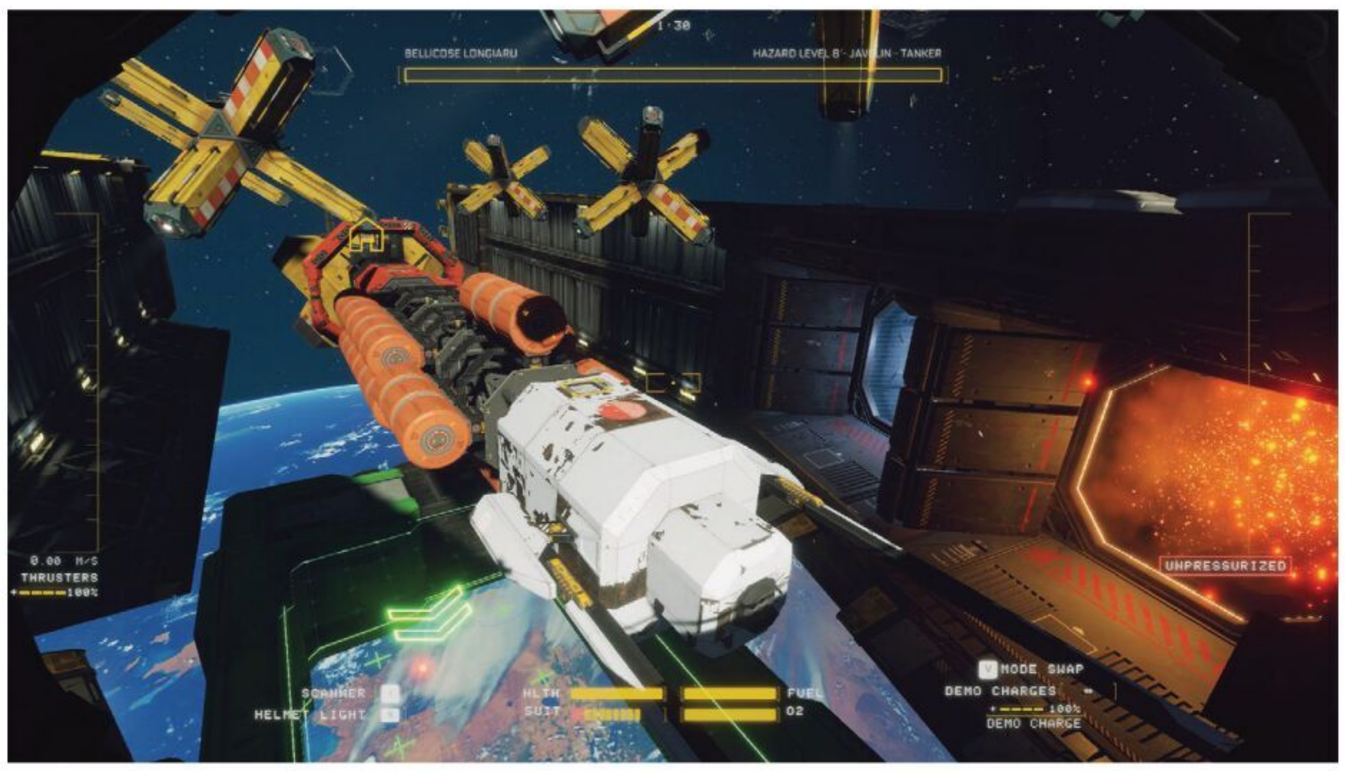
Launderettes are significantly less aspirational, by comparison, but then even *Arcade Paradise* manages to make the mundane tasks more enjoyable than they otherwise would be in real life, by coating your actions in zippy, pixelated VFX indicative of the early nineties arcade era, speeding up the daily routine, and letting you watch the profits roll in. Sound familiar?

In truth, the true job sim aspect comes from watching your business build and grow over time, as opposed to how many strangers' undies you can clean in any given 24-hour period. This idea of gradual change, where the state of



In addition to demo charges and sensors, your top-of-the-line laser cutter is crucial to breaking down ships and gaining the most salvage possible.

Hardspace: Shipbreaker offers ample opportunity to scan and assess the ship you're about to "break".



an environment or item evolves as a result of your actions, is where the true gratification from the job simulation genre truly lies.

KEEP IT COOL

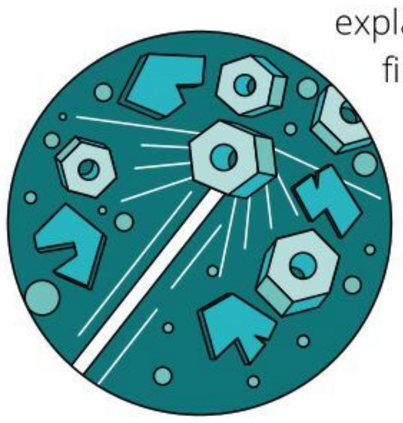
In addition to how well they represent and replicate otherwise mundane tasks, as alluded to earlier, the job sims that appeal most to a broad audience are those that put players in a relaxed state. Sticking to a routine and following procedure is an essential part of any job, true, but still, there's an absence of stress in these games that – more often than not – isn't necessarily found in their real-world counterparts. This comforting aspect is one that a lot of modern studios working in the genre now actively chase, reinforcing it in as many of their game's mechanics as possible.

"While we were still in the early stages of the development, we were just winging it," says Patryk Przybyła. "We knew that *House Flipper* is supposed to be stress-free, but when we realised how relaxing it is, we decided to just take this characteristic to the next level.

"Lots of my friends struggle with keeping their mental health in a good condition, especially [since] the Covid pandemic all around the world, so getting comments saying that our game is helping people with their depression and anxiety really warms my heart."

Even if letting players relax within the confines of what is conventionally an arduous job sometimes means offering a separate mode, it's worth it, and this was exactly the case for *Hardspace Shipbreaker*.

"It took so much iteration and hard work," explains Elliot Hudson. "But finding mechanics that in one game mode can feel exciting as you try to finish a job before you run out of air, and in another game mode can be used as a way to relax and slow down in real life? It's a combination that doesn't happen very often, and it can feel a little like catching lightning in a bottle. Once we realised how well it worked for both goals, we really leaned into it and tried to serve both audiences as well as possible."



Ultimately, whether designed around evoking a specific feeling within the player or not, job simulators – of all varieties – represent a genre arguably most suited to comfort food gaming. Taking a known, relatable practice and engaging in it entirely at your own pace helps to reduce life's complexities down to a single task, that in a job simulator you have total control over.

"Taking inspiration from real-world activities has a few advantages – one of the big ones being the relatability in the mind of potential players," says Dan Chequer, summing up. "The name *PowerWash Simulator* immediately evokes ideas of what the game might involve, and it allows potential players to make a snap decision as to whether they would be interested [in the game] or not.

"[Such games] also tend to have a novelty or uniqueness about the experience that they are promising, which is attractive both for players who are familiar with the more traditional game genres, and for players with less game experience who find such concepts easier to relate to than more abstract game designs."



Future employment

To work out how salvaging scrap from spaceships might work as a career, the studio behind *Hardspace: Shipbreaker* turned to the past. "When we looked at skilled labour from the past and labour relations through history, we found so many things that felt like they could have happened yesterday, not years or decades ago," says Elliot Hudson. "Looking forward, we can expect to see those things echo in our futures. So it was a matter of trying to imagine how those same situations and issues would present themselves in the context of space, and give some thought to what happened in that world between our today and their today."

For the love of retro hardware



KIM JUSTICE

Kim Justice is a YouTuber, streamer, and writer who specialises in the world of retrogaming. If she isn't making lengthy documentary videos about old games and companies, she's probably chatting and mouthing off about them live to a dedicated handful of people.

I have a couple of questions for you. Have you ever played *Space Invaders*? I imagine you probably have. Here's another question: have you ever played *Space Invaders* on an MK14? You probably haven't, seeing as an MK14 is a home computer kit from 1977 sold by Science of Cambridge – the precursor to Sinclair Research. It has a maximum of 640 bytes of on-board RAM, and you'd need to install a separate VDU (video display unit) in order to actually see anything it outputted. The notion of a machine like the MK14 running *Space Invaders* is an absurdity, but if you attended the Retro Computer Festival in Cambridge this past Bonfire Night weekend, you would have seen such a thing – a man named Tim Gilberts exhibiting a beautiful example of the computer, taking up a bunch of desk real estate, and running a version of *Space Invaders*. The fire button and the right direction were both mapped to the same key due to the limitations of the system, but it was still very much playable, and a sight to behold.

This year's Computer Festival, the first fully stacked event in three years, was filled with similarly impressive sights ranging from the imposing likes of a Quantel Paintbox, a video effects machine that would have cost a TV studio £150,000 in 1981 money, to the people showing off their homebrew creations and classic kits that you'd originally have bought from the pages of electronics mags. In one corner, you've got a person so dedicated to the SAM Coupé that they've spent 30 years developing software, creating add-ons, and writing magazines for the micro – another person, inspired by the marketing of the ZX81 that boasted of the machine being capable of running a nuclear power plant, has created an exhibit where the computer does exactly that. The variety of the things on display, from those that are centred around games to the ones that are more educational, the one-of-a-kind items that are rarer than a hen's golden tooth, those that use better-known machines for something more playful and innovative, and the just plain satisfying likes of watching plotters and teletypes going to town, come together for a very special weekend.

Whenever I go to an event like this, I always come away with a big smile. A part of this is down to the knowledge that can be gleaned here, but more of the inspiration comes from the passion – a positive, nonense-free community of people who dedicate themselves to these exhibits purely for the love of it, and seeing the fruits of those labours really puts a spring in my step. We tend to know about a lot of the big gatherings in the calendar, but festivals like this, whether at a museum or a local computer club, can be even more exciting, and it's something I recommend you take advantage of if you can, even if you don't necessarily think that blinking lights are prettier than the Sistine Chapel.



When it comes to computers that have no business running certain games, it's hard to beat an ancient computer kit that originally cost £40 running a game that it predates by an entire year.

Toolbox

The art, theory, and production of video games

42. Narrative Design
Exploring God of War's storytelling brilliance

46. First-hand experience
A concise guide to first-person adventure design

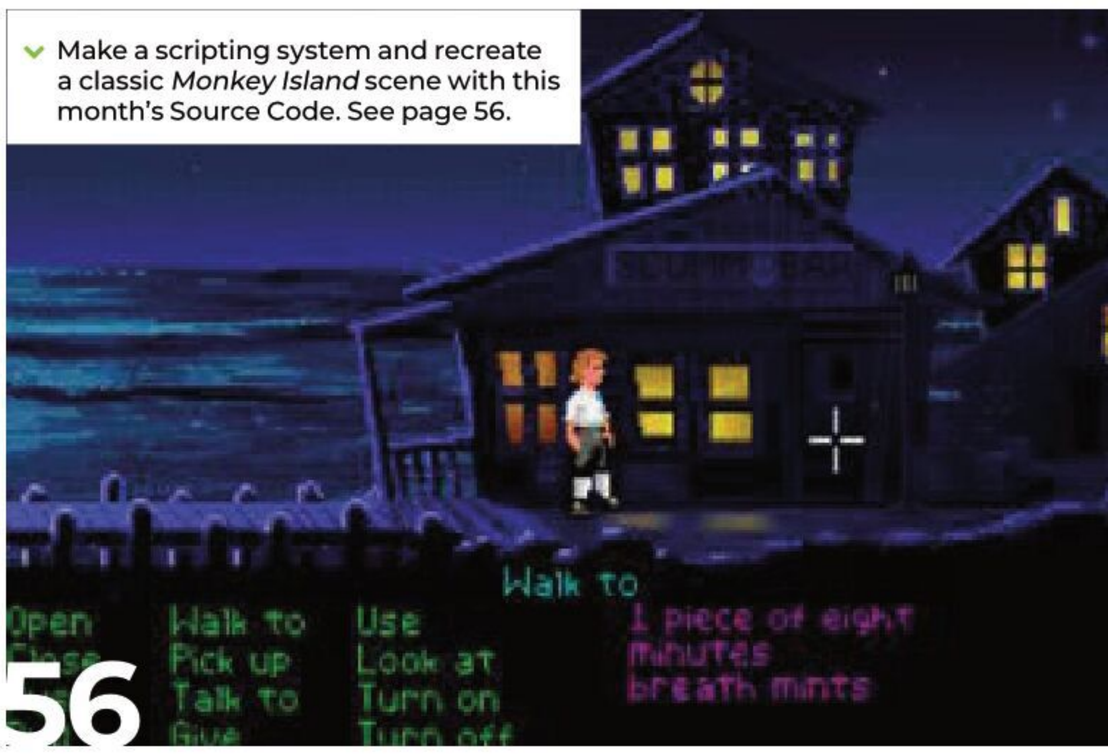
50. Sprite Shape in Unity
The quick, simple way to create organic-looking worlds

56. Source Code
Make an homage to The Secret of Monkey Island

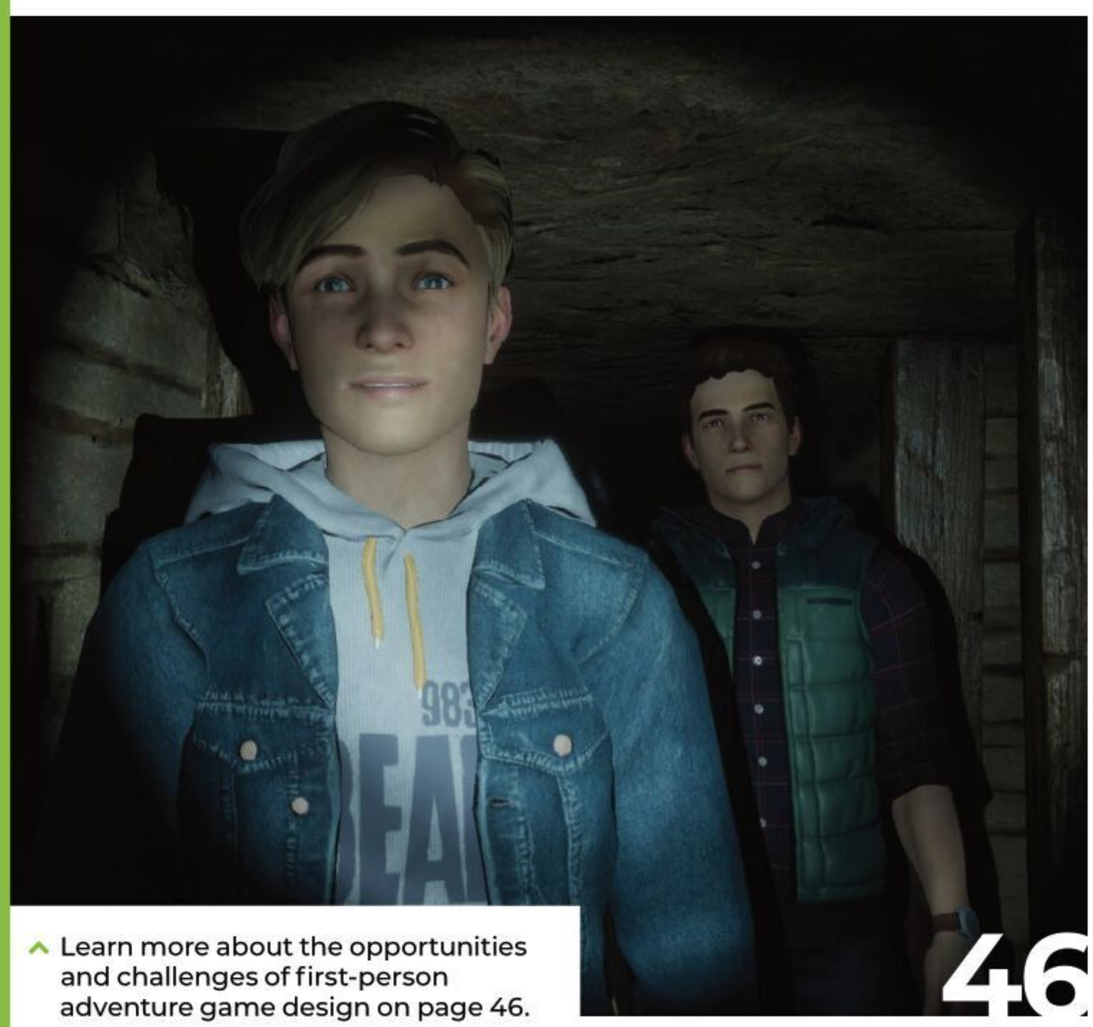
58. Getting into Games
Animation director Richard Lico shares his story



What can the latest *God of War* games teach us about video game storytelling? Antony breaks them down on page 42.



Make a scripting system and recreate a classic *Monkey Island* scene with this month's Source Code. See page 56.



Learn more about the opportunities and challenges of first-person adventure game design on page 46.

Father and son: How Ragnarök grows beyond God of War

Antony contrasts the storytelling chops of Kratos' two recent outings to see what makes them tick



AUTHOR
ANTONY DE FAULT

Antony is Wireframe's writing and narrative design columnist. He's also a videogame storyteller currently at FISHLABS, and you can find his work on **default.games** or **@antony_de_fault** on Twitter.

Let me say this once clearly at the outset: this is not a review of *God of War Ragnarök*, of which I have played most but not all. It's a comparison of 2018's *God of War and* its blockbuster sequel *Ragnarök*, focusing on the pair's narratives and breaking apart what works, what doesn't, and what's changed. I avoid major spoilers for the latest game, but will mention a few lightly spoilery gameplay changes. In preparation for the new entry, I recently replayed *God of War* to see for myself how well the critically lauded game's narrative design and writing hold up four years on. The result: while there's a lot I still loved about protagonist Kratos' seminal entry in video gaming's Sad Dad pantheon, alas, a few parts began to stick out now that we've collectively acclimatised to games with its level of visual richness and polish.

But let's have the good news first: so what still works? From a writing perspective, the characters remain undeniable. The game is chock-full of perfect lines, in both their subtle, flavoursome penning and their compelling vocal and animated performances. This applies to the high-drama moments, like son and co-protagonist Atreus' devastatingly disaffected "This is a much better knife than Mother's" in the moment after he murders a weak, broken god in cold blood. But it equally applies to a great number of less focal moments, when characterisation can lift a very gameplay-functional line to instead evoke memorable emotion. Only one in-game shopkeeper would call out to grab your attention with "If it isn't the bearded beefer and his sac-seed! Have I got something for you two," and that one vendor is *God of War*'s Brok. Such lines hit perfectly: each time, we smile or laugh at the line's humour, but also feel cumulative affection for its speaker.



Angrboda is a companion character in *Ragnarök* with notably very cool magic and (of course) a very broken family.

RESONANCE

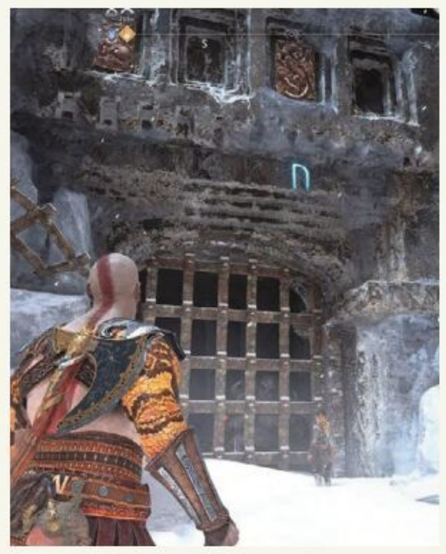
God of War largely succeeds by playing extremely close to a few key themes, namely: broken relationships, the killing of one's parent, and control. Almost every narrative element in the game hews very close to one of these three things, and the critical elements, such as all of the most plot-relevant characters, are thoroughly interwoven with all three. The goddess Freya,



Unlike its predecessor, *Ragnarök* sees Kratos and Atreus directly seeking to understand and navigate enemies like Thor and Odin's plots.

for example, has a broken relationship with her ex-husband Odin, with her people the Vanir, and her son Baldur. The climax of her story comes when she tries to let her son kill her, and he wishes to do so because Freya's attempts to control Baldur's fate have caused him lifetimes of misery. The fact that so much of the game is so thematically consistent, exploring the same nucleus of subject matter with (very importantly) a slightly different lens each time, is what makes it feel so rich.

While I'm still on the positives, there's also the matter of the 'Atreus Button'. The square-face button is only ever used in the game for when your son should act, and this is deployed to great effect. In combat, it's a relatively simple implementation, and Atreus mostly fights autonomously. But the Atreus Button will make him shoot an arrow when pressed, or do a bigger attack when held, and these have cooldown timers, which keeps the attention on Kratos the vast majority of the time. Occasionally, if you and Atreus both pummel the same enemy, you can press this button to have him assist with a finisher move. Outside of battle, one of the game's best narrative design ideas is in making our avatar Kratos unable to read Norse runes. Whenever you must read a sign or scroll, rather than using the normal interact button, you must instead use Atreus', and he relays the information to you verbally with his own interpretation of it. This moment, that in so many other games comes across as flat, with the player character reading something and either not reacting or verbalising awkwardly out loud to themselves, is imbued with the feeling of a father watching his son learn about the world. But then the game builds upon it when Atreus begins trying to teach Kratos some runes. There's a particular moment where Atreus approaches some runes and you, the player, sit there unmoving, expecting the Atreus Button to work. But, jarringly, it doesn't. Instead, you must approach and press the regular interaction button, as Atreus delivers the touching "You've taught me so much. Let me teach *you* something." The moment is lent much more gravity because the mechanical trick makes you and Kratos both experience the same nuanced thing; you realise that you *like* having Atreus read things for you. And this is not the only moment of its ilk.



SAY NOTHING

My elaboration on the games' perfect lines omits its most important counterpart: the perfect silences. When Atreus asks Kratos how he knows that killing a god is never a good idea, he doesn't reply. He barely even moves, other than to drop his gaze from his son slightly. But this body language speaks louder than any line could.

DOOHICKEYS

There are a few places in which *God of War*'s lustre has faded, though. The first is in its mission design. The plot is a quest to deliver Atreus' late mother's ashes to 'the highest peak in all the realms', and unfortunately, almost ➔

When *God of War* first introduces the Atreus Button, it's used to kill. As the characters develop, so does the mechanic.





› *God of War* established Kratos as one of video gaming's greatest sad dads.

ANIMAL INSTINCTS

One of the more surprising innovations in *Ragnarök* is its exquisite animation of animals. Early in the game, we're treated to Atreus' pet wolves, Odin's pet ravens, and even a pet octopus-thing with an incredible name I won't spoil. Their capturing of non-human movement in high-budget cutscenes is beyond anything I've seen in games. For some primal reason, animals possess a sort of shortcut to our emotions: it's why they're so common as companion characters. By mastering screen presence of them, *Ragnarök* enables itself to tap into this resource, which it does with both respect and effect.



every section of the game can be summed up thus: you take a few paces toward the peak and find some barrier which you need a magical McGuffin to overcome. You fetch the McGuffin from a realm or region designed around housing it, try for the peak, hit a barrier, repeat. There's the Light of Alfheim for some random black smog, Thamur's Chisel for some arbitrarily hard-to-engrave stone, etc. This repetitive structure puts shackles on the story, meaning that Kratos and Atreus at no point really engage with the forces of antagonism. They go on their journey to the peak, and sometimes Baldur or his cousins get in the way a bit, but Kratos and Atreus neither dedicate any serious time to *why* the antagonists harry them nor make any attempt to hit back. They simply go about their business, and defend themselves when called upon. There is some justification from Kratos, that he wishes not to get tangled in the business of gods, but his lack of attempt to defuse or understand the situation seems in opposition to his wish to protect Atreus. This is also to the player's detriment, since in the end it means that the antagonist's motivations in hunting you, which when understood are interestingly tied to the theme of control, are mostly obscured, nixing their impact and flattening the game's final plot twist even as the adjacent moment of father-son emotional payoff soars.

Enter the sequel, *God of War Ragnarök*. At the time of writing, I played about 65% of the game. From a narrative perspective, the overall result is once again stellar, but some things that worked well last time have now been muddied, and others that were flawed before are now sparkling. The plot structure, for one, has been vastly improved. *Ragnarök* retains clarity of its overall quest, in which you are always moving toward averting or surviving Ragnarök's prophesied apocalypse, and there is, of course, still a larger pattern to the game: we still visit a series of distinct realms, each region built to house a specific objective. But this time, these journeys feel much more keenly tied to the protagonists' character motivations. Whether the protagonists desire to prove themselves in the eyes of another, or rescue a potential ally, or investigate a critical prophecy, it's always something novel and character-driven, never (thus far) reverting to 'there's a literal door between you and the overarching goal, the key ~~princess~~ is in another realm ~~castle~~'.

SEQUEL SUCCESS

With this less literal, more nebulous goal in mind, the characters in *Ragnarök* directly engage with the forces of antagonism. While most characters spend the game questing to avert (or if not, win) their war, each side understands the other to a degree and will talk, compete, undermine, and sometimes even forge surprising temporary alliances with each other in pursuit of their goals. Of the several major and minor enemies in the



Secondary characters such as Freya and Odin are given more room to grow in *God of War Ragnarök*.



Kratos has come a long way from his mid-2000s roots. The nu-metal era edginess has been toned down, for one thing.

game, from the heartbroken and vengeful Freya to the Machiavellian Odin, each one now has significant screen time and is relatively up-front about their aspirations, even if subtlety and trickery are used in achieving them. And all the while, the thematic strength is still there, developing the previous game's themes of broken relationships and control, while inverting the killing of one's parent into preventing the death of one's parent.

But it's taken a step back in the narrative *gameplay*. Primarily, the Atreus Button is no longer really a thing. Atreus has become a fully playable character in his own right, and what was formerly the Atreus Button is now just generically the Companion Button, with which any of several possible fellow travellers might be commanded, some of whose abilities are underwhelming or so functionally similar to each other that they pass into disuse. And the Button is now rarely used outside of combat or occasional puzzle commands.

Rarely do any companions give us any attitude about being commanded, as Atreus used to, and neither is it used inventively to forge a bond between you and they. And while there is a lovely moment of realisation early on that Atreus has taught Kratos to read runes competently in their years together between the games, that this small act of bonding has been removed and now Kratos or the sprightly Mimir simply emit a generic "hmm, interesting" breed of line feels unsatisfying. The lack of character-driven summarisation, especially combined with the fact that the lore entries have grown considerably in length, means this particular part of the game feels almost completely neutered. No longer is it a characterful bonding activity in-gameplay, it is now a genericised call to sit and read fairly interesting but neutral text on the pause screen.

THE BOND

The beating heart at the centre of both of these games is the bond between Kratos and Atreus. It is this, and more or less this alone, that enables them to evoke long-term, nuanced emotions in their players, like affection and protectiveness and pity, in addition to the more immediately evoked action-gameplay emotions like victory and panic. And while *Ragnarök* succeeds at placing that bond within a more satisfying story context, testing it with better plotting and even better character work, it ultimately takes a step back and loses this as its focus in the moment-to-moment experience of playing the game. For most of the time that I've played *Ragnarök*, I may have been *concerned* with this core father-son bond, but I was not *in* it, was not playing with the mechanics of it, not engaging with it. Considering that it's what the game is about, this feels like a misstep.

P.S. I am fully prepared to eat my words next month if it turns out that the latter 35% of the game pulls some incredible trick that justifies these narrative design choices. Editors, hold me to this!

M FOR MATURE

Like many, I was initially put off the *God of War* series due to its somewhat edgelord aesthetic. From afar, all I saw was a lot of muscles, goatees, women-objects, and grunting. Fortunately, the two recent entries kept only the grunting, which they both use for emotional weight and actively mock. Instead, both games in the series' modern reinvention have wisely grown up with their audience: after all, many of those edgy teens who played the originals are now themselves achieving parenthood and, dare I say it, empathy.

Designing first-person adventure games

Exploring the advantages and challenges of giving players a first-hand perspective in your game world



AUTHOR
STUART MAINE

Stuart Maine has been a designer for 26 years across PC, console, and mobile. His first gaming book, *I'm Too Young To Die: The Ultimate Guide to FPS 1992–2002*, is out soon, and he's **@maine_stuart** on Twitter.

When you think of adventure games, you might jump to *Monkey Island* or *Little Misfortune*, but along the genre's journey from text to graphics to point-and-click, a distinct sub-genre formed: the 'first-person adventure'. As the name suggests, these place the game's camera behind the protagonist's eyes (as opposed to third-person games where we see them walking around on the screen), an approach that gives these games some unique strengths. So, before you begin working on an adventure, it's worth considering what the player's view of the action means for your gameplay.

A BRIEF HISTORY LESSON

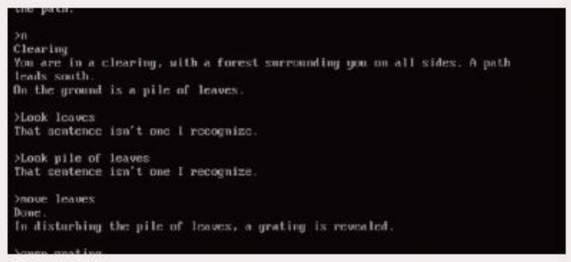
The earliest adventure games used text to describe your environment and the objects you could collect or interact with, with players typing verbs and nouns to say what they wanted to do. Played from a first-person viewpoint, often with second-person narrative ("You are standing at the end of a road before a small brick building"), players used their imagination to picture themselves in the environment described. The problem with text adventuring was that players spent as much time trying to guess the specific words they needed to type as they did actually solving puzzles, so, with increasing computing power allowing games to display graphics, it wouldn't be long before adventures introduced visuals. At first, these simply included a picture of the location being described, with gameplay still driven by typing in commands, but games began to transition to the more convenient method of displaying the list of verbs the game recognised, so you could simply select one. From here, the genre split into first- and third-person, and developers began experimenting with the strengths and limits of each.

BLURRED EDGES

Just as the nineties was a golden era for point-and-click games, it also saw a boom in first-person adventures, allowing players to explore fantastical environments and interact with esoteric machinery as they attempted to return home. Even now,

THE WRITTEN WORLD

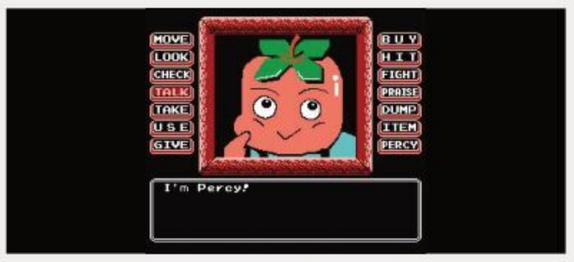
The iconic first-person adventure is *Myst*, which initially had players clicking to swap between pre-rendered scenes before sequels added the ability to rotate on the spot and then finally to explore real-time 3D environments. Set in a universe where people can write new worlds into existence, *Myst* hit a sweet spot of accessibility (anyone can click to explore and interact), amazing graphics for the time, and a real sense of immersion, and would achieve six million sales. Cyan followed the series with *Obduction* in 2016, a game that feels like a deliberate attempt to replicate *Myst*'s success.



Adventures like *Zork* used text to sketch out environments, letting the player's imagination fill in the details as they projected themselves into the game's world.



Graphics gradually began to be added to adventure games in the eighties, but gameplay still revolved around typing nouns and verbs as you collected and used objects to solve puzzles.



Quirky 1984 adventure, *Princess Tomato in the Salad Kingdom*, removed 'guess the verb' frustration by displaying all the available options as a menu.
Image credit: MobyGames.

there's still the occasional 'classic' first-person adventure release, but as the genre transitioned to real-time 3D graphics, it began to blend with first-person shooters, which was itself shifting away from purely being driven by combat.

As a result, we have games that may or may not count as first-person adventures. Does *Gone Home* count? It certainly has exploration, but not many puzzles. *Firewatch* has conversations with other characters, a staple of adventures, while the *Metroid Prime* games feature puzzles, exploration, and a focus on scanning objects to read about them, but also include combat. But rather than getting hung up on exactly which games count, let's focus on the advantages and complexities of making your adventure play in first-person.

IMMERSION

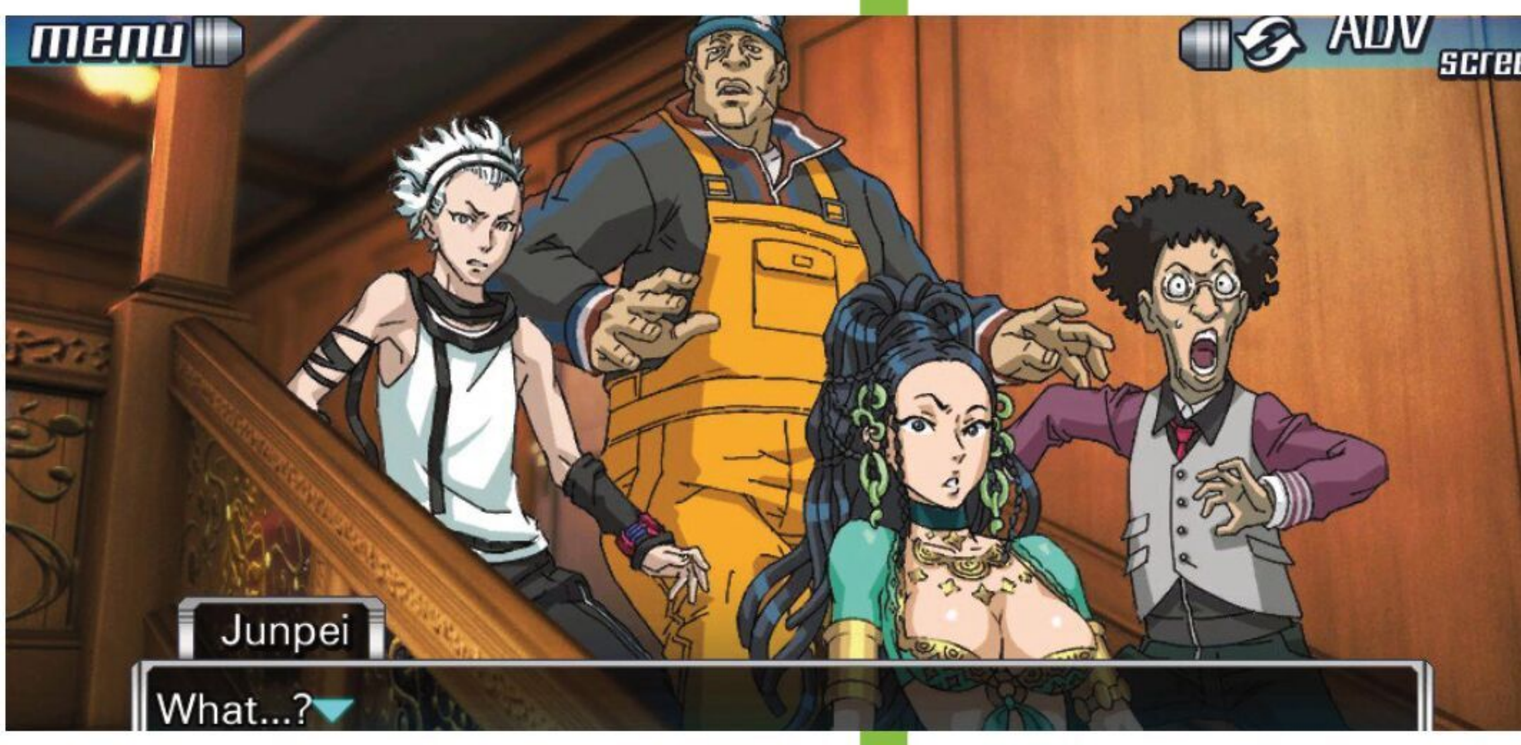
Because it places players in the middle of the action, the main reason to make your game play from first-person is that, other than VR, it's the most immersive and visceral camera viewpoint you can use. This remains true whether you make your main character a blank slate or give them a voice and personality: they still remain 'us'. Threats become personal ('I' am under attack), and majestic vistas gain impact, making these games great at providing a sense of wonder. Compare the traditional camera view of *Thimbleweed Park* to the space exploration of *ADR1FT* – while the former features some great locations, to truly feel the danger of floating above the Earth we need the latter's first-person view.

The downside to playing in first-person is that by placing the camera directly in the scene, you rob the player of most of their peripheral vision, forcing them to look around to spot things. As a result, unless you take control of the camera, you can't guarantee they'll see something change in the environment. For example, in a traditional point-and-click game, a single screen can show both a button and the door it opens, but unless first-person players are looking in the right direction, they may not see what activating a button does, leading to the 'I did a thing and have no idea what happened' problem.

One trick is to give time for players to look around and spot something happening. You could delay the door opening slightly, make it move slowly, add warning lights and sounds if it's a blast door, and so on. You could also have the player's character say what just happened ("That door opened...") or award bonus points if they pass on information the player couldn't know ("...and the temperature just dropped".). Best of all is using what they say to reveal more about their character, such as being scared or eager to move on.

OPEN TO ALL

Another advantage of making your camera first-person is that it can make your game accessible to a wide audience. We see the world through our own first-person perspective every day – helping 'casual' players intuitively understand how your game works, and by removing manual control of an external camera, you give players one less thing to think about. Games like →



▲ Do 'visual novels' like *Nine Hours, Nine Persons, Nine Doors* count as first-person adventures? Their gameplay does revolve around exploration, solving puzzles, and having conversations.

▼ *ADR1FT* uses cracks in your visor to remind you that its environment is as deadly as it is wondrous, projecting you into the protagonist's mindset.





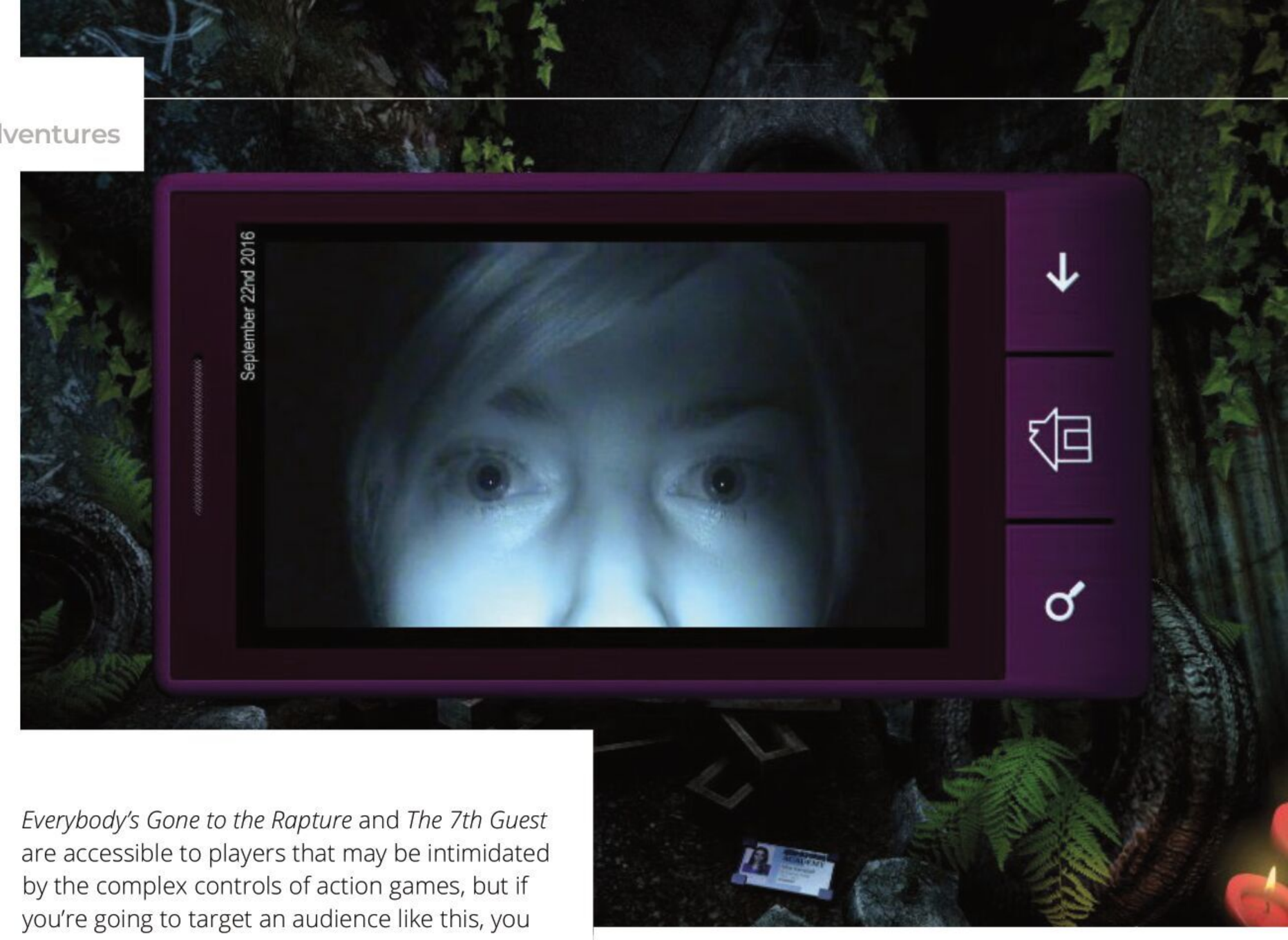
Following *Myst*'s incredible success, a slew of games appeared, like *Schizm: Mysterious Journey*, each building on the newly established pillar of exploring a strange, lonely, alien world.



As you moved around *The Last Express*' opulent carriages, its story ran on a timer, with important events happening whether you were there to witness them or not.



Gremlin's bold, quirky experiment, *Normality* – and its spiritual sequel, *Realms of the Haunting* – combined a first-person environment with a point-and-click interface.



Games with limited budgets, like *Barrow Hill*, demonstrate how small studios can make use of the development as well as gameplay advantages of first-person.

Remade many times, *Myst* benefited from 'right game, right time' but is still an evocative, captivating experience.



ISOLATION

A development advantage of making your game first-person is that you don't have to model and animate the player's character. Smaller studios can take this a step further by not featuring any characters, saving themselves a lot of time and money.

As a result, many first-person adventures can be solitary experiences, with the player alone in a location. *Voyage: Journey to the Moon* gets around this by having your character narrate, while *Schizm* has two people leaving each other messages. Games like *Myst* feature real actors overlaid on the game world, while *Barrow Hill* has radio and phone messages.

Everybody's Gone to the Rapture and *The 7th Guest* are accessible to players that may be intimidated by the complex controls of action games, but if you're going to target an audience like this, you also need to ensure the rest of your experience is similarly approachable. Returning to our earlier point, you can debate whether games like *Coffee Talk* count as first-person adventures, but by limiting your interaction to making choices from a list, they remove any hand-eye coordination barriers from play.

FIRST-PERSON PUZZLES

Whether first- or third-person, most adventure games revolve around solving puzzles, a topic we covered in Wireframe 65 (**wfmag.cc/65**). Because you're present in and moving through the game's world, first-person adventures tend to focus on exploration puzzles; a sealed door next to a complicated control panel, a vehicle with no power, and so on. This gives these games a clear goal of unlocking progress to the next area, compared to traditional adventures where you often have to explicitly tell the player what their next objective is. Even so, you need to ensure that whatever's blocking the player's progress is an obvious obstacle to overcome – such as a flooded passageway or uncooperative guard – to avoid aimless wandering while they search for how to progress.

The classic first-person adventure puzzle revolves around players needing to learn the rules or language of the game's universe in order to activate/deactivate/control some sort of device. For instance, *Myst III: Exile* requires players to learn pictographs and numbers in order to translate their options, while *Voyage: Journey to the Moon* revolves around learning to communicate with sarcastic, hooting aliens. As a developer, you can affect the difficulty of these puzzles in several ways:

- Do players understand what they need to do? As mentioned above, players need to realise there's a puzzle to solve here in order to progress. The challenge is in making this clear while maintaining the illusion that they're exploring a real place, not a puzzle-filled test chamber.
- Do players realise which information they need? When players encounter a complex



HeR Interactive has been developing frequently spooky games based on Nancy Drew since 1998, each featuring a varying emphasis on exploration, minigame puzzles, and conversation.



Though classified a first-person shooter, *Metroid Prime*'s focus on unlocking an alien world through scanning objects and solving puzzles could arguably count as an adventure.



Despite 36 years of progress, *2064: Read Only Memories*' interface is basically an evolution of *Princess Tomato*'s, proving that content – characters, story, world – is key.

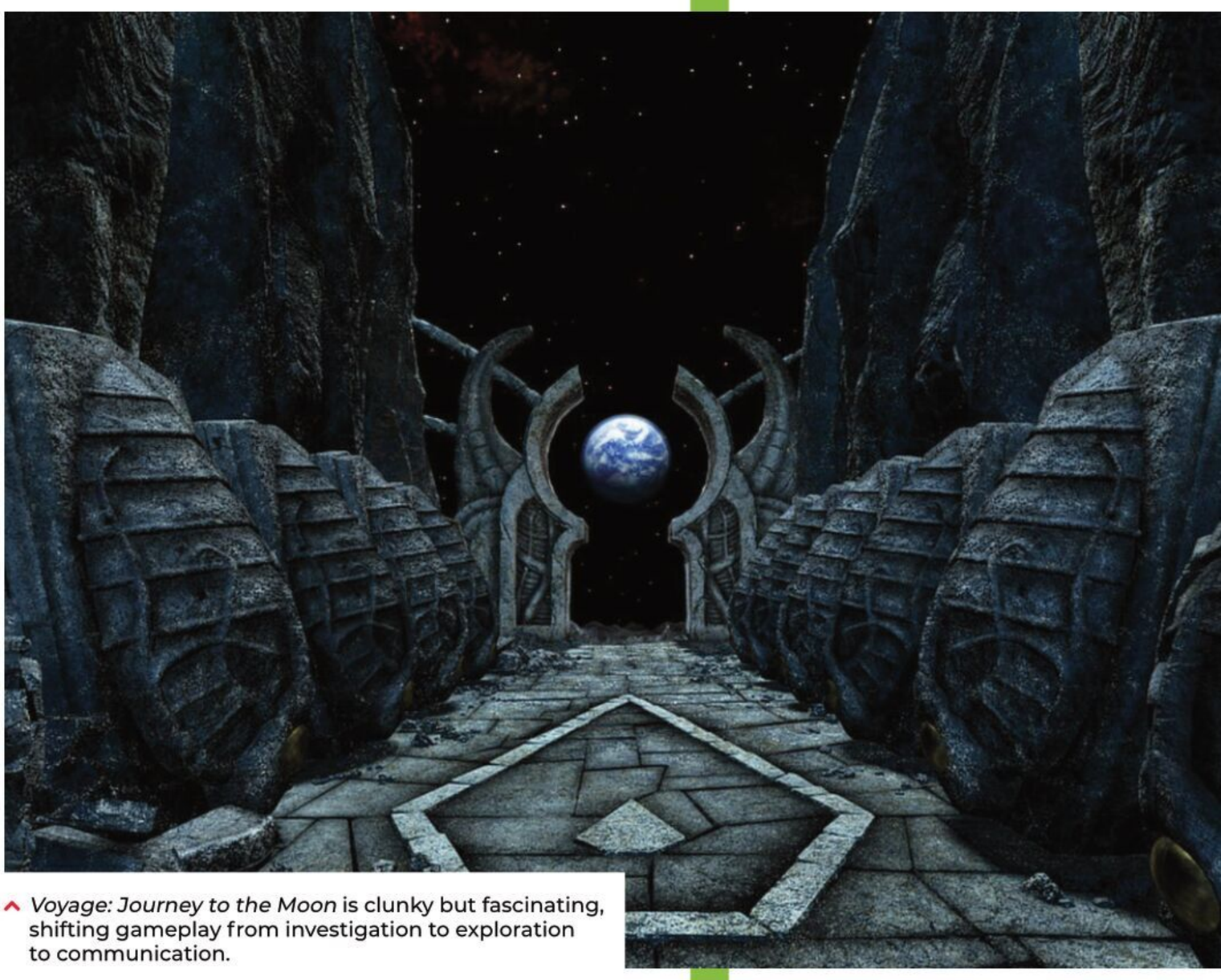
device or need to enter a code, they're likely to try a few things at random, which should reveal the information they need to solve the puzzle. For instance, interacting with a lock might tell the player that the solution revolves around symbols, sounds, coloured crystals, and so on.

- How far apart are the necessary information and the puzzle? Now that players know what the puzzle revolves around, how far away from the puzzle is the information they need to solve it? The symbols/sounds/crystals they need can be nearby or far away, either in distance or time (as in, they saw them much earlier in the game). The further the distance between puzzle and information, the more difficult solving that puzzle is likely to be.

If your game revolves around exploration, then you want a cool pay-off or reveal as the player's reward for completing the puzzle, or it can feel like you're not making progress. Players also better understand your world's rules, meaning you can use the information they now have as part of a later, deeper puzzle.

CONCLUSION

Like most game development decisions, it helps to consider the 'why' behind choosing your game's viewpoint. If you want players to have a clear view of a scene and their character's place in it, then third-person is the way to go. But if you want to transport players to an alien world, an abandoned building, or a fantastical realm, then the immersion provided by the first-person view can help the real world fall away. Whether your gameplay revolves around puzzle-solving, conversation, or simple exploration, first-person adventures are unmatched for transporting players somewhere else.



Voyage: Journey to the Moon is clunky but fascinating, shifting gameplay from investigation to exploration to communication.



Call of the Sea evokes the spirit of classic first-person adventures as you solve puzzles to push deeper into both its island and story.



Cyan followed the *Myst* series with *Obduction*, which features a unique and intriguing premise but (deliberately?) harks back to classic first-person adventures in its gameplay.



Exploring a strange world as you learn its rules, talk to people, and solve a variety of puzzles? It definitely sounds like *Paradise Killer* is a first-person adventure to me.



The Beginner's Guide, Davey Wreden's quietly devastating follow-up to *The Stanley Parable*, demonstrates just how flexible the term 'first-person adventure' can be.

An introduction to Sprite Shape in Unity

Create beautiful, organic-looking levels quickly with limited art assets

AUTHOR
GARY PETTIE



Gary Pettie is an independent video game developer, freelance programmer, and online instructor at **GameDev.tv**, where he has helped teach thousands of students game development in Unity.

When it comes to building levels for your game in Unity, there are many different options to choose from. You could use the Tilemap component for grid-based games, or you could build your levels using individually placed assets for a more handcrafted look. But if you want an organic-looking level that is also quick to make, it's time to break out the Sprite Shape asset.

Sprite Shape allows you to quickly build an environment without having to pester your artist for customised assets, and you can even procedurally generate shapes via code. Sprite Shape works using splines, which are essentially functions that can be manipulated to draw the outline of any shape. If you've ever used any kind of image editing software in the past, you can think of Sprite Shape as being somewhat similar to the Pen tool in those programs.

SETTING UP YOUR PROJECT

To follow along using the same assets as me, you can access them all at **wfmag.cc/snowyassets**. You can also download the complete project repo at **wfmag.cc/spriterepo**.

To get started, create a new project using the '2D' or '2D (URP)' template. Setting up a project with one of the 2D templates is important as it will import all the required 2D packages you need. Specifically, you need the 2D SpriteShape package installed via the Package Manager, so double-check this has been added to your project. With everything set up, it's time to add our first sprite shape.

ADD A SPRITE SHAPE

Right-click on your hierarchy and go to 2D Object > Sprite Shape. You can also find Sprite Shape hidden under the GameObject menu if you prefer going that route to add objects to your scene (**Figure 1**). From there, you have two options: Open Shape and Closed Shape. For this tutorial, we'll mainly focus on the closed shapes, as there are a few more options to play around with when setting them up. So, add a new closed shape to your hierarchy.

With our sprite shape added, it's now time to make it look good. In the provided resources, you'll find a small collection of sprites. Import them into your project if you haven't already – or make your own.

To add your sprites to your sprite shape, you first need to create a new Sprite Shape Profile. Right-click in the project window and go to Create > 2D > Sprite Shape Profile (**Figure 3**), then give your new profile a name and add it to

OPEN AND CLOSED

The open sprite shapes are similar to closed shapes. The only difference is that with a closed shape, the two ends are connected and a fill sprite is applied to the middle of the shape (**Figure 2**). You can switch between these two options by toggling the "Is Open Ended" parameter in the inspector. So if you change your mind, or just selected the wrong type to begin with, it's pretty easy to fix, and you don't need to make a new shape from scratch.

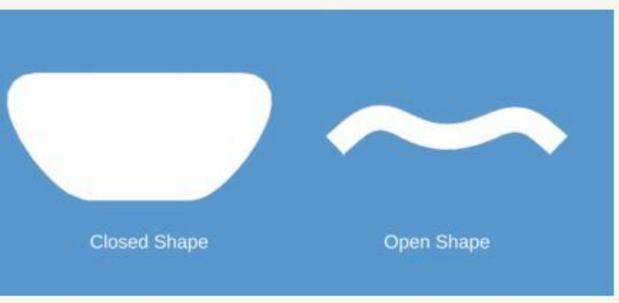


Figure 2: The default Closed and Open Sprite Shapes.

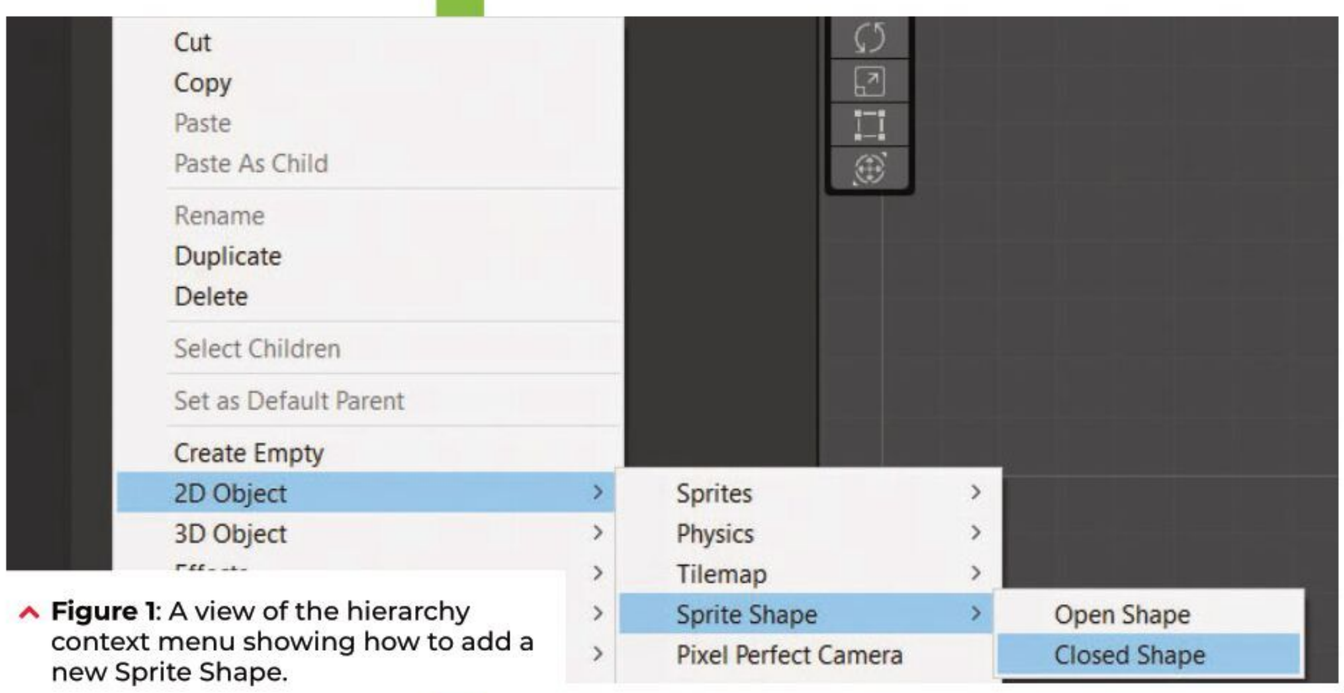


Figure 1: A view of the hierarchy context menu showing how to add a new Sprite Shape.

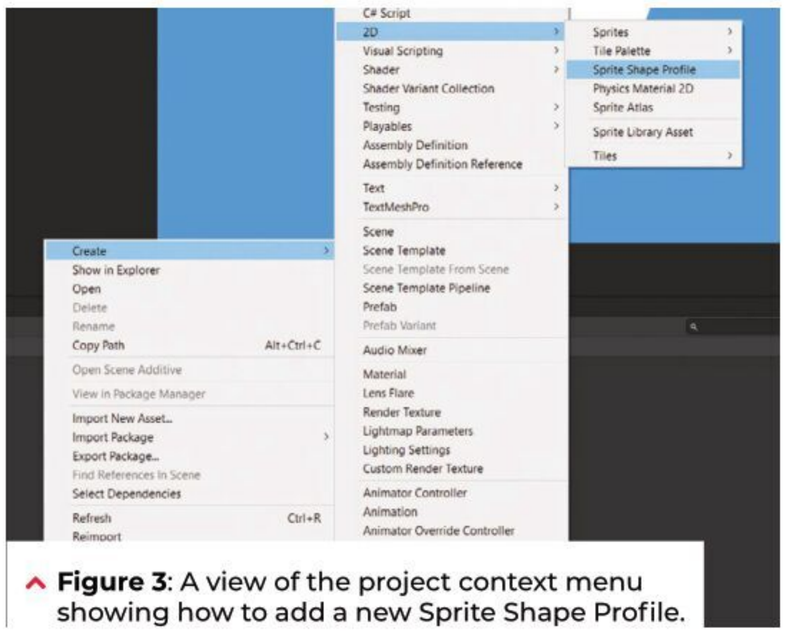


Figure 3: A view of the project context menu showing how to add a new Sprite Shape Profile.

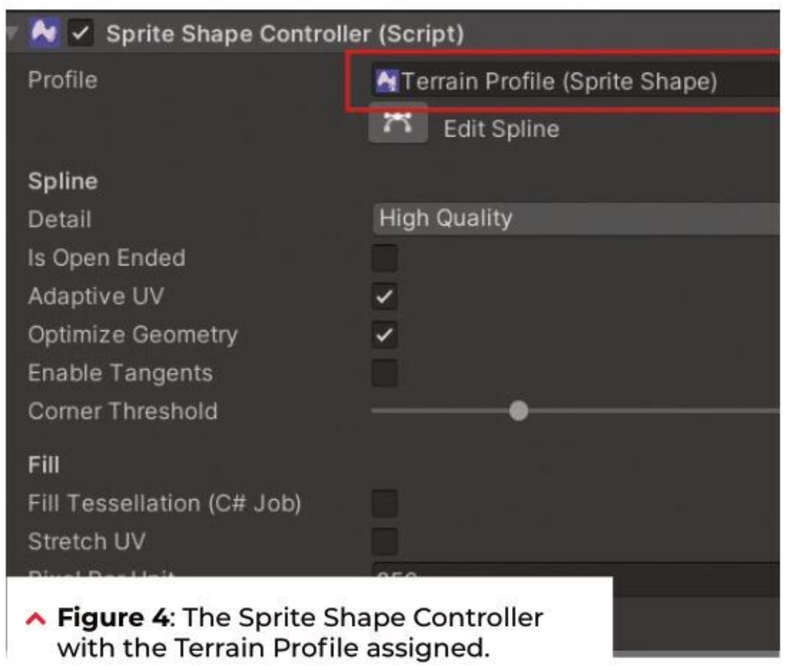


Figure 4: The Sprite Shape Controller with the Terrain Profile assigned.

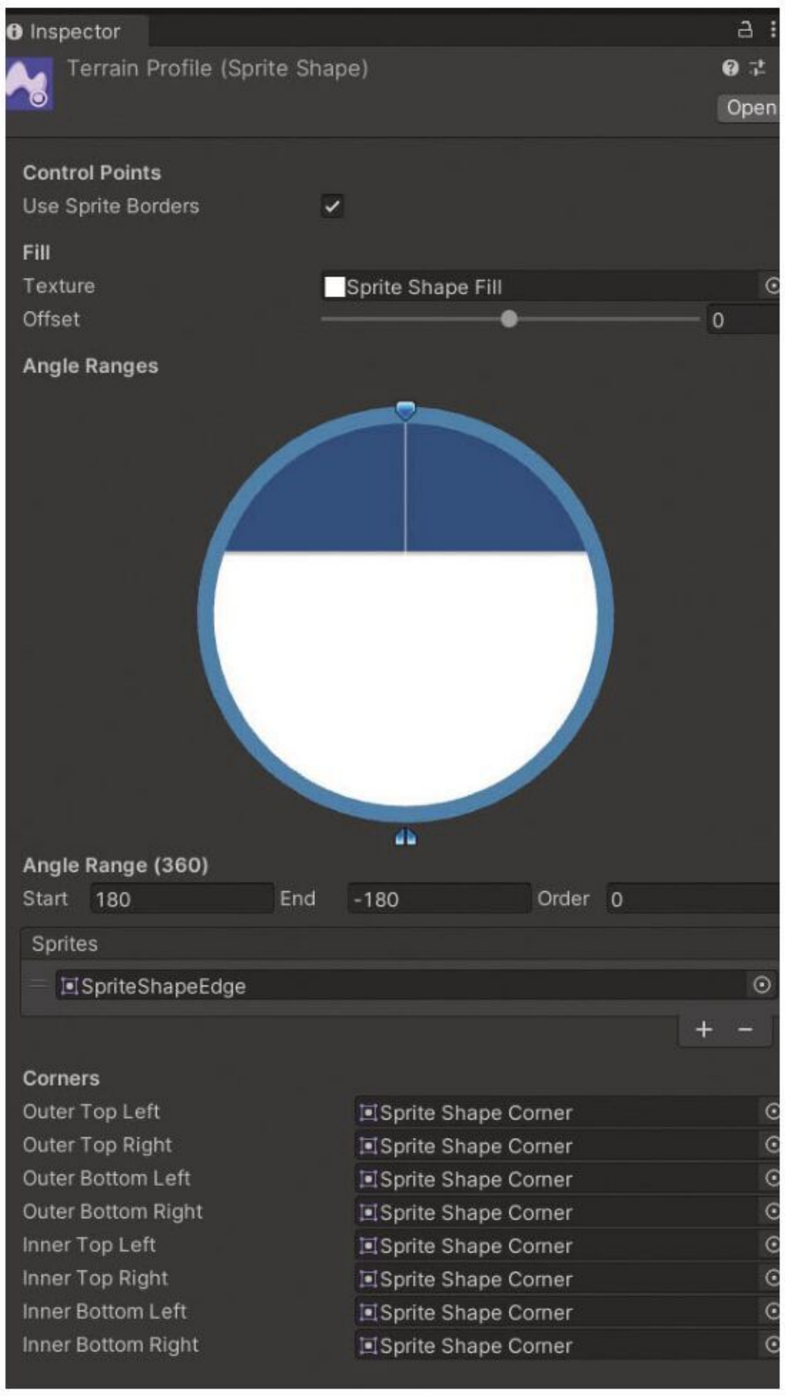


Figure 5: The Sprite Shape Profile interface.

your sprite shape (**Figure 4**). I'll be calling mine 'Terrain Profile'. Finally, open up your new Sprite Shape Profile by double-clicking on it. You'll then see the profile editor (**Figure 5**) where you can set up all your sprites and tell your sprite shapes how you want them to behave. The interface for the profile editor can be a little overwhelming at first, but once you get the hang of it, though, you'll be flying.

The first thing you may want to do with a closed shape is set up the fill properties and tell Unity what sprite should fill your shape. Add your desired fill texture and set the offset to your liking. I tend to leave the offset at zero, but it depends on what you're using your sprite shape for. Once you've set the fill texture, you should see this reflected in the editor. You can play around with the offset to see how this modifies the borders of the fill sprite.

Next, let's look at the angle ranges. This is probably the most confusing part of the Sprite Shape Profile if you're unfamiliar with how it works. In the centre is a preview window that will show you how the different faces of your sprite shape will look at a given angle. To change the preview angle, drag the small solid blue handle around the edge of the ring. At the moment, you won't see anything change because all angles are currently assigned the same default sprite. This is denoted by the blue ring around the outside of the preview window. To change this, look for a split blue handle at the bottom of the ring, which can be broken into two segments. If you break these handles apart, you'll see that it leaves an empty gap in the ring, and if you rotate your preview handle to that area, the edge sprite will now disappear.

This is perfect if you're making a level platform and only want to apply a sprite to show the top surface that a player can walk on. You may want to add additional sprites to the side or base of your sprite shape, or even add different sprites to indicate the steepness on a hill.

To add additional sprites, you need to add more angle ranges. Hover your mouse over one of the blank areas in the ring, and you'll see a ghost outline for a new angle range. Left-clicking in the blank area will create it for you. Before you create the second range, drag the handles of the first one to make it cover the top 180° of the ring. If you want to be precise about the start and end points, you can manually type them in the boxes below the preview.

Now add a second range to the bottom of the ring and make it cover the remaining 180° (**Figure 6**). You should now have two segments set up – the top one with a default white sprite assigned, and the bottom with ➔

POINT UP

If you decide to use your own sprites, make sure they're all pointing upwards – even those that will eventually appear on the bottom of your sprite shape. When applied to the sprite shape, your sprites will be automatically rotated to point outwards from the shape.

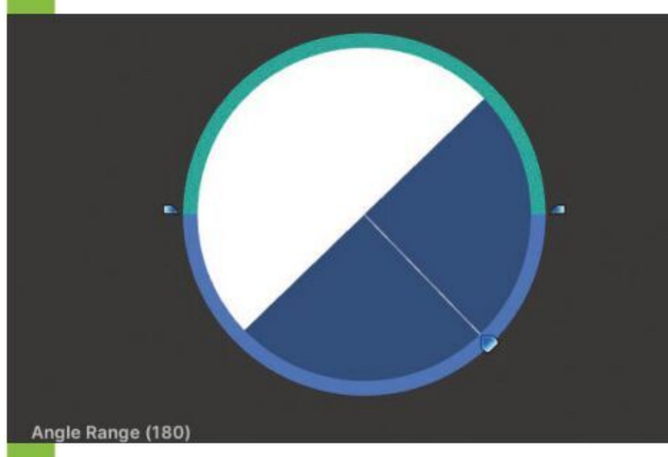


Figure 6: Your angle ranges should look something like this when you're done.

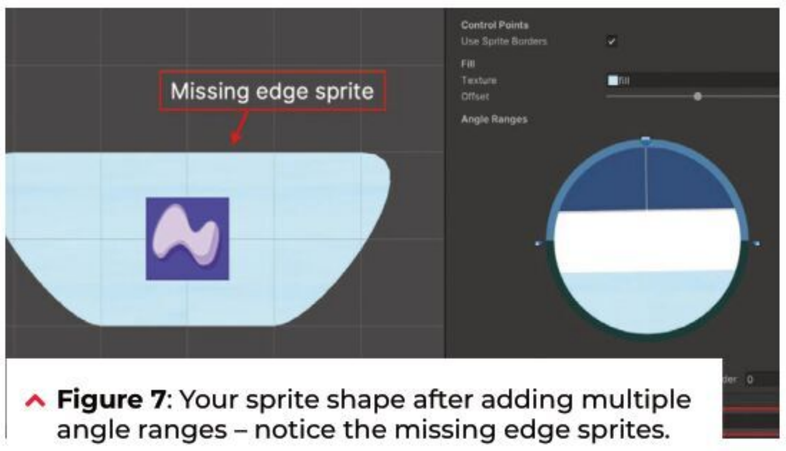


Figure 7: Your sprite shape after adding multiple angle ranges – notice the missing edge sprites.

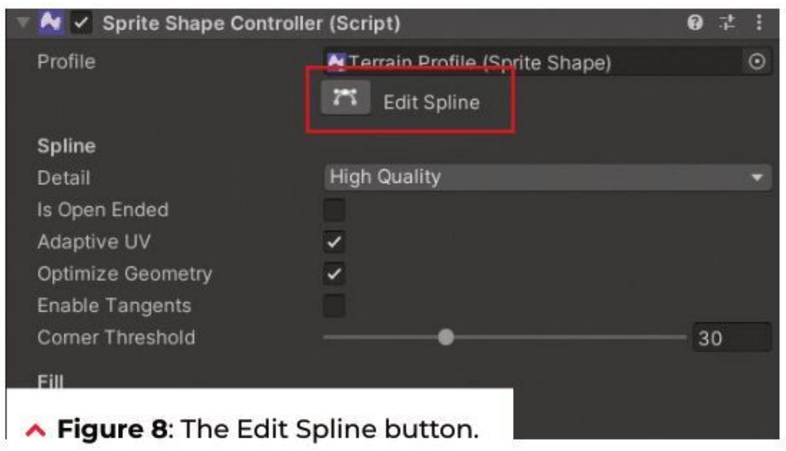


Figure 8: The Edit Spline button.

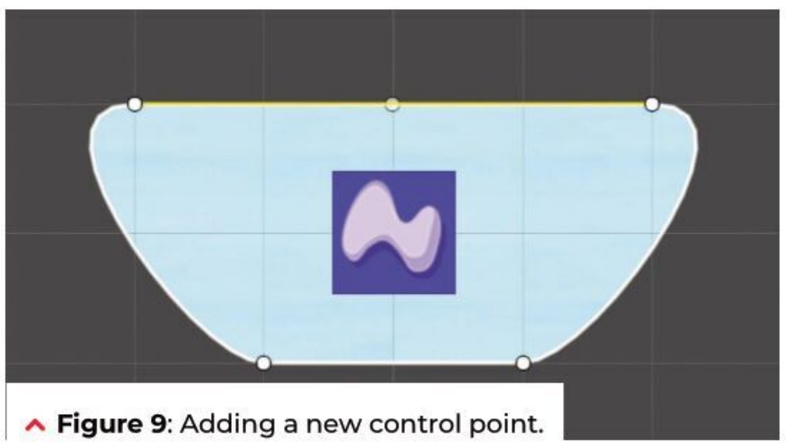


Figure 9: Adding a new control point.

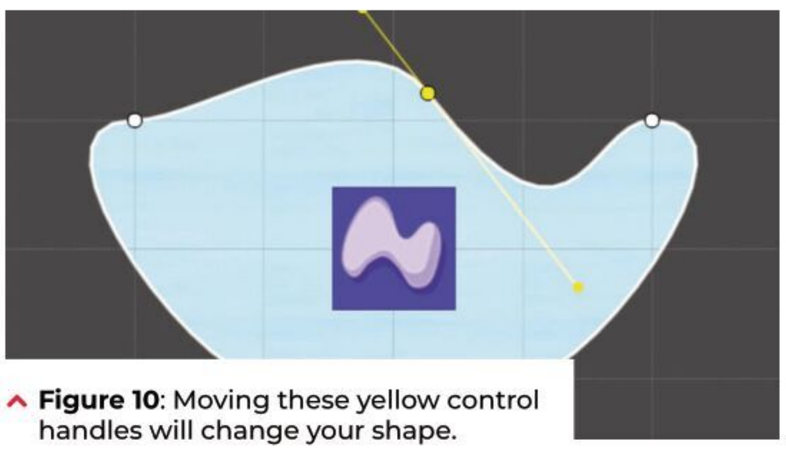


Figure 10: Moving these yellow control handles will change your shape.

STRETCHY

If your fill sprite looks stretched, make sure you set the wrap mode to 'Repeating' in the sprite import settings. This will then tile the sprite to fill your shape.

no sprite assigned. You might expect this is all that's needed to get your sprite shape looking the way you want, but if you look in your Scene view, you'll notice it isn't working how you might expect. In my case, I'm not seeing any edge sprite along the top edge at all (**Figure 7**).

So what's going on? Well, our shape may look like it has four corners, but it's actually one continuous line – like a lumpy circle – and the angle ranges you've set up only affect the edges of your shape when they meet a defined corner.

MANIPULATING THE SPRITE SHAPE

To create a corner, we will have to modify our shape's control points. Head back to the Sprite Shape Controller component in the Inspector and click on the 'Edit Spline' button (**Figure 8**). You'll notice that the view of your shape has changed in the Scene view. There's now a white outline surrounding the shape, with dots at various points along the perimeter. These dots are called control points, and this is where the similarities to the Pen tool in image manipulation programs come in.

These control points allow us to modify our shape. You can drag them around, add new points, and change how each point affects the curve of the shape. To move them, simply click on a control point and then drag it to your desired location using the Move tool. You can also modify multiple control points by box-selecting them in the scene.

To add a new control point, hover over the edge where you want to place it and left-click. Before you click on the line, you'll notice it turns yellow and a ghost point will appear (**Figure 9**), which is how you know you're in the right spot. Don't worry about being super-accurate with the control point placement when first adding it though, as you can move it into position later.

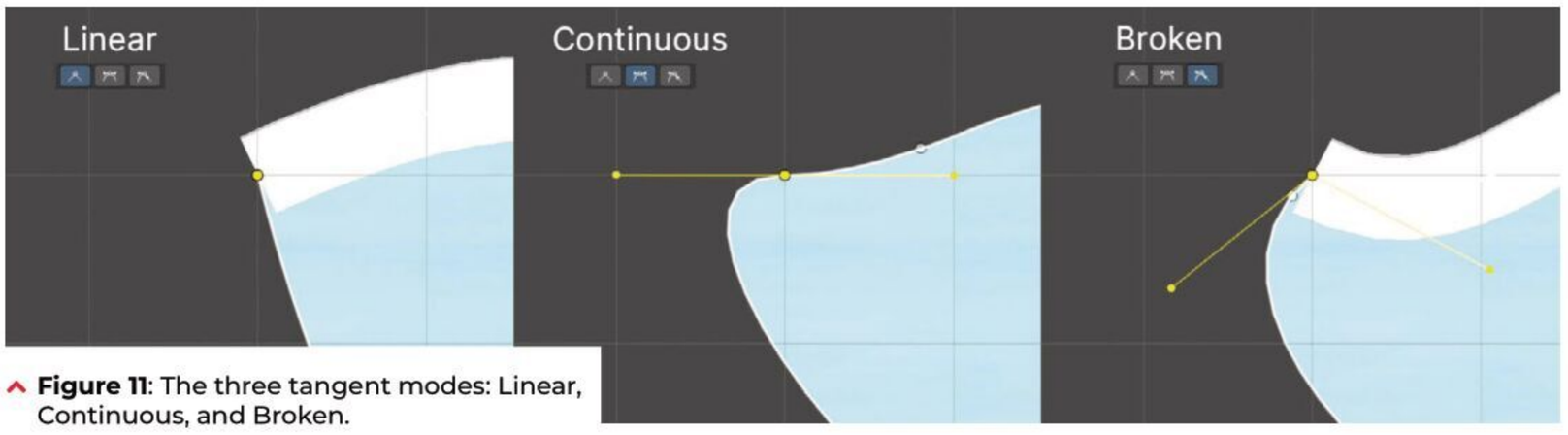
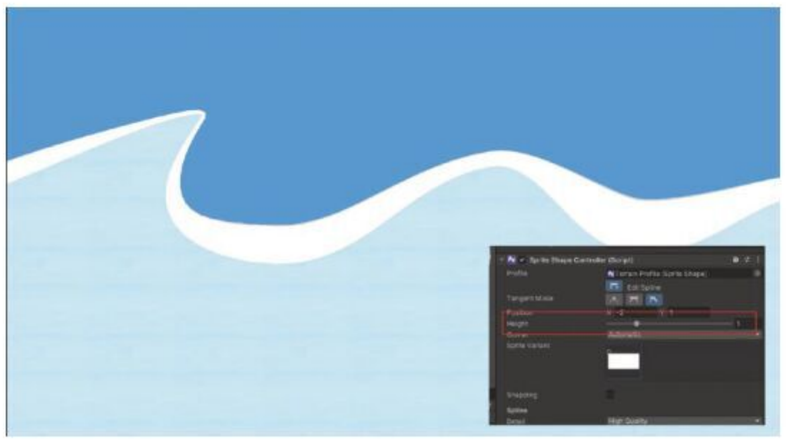


Figure 11: The three tangent modes: Linear, Continuous, and Broken.

Figure 12: Give your shapes more character by affecting the height.



To adjust the curve of the lines near a control point, click on the point you want to modify. You'll now see two yellow handles on each side (**Figure 10**). You can move them around the control point to affect the line's tangent angle, or move them in and out to affect how much the control point affects the curve.

Moving these control points to get the desired shape can take a bit of practice, so I encourage you to play around with them. Before you go down that rabbit hole though, let's talk about tangent modes.

TANGENT MODES

As you move the control handles around, you may notice that both handles are always 180° apart and can't be changed. This is where tangent modes come in handy. In the Inspector, you'll see there are three new buttons under the Edit Spline button. These are Linear, Continuous, and Broken.

All the control points are set to Continuous by default, which gives you a smooth shape. But you'll often want the ability to add some hard edges and corners, and that's where the other two tangent modes come in. Changing the tangent mode to Broken will give you individual control over both handles, and setting them to Linear will completely remove the handles, giving you the ability to add straight edges and hard corners to your shape (**Figure 11**).

By modifying your control points to use these tangent modes, you'll also notice you can get your sprites displaying in accordance with the parameters you set up in your Sprite Shape Profile. If the edges are too thick, too thin, or you want to add some variations along your line, you can adjust all this with the Height parameter (**Figure 12**).

Now we can see the different edge sprites, as dictated by our specified angle ranges, let's look at how to change these sprites to something more appropriate. Head back into the Sprite Shape Profile and select the original angle range. Underneath, you'll see a list containing a single default sprite which you can replace with whatever sprite you choose. If you'd like to add additional sprites to your other angle ranges, rotate the preview handle to an area inside the desired range and add a new sprite to the list by clicking on the Plus button.

Finally, you may notice that wherever you have a hard corner on your shape, the edge sprites can break and look a little off (**Figure 13**). To fix this, you also have the option to apply different types of corner sprites to handle these edge cases. In total, there are eight options: four for the outer corners and four for the inner corners.

So that's it for this tutorial. I encourage you to play around with these tools and let your creativity run wild! Try adding more angle ranges for finer control over the look of your shapes, and play around with adding corner sprites to further refine your assets. Also, try using Sprite Shape to create other assets, such as trees, rivers, etc.

If you'd like to learn more about how to use Sprite Shape, check out GameDev.tv's Complete C# Unity Game Developer 2D course. It teaches you the basics of Unity and C# programming with no prior knowledge required. You'll also create five game projects: 'Snow Boarder' (**Figure 14**) will teach you more about how to make a level using Sprite Shape, as well as adding colliders and effectors. You can also get a whole set of GameDev.tv courses at a bargain price with Wireframe's exclusive reader offer – for full details, turn the page.

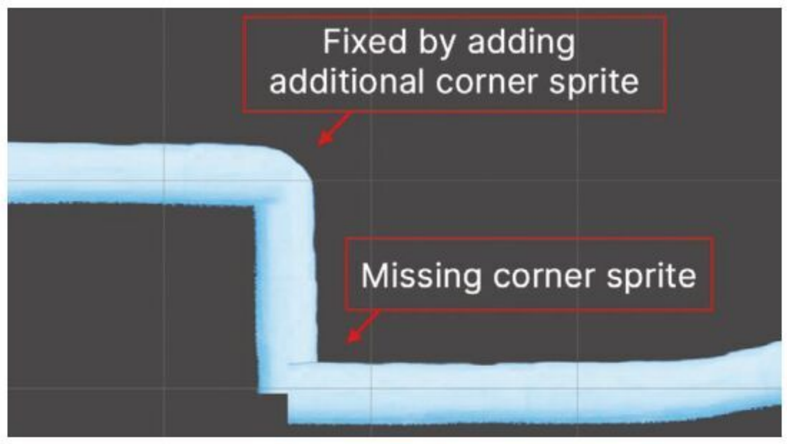


Figure 13: Fix broken corners by adding additional corner sprites to your Sprite Shape Profile.

My final sprite shape with some added set dressing.

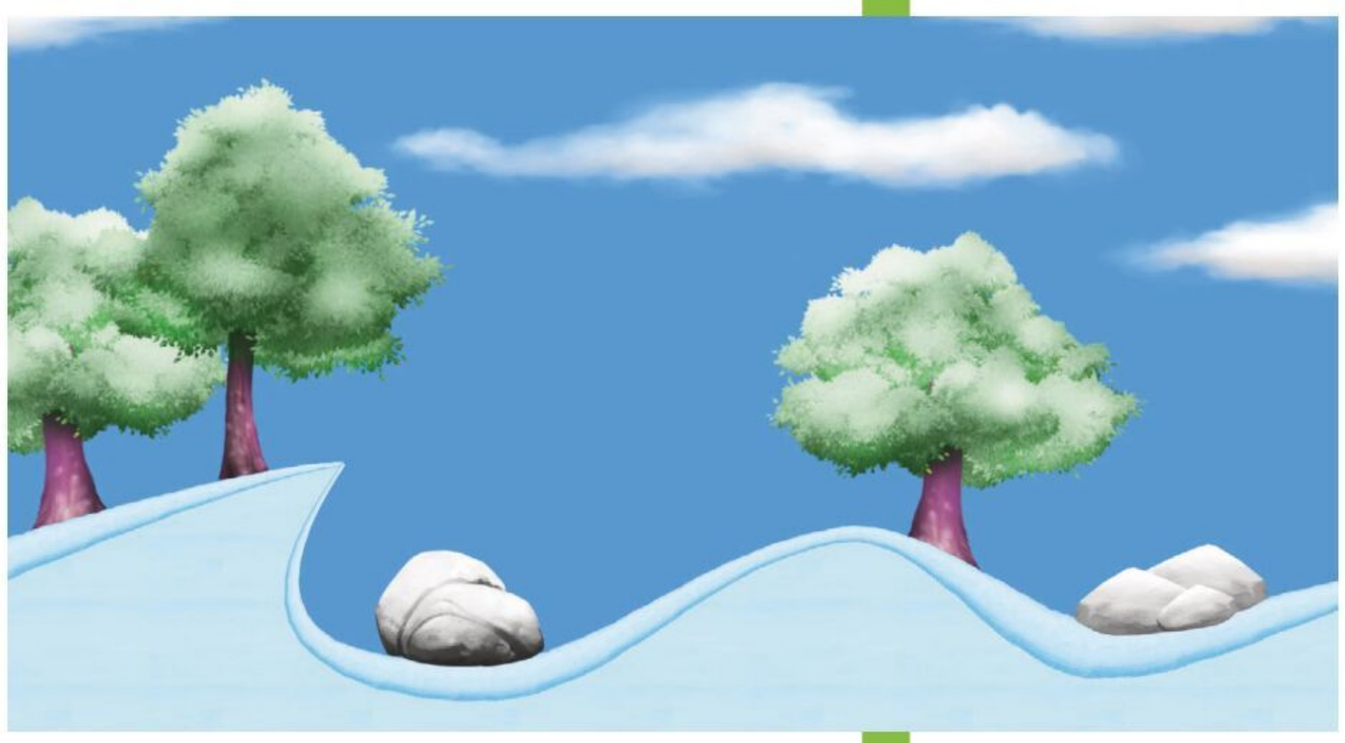


Figure 14: Snow Boarder project from the Complete C# Unity Game Developer 2D course.

SEAMLESS

The sprites you use for your sprite shape edges should ideally be seamless on the left and right edges, making them easy to tile horizontally. If your sprite isn't tileable, you can often get away with slicing the sprite edges in the sprite editor to make them look 'good enough'.

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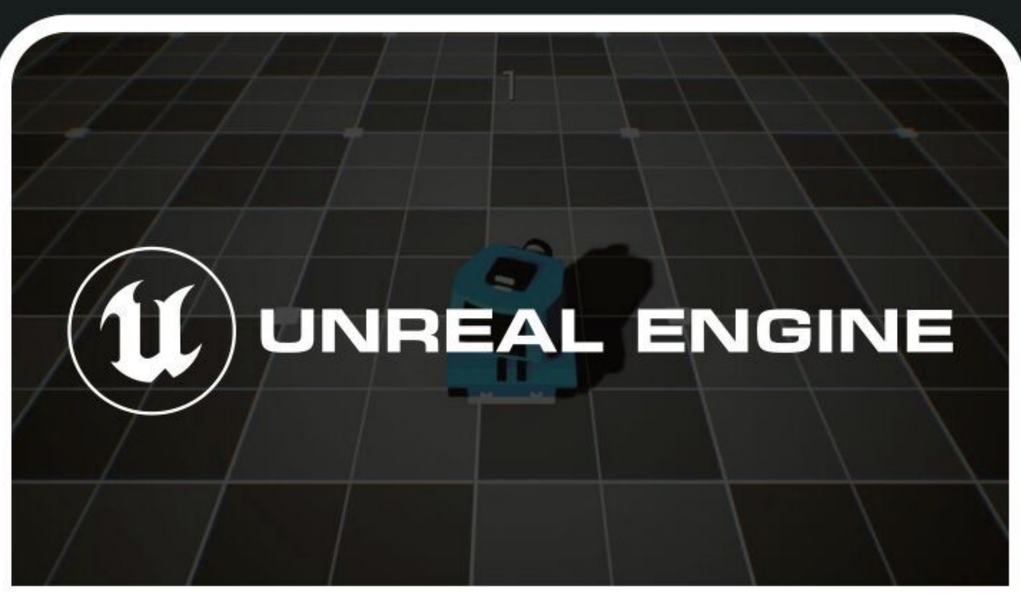
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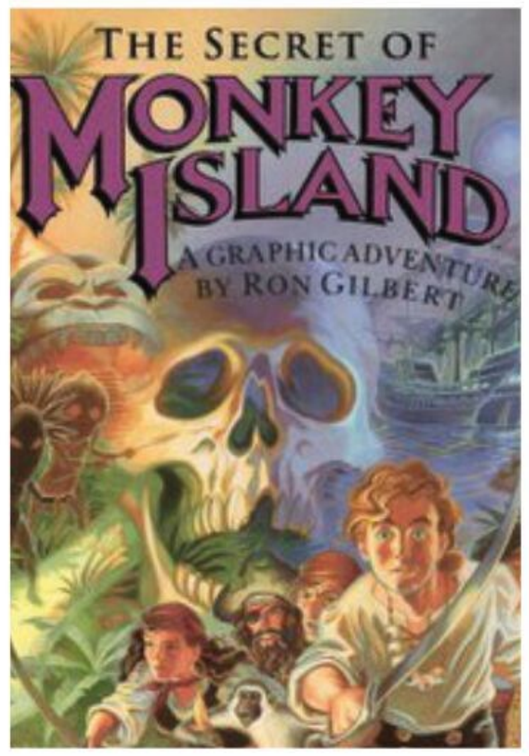
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Source Code

Make a Monkey Island-style adventure

Find out how to make a scripting system with Mark's re-creation of LucasArts' point-and-click classic



AUTHOR
Mark Vanstone

In 1990, LucasArts debuted a point-and-click adventure that immediately captivated audiences with its humour, storytelling, and devious puzzles. Indeed, *The Secret of Monkey Island* – first released on the Amiga, Atari ST, MS-DOS, and Mac – is so beloved that the series is still going today; the latest instalment, 2022's *Return to Monkey Island*, saw series creator Ron Gilbert return as director.

The original game's story follows the young Guybrush Threepwood, his ambition to become a pirate, and his encounters with the ghostly villain, LeChuck. Like LucasArts' other adventure games of the era, *Monkey Island* combined scripted interactions between characters, animation, and interactable objects in each scene. For this sample, we'll re-create the game's opening, where Guybrush meets the lookout man and asks how he can become a pirate. We'll be coding a scripting system that can deal with character interactions and respond to options the player is presented with.

Our scripting system is straightforward in concept, but it's flexible enough to allow us to add extra options as we go along. The script is held in a text file, **data.txt**. In it, we'll have commands such as **`Background:clifftop`**, which we'll interpret as meaning, "set the scene background to be the image called clifftop". We'll have one command per line, each separated from its action with a colon. We may need to vary the format depending on what the command is.

To start our scene, we load in our data file, set our default background image to be a title screen, and then start reading lines from the script list. Our **`processScriptLine()`** function breaks up each line of the script into commands and action data. For example, our first line of script is **`Pause:8`** – **`Pause`** is a command and **`8`** is the data. This sets a countdown lasting eight seconds before the next line of script is read. Then we can set the background image with a **`Background`** command, and in this scene, we've set a foreground image of a wall so that our characters can move behind it.

To set up our characters, we have a list of Actors, and our script command will determine which slot in the list we use for that character. For Guybrush, we'll use slot 0 and in the script write **`Character:0:guybrush1,460,220`**. This translates to, 'Set character 0 to the image guybrush1 and position it at x=460, y=220'. We can set up a character for the lookout man in the same way and make Guybrush walk towards him by alternating between two walking frames and pausing in between each. We then start the dialogue between the two characters. We define a **`Speech`** command and have the text defined in this script line appear over the character's head. While this speech is being displayed, we can alternate between two animation frames to make it look like the character's talking.

So there we have the basis of our scripting system for a scene. There are several lines of dialogue before it's time to move to the next scene. For this example, we can set up some text options for the player to click on. When the player clicks on the option text to 'Go to the Scumm Bar' we search through the script looking for the **`Scene`** command for 'Scumm Bar' and start reading the script from there.

We've only made a small section of the *Secret of Monkey Island* adventure here. To continue the action, we'd need to add more commands to the scripting system to allow Guybrush to move around the screen and interact with items, but our code snippet should give you a good basis to start making your own point-and-click adventure.

Download the code from GitHub: **wfmag.cc/wfmag69**

The Secret of Python Island

Here's Mark's code for a *Monkey Island*-style adventure game scene. To get it running on your system, you'll first need to install Pygame Zero. Full instructions can be found at **wfmag.cc/pgzero**.

```
# Monkey Island
import pgzrun
import random

with open('data.txt') as d:
    script = d.readlines()

pauseCount = 0
stopped = False
currentScriptLine = 0
sceneBackground = "title"
sceneForeground = ""
currentScene = ""
currentText = ""
currentCharacter = 0
characters = [0,0,0]
mycolours = [(100,240,255),(200,200,200),(240,100,100)]
frame = 0
talkRandom = 0
optionText = ["","",""]
optionAction = ["","",""]

def draw():
    screen.blit(sceneBackground,(0,0))
    for c in characters:
        if c != 0:
            if (frame/(5+talkRandom))%10 < 5 and c.talking ==
True:
                c.image = c.imagename + "talk"
            else: c.image = c.imagename
            c.draw()
    if sceneForeground != "": screen.
blit(sceneForeground,(0,0))
    cc = characters[currentCharacter]
    if currentText != "": screen.draw.text(currentText,
center = (cc.x,cc.y-100), owidth=0.5, ocolor=(0,0,0),
color=mycolours[currentCharacter] , fontsize=30)
    for o in range(0, 3): screen.draw.text(optionText[o],
center = (400,450+(o*40)), color=(255,255,255) , fontsize=30)

def update():
    global pauseCount, frame, talkRandom, currentText
    while pauseCount == 0 and stopped == False:
        processScriptLine()
    if pauseCount > 0: pauseCount -= 1
    if pauseCount == 0: currentText = ""
    if pauseCount < 15 and characters[currentCharacter] != 0:
        characters[currentCharacter].talking = False
    frame += 1
    if frame%30 == 0: talkRandom = random.randint(0, 2)

def processScriptLine():
    global script, currentScriptLine, pauseCount, stopped,
sceneBackground, currentScene, sceneForeground, currentText,
currentCharacter
    sl = script[currentScriptLine].split(":")
    if sl[0] == "Background": sceneBackground = sl[1].
strip('\n')
    if sl[0] == "Foreground": sceneForeground = sl[1].
strip('\n')
    elif sl[0] == "Pause": pauseCount = int(sl[1].
strip('\n'))*30
    elif sl[0] == "Scene": currentScene = sl[1].strip('\n')
    elif sl[0] == "Character":
        cl = sl[2].split(",")
        setCharacter(int(sl[1]),cl[0],int(cl[1]),int(cl[2]))
    elif sl[0] == "Speech":
        currentCharacter = int(sl[1])
        currentText = sl[2].strip('\n')
        characters[currentCharacter].talking = True
    elif sl[0] == "SetOption":
        optionAction[int(sl[1])] = sl[2]
        optionText[int(sl[1])] = sl[3]
    elif sl[0] == "Stop": stopped = True
    currentScriptLine += 1

def setScene(scene):
    global optionText, optionAction, sceneForeground,
currentScriptLine, stopped, currentText, currentCharacter,
characters
    optionText = ["","",""]
    optionAction = ["","",""]
    currentText = ""
    currentCharacter = 0
    characters = [0,0,0]
    sceneForeground = ""
    line = 0
    for s in script:
        if s.strip('\n') == "Scene:"+scene:
            currentScriptLine = line
            stopped = False
        line += 1

def on_mouse_down(pos):
    for o in range(0, 3):
        if pos[1] > 450+(o*40)-15 and pos[1] < 450+(o*40)+15
and optionAction[o] != "":
            setScene(optionAction[o])
def setCharacter(cnum,cname,cx,cy):
    characters[cnum] = Actor(cname, center=(cx, cy))
    characters[cnum].imagename = cname
    characters[cnum].talking = False

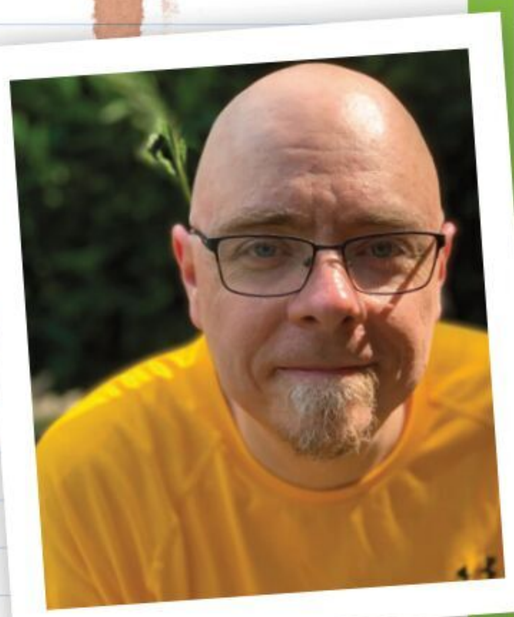
pgzrun.go()
```

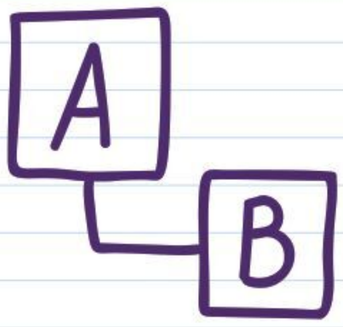


GETTING INTO GAMES

How I became an... Animation Director

Polyarc's **Richard Lico** on imbuing characters with emotion through animation, and how to increase your chances of getting hired





What was the game that first made you want to work in the games industry?

The original *Super Mario Bros.* I was ten years old when it was released. It was the start of an addiction for me, causing me to become far too enamoured with the NES's library of incredible games. I'd read every issue of the Nintendo Fan Club and Nintendo Power dozens of times. I'd spend all my allowance on games. I was addicted to *Zelda*, *Mega Man*, *Dragon Warrior*... all the greats from back then. I knew people made these games. They were paid to do this for a living! My dad thought it was a wild fantasy and he wanted me to be a plumber like him, but I just couldn't see myself doing anything other than making games.

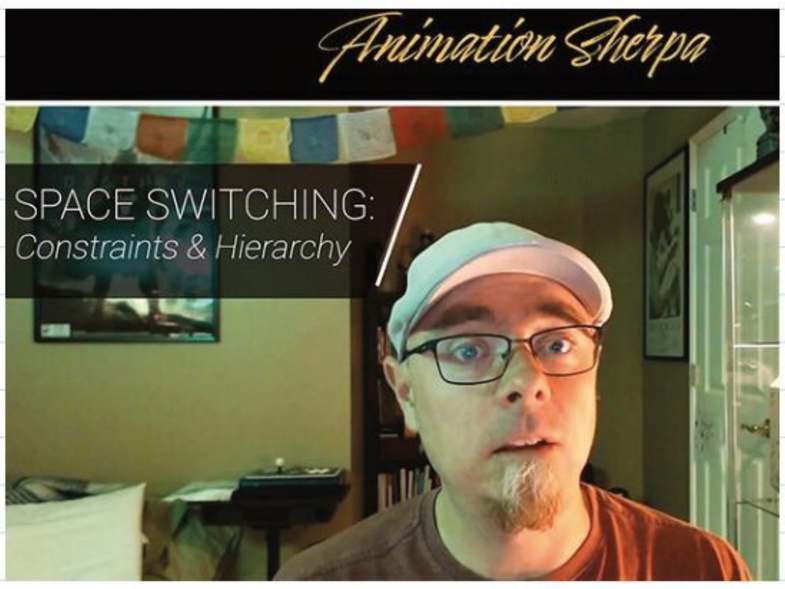
How did you break into the industry?

Back in the mid to late nineties, the gaming industry was growing exponentially and transitioning from 2D to 3D. At that same time, Pixar was exploding in the film industry. I was attending The Savannah College of Art and Design while all this was happening. I saw where things were headed, so I changed my major from 2D to 3D art to adapt, figuring the industry would be hungry for people who knew 3D animation. This bet paid off as studios were on a hiring binge in 2000, taking almost anyone who knew the basics of 3D character animation. My first open door was with Sunstorm Interactive, working on the *Duke Nukem* and *Deer Hunter* games.

What was the first commercial game you worked on? Are you still proud of it?

Ha! That would be *911 Fire Rescue*, which was a shareware game at Sunstorm. It was made by three, maybe four people in something insane like three months. It was a quick cash-in for those who wanted a game about firefighters. It was horrible, and we knew it. Can't say I was ever 'proud' of it. But it was my first shipped game, so I'm thankful for it.

"We are the craftspeople best equipped to build a bridge between humanity and interactivity"



In addition to his full-time gig at Polyarc, Lico runs an online animation course on the side at his Animation Sherpa school (animationsherpa.com).

What's the chief responsibility of an animator, and how do you achieve it?

Animation is the art of creating life. We are the craftspeople best equipped to build a bridge between humanity and interactivity. We are the mirror of game development, reflecting life back at our players. It's our job not only to help make the game fun but also to reach the emotions of our players. How we do this is so complex and unique for every game.

In *Moss*, for example, this meant animations needed to feel detailed, exaggerated but realistic, and fluid. Quill, the protagonist, needed to struggle and put in 110 percent effort to show players how big her world is and make [them] feel protective of her. So, when she swings a hammer, it's not just any generic character



Exaggerated and fluid were two of the primary cornerstones for how Lico wanted *Moss*' cutesy protagonist to move and handle in both VR games.

attacking with a hammer, it's Quill struggling to survive in an oversized world using a hammer. I live by this saying from the old Disney animator, Ollie Johnston: "You're not supposed to animate drawings. You're supposed to animate feelings."

Are there animation pitfalls or rules of thumb you do your best to avoid?

So many I could call out here! But I think the most important one is making sure you can feel a character's emotional and psychological state. It's easy to forget about a character's emotion and psychology when manipulating a curve, or worrying about anticipation, or defining an appealing arc. Gameplay can be especially hard, as designers ask us to have attacks land by frame five with a set lunge distance and branching exits. Getting swept up in the technical challenges or general character movement can sometimes overwhelm animators and distract them from the real goal of bringing that character to life.

What's a mistake you made early on in your career but learned from?

Hubris. Like any new animator in the industry, I was learning a tremendous amount every day. Way more than I was in school. Seeing my own growth curve went to my head. Made me think I knew more than I did, so I got cocky. Which was exaggerated more for me because I was the only animator at Sunstorm. Back then, demo reels weren't readily available online like they are now. So, I didn't have a comparison metric. It wasn't until Ravensoft, when I had the pleasure of working with much more experienced animators, did I really understand my place.

What advice would you impart to your younger self?

I think I'd ask myself to have more empathy. Something I was taught over time by friends, family, peers, and especially having kids. Polyarc, my current studio, has really helped me become more empathetic over the last six years or so. Which, now that I think about it, is probably one of my favourite things about working here. But I wouldn't suggest it only as career advice... rather as life advice. Understanding others doesn't just help you as a person, it helps you become a better actor.

Would you say it's easier or harder than before to work in games today?

Oh, much harder. The quality bar is significantly higher now. The career path is much more crowded. The technical requirements and scope of games today require a vast amount of knowledge. Even at a basic level, a gameplay animator needs to know how to animate well, general game design concepts, state flow, layered clip aggregation, etc. When I started out, we could get away with a few basic clips that popped between states and looked puppet-like, at best. Now we have humans and creatures reacting to complex inputs realistically. It's why animation schooling has gone from being a benefit to almost essential.

If somebody is thinking about a career in games, what's something they can do now to help their future prospects?

Consider what it is about games that interest you the most and laser-focus on that topic. Because when you're applying for a given job, your depth of knowledge is what you'll need to stand out. For example, when we have a job open for a gameplay animator, of course we want someone who can animate well. But we're also looking for candidates who showcase an understanding of gameplay feel and design. Who show proficiency for state flow logic, advanced body mechanics, additive overlays, systems planning, and much more.

Career highlights



Moss: Book II

2022

Lico's current role at Polyarc makes him principally responsible for the way Quill looks and moves in both *Moss* games – an endeavour that has seen him nominated for two Annie Awards.



Destiny 2

2017

After working as senior art lead on *Halo 3: ODST*, and *Halo: Reach*, Lico capped off his eight-year tenure at Bungie as the principal animator for a little game called *Destiny 2*. It was fairly successful, it's fair to say.



X-Men Legends

2004

Before the Avengers formed on the big screen, the only superhero team-up us gamers had was *X-Men Legends*. Lico animated the cinematics of this co-operative brawler as well as gameplay.

How to use GRAFFITI effectively in your virtual world

Graffiti is everywhere in real life, but how can designers and artists make the graffiti in our virtual worlds as effective and believable as the world they exist in?

Written by
Devon Wiersma

Whether a child got bored and wrote something naughty in the cement drying on the sidewalk or a graffiti artist decided to hone their skills on the side of a subway train, wherever people exist, so too does graffiti. Naturally, this means it should extend to the virtual worlds we build as well; after all, why wouldn't a place with virtual humans also have virtual children or virtual artists existing as a part of it?

If the worlds we build are even remotely like our own, they're frequently sites of conflict, upheaval, and socio-economic inequality; to this end, graffiti should be on the cultural frontlines of these battles. For a world-builder, graffiti becomes a useful tool for illustrating these struggles in the worlds we create. So while we know we're inevitably going to have graffiti in our games, how exactly do we, as world-builders, actually go about doing that in a logical way that makes those worlds feel more believable?



‹ Graffiti can exist in many different mediums, including blood as seen in *Dead Space*.



^ *Watch Dogs: Legion* uses buffed walls in its world to illustrate the divide between oppressive government forces and the people being oppressed.

WHAT IS 'GRAFFITI'?

To understand how to use graffiti in world design, we first need to understand what graffiti is as a form of art.

Graffiti is as old as time, with archaeologists discovering examples of crude carvings in bricks as far back as ancient Rome. Modern graffiti as we know it, however, was developed and innovated by the African-American community in the late 20th century and was rapidly adopted by other marginalised people as a means of growing community, self-expression, and resistance. Graffiti writing as a culture is a whole language and form of expression using similar artistic principles and stylings as graphic design. Graffiti can be broadly defined as public art that is created without sanction or approval by those in power.

Therefore, what most people consider to be 'street art' is not, and *cannot* be graffiti, as it's often created with approval (and even funded) by those in power. When we discuss graffiti, this is an important distinction to make – graffiti is in direct opposition to what those in power want themselves or other people to be exposed to.

LOCATION, LOCATION, LOCATION

Graffiti is also almost always about sending a message to an audience. A graffiti artist is painting overt obscenities (the message) on the front door of a government official's home (the audience) or writing a tag (the message) to mark their territory in order to stave off other graffiti writers (the audience) are examples of this. When placing graffiti in virtual environments, this is a key point to remember when you're looking for places for graffiti to live.

Empathy is key in placing graffiti in a world, then – since we're not directly affected by the factors an artist faces (after all, we can just drag and drop graffiti wherever we want), we need to put ourselves in the shoes of the artist to understand the context of a graffiti's application.

Ask yourself: does this piece of graffiti being placed here send the right message to the right audience? If I were a graffiti artist, would this location make the most sense for me to reach my audience? Does *this* piece send the right message, or would a different piece or different location suit the intention of the message or audience better? If we, as creators, can visualise and imagine how or why an artist might have gone about creating a piece in the world, then the player too will have an easier time buying into the world we're creating.

THE PIECE MATTERS, TOO

The piece and the medium it's made of is equally as important as the location of the piece itself. Some forms of graffiti art are faster and more accessible than others, and each has different strengths and weaknesses. Take, for example, a piece which is hand-painted with traditional brush-and-bucket painting techniques. This is going to be time- and resource-intensive, demanding that an artist bring all their painting supplies as well as take the time to mix and apply paints to create it – something only suitable for placement in more obscure areas which might afford the artist less chance of being apprehended while they ➔

Toys

Graffiti-writing itself is an entire subculture with its own rules, language, and history. If you're creating virtual graffiti, you *need* to spend the time learning about the culture in order to ensure you're also placing your graffiti to match real-world contexts. For example, it's offensive to write your own graffiti over the top of someone else's; it implies that you're better than they are or they've got no right to tag in that location. Often this mistake is made by amateur writers or artists looking for a beef. They're called "toys" as an insult.

apply it illegally. Aerosol, however, excels at fast and lightweight application and is more suited to being placed in obvious, visible areas where an artist can spray and escape with ease. Mediums like stencils or wheatpaste, similarly, allow an artist to create the piece beforehand before applying it in the world, allowing more accurate results with less hassle. Each type of graffiti medium has different strengths and weaknesses that should be considered before placing them in the game world in order to maintain a logical consistency.

Where isn't the graffiti?

It's equally as important to consider where graffiti isn't, and why that's the case. Thanks to the stigma around graffiti, there's a tendency to consider its presence as an indicator of crime or a dangerous population, when it's more of a visual shorthand for systemic resource allocation. There's a reason the financial district of most cities is well-maintained and rarely shows any signs of graffiti, while low-income or abandoned areas are covered in it: because those in power decided these areas aren't deemed worth the investment of keeping it maintained.

So richer areas are well maintained. But how do they do that? The graffiti term for it is 'buffing', which basically means removing graffiti, typically by means of a pressure washer or repainting a surface. Buffing is usually undertaken by janitors, groundskeepers, or street cleaners and is usually poorly done, leaving behind patchy walls of new and old paint, or faint remains of the graffiti underneath. Buffed walls are powerful visual storytelling tools that are criminally under-used in games; their inclusion can reveal the history of the surface and illustrate to the player a struggle between cultures that might be occurring in areas around them. Where graffiti exists, so too do powers which want it to be gone forever, and putting effort into depicting that struggle is key to making virtual spaces and cultures feel in conflict and truly real.

If there was graffiti in a location that an oppressor had an interest in removing, signs that graffiti was there should remain. If we compare the virtual worlds we build to the real ones, they should equally have as many buffed walls, or at least remnants of graffiti, as real ones. From what I've observed, however, buffed walls are often used as an afterthought if they're used at all – otherwise graffiti either exists or doesn't, and the struggle between forces in virtual worlds remains much more muted when we take that approach to them. Push for more buffed walls in your worlds, because graffiti, like many elements of society and culture, doesn't exist in the binary.

Graffiti is everywhere

Remember that graffiti writers aren't exclusively lower-income folks, nor do people always create art exclusively in their own communities. Remember too that wherever there are people, graffiti is sure to follow, and the general public typically has little idea as to just how unhinged graffiti writers can be in pursuit of an opportunity to showcase their work. Many games will focus graffiti on the ground level of buildings and largely use it as an aesthetic device on areas players will most frequently inhabit and observe. In reality, graffiti deviates

Many games feature graffiti prominently as a mechanical incentive to have the player interact with the world.



Left 4 Dead's safe rooms are an excellent example of graffiti that shows how the space has evolved over time through its graffiti.





In *Dying Light 2*, even the most obscure tunnels of the sewers have a rich presence of graffiti, showing artists will go anywhere to put up a piece.

from this pattern aggressively – take a walk through any city and you'll see numerous examples of graffiti on rooftops, fire escapes, billboards, and even on the sides of buildings. Graffiti artists aren't limiting themselves to areas where people are most likely to tread; in fact, graffiti is often everywhere, and this should be consistent in the worlds we create.

In graffiti culture, hard-to-reach locations are incredibly desirable to writers. If you can tag a spot that's hard to reach – especially if it's highly visible – it shows other artists your bravado and skill. Officials will also have a harder time buffing locations that are harder or cost more resources to get access to, so a piece in a more difficult-to-reach spot will last for much longer than one on ground level. Graffiti writers will use rock climbing and pulley systems, breaking and entering, impersonating officials, swimming through bodies of water, and even bribery in order to secure access to obscure locations to create their works in new and unusual places.

If you, as a level designer or artist, need to find a place where graffiti "makes sense", then I have good news for you – that place can be anywhere. There's practically no limit! Keeping this in mind truly unlocks our use for using graffiti as a means to guide players and build on the story of our world in exciting and versatile ways. Graffiti never exists only in places where most people can see it, and neither should we adhere to these limitations in the worlds we create.

GRAFFITI TELLS A VISUAL HISTORY

Graffiti is also a tool for depicting the visual history of a place – how people got here, what their thoughts and feelings were, what their ideals might have been, what happened to them or the space after they left – a type of virtual archaeology chronicling the spaces we create. Let's embrace it as such.

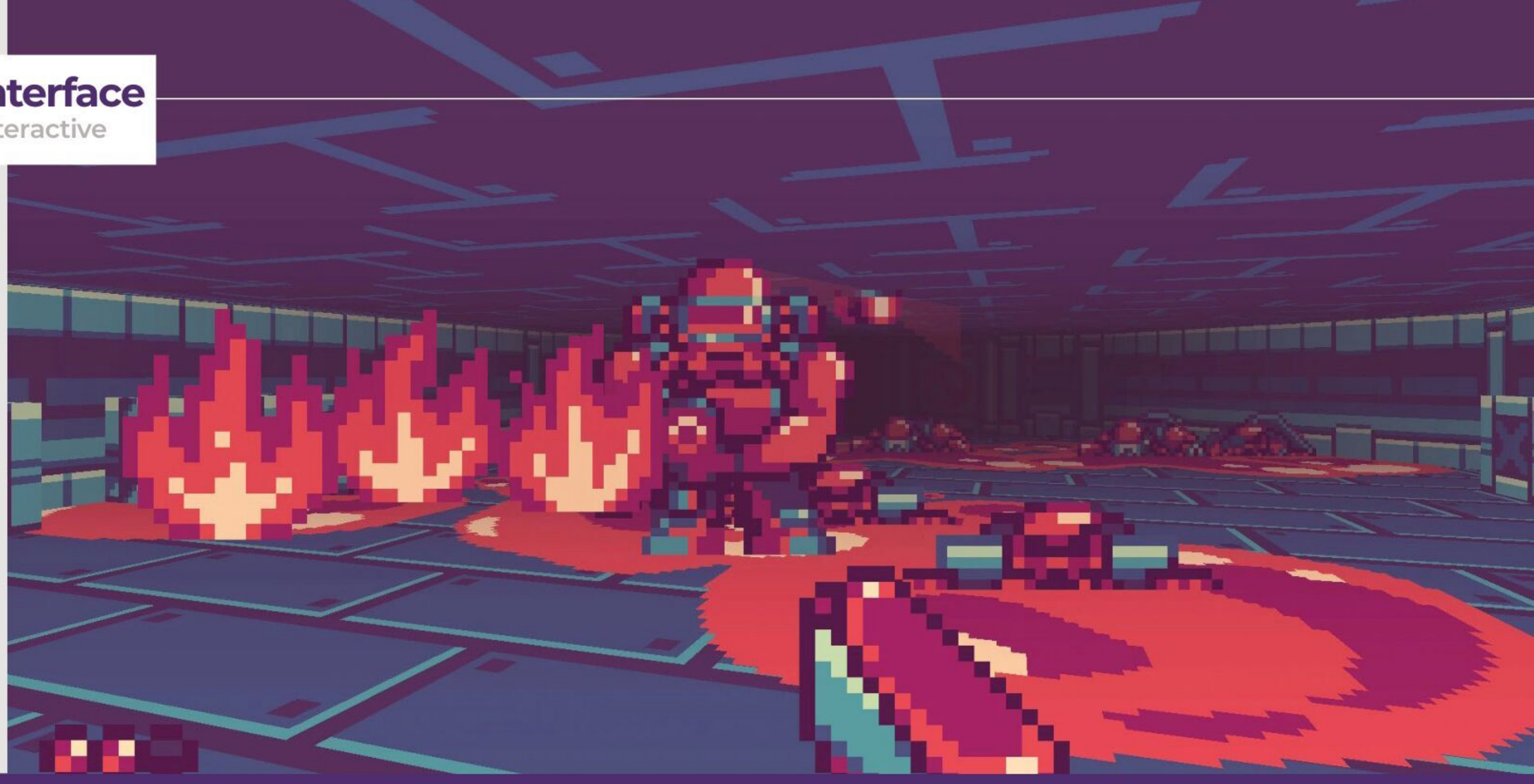
When a graffiti artist creates, it's rarely in a vacuum, and is usually influenced by the world around them. The location they choose is informed by how easy and safe it is to reach, and the distribution of the piece is influenced by how well-suited the wall is to being sprayed on; the piece just existing on the wall for long enough can prompt other pieces to appear, which might prompt authorities to crack down and buff that wall in particular or, alternatively, the space might be forgotten and the piece could be overrun by overgrowth. The entire growth and development of a space over time can be driven by graffiti; it's a dynamic dance of factors that can be seen in the final product. When we place graffiti in our worlds, we need to consider the age of the space as a factor in how it appears, and how that history might come across to the viewer.

DRAWING A LINE

There's a lot of nuance to keep in mind when evaluating how we use graffiti in our games, but hopefully these tips can help inform your approach. Where there are people, there will always be graffiti, and the better we can understand and empathise with its creation (and its creators), the closer we can get to building virtual worlds that are as immersive and relatable to our own.

Messages of revolt and revolution to inspire a populace are an example of abundant graffiti in *Far Cry 6*.





The contrasting red and blue colour palette is designed to contrast the cool steel of the ship with the "hot" organic materials like alien flesh, fire, and blood. Nice.

Interactive / Exophobia

It has the pace of a retro FPS but the soul of a Metroidvania. José Castanheira tells us about his first commercial project

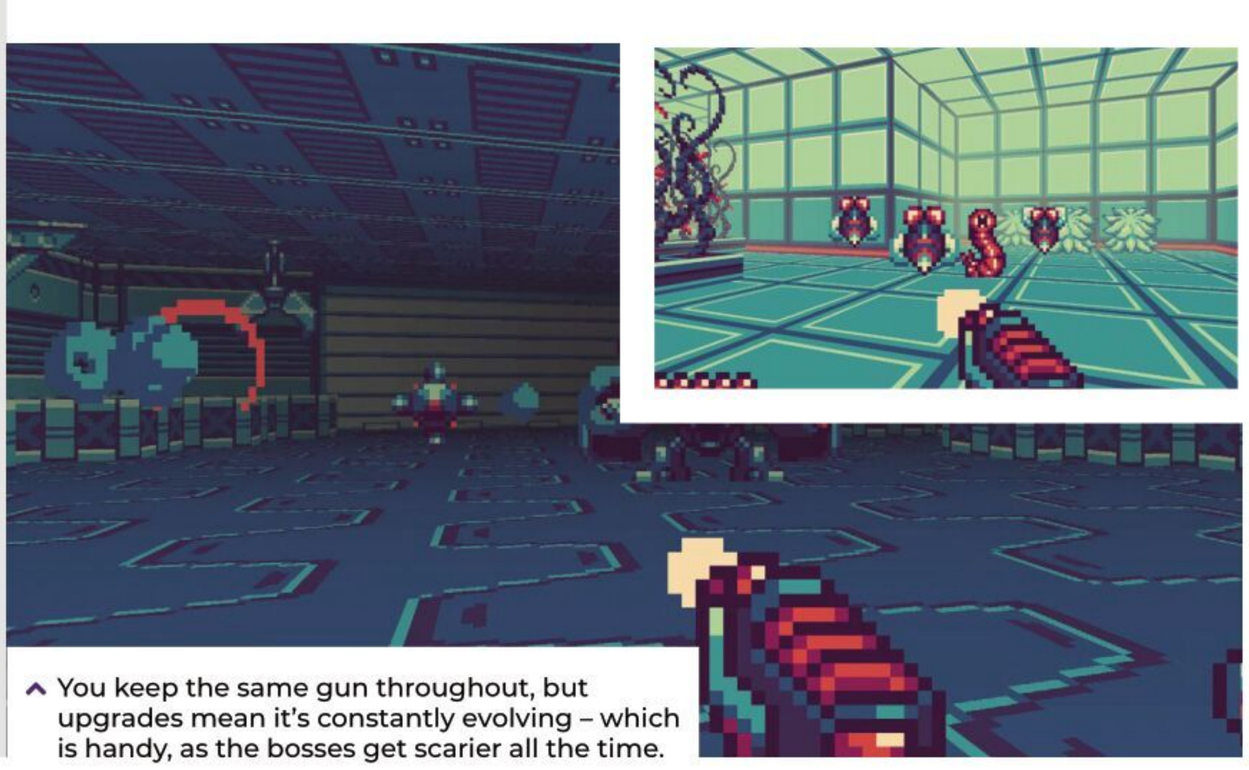
Are you a solo developer working on a game you want to share with Wireframe? If you'd like to have your project featured in these pages, get in touch with us at wfmag.cc/hello

What do you get if you fuse the sprite-based, first-person action of an early *DOOM* game, the aggressive enemies of *Mega Man*, and the level structure of *Metroid*? You get Spanish developer José Castanheira, poring over GameMaker Studio 2, trying to get to grips with the challenges of making his first 3D game. Or, more specifically, you get *Exophobia*: a hectic shooter that, with its limited palette and low-res sprites, looks like a first-person shooter (FPS) that's somehow been forced to work on ageing NES hardware.

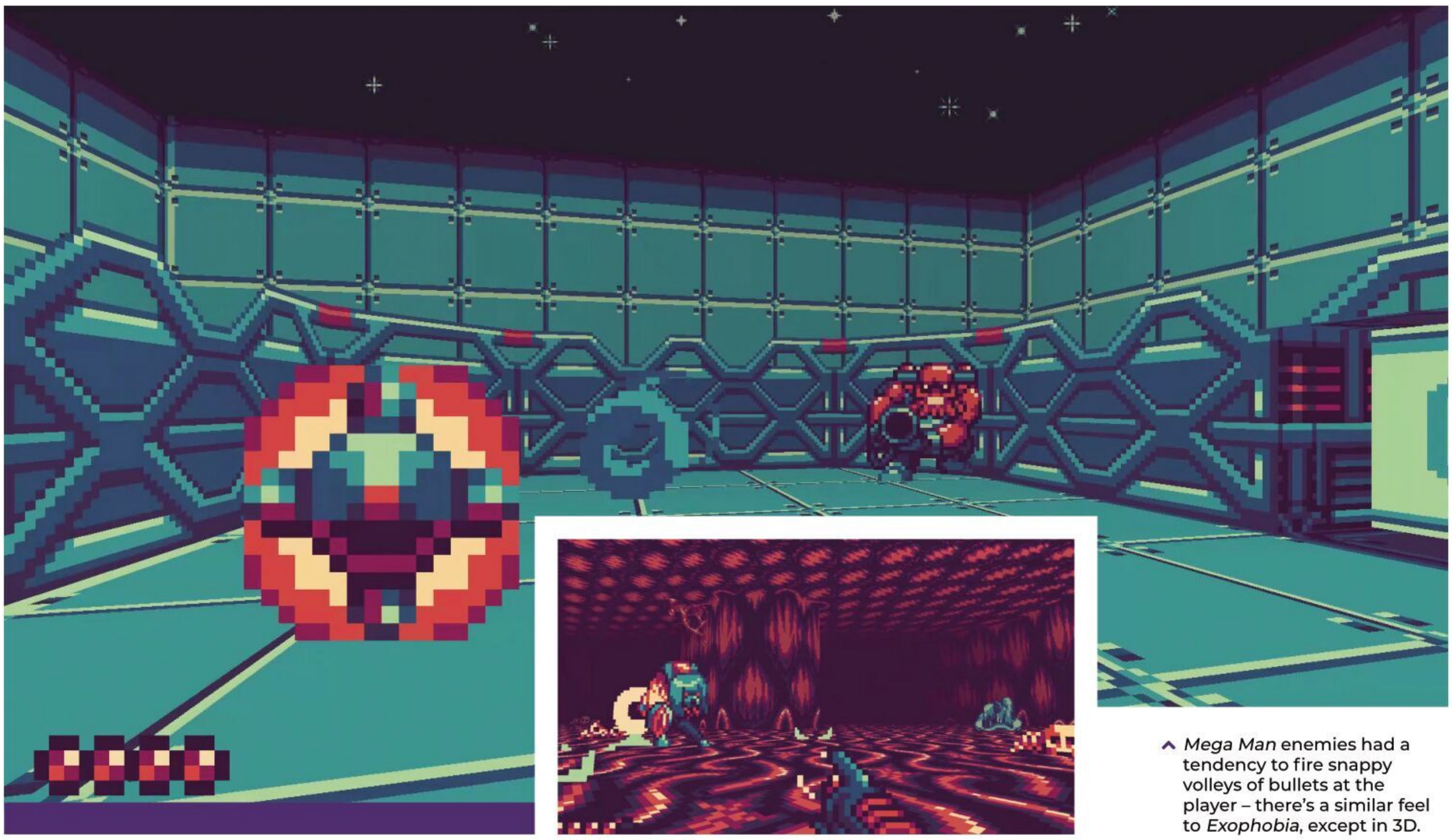
Set aboard a spacecraft that has crashed on an alien planet, *Exophobia* has you roaming the vessel's cavernous floors, finding keys for locks, and discovering new weapon upgrades that will help you defeat the increasingly vicious enemies you'll encounter as you progress. If Castanheira has struggled somewhat with the process of getting GameMaker – a platform more typically associated with 2D experiences – running an FPS, there's little sign of it in the demo currently available on Steam (**wfmag.cc/exodemo**). The action's fast and punchy, while the *Metroid*-style sense of progress means you're constantly finding new items or uncovering previously hidden areas.

Most surprising of all, Castanheira previously had little interest in the FPS genre. "I like to make games I enjoy playing myself, so *Exophobia* collects influences from outside the retro FPS genre," he tells us. "*Metroid* and *Mega Man* were huge influences, and I always thought about how I could bring the feeling of playing those games in the first-person."

Exophobia began life in 2015 as a "super-clunky and impossible to beat" entry in a Ludum Dare game jam. Called *The Red Planet*, it may have been a victim of its hurried development, but still provided the basis for what would become *Exophobia* – there was the sci-fi story, the *DOOM*-like action, and a limited, 8-bit style colour



You keep the same gun throughout, but upgrades mean it's constantly evolving – which is handy, as the bosses get scarier all the time.



▲ *Mega Man* enemies had a tendency to fire snappy volleys of bullets at the player – there's a similar feel to *Exophobia*, except in 3D.

palette. "Despite the bad gameplay, the game got a lot of attention because of the graphics and how it was reminiscent of retro shooters at a time when they were just starting to make a comeback," Castanheira recalls. "When it was time for me to start my first commercial game, I picked [*The Red Planet*] because I thought I could make something small and special with it, and most importantly, I wouldn't get too attached since it was a genre I didn't particularly love – I wouldn't risk falling into the pit of scope creep."

Castanheira was still in college when he made his Ludum Dare entry, and as graduation approached about three years ago, he made the bold decision to start making *Exophobia* rather than take on a full-time job.

"My plan was to release my first commercial game right after college, before I got bigger responsibilities or got used to a comfortable salary," he says. "So I worked on it pretty much full-time, doing the occasional client work or some teaching each week, because I needed something else to focus on for a while."

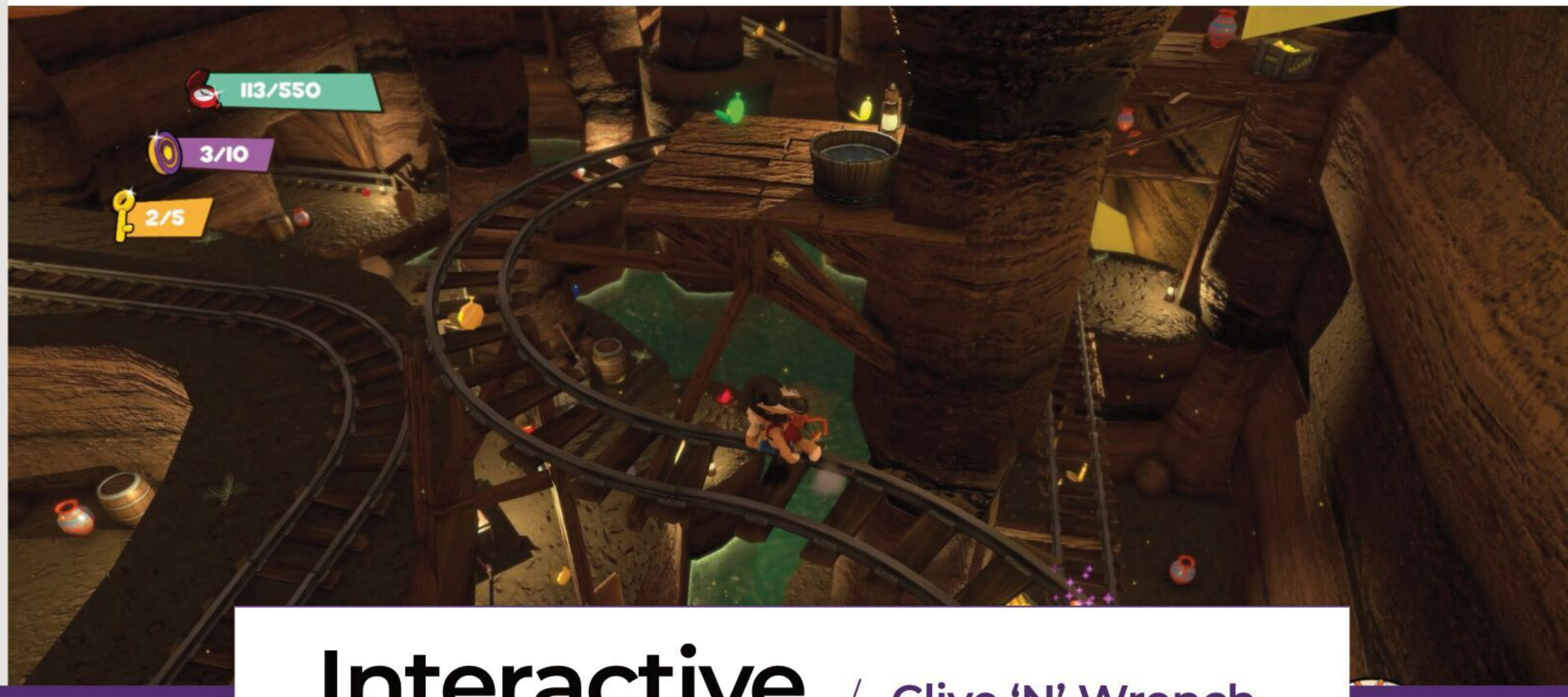
What Castanheira didn't envisage was just how long development would take – which is where we come back to the task of getting an FPS working in GameMaker. "There have been efforts by the community and the GameMaker team itself to improve how it works with 3D, but it's still a challenge compared to other 3D engines. For someone who'd never worked with 3D graphics before, most of my early development time was understanding it. But I still fell into traps like bad performance, where a lot of things needed to be rewritten, and that's where I really had to ask for the help of someone experienced."

Support also came from PM Studios, whose funding enabled Castanheira to move out of his parents' house and spend more time on development. *Exophobia* is now scheduled for release in 2023, and for Castanheira, those larger technical concerns are at last in the rear-view mirror. "Right now, I'm working on finishing the map and assembling everything together," he says. "There's also a lot of testing and bug fixing left. There's always that lingering feeling that the game could be so much better, but I will have to let it go sometime! I'd cut some content before the game got delayed, so I hope now I can add one last secret boss fight for players that like a good challenge. I really hope I can hit gold before the end of the year so I can finally move on to other projects. I've been itching with some ideas but no time to do anything about them yet."

Whatever Castanheira tackles next, don't expect it to be an FPS. "I will probably never return to 3D after this experience" he laughs, "but that's just because I really prefer to design 2D games."

Maps and legends

One of the project's major challenges, Castanheira says, came from designing a *Metroid*-style map in a 3D, first-person game; where most Metroidvanias are partly designed around climbing platforms and ascending or descending vertical level layouts, the earliest first-person shooters had almost no verticality at all. "Metroidvania maps in themselves are hard to design and require a lot of planning, but to mix them with *Wolfenstein 3D*, maze-like levels takes it up a notch. I'm still in the process of making sure levels have good pacing and aren't confusing to the player, since rooms can look a lot alike. Also, trying to add enough content for a full-length game has been hard – I've fallen into a loop of adding just one more feature several times and still feeling it's not enough!"



Interactive / Clive 'N' Wrench

On the eve of Clive 'N' Wrench's launch, we catch up with solo dev Rob Wass to reflect on his decade-long passion project

Are you a solo developer working on a game you want to share with Wireframe? If you'd like to have your project featured in these pages, get in touch with us at wfmag.cc/hello

Right up there with roguelikes and Metroidvanias, another old-school genre that continues to boom is the throwback 3D platformer. Yes, games in which you must carefully guide a character (often alongside a cutesy companion) as they jump, hop, or bounce from one scenario to another are firmly back in fashion, as indicated by *Spyro* and *Crash*'s recent-ish remasters and the several indie homages that followed. One person to have foreseen the style's potential for glorious return is Rob Wass, who first decided to do something about its absence some twelve years ago.

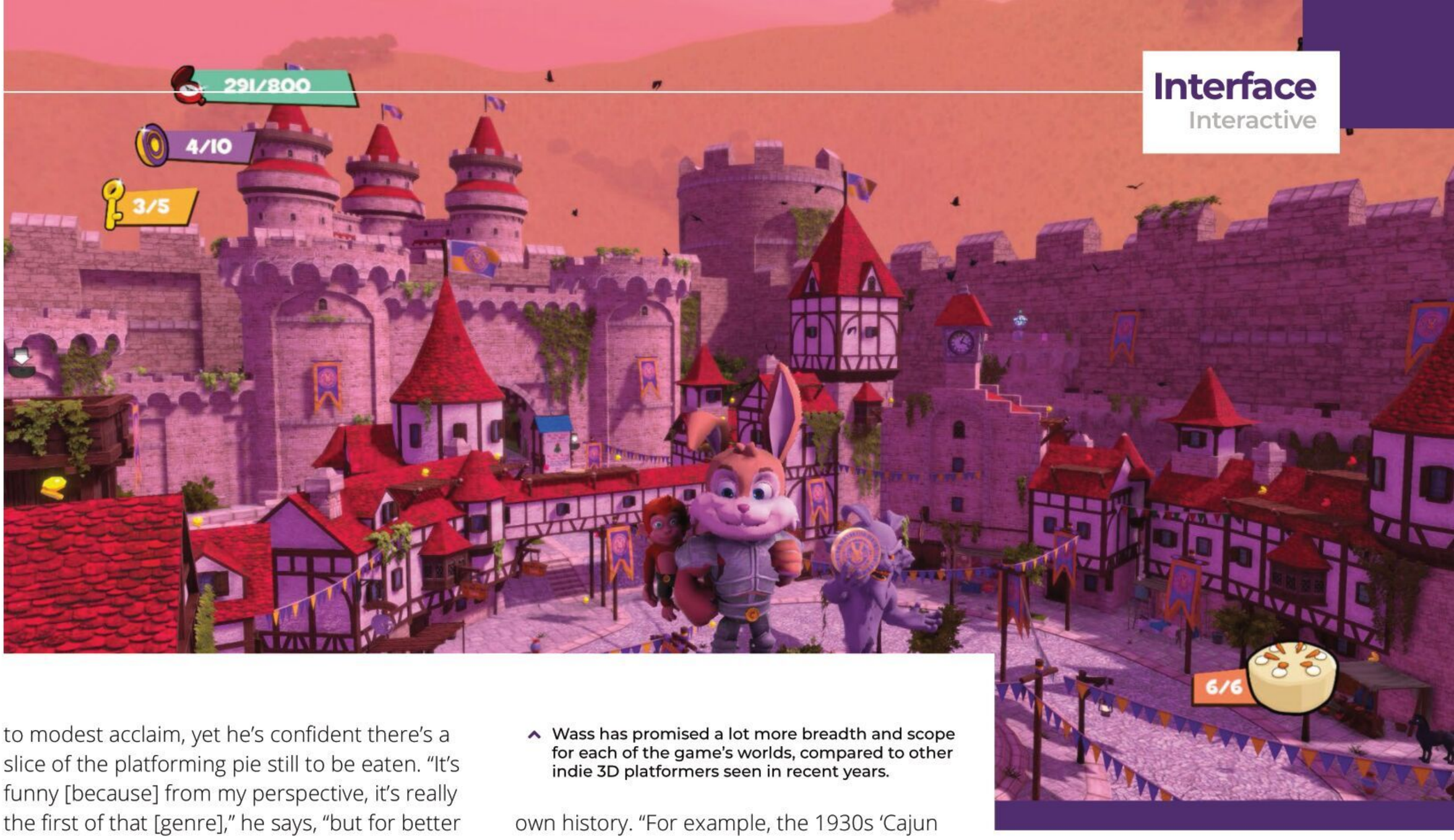


^ Time travel playing an important part in the story means no world you visit ever need look or feel the same, and all eleven riff on a different theme.

"Around 2010 or 2011 I'd been noticing how few 3D platformers there were on the market; it seemed the genre was all but dead," Wass remembers. "I even went as far as creating a YouTube video outlining my disappointment that it seemed nobody was making the kind of games I like to play anymore." Thousands of viewers unsurprisingly agreed with him, and the positive response to the video gave Wass the inspiration he needed to try and tackle the issue himself. "Little did I know, at the time, that this curiosity would result in a decade-long project!"

Even in Wireframe time, *Clive 'N' Wrench* has been a long time coming. When we first interviewed Wass for this section some four years ago, the graphic designer-turned-solo developer had ambitions for what he wanted his game to be, but was without a publisher and admitted to being "rather naïve", even back then. The pace has picked up drastically since 2018, however, and now with Numskull Games on board to help bring this rabbit and monkey duo's adventure across the finish line in February next year, a simultaneous launch on Switch, PlayStation, and PC is imminent.

There's an understandable hint of frustration from Wass regarding *Clive 'N' Wrench*'s protracted development time. After all, the likes of *Yooka-Laylee* and *A Hat in Time* have since released



▲ Wass has promised a lot more breadth and scope for each of the game's worlds, compared to other indie 3D platformers seen in recent years.

to modest acclaim, yet he's confident there's a slice of the platforming pie still to be eaten. "It's funny [because] from my perspective, it's really the first of that [genre]," he says, "but for better or worse, it isn't the first to release. Having said that, I think more than most of its peers, *Clive 'N' Wrench* leans far more into the large, open explorable areas of something like *Jak and Daxter* or *Spyro*, mixed with some of the more complex combination moves seen in games like *Super Mario Odyssey*. You'd also be hard-pushed to find a game with as many awful puns as this."

Pun proficiency aside, Wass cites the game's time travel element as being a key differentiating factor for *Clive 'N' Wrench*, too. After being given a job as his cousin Professor Nancy Merricarp's apprentice early on in the story, the titular duo are thrust together under the same roof and forced to form a bond. Cut to the blueprints for Nancy's time machine being stolen by the power-hungry Dr Daucus, which gives Clive and Wrench the perfect excuse to traverse no fewer than eleven distinct worlds in an effort to get them back. More than just a loony premise for a family audience, stretching levels across different time periods helps ensure that this 3D platformer is never short of visual or design variety.

Surely making eleven environments each look and feel unique is a tough prospect? "Not particularly," Wass enthuses. "I think the time travel element naturally lends itself to a wealth of interesting places to visit; if anything, the tough part was keeping the ideas focused on just those eleven. Any time I got stuck, I could just delve into a history book and get inspired by places that actually existed once upon a time." Most often, this technique led Wass to combine several times and places within our own history. "For example, the 1930s 'Cajun Mob Bog' world combines New York-style Italian American architecture with a New Orleans-esque geographical setting. [Then there's] the rather counter-intuitive Christmas-themed prehistoric level, where you can use dinosaurs as platforming elements and meet the rather jolly woolly mammoth, Father Noelephant."

Between two failed Kickstarter campaigns, development being partially funded by Patreon backers, and an entire global pandemic to deal with, *Clive 'N' Wrench* has overcome more challenges than even the pluckiest of platforming heroes. That said, with the end finally in sight, Wass hopes that long-term supporters and new fans alike won't be disappointed by his throwback to a nineties genre so beloved by so many. It won't be just Wass closing a life chapter, but also everyone who has patiently anticipated the game's release for well over a decade.

"It seemed nobody was making the kind of games I like to play anymore"

"I've been developing *Clive 'N' Wrench* fairly publicly since 2011, with the original release announcement being for winter 2020," reflects Wass. "Rather unfortunately, this coincided with the time Covid really started throwing wrenches into basically everything on the planet. For *Clive*, that's meant bottlenecks spanning from cancelled convention appearances, to extended manufacturing timelines and even difficulty finding the right studio to help with console porting. As such, to actually be finally looking at the finish line now does feel great. Though of course I'm nervous to see what people finally think after such a long wait, and even longer development."

▼ *Clive 'N' Wrench* offers players the opportunity to discover whether dinosaurs enjoy snow.



DREAM DUO

Despite a similar naming convention to Insomniac's *Ratchet & Clank*, *Clive 'N' Wrench* does a few things differently with regards to how its heroes interact. "Wrench spends most of his time hanging onto Clive's backpack," says Wass. "Clive does the majority of simple traversal, be it running, jumping, flipping, etc. Wrench comes into play as a weapon for spinning around and hitting objects or enemies (don't worry, it's his idea). Wrench also acts as a makeshift propeller for their combined 'Chimp Chopper' hover move and is quite happy to hop onto Clive's back when he's sprinting on all fours.

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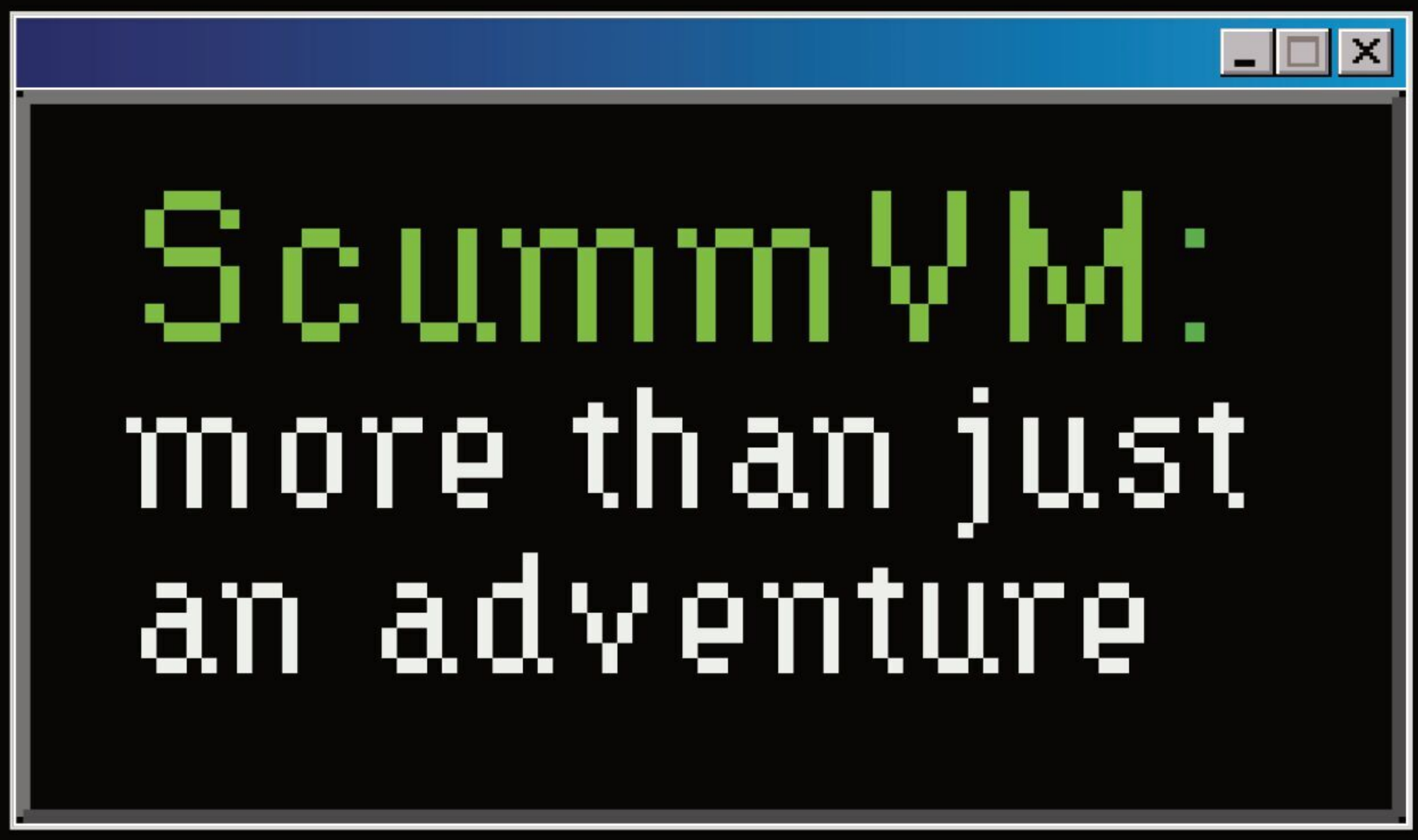
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It's a popular frontend used to play point-and-click adventures and other games. But where did ScummVM come from, and who works on it? We find out...

WRITTEN BY **DAMIANO GERLI**

Preservation wasn't considered a pressing issue for the gaming industry until well into the 2000s. While such emulators as KGen and Snes9x allowed PC users to play Mega Drive and Super Nintendo games from the late 1990s onwards, there was no such luck on the MS-DOS or Windows front. With the Microsoft operating system abandoning the DOS architecture for good at the end of the nineties, playing old PC games started to become more and more of an issue. Around the turn of the millennium, though, a dedicated adventure game fan base began to overcome those hurdles, providing access to the output of LucasArts and beyond. The original ScummVM project was started in 2001 by Vincent Hamm and Ludvig Strigeus – the latter becoming better-known as the main developer of Spotify.



Indiana Jones and the Last Crusade: The Graphic Adventure was arguably among the best licenced games of the late eighties.

Since its inception, ScummVM – its name derived from LucasArts' Script Creation Utility for Maniac Mansion engine – was never meant to emulate any specific software or operating system. Instead, it's based on rewriting a game's original executable using its source code. When this isn't available, reverse engineering techniques are used to extract the code contained in the executable, thus rewriting it in C++. Using the replaced ScummVM executable, all the game's data files (graphics, audio, scripts, and so on) are still needed to play it. This allows new features to be added, such as cross-platform support and graphical filters, and introducing new functionalities like save states or mouse functionality.

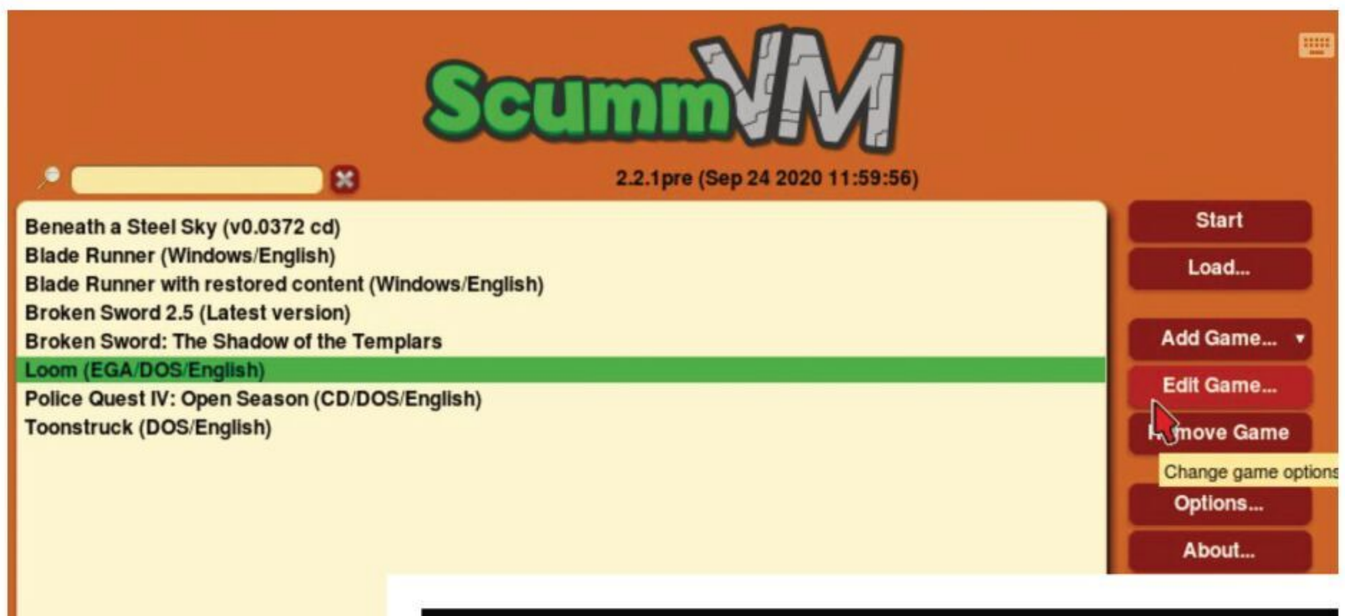
HUMBLE ORIGINS

Thinking back to when the project got started, co-developer Vincent Hamm remembers that he'd been poking around SCUMM-based tools for a while. "Other people had previously worked on the games, but nobody had taken a stab at the scripting language," he says. "So I started working my way through *Maniac Mansion* and *Zak McKracken*. When it came to adding characters, I found a doc online on *Monkey Island 2* written by Ludvig. I got in touch and he was working on something similar, but was way ahead of me, so I dropped my own project and joined his – that was yet unnamed, as I recall."

They started working on supporting several LucasArts adventure games, but after finishing work on *Monkey Island 2*, they hit a wall. "The sound system in *Sam & Max* and a large bunch of script bits were very different from previous games," says Hamm. "This was also around the time that Ludvig, whose aim was just to emulate *Day of the Tentacle* and *Monkey Island 2*, started to lose interest. He was still around in the chat, but contributed less. By then, though, the project had gained traction, with other people helping. I was still very much involved in the core of the SCUMM interpreter, continuing the work on later [games] – *Full Throttle*, *The Dig* – and earlier [ones] – *Indy 3* and *Loom*."

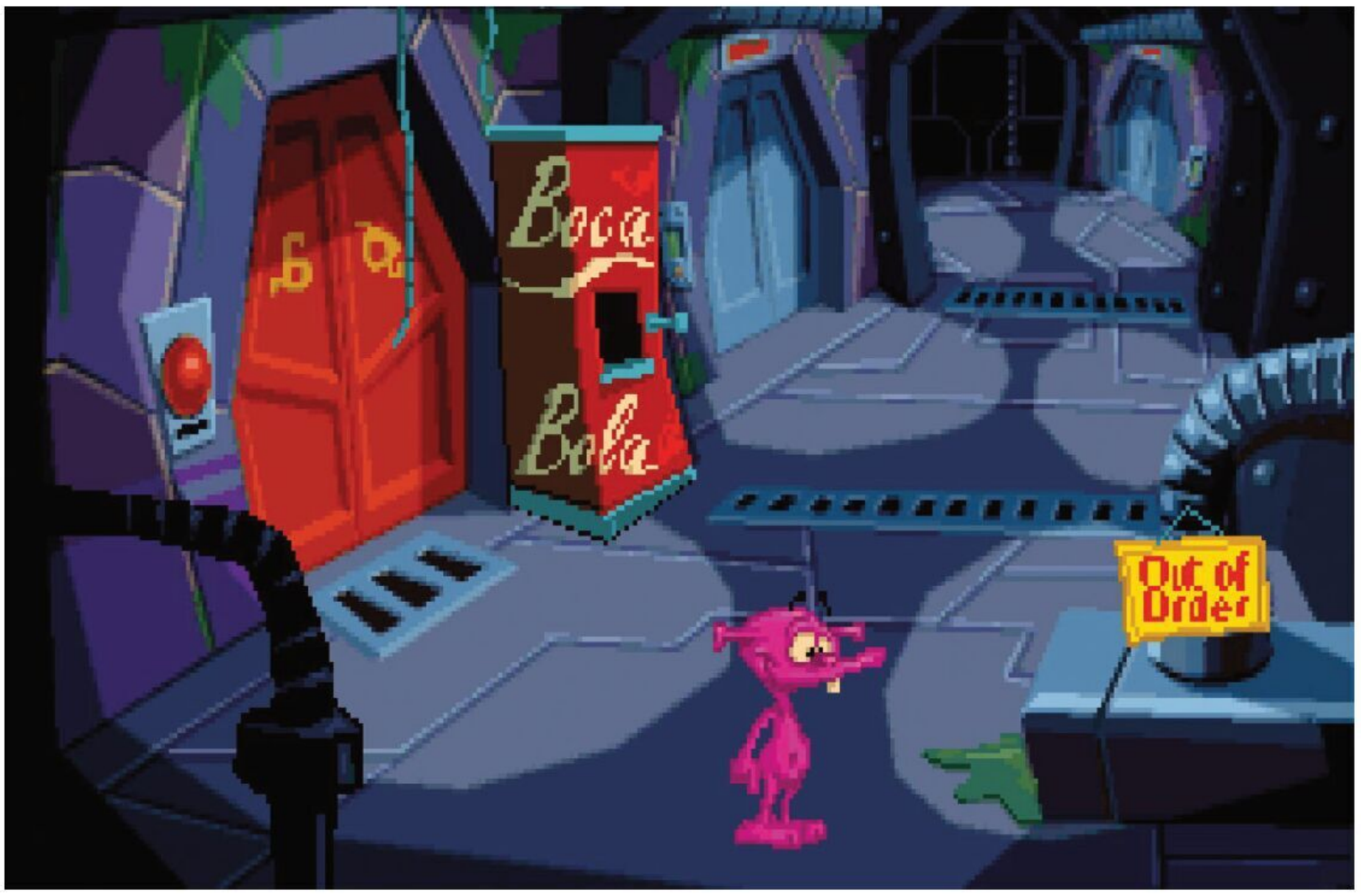
Once those LucasArts games were also being supported successfully, Hamm would gradually reduce his contributions on the project, though he still stayed in touch with the community he helped foster. "There's an educational aspect to ScummVM," Hamm says. "Being open source, everyone can go in and see how those games are made and work, and learn from it. There's also preservation. Those games were harder and harder to get working, and that was something I wanted to solve in some way. Sure, one could always go back to a virtual machine, but it was a hassle compared to just being able to run the games on a modern OS." ➧

The current interface has a cleaner look, less like a classic LucasArts game and more like a modern frontend.



The classic old ScummVM interface can still be used by selecting the appropriate theme in the options.





› *Chewy: Esc from F5* is another recent addition to the ScummVM list of compatible games.

EXPLAINER: MACROMEDIA DIRECTOR

Director was an application for developing multimedia projects without the need for fiddly programming. Originally released as VideoWorks on Macintosh by MacroMind (later Macromedia), the name Directors was introduced in 1987, with a Windows version made available several years later. The platform also included a scripting language, Lingo, which worked in a similar manner to Microsoft's ActiveX. Director was used to develop many multimedia projects and adventure games, such as *The Journeyman Project*, *Noir: A Shadowy Thriller*, and *PYST*. In 2005, Adobe bought Macromedia and changed the application's name to Adobe Director. It lasted until sales and support ceased in 2017.



^ *Sanitarium* is one of the latest games added as an engine in ScummVM. It's a 1998 point-and-click psychological horror.

SCUMMVM TAKES FLIGHT

The project soon saw other leads step in, like Eugene Sandulenko, who's now been working on ScummVM for almost 20 years. "It was October 2003, I purchased a Russian release of *Full Throttle*, came home to find a way of running it, and found ScummVM. I ran it and it crashed immediately," he recalls. "Apparently there was a problem with the fonts, which I fixed and submitted a patch for in the channel. Then, after playing for a little while, I got a message, 'You can now jump the gorge' [a part of the game that only comes after fighting the biker gangs].

"That meant the whole arcade bike fights section wasn't implemented. I jumped to the IRC channel again and got an explanation. Since I had several years of reverse engineering experience by then, I told them that I'd like to look into it. All I got was a pat on the shoulder and best wishes. If only I'd known!"

Indeed, it was only four months later that Sandulenko would finish working on the INSANE engine that powers the *Full Throttle* bike fights. "INSANE is a name well-earned," he continues. "In the end, the developers got fed up with me continuously submitting patches, and I was invited on the main team."

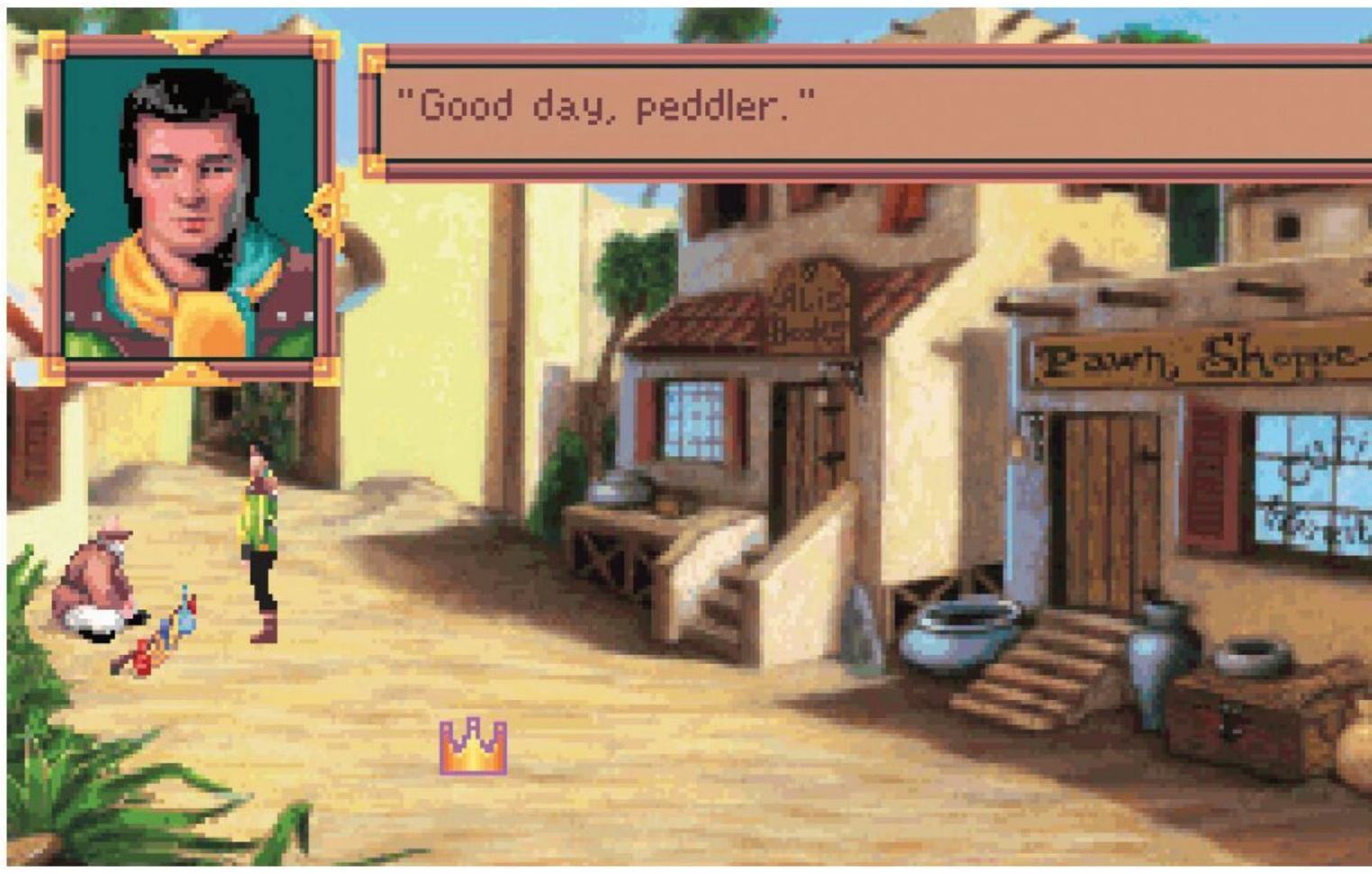
When asked what made him stay on the project after the *Full Throttle* engine was completed, he says "reverse engineering. It definitely feels like solving an enormous puzzle, when you're making sense out of thousands of unnamed functions, variables, and a soup of engine logic. Nowadays it's easier with disassemblers, but at that time, it was all hardcore assembly work."

REVERSE ENGINEERING

How does work on a title begin? It's all down to one person's determination, Sandulenko explains. "We need a capable developer with enough time, skill, and passion. Sometimes we make contact with the original developers, but, in most cases, it's just a game executable and you. There are only relatively few engines where we started with the original sources available.

"Once the developers feel like the engine is closer to completion, they submit a request. Then, the engine's reviewed, brought to our standards, merged, and then the work continues in-tree. Unfortunately, sometimes real life takes over and the devs who started working have no more time and/or motivation to continue. This leads to a stalled engine in our codebase, which we need to remove after no progress has been made for quite a while."

As the project has gained traction over the years, several people have inevitably tried to take advantage of it economically. There have been several cases of ScummVM being put on Steam, Google's Play Store, or the App Store. This goes against the application's GNU V2 licence, which applies to the modified game executable. The original copyright holder is allowed to bundle ScummVM with the game they're selling, only by providing a GPL licence notice together with



› Despite the April Fool's prank in 2007, ScummVM can indeed now run all of Sierra's SCI games.

the ScummVM copyright file, and must specify whether the code was modified in any way. Sandulenko angrily recalls one example of a breach of licence. "One guy was able to run a successful Kickstarter campaign, taking our Dreamcast ScummVM port and the freeware game from the website, and burning them on a CD-R. The Kickstarter raised €4000!"

The advantages to replacing an executable, as opposed to just emulating the game, become clear when looking at some of the latest supported titles. Arnaud Boutonné, one of the co-leads, got into the project in 2009 to support one of his favourite games, *Fascination*: "The former main [developer] didn't want to work on it anymore and told me to do it myself."

After that, Boutonné worked on support for the *Hugo* trilogy (a series of parser-based adventures first released in 1990) to make them ready for sale on GOG. Boutonné wasn't familiar with them, which he recalls as an interesting experience, since when he started rebuilding them – with the help of the original developer – he ended up fixing some of their bugs. "I also added a couple of rooms that were unused but looked fancy, and documented previously unknown Easter eggs," he says. "[And] we fixed some critical bugs, like we did with *Nightlong: Union City Conspiracy*. Adding cutscenes is more rare, since most of the games we support came on floppies, and developers were keen on keeping files as small as possible to reduce production costs.

"One great example of restored content is *Blade Runner*. All the cut content was already present in the data on the CDs themselves – it was just a matter of making it accessible."

With a list of fixed bugs, restored audio, and text running to almost three pages long, the ScummVM version of Westwood Studio's *Blade Runner* feels like a Director's Cut of sorts. Sandulenko recalls that their work on *Blade Runner* led to an approach from Nightdive Studio, which was working on a remastered edition of the same game.

"We tried to reach an agreement, but it didn't work out," he says. "They wanted to be allowed to use our engine, but we couldn't agree on a price."

Sandulenko also recalls the drama when Nightdive's *Blade Runner* was released to harsh reviews and unhappy players. "For a while, GOG removed our version and everyone was forced to buy the enhanced Nightdive edition. Luckily, after a couple of weeks, they came to their senses."



^ All games can benefit from a slight filter update to make them look a little less grainy on modern displays with higher resolutions.

PRESERVATION

On the subject of game preservation and its future, several team members express worry ➔

APRIL FOOL'S

The ScummVM team has a tradition of making April Fool's pranks. One famous example was 2004's announcement that they were joining forces with the Sierra and Infocom frontends, FreeSCI and Sarien, to create an all new "universal adventure interpreter" named CABAL. "The funny thing about that prank," says Sandulenko, "is that, later, that's what actually happened! We merged those engines under ScummVM."

Later, on 1 April 2017, the team announced they were changing the name of the project to PlumberVM because of the addition of the engine of dubious "erotic adventure" *Plumbers Don't Wear Ties*. Again, quite the cheeky announcement, since people assumed it was a joke, but ScummVM did actually add the *Plumbers* engine to its list. Other notable jokes from the past included id Software's John Carmack joining the team and ScummVM supporting Kinect, with manipulated images of the developers pretending to play *Full Throttle* and *Gabriel Knight*.

that studios still haven't learned much from the old days of perishable media. "Once, you stored source data on floppies and they might eventually end up being unreadable," comments Sandulenko. "But what's their excuse now?"

"Take Nintendo," says Lothar Serra Mari, who's been working on ScummVM since 2014. "Except for re-releasing the same titles, they seem to not be doing anything to look after their download-only releases. At some point, I think pirating will be the only way to access most of their library. I think it's clear by now how digital makes preserving games much harder – often, there's no apparent way to access the 'raw' original files."

Co-lead Paul Gilbert concurs that preservation still isn't being taken seriously by enough developers and publishers. "With games getting more complicated, it gets harder and harder to support them without source code. Without sources, it becomes less likely we'll be able to support anything recent, since even old games require so much work. I'm amazed by the number of new games that we're still able to support with each release."

There have been several discussions about the purity of recreating a game engine as it was, versus adding improvements and fixing bugs. Boutonné recalls the team wasn't always 100 percent pro-enhancements but, over time, several of the more outspoken supporters of "purism" have left the project. "Today, the majority definitely seem to be in favour of ScummVM adding quality of life improvements to the games supported," he says.



The infamous *Full Throttle* INSANE engine at work during the bike fights.

Gilbert, who's been on the project since 2005, first working on Revolution Software's *Lure of the Temptress*, is also a firm believer in adding new features. "I'm always happy when, in some cases, cut content can be restored. I consider it as an homage to the authors' original intentions."

Documentation is also a topic related to preservation, since without keeping track of the changes, rebuilding an executable becomes rather difficult. Mari previously translated the GUI and documentation, and recently became one of the co-leads. He enthuses about the project's constant growth, along with his passion for keeping the experience as close to the original as possible. "I decided to add simulated loading times to the *Myst* games," Mari says, "since I didn't like the instant transitions between scenes."

Mari also recalls that, until recently, the project didn't really have a defined process for updating documentation. "If you want to keep track of new features and relevant changes, it's essential to keep the docs updated," he says. "But even I'm guilty of being a little lazy about it at times..."

BEYOND POINT-AND-CLICK

Once solely focused on LucasArts point-and-click adventures, ScummVM's scope has gradually expanded over the years. Sandulenko expresses his wish to have proper Android and iOS devs to further develop mobile ports, which has so far proven difficult.

"We're continuing our work on Macromedia Director [see box on page 72]," he says. "It's unknown when we'll finish, but each step takes us closer to supporting many more multimedia titles."

Little-known 2D point-and-clicks, like Italian adventure *Tony Tough and the Night of Roasted Moths*, are also supported by ScummVM.



A classic RPG like Westwood's *Eye of the Beholder* is among the game engines supported by ScummVM.



"With the support of Director, we're now more than just a convenient way to play adventure games on modern platforms," adds Boutonné. "The versions of the program we support have been used by thousands of titles of the time, so we're preserving games and software as well."

Mari observes that by supporting Director, QuickTime assets are slowly being integrated as well, "so many more lesser-known titles can be run without having the original hardware on hand".

Gilbert, meanwhile, seems to appreciate the project's new broadened scope.

"With the recent inclusion of interactive fiction, ScummVM could be seen as the go-to place for all forms of storytelling games in the future," he says. "We already support *Might & Magic* and *Ultima* titles, and I'd like to see full support for those series. Plus maybe the *Wizardry* and early *Final Fantasy* games as well."

"This change was definitely necessary, since people are essentially working on games they loved when they were younger, and as most of the bestsellers were supported, we had less and less interesting targets," Boutonné continues. "So, we were losing developers and not getting new ones. Since we have this new scope, we have a lot of newcomers, and fresh blood is what will keep the project alive."

Could ScummVM gradually become a platform which will support all kinds of game engines? "Not yet," says Sandulenko, "and it probably never will, since arcade games or shoot-'em-ups would clearly be out of our scope. However, there was one idea of turning ScummVM into a library, so any game could be built on top of it, but this is an old dream of mine and I don't think we ever put any substantial effort into it."

On the potential future of the project, some of the co-leads recognise that there's no easy way to tell where ScummVM will head next. "With all the new changes, the sky's the limit," says Boutonné. "We jumped in a short period of time from supporting hundreds of point-and-click games to thousands of titles. The main thing badly missing is time – we all have dozens of titles in mind, and as we aren't paid for this, we still have to make a living on the side."

Sandulenko similarly notes that real-world commitments often get in the way of ScummVM development, and even jokes that he'd like to create some sort of machine that could take over his "boring daily routine" so he could spend more time with his favourite project.

"I'm pretty sure," he says, "that most of us spend more time reverse-engineering games than actually playing them!"

WHAT'S IN A NAME?

One of the questions most often asked of the team, Sandulenko says, is about the project's name. Since ScummVM now goes beyond LucasArts games, shouldn't its acronym be changed? Sandulenko recalls that at one point, the team compiled a list of possible alternative names, including Set of Clumsy but Universal MultiMedia-related Virtual Machines. Does he have a favourite? "Oh, not really. I think everyone can decide [what it stands for] themselves. But we'll stay ScummVM."



Old CD-based Sierra games, complete with music and voices, are also supported without a hitch.



Going overboard with filters isn't recommended, but it beats having to play the game at a native resolution on a big screen.



The Case of the Serrated Scalpel is a little-known Sherlock Holmes point-and-click that's definitely worth a play on ScummVM.

Snap, drag, 'n' drop



STEVE MCNEIL
Steve will gladly waste money on snazzy oblongs.

I love CCGs. In the last five years, I've gone from never playing one to having blown an embarrassing amount of money on cardboard and digital rectangles. I have every single card for Marvel Legendary and so, it will come as no surprise when I tell you that I have become *obsessed* with *MARVEL SNAP*.

If that last paragraph meant absolutely nothing to you, allow me to briefly explain. CCG stands for collectable card game, which fairly concisely tells you what you're getting into. You acquire new cards, and use them in a game. Some take the form of deckbuilders where, during gameplay, you receive better cards that improve your power or abilities. Others allow you to gather better cards between rounds and choose which ones to take into any given battle with you. Whether it's physical games like Star Realms and Boss Monster, or digital titles like *Slay the Spire* and *Monster Train*, there are very few where I don't find something to love and obsess over.

MARVEL SNAP is the latest, and highest-profile, addition to this world and, if you've been wondering what all the fuss is about, I'd encourage you to leap in. It's free-to-play, which I appreciate will already have some of you running for the hills.

That said, unlike other titles, you genuinely don't need to throw money at this one. You might *want* to but, as is the trend with *Fortnite* et al, almost everything you can blow money on offers only cosmetic changes, rather than gameplay-breaking power-ups – the £8.99 Season Pass, which refreshes each month, only grants you one exclusive new card, which, in a game with over 250 to acquire through free play and multiple different valid strategies, is by no means essential.

The game even rewards you with free credits on a daily basis, as does the 'Collection Level' path where you'll also unlock all those free cards, and boosters which contribute to upgrading them. It also sets you new missions every few hours that can give you additional free rewards. Matchmaking is so fast it's almost instant, and each game only lasts maybe three minutes, making it the ultimate toilet game (do with that what you will).

When you first play it, you get a series of intro battles that gently guide you through the core gameplay mechanics so, if you've always felt a bit intimidated by these sorts of games, rest assured it'll get you educated in no time. I appreciate this sounds like I work for Marvel. I wish I did*, but I don't. Download it today and, I promise you, you'll be enjoying toilet trips more than ever. No doubt that will be the review quote used on all future promos. There is no higher praise.

* *Sorry, Wireframe.*

Yes, the phrase 'Snap' is used in the game's title, but taking photographs of popular Marvel heroes is never required.



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Reviews, retro games, and lots more besides

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80. **A Little to the Left** PC, Switch

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83. **Lucy Dreaming** PC, Mac, Linux

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85. **Gotham Knights** PC, PS5, XB X/S

86. **Itch.io roundup** PC



Does Santa Monica Studio deliver a god-tier sequel for Kratos? Find our verdict on page 78.

OUR SCORES

1–9
Trash. Unplayable. A broken mess.

10–19
A truly bad game, though not necessarily utterly broken.

20–29
Still awful, but at a push could be fun for two minutes.

30–39
Might have a redeeming feature, but otherwise very poor.

40–49
Adds in more redeeming features, but still not worth your time.

50–59
Average. Decent at best. 'Just about OK'.

60–69
Held back by glitches, bugs, or a lack of originality, but can be good fun.

70–79
A very good game, but one lacking spit and polish or uniqueness.

80–89
Brilliant. Fabulous fun. Everyone should at least try it.

90–99
Cutting edge, original, unique, and/or pushes the medium forward.

100
Never say never, eh?

PLUS

87. **Stream of Consciousness**
Shining a light on the comfortable side of games with streamer CozyGamerKat

90. **Backwards compatible**
Another mini Sega Mega Drive, hand-carved game cases, and more

94. **Now Playing**
Returning to Resident Evil Village's titular location for some spooky DLC

96. **Killer Feature**
Looking at how Super Mario's weird Game Boy debut cemented Nintendo's handheld dominance



We cast our eyes over 60 16-bit classics, giving our impressions of Sega's new Mega Drive Mini II console on page 90.



Even when not going toe-to-toe with another god, boss battles manage to feel like true set pieces.

Review

God of War Ragnarök

A sequel worthy of the gods

Info

GENRE
Third-person action-adventure

FORMAT
PS5 (tested) / PS4

DEVELOPER
Santa Monica Studio

PUBLISHER
Sony Interactive Entertainment

PRICE
£59.99

RELEASE
Out now

REVIEWED BY
Aaron Potter

How do you follow up what many players consider one of the best soft reboots to an established first-party franchise of all time? With a sequel, of course. Obvious though that next step was, actually topping 2018's *God of War* still sounded like a tall order for Santa Monica Studio. After all, while Kratos' sombre reinvention of a character previously steeped in anger and revenge initially came as a surprise, the resulting adventure was a great rumination on the idea that change (however unlikely) is possible. Even more impressive, then, is that in just four years, the reformed Spartan-turned-god has returned with an even grander, more ambitious journey that is equal parts emotional and introspective. *God of War Ragnarök* is the well-oiled machine of third-person action games.

The point constantly hammered into you during the course of this 25- to 30-hour adventure is there in the subtitle: *Ragnarök* is coming. Much more than just a grand-sounding threat, though, averting this prophesied end of days serves as the main driver for Kratos and Atreus this time around. As you can imagine, the father-and-son duo have differing opinions on how to go about doing this, creating an ever-present friction between the two. Atreus is older, but not necessarily wiser or less boisterous. Kratos, meanwhile, still touts a hard exterior that makes it hard for him to break out of his fatherly instincts that are almost too protective.

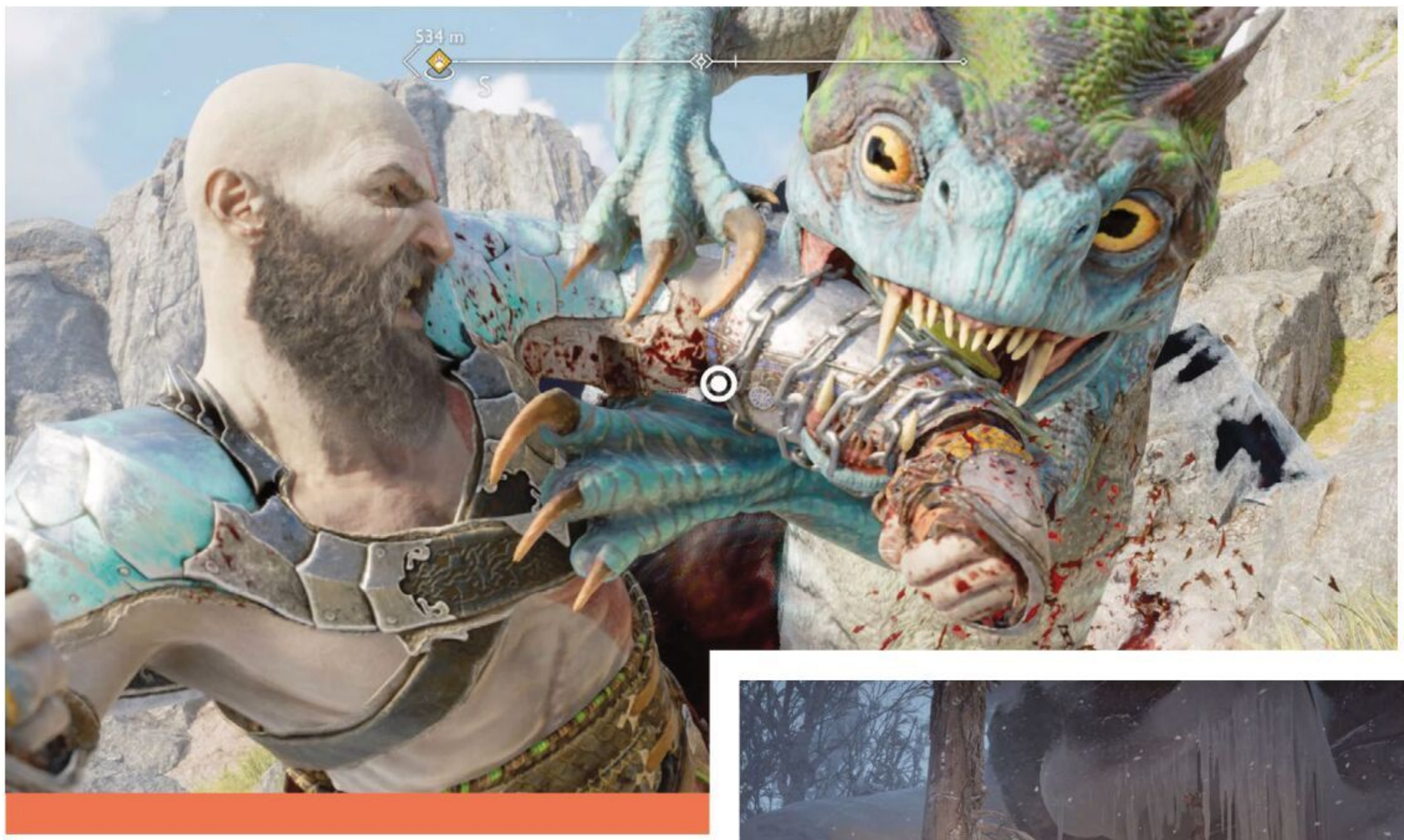
I believed in the pair's dynamic every step of the way, largely thanks to Christopher Judge and Sunny Suljic's nuanced performances, of which much is asked. It'd be so easy for Judge to pepper his Kratos with nothing but monosyllabic line deliveries due to the inherent bluntness of the character, for instance, but through his interaction with others, he carves out pockets of subtlety between the grunts and grumbles.

Side characters like Brok, Sindri, and Freya are all given deeper arcs to explore too, further helping to round out this changed version of the nine realms our heroes are forced to fight through. Somehow, Santa Monica Studio expertly spills these emotional beats into gameplay in ways that should be experienced first-hand.

Speaking of which, fights in *Ragnarök* continue to be a satisfyingly intimate affair, with the over-the-shoulder, up-close action giving every strike Kratos dishes out an incredible sense of weight, purpose, and power. Santa Monica Studio clearly recognised that nothing with the first game's combat system was outright broken,



The "boy" has become closer to a man, as the relationship between Kratos and Atreus continues to deepen.



Just because the action is up-close doesn't mean that combat can't also be incredibly cinematic.

Once again, throwing and recalling Kratos' trusty Leviathan Axe never ceases to feel amazing.



so it's instead chosen to layer even more flexible systems over the established framework to offer players new options and approaches in battle. Light and Heavy Runic attacks return, for example, as does Kratos' near-unstoppable Spartan Rage ability, yet now they combine with new charge-up attacks, elemental effects, and more.

At first, enemy encounters, as fun as they are to get thrown into, appear overwhelming. Because in addition to Kratos' standard light and heavy attacks, you're also managing your companion character's actions, weighing up the effectiveness of each individual armour and weapon piece's stats, what amulet upgrades to insert, and so on. In the thrill of the action, though, having all these combat systems work in harmony only need be a luxury prioritised for sadists wanting to play on the hardest difficulty. It helps that *Ragnarök* never overwhelms you with these various mechanics and considerations all at once, instead dishing them out to you over an extended period of time – to the extent that I was still gaining new game-changing abilities right up until the story's final hours.

Despite the urgency that the game's namesake suggests, it's easy to become distracted in *Ragnarök*'s changed world. You'll revisit many of the six or seven realms you did in *God of War* (2018), true, but Santa Monica Studio has found smart ways to have them deliver a new treat for the eyes. Whether it's promoting Muspelheim to more than just an endless enemy wave arena or shrouding Midgard in the relentless snow of Fimbulwinter, it's a constant treat to see these spaces changed as a result of the oncoming catastrophe. But it's more than that, because the side missions are more thought-through and meaningful in *Ragnarök* than they are in other triple-A, blockbuster games of this ilk. Odds are if a realm or character was teased beforehand, you'll bump into them with additional exploration later on.

"The well-oiled machine of third-person action games"

God of War Ragnarök is a bigger, better, and more fulfilling sequel in almost every way. It never once stumbles under the weight of its own ambition either, and acts as a perfect "Part II" to the more than solid foundation set by 2018's gear-shift entry. The drama, combat options, traversal, world, and side missions are all improved in myriad ways, ending *God of War*'s Norse saga with a heartfelt bang that doesn't skimp on spectacle.

This is what big-budget, first-party Sony exclusives are all about, and *Ragnarök* easily sets the new standard for the form.

HIGHLIGHT

One of the best things about both *God of War* eras of games is the grounded way they depict their ancient gods. *Ragnarök* is no exception to this rule, portraying such Norse deities as Thor, Odin, and Heimdall as fallible and borderline obnoxious, as opposed to figures people should needlessly worship.

VERDICT

The Rolls-Royce of video games, *God of War Ragnarök* is a near flawless continuation of an already exceptional franchise reboot.

91%



HIGHLIGHT

Some puzzles have multiple solutions, inviting you to unpick the answer you've just arrived at and consider how else the pieces might be organised. This adds a little longevity to the game, but it's also an interesting test of how you perceive order and the kinds of patterns you're drawn towards.

Review

A Little to the Left

Everything in its right place

GENRE
Puzzle

FORMAT
PC (reviewed) / Switch

DEVELOPER
Max Inferno

PUBLISHER
Secret Mode

PRICE
£12.99

RELEASE
Out now

SOCIAL
@MaxInfernoGames

REVIEWED BY
Jon Bailes

A Little to the Left is further evidence that tidying up can make for a powerful gaming hook. Last year's *Unpacking* showed the way with its moreish take on filling shelf space, but the potential has been apparent since at least *Tetris*, where nothing is more satisfying than making uniform lines. Now Max Inferno's domestic puzzle experience asks you to zoom in on the finer details of putting stuff in order.

The sales pitch here is aimed squarely at anyone who can't stand to see a picture hanging off-centre, and the first of *A Little to the Left*'s single-screen puzzles presents precisely that scenario. If you instinctively guide your mouse to correct the wonky edges, it has you in its grasp. Now, how about putting a row of books in order? Or aligning patterns on mugs? These and other demands are hard to resist, especially when everyday sound effects add a crisp tactility to manipulations such as peeling stickers off fruit or shuffling pencils into a neat parade. The result is a cheery jaunt through suburban bliss – although if you've even seen the film *Sleeping with the Enemy*, you might feel a sinister undercurrent when asked to rotate tins of food so that the labels all face forwards.

As for what order things should be in, well, that's the puzzle, and it evolves rapidly. What if it's not the frames of pictures that need straightening, for instance, but the angled landscapes within? What if pencils should be arranged by sharpness or colour, rather than length? With its introductions out of the way, *A Little to the Left* throws you into tests of pattern recognition and spatial awareness, or the jigsaw-like delights of a mess of items and a storage space that might just fit them all perfectly. Sure, you could be playing *Bayonetta 3* or *God of War Ragnarök* right now, but few of their dynamic action sequences evoke the climactic joy of successfully tidying a drawer.

Such highs, however, mostly arrive in the middle of the game, and with a sense that the concept is overstretching, challenges in the final two of five chapters tend towards obtuseness. In particular, stage four's series of object jumbles based around the concept of symmetry made no more sense to me after I'd used the hint system to reveal the answer than it did before. At points like these, it seems the game really has taken a turn a little to the left, from relaxing playfulness to wide-eyed bemusement at an abstraction too far. Plus the hint system is a rather blunt instrument, not so much nudging you to comprehension as allowing you to copy its homework.

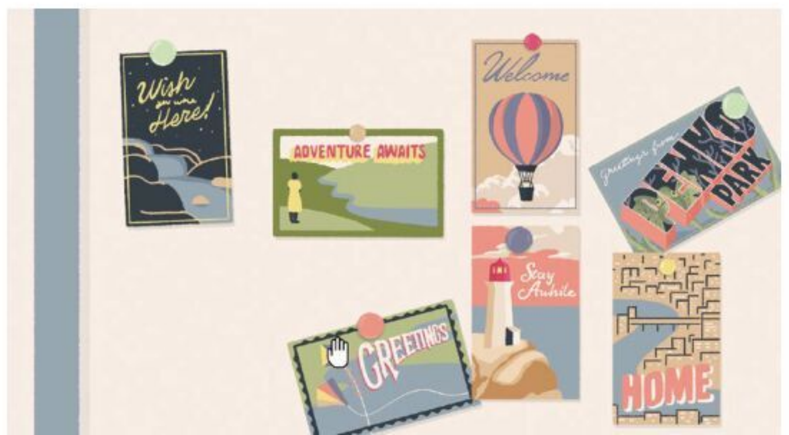
In these later stages, some puzzles also become a little too fussy with control or positioning, or add in moving parts that seem reluctant to function. And thus, what begins with such nourishing clarity of purpose and presentation, ironically ends up a little untidy, leaving you itching to straighten its edges. W

VERDICT

A fine, therapeutic puzzle game that overthinks itself in the later stages.

65%

› The 'Daily tidy' mode serves up a new puzzle each day, giving you a reason to keep popping back.



CUSTOM PC

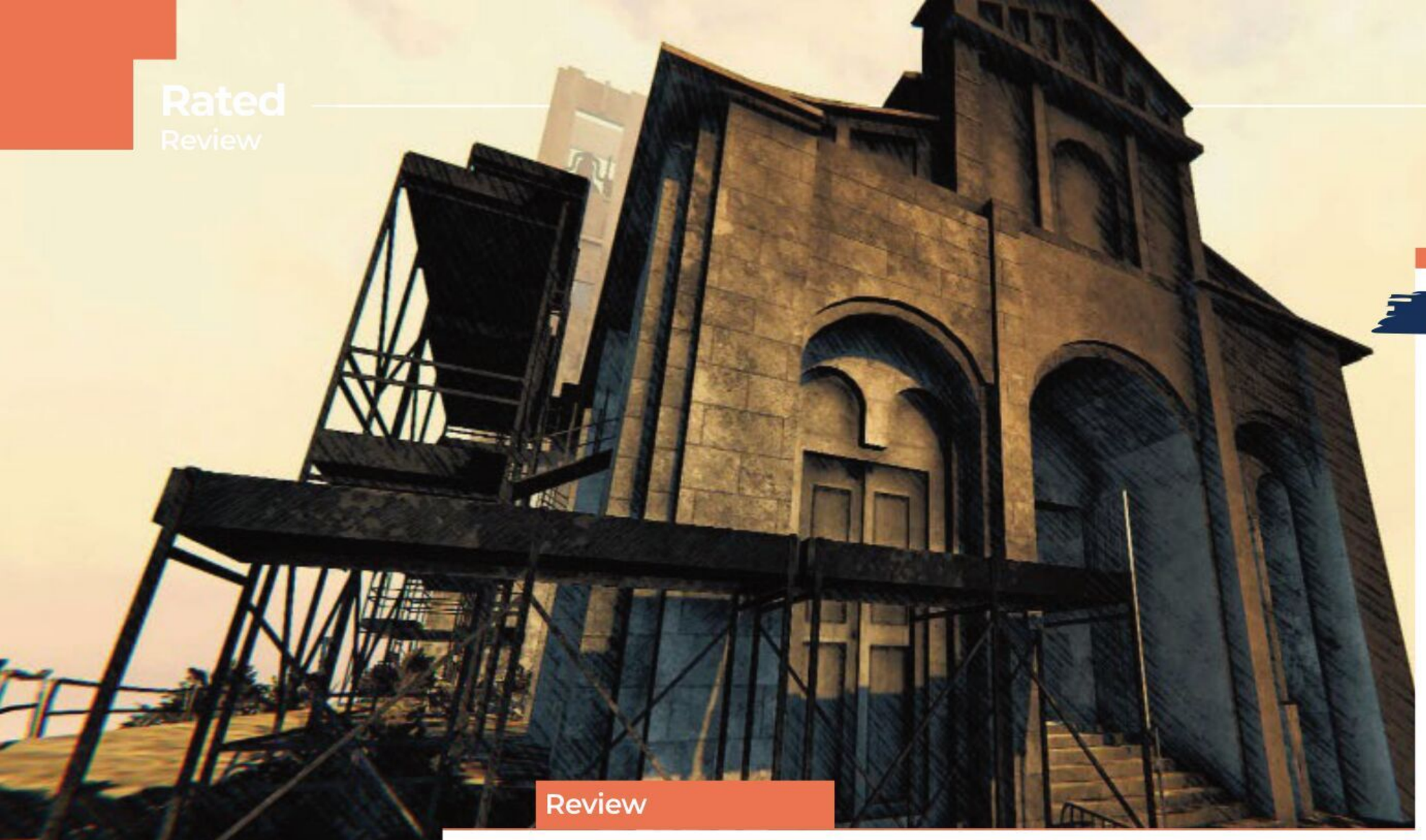
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Review

Saturnalia

It takes a village

Gravoi brims with tiny pockets of space, secluded squares, and narrow cul-de-sacs that you can easily find yourself trapped in.

Info

GENRE
Open-world horror adventure

FORMAT
PC (tested) / PS4 / PS5 / XBO / XB X/S

DEVELOPER
Santa Ragione

PRICE
£15.99

RELEASE
Out now

REVIEWED BY
Alexander Chatziioannou

VERDICT

At once engrossing and frustrating, *Saturnalia* is a unique folk-horror experience.

80%

Folk horror, from *The Wicker Man* to *The Excavation of Hob's Barrow*, tends to elicit a highly specific mode of unease, one instinctively relatable to the social animal that is the human being: the vague certainty that everyone around you is privy to some vital piece of information you're missing. This summarily describes the mood for *Saturnalia*'s cast of playable characters, who find themselves in the Sardinian town of Gravoi during the festival of St. Lucia on 21 December 1989. All are outsiders but somehow connected to the reclusive island community.

But this is no idyllic Mediterranean paradise. Rather, it's a craggy fortress that a feeble sun paints the colour of rotten yolk, where the sea shimmers beneath jagged cliffs like a vast oil spill, and a sulphurous mist rises from the cobbled streets come sunset. Befittingly, it has been barricaded for the duration of the festivities so that none can escape after the mass you've been rudely excluded from has concluded, only for a masked entity to start prowling the winding alleys and deserted thoroughfares. Thus, sneaking through the labyrinthine town, cowering behind Piaggio tricycles, and breaking into local establishments, each of our wards pursues their individual agendas – Anita clarifying the status of her illicit affair with the local sacristan, Sergio discovering the fate of a lover left behind decades ago, and so on – alongside the shared goal of surviving the night and leaving the accursed place.

An open-world horror-adventure that plays like a southern European riff on *Pathologic*, *Saturnalia* benefits immensely from the same refusal to explain basic mechanics, whether that's the areas it designates as safe or the precise function of key items. It adds to the sense you're a stranger here – an unwanted one at that. The resultant disorientation is not just true to the setting (as anyone who has become lost in these maze-like villages can attest to) but also a brilliant means of ramping up the tension to near-unbearable levels, when every confused turn runs the risk of trapping you in a dead end with the creature at your heels.

As your investigations shed light on Gravoi's guilty past, the pieces of criss-crossing individual histories are assembled into a mosaic of persecution and abuse that highlights another genre hallmark: the struggle between modernity and tradition. It's here that Santa Ragione's otherwise brilliant horror experience falters, its progressive bluster deflating in the eagerness to paint each of the local residents a different hue of bigotry with almost no exception, and its stereotyping of the "provincial mindset" just as misguided as the conservative attitudes it purports to denounce.

Saturnalia's hollow politics aside, the underlying experience is among the most eerie, engrossing, and original in what has been a marquee year for horror indies, enhanced by distinctive aesthetics and an all-pervading air of mystery conveyed by the setting and reinforced by its opaque mechanics. As a real-world travel guide, *Saturnalia* won't be much help. But it makes for a hell of a horror game.

HIGHLIGHT

Permadeath is the best way to experience *Saturnalia*, where each encounter with the creature sends you into full panic, and each hard-earned discovery registers like a revelation. And if it all goes south, the game's roguelike elements ensure your second run will feel as absorbing and terrifying as the first.



Recruiting additional characters typically involves locating them or performing a mini-quest related to them.



Review

Lucy Dreaming

Is this the real life? Is this just fantasy?

How do you go about capturing the essence of British culture in a video game? Village fêtes, badgers, manor houses, charity shops, grungy pubs, chip vans, and jokes about Brexit would likely top most people's lists, and they're all to be found within *Lucy Dreaming*, by solo developer Tom Hardwidge, but there's so much more than that. Lucy's home will likely feel familiar to anyone who grew up in the UK, and the variety of accents and temperaments displayed by the largely excellent cast go a long way towards furthering that distinctly British feel.

But an homage to the things that make up the culture of our country, both good and bad, don't necessarily make a great game by themselves, and it's here where Hardwidge's lovingly crafted send-up of all things British meets his clear adoration of all things point-and-click. *Lucy Dreaming* is a pure example of this genre, down to the occasionally confusing puzzle solution and twisting storyline. More than anything, it's clear he has a real passion for the work of LucasArts, with nods to the studio's games throughout (and one character even voiced, excellently, by Guybrush Threepwood himself, Dominic Armato).

This isn't an attempt to carbon-copy those games, however. The game has been crafted to give that nostalgic feeling, right down to the pixel art graphics, leveraging what made the LucasArts games so special while throwing in a British point of view and a mostly well-realised story.

You play as Lucy, a young girl plagued by nightmares she can't seem to shake. With the help of her dad's handy psychology book, Lucy tries to change the course of her dreams while also trying to solve a real-life mystery that presents itself during her waking moments. This adds an interesting wrinkle to the expected gameplay in that you're able to explore the relative normality of your hometown, Figgington, alongside the bizarre and outlandish content of Lucy's vivid dreams. Both require you to solve puzzles with their own inventories to manage, and while mostly the two worlds don't meet, there is sometimes more than meets the eye, which it would be cruel of me to spoil for you here.

I can't say I've ever been the biggest fan of the point-and-click genre, but with *Lucy Dreaming*, I think I've found my sweet spot. The charm and humour that emanates from the screen is delightful throughout, and although some solutions evaded me at times, I always appreciated that they mostly made logical sense – a fact aided by some puzzles even being incredibly clever and well put together. The story hooked me throughout, too, but I will admit to being left a little cold towards the end.

If you're looking for a six- to eight-hour adventure with a smart, sarcastic heroine and send-ups of Paul Hollywood, then *Lucy Dreaming* will be just your cup of tea. Milk and wo sugars for me, thanks!

HIGHLIGHT

The dream sections of Lucy's journey are a brilliant counterpoint to the places and people you meet in Figgington. From a comedy club filled with carnivorous plants to a town made of baked goods inhabited by trolls, there's always something interesting and unusual going on.



Lucy Dreaming pokes fun at the British, and the adventure game genre, too.

You're introduced to Lucy as she falls through the sky during her nightmare, an experience many of us have likely had in real life.

Info

GENRE
Point-and-click adventure

FORMAT
Mac (tested) / PC / Linux / Mobile

DEVELOPER
Tall Story Games Ltd

PUBLISHER
Tall Story Games Ltd

PRICE
£14.99

RELEASE
Out now

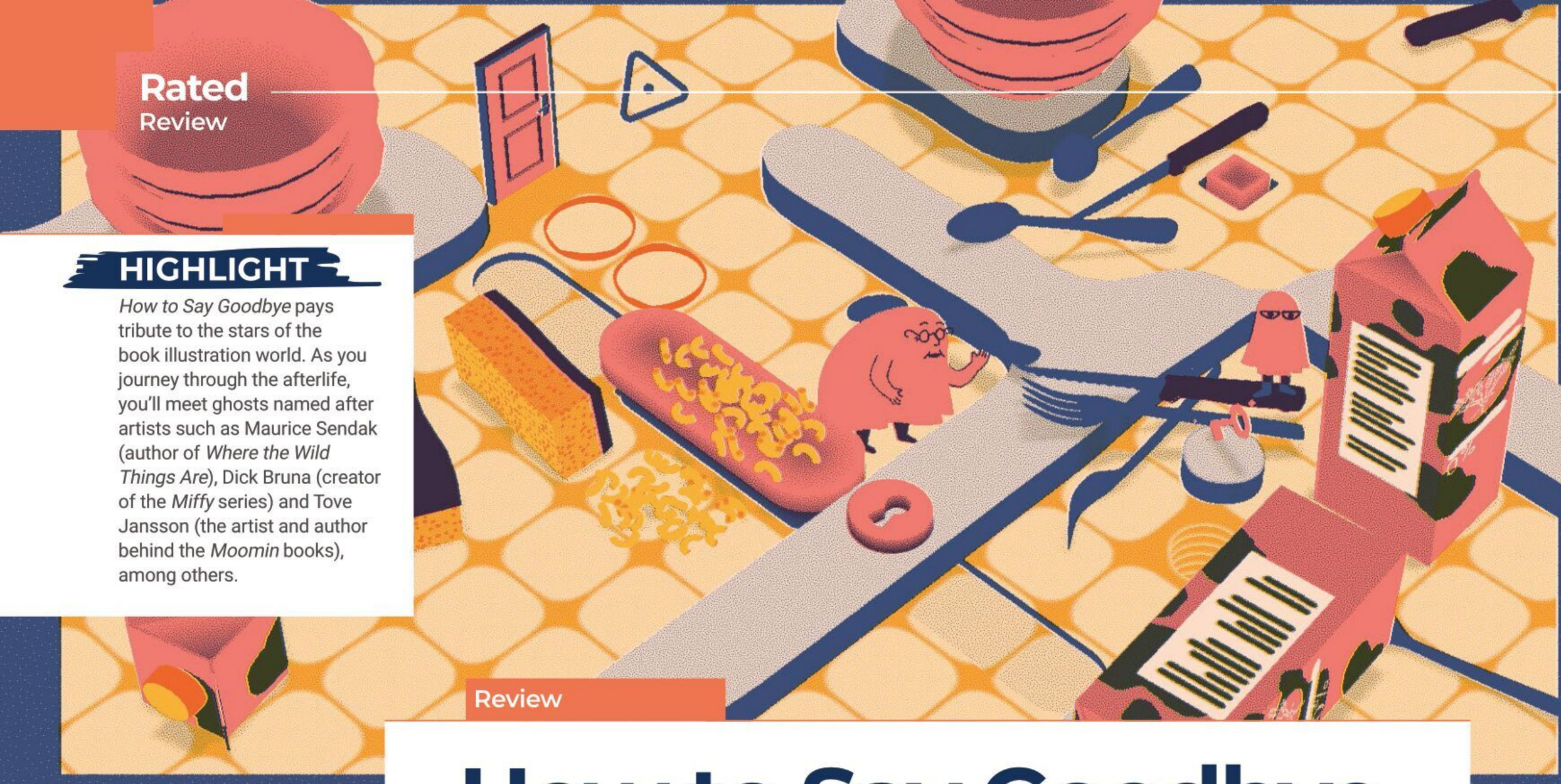
SOCIAL
@tallstorygames

REVIEWED BY
Andrew J. Dickinson

VERDICT

Lucy captivates when awake and while dreaming. It's a wonderfully Anglo-centric point-and-click with plenty to love.

82%



HIGHLIGHT

How to Say Goodbye pays tribute to the stars of the book illustration world. As you journey through the afterlife, you'll meet ghosts named after artists such as Maurice Sendak (author of *Where the Wild Things Are*), Dick Bruna (creator of the *Miffy* series) and Tove Jansson (the artist and author behind the *Moomin* books), among others.

This level is full of kitchen clutter, although the detritus sadly has no bearing on the puzzle.

Review

How to Say Goodbye

A heartfelt ghost story imbued with 20th-century style

How to Say Goodbye is a love letter to the glorious heyday of illustrated book covers. Back in the Victorian age, books were mostly bound between slabs of monochromatic cardboard. But between the start of the 20th century and the late 1960s, there was a fantastic surge of creativity as artists explored different ways of brightening up the hitherto drab world of publication. Illustrators like Tomi Ungerer and Hans Tisdall became famous for their strange, often wild, cover art, and publishers would clamour to have them design the cover of their latest book.

The printing technology available meant these artists often had only a handful of colours to work with – perhaps just three – and *How to Say Goodbye* faithfully replicates that distinctive look, with a limited colour palette that's highly reminiscent of mid-century illustration. In terms of style, it's clearly influenced by Ungerer and artists like Dick Bruna, and the result is an incredibly unique-looking game that regularly dazzles with its starkly beautiful imagery.

It's heartfelt, too. The plot sees you guiding a wandering spirit through the afterlife on a quest to pass on to the next world. You'll meet other ghosts along the way, plus other spirits called spleens who have given up the will to carry on.

It's an affecting tale of loss, hope, and letting go, all told in a storybook way, in which the innocent language belies the graveness of the subject. Unusually, you cannot directly move the spirit you control. Instead, each screen is made up of a hidden set of conveyer belts, which you use to guide your ghost towards the exit. There's a sense of playfulness when dragging on each piece of the floor, working out which squares slide where, and the puzzles typically involve deducting how to use a series of buttons, keys, and switches to unlock the path to the exit.

But initial delight at this quirky control scheme quickly gives way to boredom. The puzzles are far too simple and repetitive to really succeed. The best puzzle games throw in new mechanics at a rapid pace, mixing and remixing concepts to make every new level a journey of discovery. But here, my eyes quickly began to glaze over as I was yet again tasked with uniting a key with a lock in a slight variation on the dozen levels before. New mechanics are few and far between, and quickly become overused.

It's a crying shame, because *How to Say Goodbye* is one of the most distinctive-looking games to have emerged in years. But, much like the spirits whose tale it tells, it's distinctly lacking in substance.



You'll meet various other spirits along the way, all with reasons why they stubbornly refuse to move on.

GENRE
Puzzle

FORMAT
PC (tested) / Mac / Switch / iOS / Android

DEVELOPER
Florian Veltman, Baptiste Portefaix, ARTE France

PUBLISHER
ARTE France

PRICE
£10.29

RELEASE
Out now

REVIEWED BY
Lewis Packwood

VERDICT

A gorgeous game where the book illustration visuals mask a shallow, repetitive puzzler.

61%



Review

Gotham Knights

Working hard, but Harley working

More than just marketing spiel, the phrase "Be the Batman" came to define the *Arkham* series because it actually fulfilled its lofty promise. Entering a room full of 30 goons, whooping their butts, and walking away untouched was immensely satisfying for players able to master that oh-so-delicate ballet of countering and free-flow combat. It's unsurprising, then, that in a spin-off game where you don't get to "Be the Batman" at all, combat doesn't feel anywhere near as fluid and the resulting experience is far more flat. *Gotham Knights* clearly wants to be a bold co-op spin on a template we know, but its poorly executed hodge-podge of underbaked ideas undercuts all that came before.

Take exploration, for example. That feeling you'd get after jumping off a skyscraper for the first time – gliding down to take in the sights below – is done away with, replaced by constant zip-lining. For some reason, WB Montréal has locked each Knight's main traversal method behind an arbitrary set of challenges and side missions, souring your first impression of this Gotham. Exploration also isn't helped by how floaty the Batcycle feels to handle, which is a problem seeing as it's by far the speediest way to get around – even compared to zip-lining.

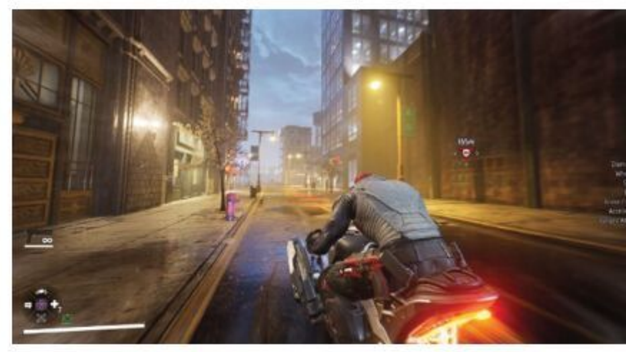
Sadly, the changes to combat don't fare much better, either. Red Hood, Nightwing, Robin, and Batgirl each boast skills unique to their character, yet getting to unlock the best of them means whaling on endless waves of enemies, who are no longer fun obstacles to overcome using smart timing and cool gadgets, but punching bags you must farm for XP. It's easily the ugliest way *Gotham Knights* pitches itself as a multiplayer RPG, as opposed to the refined single-player superhero experience of old. The absence of a dedicated counter button (you read that correctly) is particularly egregious, as it keeps you on the back foot by forcing you to endlessly dodge and land hits that deal minimal damage.

It's a shame because there is the semblance of a great story trying to break out of *Gotham Knights*. Following the Bat-family's attempt to protect a world no longer overseen by their father figure, Batman, could have proved intriguing, and finally seeing the Court of Owls done justice in a video game is one of the elements I was most looking forward to. Alas, however, the relentless RPG gubbins surrounding it all often proves too distracting.

In the end, *Gotham Knights* comes across as a gauntlet of compromises: there are four heroes, but none of them play as well as Batman. It presents a fully populated version of Gotham, but it's never felt less alive. Fighting crime with a friend in co-op is fun, but it comes at the cost of unrefined combat and XP grinding. There are countless comic-book accurate costumes to wear, but you have to gather resources to craft them. I could go on... This is one Batman spin-off best left in the shadows.

HIGHLIGHT

Momentum abilities serve as the main differentiator when it comes to how all four heroes handle. Some can even let you take down an enemy in a single hit. Problems soon arise, however, when you discover that momentum abilities can be disrupted while you're locked into an animation.



Who knew we'd miss the days when *Arkham Knight*'s Batmobile came barrelling from around the corner?

Info

GENRE
Third-person action, open-world

FORMAT
PS5 (tested) / XB X/S / PC

DEVELOPER
WB Games Montréal

PUBLISHER
Warner Bros. Interactive Entertainment

PRICE
£49.99

RELEASE
Out now

REVIEWED BY
Aaron Potter

VERDICT

By gutting the traversal and combat of *Arkham* in favour of mundane RPG fare, *Gotham Knights* commits an open-world injustice.

46%

Why not try...

Itch.io roundup

Picking out some of the platform's standout titles | **REVIEWED BY** Nic Reuben



An Average Day at the Cat Cafe

Angela He / Name your own / wfmag.cc/catcafe

While its lo-fi autumnal beats, video vibes, and creepy-cute, knife-wielding bunnies might suggest that *An Average Day at the Cat Cafe*'s wholesomeness runs saccharine, there's a certain world-weariness in its *Overcooked*-lite schtick that I deeply appreciate. It's probably something to do with the unnamed proprietress' constantly zonked facial expressions, but the game does a wonderful job capturing what a labour of love running any kind of customer service joint really is. It is, nonetheless, exceptionally cute.

Donum

Bitfans / €2.50 / wfmag.cc/donum

If you're not all spooked out for the year, you might want to check out *Donum* – a fascinating and deeply unsettling ZX Spectrum-style adventure game with what seems like similar artistic influences to the recently released *Scorn*. Era-appropriate monochrome and an eerie, crunchy soundtrack complement its eldritch storytelling to create a palpable atmosphere of unease.



The Turgenev Study

PUNKCAKE Délicieux / Free / wfmag.cc/puncake

Possibly named after a study that involved weighing the brain of a famous Russian novelist – or not, but I choose to believe this – *The Turgenev Study* involves no scales or mushy parts, but instead a measured bullet hell as seen through a microscope lens. To score, you'll need to harvest groups of cells, but you can only harvest every ten seconds. You'll spend the rest of that time threading and weaving between them, or occasionally using a limited resource to repel their flattering but ultimately unwanted attempts to get close to you. A frantic but impressively thoughtful slice of arcade goodness.



Out of Space

Wubs / Name your own / wfmag.cc/outofspace

Immediately after booting up twin-stick roguelike arena shooter *Out of Space*, I was greeted by a horrible, hairy meat man holding a pistol, and a bassline that slaps so hard I forgot what day of the week it was. Sure, sign me up. It's an early build at the moment, which means only two biomes, but those biomes are horrible space sumo rings stuffed with floating eyeballs and lumbering frogs. Health is contiguous between waves, meaning preservation is key, as medkits are sparse. You'll also die if you get thrown off the planet, so don't do that. I couldn't be more excited to keep a terrifying large, disembodied, floating eye on this one as it develops.

The bonus game this month is *Kevin Costner's Waterworld* (**wfmag.cc/kevinworld**) because the only thing still funnier than a low-effort, classic Simpsons reference is an extremely high-effort one, such as this.

STREAM OF CONSCIOUSNESS

Talking about the wholesome side of Twitch streaming with **CozyGamerKat**



What would you say is your favourite game of all time, and why?

It's hard to say; I feel like I have a favourite game in a few different categories. My favourite all-around game is probably *The Legend of Zelda: Breath of the Wild*, as it can be chill, cosy, but also, it really challenged me as a gamer with the combat and open world.

When it comes to story, though, we recently played *The Last of Us Part II* on stream and my life has been changed forever. I have never been so emotionally moved by a game before – it was honestly so incredibly written. It was also amazing to see a queer character in the lead of such a major game; it felt really special.

Can you remember the game that first got you into gaming?

The Legend of Zelda: Ocarina of Time was one of the first games I played on N64 and was my obsession for a long time. I also played a lot of *Harvest Moon* and *Animal Crossing* (like most cosy gamers) and love to replay the originals to feel that nostalgia hit again.

Has there ever been a time where you felt like you needed to take a break from gaming/streaming?

Absolutely. I am now a full-time content creator and there are lots of times when I'm exhausted and burnt out and kind of wish I'd just stayed in my 9-5 job. Taking breaks during those times has been helpful to reboot my energy and to remind myself what I love about this job, and to lean on my friends and family outside the internet space.

Overall, I think it's incredibly important to take care of yourself and remember that the anxiety around worrying no one will remember you when you get back is just that: anxiety.

At the end of the day, your community will appreciate seeing you at your best and most energetic. So, take that break. I promise it'll be worth it.

For you, what's the appeal of streaming? What do you get out of it?

I originally pursued streaming as a hobby as I was really unhappy in my career and needed a creative pursuit.

Since then, I've fallen in love with my community and the lifestyle I've been able to curate since starting to work for myself. Don't get me wrong, it's hard. I've burnt out many times from overworking myself or have had anxiety spirals over the nature of this type of work. But I *love* working for myself, making my own schedule, and having ownership and creative control over everything I do.

Like most jobs, you get out of it what you put in. If you're ready to work hard, be genuine with your community, and connect with people on another level, streaming will give you the world.

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Watch Kat streaming regularly on Twitch at wfmag.cc/cozygamerkat

"Your community will appreciate seeing you at your best and most energetic"



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wfmag.cc/AOC-C27

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* Prices may vary

Backwards compatible

WRITTEN BY RYAN LAMBIE

Peak Mini?

Has the mini console era passed its peak? Looking at Sega's recently released Mega Drive Mini 2, I'd say the evidence is there. As the name implies, it's another miniaturised device packed full of old games – a hardware sequel to 2019's Mega Drive Mini, but this time modelled on the smaller (and less fondly remembered) version of the console Sega first launched in 1993.

This decision alone is significant: rather than go for a Master System Mini (too obscure for most markets outside Europe and Brazil) or a Saturn Mini (too hard to emulate on relatively cheap hardware), Sega's gone for a second bite at its most successful console. And, in a sorry reflection of the global economic climate, the MDM2 is more expensive than its predecessor (£104.99 versus £69.99), and there are tell-tale signs of cost-cutting. You get one controller now rather than two, and there's no power light on the console – a glaring omission given how accurate the moulding replicates the original MD2 elsewhere.

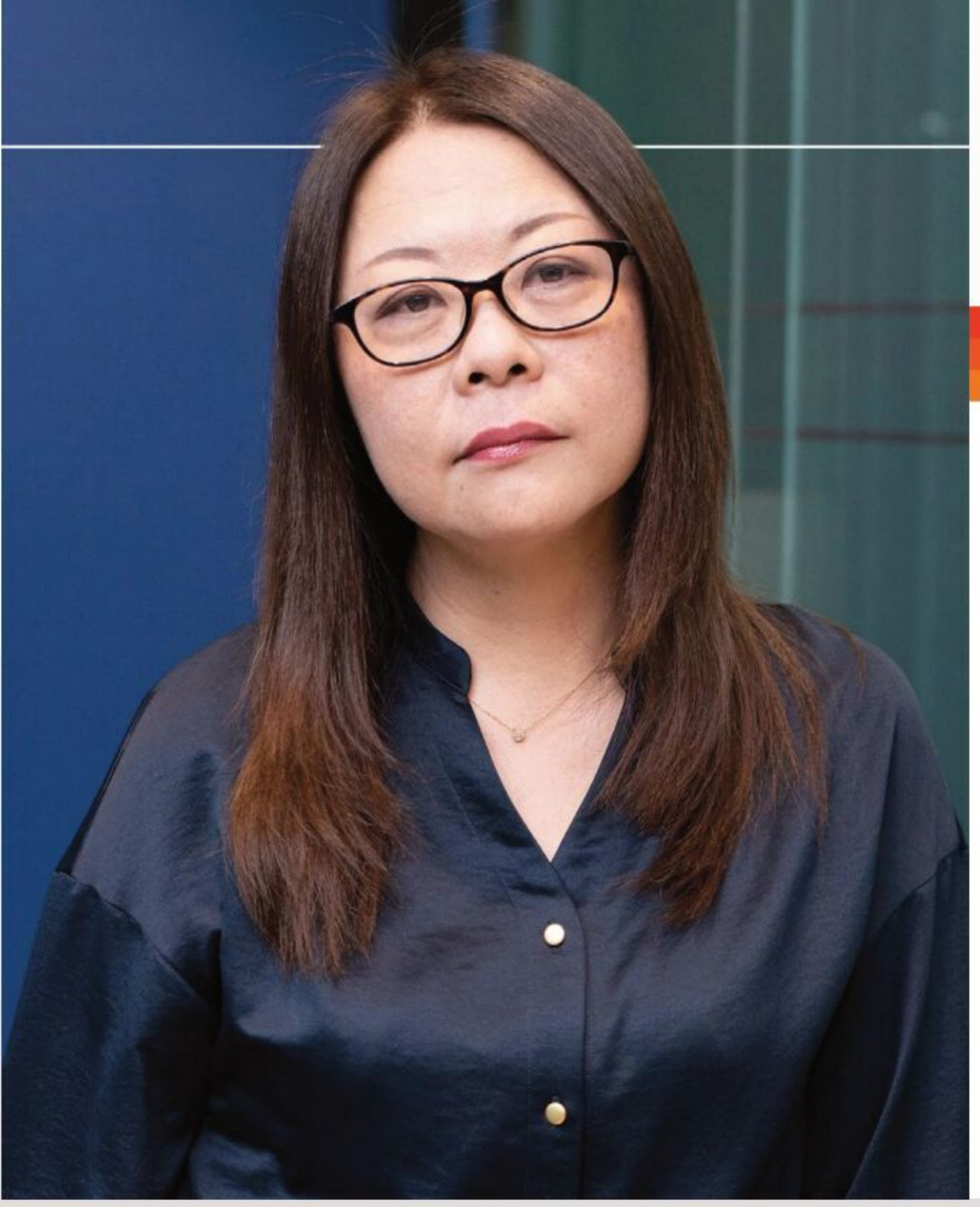
The MDM2 is also being sold in smaller quantities than the MDM1 – ten times fewer have been produced, we're told – and in the UK at least, it's an Amazon online exclusive. Sega's clearly expecting its latest offering to have a more select audience, then, and that's reflected on the 60 games loaded on the machine: where the first Mini largely concentrated on the biggest, nostalgia-evoking hits, the MDM2 has some far more obscure titles, this time expanded to include releases for the Mega CD. For the devoted Sega fan, the chance to have plug-and-play access to the likes of *Crusader of Centy* and *Robo Aleste* will likely sound too good to pass up, even as lapsed Mega Drive owners whose knowledge of the system began and ended with *Sonic the Hedgehog* and *Altered Beast* will squint in bemusement at a list that includes such obscurities as *Ranger X*, *Warsong*, or *Shining Force CD*.

If the MDM2 is a bit of a niche proposal, then the ever-nerdy M2 development team clearly revel in all the nineties minutiae. You'll find multiple versions of certain games on here, for one thing – there's a saucier, Japan-only version of *Final Fight CD* to compare and contrast with its cleaned-up western version, plus entirely rebuilt versions of *Space Harrier II* and *Fantasy Zone* that are more faithful to the arcade than the original MD editions. Then there are unreleased curios like *Devi & Pii* and *Spatter*, plus the option to change the sound emulation so it sounds closer to the punchier MD1 or the somewhat tinny MD2.

Some of the inclusions are eyebrow-raising (*OutRunners* sucked in the 1990s, frankly, and time hasn't exactly been kind to it), particularly when there are so many lesser-known but amazing games in the Mega Drive's library. Then again, the MDM2 also includes *Atomic Runner* (aka *Chelnov*) – truly one of the console's unsung greats.

The MDM2 is the true Sega nerd's mini system, then. For almost anyone else, it could be viewed as an inessential throwback to a more innocent, pre-energy crisis time, when there was still a more mainstream appetite for such nostalgic luxuries.





In Memoriam: Rieko Kodama

Among the Mega Drive Mini 2's credits, Retro Gamer discovered in late October, there's the line: "In memory of Rieko Kodama". Not long after the device's launch that month, Sega confirmed the news: the designer and director had sadly passed away in May 2022. Over a long career, which began when she joined Sega in 1984, Kodama worked on a wealth of classics, among them *Alex Kidd in Miracle World*, *Fantasy Zone II*, and *Shadow Dancer*. Perhaps her greatest contribution to gaming, though, was *Phantasy Star*. Sega's answer to the *Dragon Quest* franchise, *Phantasy Star* gave the Master System and Mega Drive a JRPG opus that quickly carved out its own niche with its mix of sci-fi and fantasy – an idea that came directly from Kodama, who created the game's characters, 2D worlds, and more besides. Kodama went on to co-direct *Phantasy Star IV*, now regarded as one of the greatest 16-bit JRPGs of all time, and also worked as a designer on *Sonic the Hedgehog*, *Sonic the Hedgehog 2*, and *Sonic the Hedgehog CD*. Widely recognised as one of the earliest high-profile female game developers, Kodama's mark on the industry is indelible.

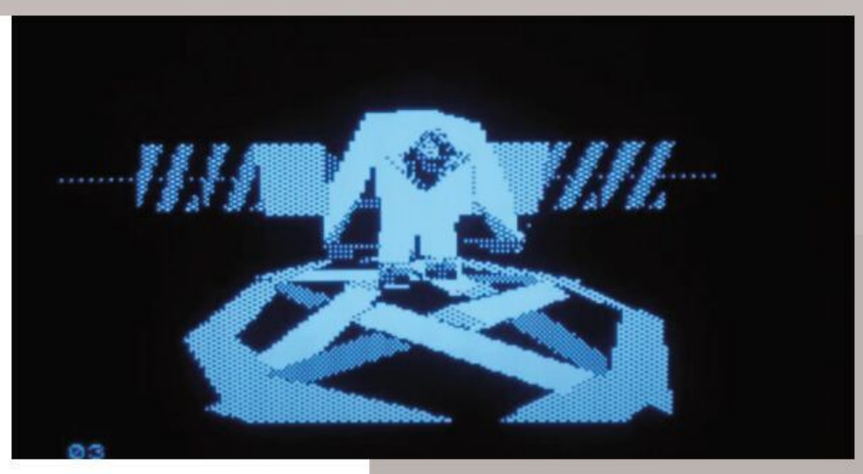
The Light Fantastic: Part II



You may remember last month that I (once again) started taking a Game Gear to bits. You may also remember that I added RetroSix's CleanLight GG, but promptly realised that without see-through buttons, its sparkly LEDs would be invisible to the outside world. This month, I've rectified this rookie error, and one set of transparent buttons later (also from RetroSix), you can finally see those shiny lights in all their glory. The brightness level is fully adjustable, which is handy, and if you're not as into Game Gears as I am, you can also get the same mod for the Game Boy Advance and Game Boy Color – and there's a variety of colours to choose from, too.

ZX Quaketrum

This month in "making old computers do things they shouldn't be technically capable of", we have *Quake* running on a ZX Spectrum 128K. Yes, that mid-eighties, 8-bit micro that had no built-in 3D hardware capabilities whatsoever. And a clock speed of about 3.5MHz. Created by Modern ZX-Retro Gaming on YouTube, it's a fully playable version of the original Quake engine, and allows you to move around a first-person environment with the WSAD keys. With its flat-shaded polygons, it didn't look too much like *Quake* to me at first, but then I spotted a full-realised Shambler rotating on a pentangle and realised just what a technical marvel this is. You can watch it in action at **wfmag.cc/quaketrum**.



Backwards compatible

WRITTEN BY AARON POTTER

Read-'em-up

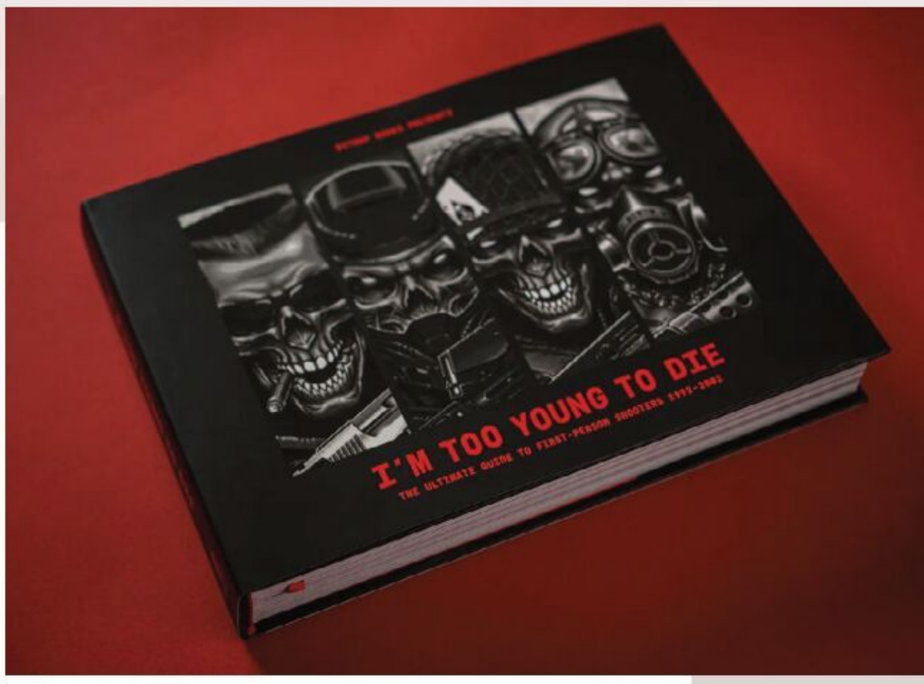
You're always guaranteed two things when it comes to the tomes Bitmap Books regularly puts out: meticulously researched text about a specific genre or franchise, and page after page of beautiful video game art. The publisher's latest release, *I'm Too Young to Die*, penned by author (and regular Wireframe contributor) Stuart Maine, is no exception, proudly announcing itself to be "the ultimate guide to first-person shooters". It mostly lives up to this bold claim, and that's despite wisely choosing to limit its range between 1992–2002 for fear of collapsing the bookshelf of anyone who purchases it.

The heft is warranted, however, as the book comes stacked with interviews, articles, and facts covering almost every FPS from that period you can think of. As a child of the nineties, my curiosity instantly jumped to learning more about the debts modern classics like *Halo: Combat Evolved*, *Metroid Prime*, and *TimeSplitters 2* owe to their countless genre forebears, while discovering how they still found ways to innovate on their own terms. More page space is dedicated to the shooters that left the biggest impact, as expected, but oddballs like *William Shatner's TekWar* and that one *South Park* game where you throw infinite snowballs are all paid adequate attention, too. Quite rightly, Maine doesn't just consider games with guns as the only genre entries worth discussion.

The highlight for a lot of readers will undoubtedly be the various Q&As from FPS icons sprinkled in throughout, with Ken Levine, David Doak, John Romero (who also writes the foreword), and more, all offering valuable insight into what makes the genre so popular and successful. Even these sections are a true love letter to that classic era, too, with each interviewee appropriately rendered in pixel art portraits reminiscent of the original *DOOM*. I'm not sure where else you can read the thoughts of people who helped birth an entire genre in such a digestible manner as this.

As well as being a comprehensive breakdown of how shooters evolved in that crucial ten-year period, *I'm Too Young to Die* is a constant reminder of just how flexible the concept of firing a weapon and taking down enemies at range has proven – even in a single decade. Because while most first-person shooters these days tend to veer away from quirky ideas and premises, sometimes it's easy to forget that there once existed, say, a PC tie-in game for *Bram Stoker's Dracula* or an adaptation of the *Noah's Ark* Bible story made in the Wolfenstein 3D engine and released for the Super Nintendo. What? Yes, you read that correctly.

It's this kind of Wild West attitude demonstrated by contemporary developers that Maine's excellent book does so well to highlight.



There's no doubt that *I'm Too Young to Die* is a must-read for any avid enthusiast of classic FPS games. Whether, like me, you hold particular fondness for those early 2000s titles that benefited from previous lessons learned in the 3D space, or want to revisit a time when what we now call "Boomer Shooters" were passed around as shareware on floppy disks, this is the definitive guide. I can only imagine the scale of the challenge Stuart Maine and Bitmap Books have set themselves for the still unconfirmed 2002-2012 second volume, but I'm already carving out a space on my shelf. Find out more at **wfmag.cc/die-young**.





Wood is good

Downloading games might be the ultimate in modern convenience, but there's undoubtedly an inherent satisfaction that comes from holding a physical game in your hands. Especially if it's a classic game that means a lot to you, owning it in the real world as something that tangibly exists isn't so much a choice or necessity. But with the retro games market constantly skyrocketing due to increased demand, original boxes and manuals are hard to come by. What's a collector to do?

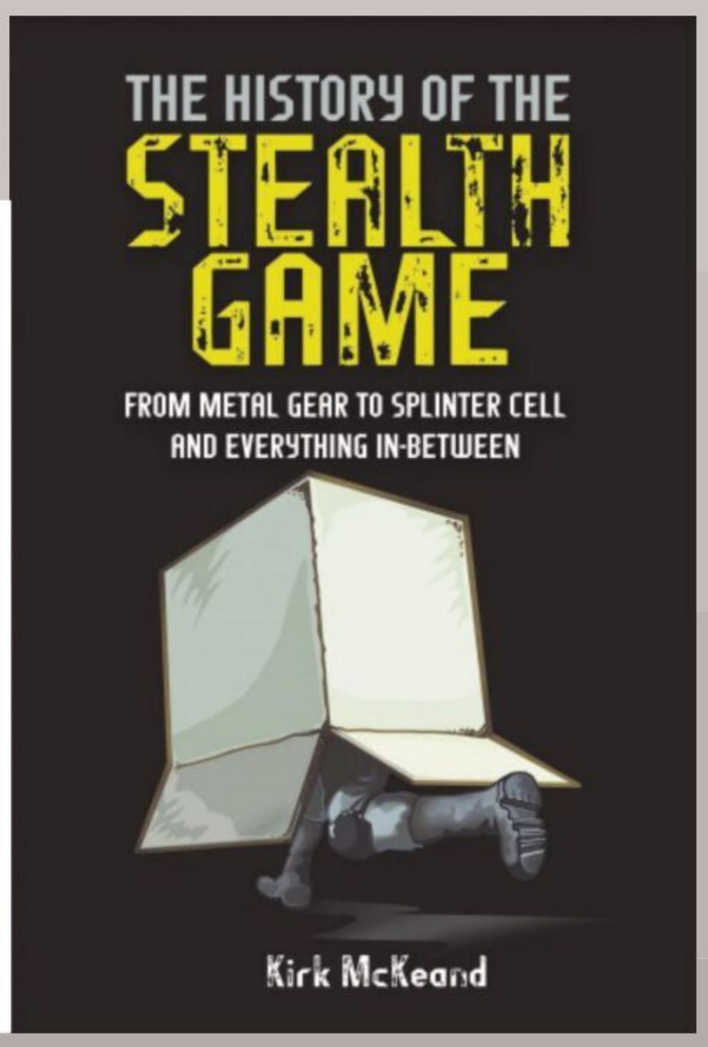
Twitter user @Pigminted might have the answer. Rather than faithfully recreate the plastic or glass clam-shell cases of previous console eras, they're using some impressive woodwork and carving skills to create case designs that are true 3D works of art. Examples so far include the *Suikoden* games on the PSone, all three original *Pokémon* Game Boy cartridges, and *Skies of Arcadia* for the Nintendo GameCube. @Pigminted is taking commissions on Etsy, but don't be surprised if getting a wood case for your favourite physical game takes a while.

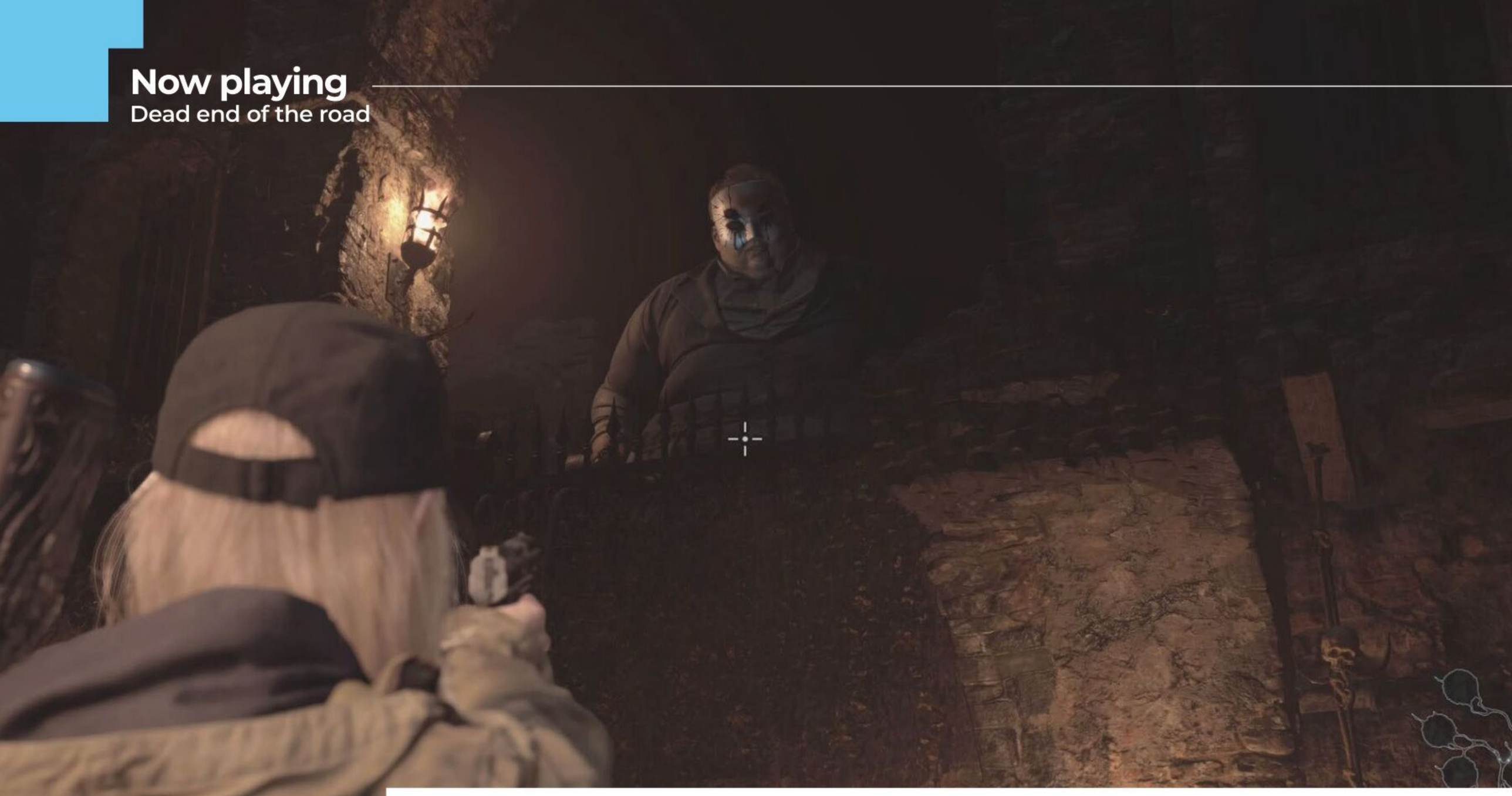


Turn on the dark

Sneaking around as the likes of Solid Snake and Sam Fisher may not be as popular in the mainstream as it once was, true, but the stealth genre's influence on modern game design still looms large. This is the overarching message of journalist Kirk McKeand's new book, *The History of the Stealth Game*, which tells the story of how several sneak-centric franchises like *Deus Ex*, *Metal Gear Solid*, and *Hitman* came to be. All anecdotal tales are told via new, first-hand interviews with the people behind them too, and at just under 150 pages, this hardback is an incredibly breezy read and easy to recommend.

While the main focus is on fun development stories from the past, McKeand also dedicates ample time to ponder the stealth genre's place in future. It's fascinating hearing the likes of Arkane's Harvey Smith and Julian Gerighty (of *Untitled Goose Game* fame) speak to where the status of video game stealth currently lies, while simultaneously acknowledging the industry's hesitancy to invest in a genre that has historically almost always appealed to a niche following. Niche or not, there's just as much elegance in the design of stealth games as there is playing them, and this book is a worthy celebration of that. You can buy a copy at **wfmag.cc/stealth-history**.





Dead end of the road

Spoilers for Resident Evil Village lie ahead, as Aaron tackles its follow-up DLC story centred on Ethan's daughter

Wet and shiny. These two words have quickly come to define the new era of *Resident Evil* for me. And not shiny as in "Ooh, a shiny new game to play". No, I mean the literal shine found in so many of the games' gloriously gruesome environments. It began with 2017's *Resident Evil 7: Biohazard*, of course, but last year's *Village* clearly kicked this up a notch by squeezing every ounce of aesthetic detail possible from the RE Engine. Revisiting the eponymous location's sludgy mud and the ornate halls of its accompanying castle (in honour of the DLC's recent release) proves it. *Shadows of Rose* plays like an abridged version of the main story, true, but at the heart of it is a threat appropriately much wetter and shinier than before. I love it.

It would have been enough for this inky, black-and-red goop to serve merely as set dressing, a way for Capcom to make these recycled locations appear just about different enough. However, *Shadows of Rose* goes a step further by letting you directly interact with it. As Ethan's supernatural daughter, you see, you're able to disperse the slop in order to access new areas, which plays into the DLC's almost Metroidvania-like structure. Exploring such familiar areas as Lady Dimitrescu's dungeon, the courtyard, and House Beneviento again would have been fine – having adored my first visit – but now new and alternate routes open up as Rose's powers grow stronger.

Such powers also affect how you're able to deal with enemies. Rose inherits her father's trusty pistol and shotgun – in addition to his waterproof overcoat – but slowing down moulded creatures proves to be a far more effective tactic. This ability saved my backside on many an occasion during this short but sweet three-hour jaunt, letting me manoeuvre Rose





into the perfect aiming position. If I have one complaint, it's that these monsters, born of the same sludge engulfing the surroundings, take a ridiculous number of rounds to take down. Well over half a clip is required to take down just a grunt, but if all else, it works to stay true to *Resident Evil*'s survival horror heritage, and Rose isn't a military-trained person like Leon or Chris, after all.

Fortunately, *Shadows of Rose* does feature an extended sequence where your weapons and resources are temporarily removed, and just as in *Village* proper, this is the standout section. It allowed me to indulge in the story at hand a little more without fear of depleting Rose's powers or ammunition, which could prove annoying for tougher sections later. In addition to that, though, the DLC's combat-free sequence strips back *Resident Evil* to nothing but pure scares, being most reminiscent of *Biohazard*'s early hours, where players explored the Baker family's creaky Louisiana home all alone. Except this time around, Rose isn't alone. And without giving too much away, just know that what's following you in this doll's house is utterly terrifying.

I will admit that viewing the world of *Resident Evil Village* from a third-person perspective does lessen the scares somewhat. Turning each corner is just that bit less daunting than it was when I was experiencing these frights through Ethan's eyes, but it makes sense since even in just a two- to three-hour story, we learn more about Rose and her position in life than we ever did her father. Like him or lump him, Ethan Winters was always a conduit for the player. This is evidenced various times yet again by how even *Shadows of Rose* goes to great lengths not to reveal his face.

By the time I'm done gathering masks, avoiding oversized pursuers, and destroying sludge enemies in a bid to find Rose a cure to her supernatural curse, this coda of sorts left me extremely fulfilled. It's a staunch reminder that grisly sights (if handled correctly) can have an equally traumatic effect in first- or third-person. Plus, now that the base game's eerie adventure is playable in the latter form too, I've got every reason to jump back into that original story with a fresh sense of dread.

"Grisly sights can have an equally traumatic effect in first- or third-person"

Does this DLC end up being a series of fetch quests at times? Certainly. And does its reliance on reusing familiar locations hinder what could have been a bolder, more ambitious follow-up to the main tale? Probably.

Having said that, though, stepping into Rose's shoes was a good excuse to fall in love with *Resident Evil Village* all over again. It remains right up there with the *Resident Evil 2* remake as being a white-knuckle horror thrill-ride that doesn't really let you catch breath, largely due to the various avenues it goes down to deploy its scares. Werewolves, possessed dolls, and religious cults... there's seemingly no concept too fantastical off the table. Just remember: the shinier and wetter they all are, the better.

Now playing

Dead end of the road

Wireframe Recommends



Mundaun

PC, PS4, XBO, SWITCH

Another first-person folk horror with a protagonist searching for their missing relative – Mundaun's muted colour palette and lo-fi visuals always keep you on edge. Are the villagers trustworthy?



Alien: Isolation

PC, PS4, XBO, SWITCH

This excellent sequel to Ridley Scott's 1979 sci-fi horror masterpiece knows how to increasingly ramp up the tension. Hiding from the Xenomorph is almost always the best way to survive.



Metro Exodus

PC, PS4, XBO

4A Games shows great confidence in its post-apocalyptic shooter by uprooting the player's perspective from underground to overground. The surface world, however, brings with it all-new mutated terrors.



Super Mario Land

Celebrating the unprecedented weirdness of Mario's Game Boy debut

NINTENDO R&D1 / 1989 / GAME BOY

Imagine a parallel universe where the Game Boy completely tanked. It was 1989, and the gaming public simply wasn't interested in buying a handheld console with a blurry screen that you could only see in a certain light. The system sat on store shelves for a year or so before quietly fading into history as the Super Nintendo took flight across the globe in the first years of the nineties.

This never happened, of course, but it's worth remembering that Nintendo was entering a largely untapped market with the Game Boy. Sure, it had captured imaginations with the Game & Watch years earlier, but these were comparatively cheap devices; the Game Boy was a true, cartridge-based console.

For a possible glimpse at Nintendo's apprehension in the late eighties, take a look at *Super Mario Land*, one of the system's launch titles.

Short of divorcing it from the lucrative Mario brand entirely, *Super Mario Land* is conspicuously distant from the console games that preceded it. There's no King Koopa, no Mushroom Kingdom, and no Princess Peach; in their place, there's a new villain, the alien invader Tatanga, a new setting, Sarasaland, and a new abductee for Mario to rescue, Princess Daisy. It was as though the team behind *Super Mario Land* – Nintendo's R&D1 squad, headed up by Game Boy designer Gunpei Yokoi – were hedging their bets a little. If the Game Boy was a failure and nobody bought *Super Mario Land*, at least it stood at a sufficient distance from the mainline games to avoid sullying the brand.

Perhaps they could even dismiss the game's events as simply a bad dream Mario had after eating too much cheese before bedtime.

Because, even by the standards of a franchise that casually floated the idea of a grown man repeatedly jumping on turtles and mushrooms, *Super Mario Land* is incredibly surreal. Mario's journey through Sarasaland takes him inside Egyptian pyramids populated by fire-breathing sphinxes, past Moai heads from Easter Island, and through what appears to be a bamboo forest.

Most worlds end with Mario thinking he's rescued the princess, only to see her mutate into a giant insect and hop off the screen – leaving Mario visibly shaken. It's "the princess is in the other castle" routine from *Super Mario Bros.*, given a Kafkaesque twist. "Oh! Daisy!", indeed.

Then there's *Super Mario Land*'s curious obsession with UFOs. You can see the first one hovering in the air at the start of World 2-1, and looking at the ladder-like tractor beam that emanates from the underside of the craft, stretching down to where Mario's standing, the implication seems to be that our hero was actually brought here by the flying saucer.

"Is Nintendo suggesting that Mario was abducted by aliens in the late eighties?"

Note that this isn't just any old flying saucer, either: it's very evidently modelled after the ones 'photographed' by George Adamski in the early 1950s. Later that same decade, Adamski claimed to have taken a ride inside one of these spaceships from Venus. Is Nintendo suggesting that Mario was abducted by aliens in the late 1980s?

Super Mario Land's oddness doesn't begin and end with its background details, either. Enemies include the snapping fish skeletons, galloping Moai heads, floating Moai heads with wings, and hopping zombies.

Then there are the unexpected shoot-'em-up sequences, where Mario slices through the ocean depths in a submarine, blasting away at aquatic life, or takes to the air in a biplane to



take on the final boss, Tatanga, and his flying war machine. Interestingly, Shigeru Miyamoto originally planned to have aerial shooting stages in *Super Mario Bros.*, but the idea was dropped because he felt it distracted from all the running and jumping.

Put all this together, and you're left with a curious assortment of locations, enemies, and gameplay elements that were never explored again before or after. Haphazard though it all feels, there's also something wonderful about *Super Mario Land*'s unfettered imagination. Faced with a new, untested system, some tightly limited hardware, and seemingly without the oversight of Miyamoto (who was probably busy on *Super Mario World* at the time), the *Super Mario Land* team approached the project with a cheerfully relaxed, anything-goes attitude.

Like the Game Boy itself, *Super Mario Land* was an unqualified success, ensuring that its sense of mild anarchy would continue in two further handheld sequels, both produced by Yokoi and Nintendo R&D1.

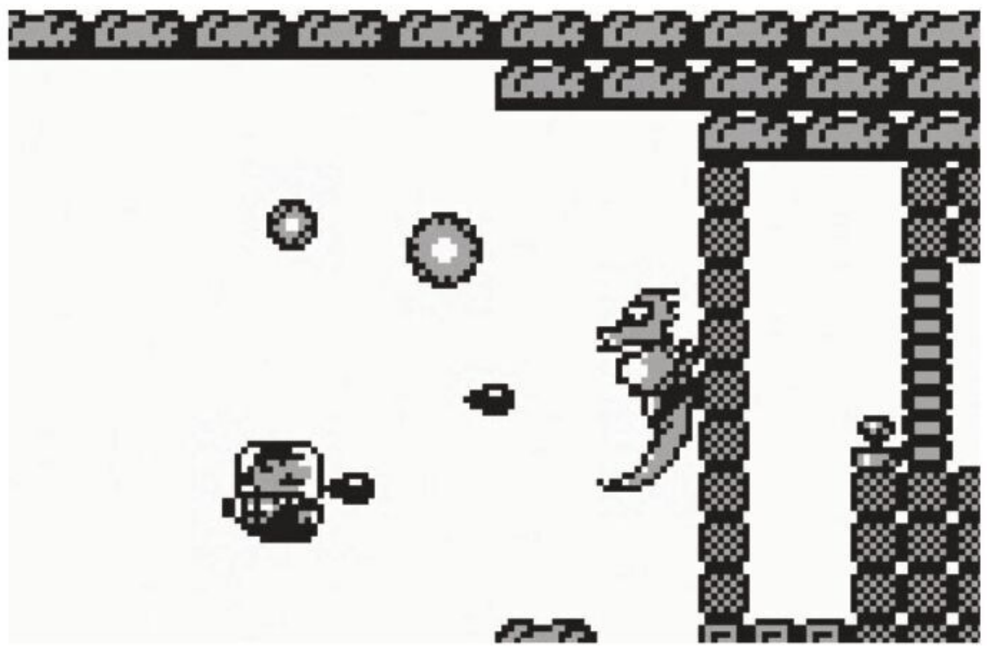
The first, *Super Mario Land 2: 6 Golden Coins*, introduced Wario – a villain consciously designed as Mario's dark mirror image, and one who survives a series staple to this day.

Indeed, while Nintendo quietly dropped a lot of the things introduced in *Super Mario Land*, traces of its oddness remain in the wider series to this day – often in the shape of UFO sightings.

In *Super Mario Galaxy*, for example, a UFO that looks remarkably like Adamski's swoops down and takes away Princess Peach's castle. In 2011's *Super Mario 3D Land*, there's a blink-and-you'll-miss-it UFO cameo if you look through a particular set of binoculars.

All subtle yet affectionate nods, perhaps, to Mario's trippiest outing to date.





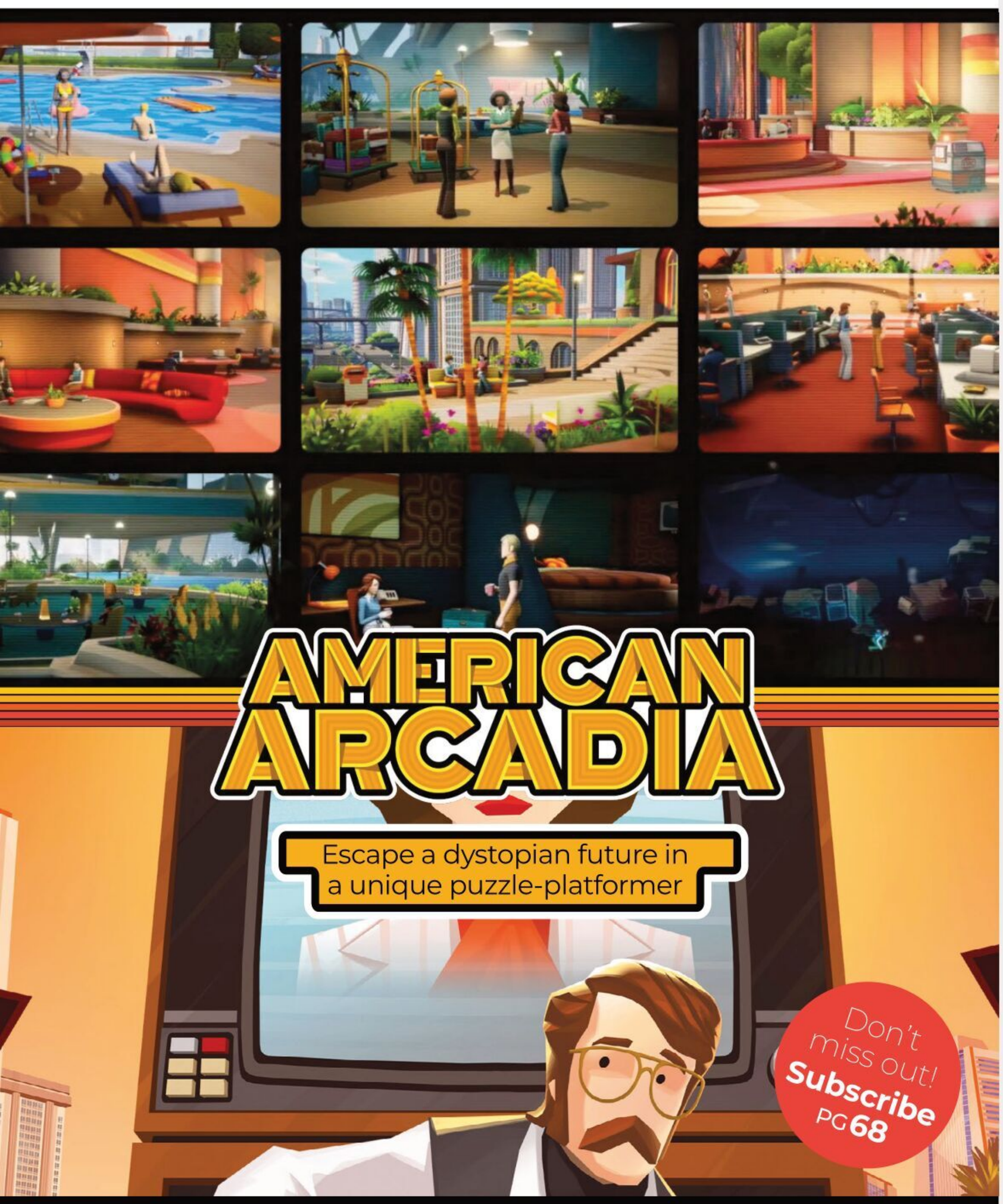
UFO grabber

While Mario's flying saucer experience was quietly swept under the rug by Nintendo, *Super Mario Land* wasn't the only game in the series to feature alien abduction. The 1990 match-three puzzler spin-off *Dr. Mario*, despite its medical theme, has a secret ending in which three of the game's colourful germs are shown sitting in a tree, looking up at the sky. Night falls, and a glittering alien spacecraft – which looks remarkably like those in Steven Spielberg's *Close Encounters of the Third Kind* – descends, beams up the germs, then whizzes back off into space. It's worth noting that *Dr. Mario* was also developed by Nintendo R&D1. Its producer: Gunpei Yokoi. Was he a secret ufologist? The truth is out there...



Next Issue

ON SALE 5 JAN



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