

£3

ALL FORMATS

# Wireframe

LIFTING THE LID ON VIDEO GAMES

## TEARDOWN

The best destruction sandbox yet?

## DISCO ELYSIUM

Why it's the future of RPGs

Issue 28 £3

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## BATTLE ROYALE

The genre's rise and rapid evolution

# FROZEN

Inside Röki's fairy tale adventure of love and loss



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# Pixel art as a movement for the 21st century

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**P**ixel art emerged from the hardware limitations of early computers. Machines back then were simply too primitive to display the colours and resolution needed to emulate high-detail images, so technicians had to come up with a new way to display visuals on the technology available. Their solution was to build up images from small square elements – better known as the pixel.

Nowadays, modern computers offer nearly unlimited freedom in the creation and display of images. While screens are still made up of pixels, their pixels are now so sharp and so tiny, they can hardly be seen by the naked eye.

There are plenty of digital artists who want to create highly realistic images, and so the onward march of technology, and the ever-increasing resolution and calculation power of computers, has massively helped their craft. Disciplines like photography, photogrammetry, motion capture, 3D-scanning, virtual reality, and augmented reality – which are often oriented around realism – definitely benefit from it, because restrictions are unwanted side effects they previously needed to work around. But some artists ask themselves whether the driving force behind their creativity lies in the limitations themselves.

Those artists are pixel artists. Pixel artists want to embrace the strictly digital nature of their art. They want to work within restrictions. Most importantly, they want to consciously define their own restrictions and play around with them.

It's worth pointing out that pixel art isn't about nostalgia for old games. Nostalgia is a feeling of pleasure and sometimes slight sadness as you think about things that happened in the past. But pixel art can exist outside of this, because it's based on its own values, which define it and help differentiate it from all other forms of digital art.



## THOMAS FEICHTMEIR

Thomas Feichtmeir is an independent artist, art director, and art consultant specialising in pixel art. He joined the video games industry in 2010 and has worked on such games as *Blasphemous*, *The Mummy Demastered*, and *Tower 57*.

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## #28



One of the three basic values behind pixel art is intention: there's a strong, conscious decision behind the placement of every single pixel. The squares in pixel art need to be aligned in perfect harmony, where every single one of them has its distinct place, goal, and meaning, because even a single pixel can completely change the overall interpretation of an image. There's no place for chaos or randomness in pixel art.

Pixel art is about perceiving the real world and interpreting it in an engaging, simplified way. Effective simplification – figuring out how to represent a human face in an eight-by-eight grid of pixels, say – will strongly enhance the way the art is interpreted by the viewer. It's up to pixel artists to break up visual information into tiny bits, which later on have to be reinterpreted by the viewer, who will inevitably fill in the blanks with their own personal narration, reflection, and details. This unique communication between artist and viewer creates a strong personal bond with the art. In pixel art, the interplay between artist and viewer is key.

Then there's resourcefulness: pixel art tries to make the most out of very little. The restrictions pixel artists choose for themselves are the most important decisions in their artwork. What resolution do they choose? Do they go for a vibrant, 32-bit era colour palette, or restrict themselves to the monochrome hues of the Game Boy? In great pixel art, everything is considered with care. Pixel art sits somewhere between minimalism and figurative representation – you could describe it as the most minimalistic figurative art form.

As a medium, pixel art was born out of necessity. Today, it's not merely driven by a fondness for ageing games; pixel art is an independent art movement based on unique values, goals, and a specific mindset which separates it from all other digital art. Thousands of artists are dedicating themselves to this modern and growing movement. Together, they're pushing the boundaries of the form – one pixel at a time. 🎮

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## WELCOME

We're on a bit of a Sega nostalgia trip at Wireframe Towers this issue. Ian's managed to get hold of a 32X – that ill-fated add-on for the Sega Mega Drive; meanwhile, by complete coincidence, I just acquired a scruffy yet functional Mega-CD 2 – another ill-fated add-on for the Sega Mega Drive.

Maybe we were both subconsciously influenced by the seismic events that rocked Japan's games industry in autumn 1994, when Sega made the decision to release the 32X and its next-gen console, the Saturn, within weeks of Sony's PlayStation. You can probably figure out what happened next – the 32X tanked, and the PlayStation eclipsed the Saturn to such a degree that Sega never really recovered its standing.

Still, we can't help but hold a lingering bit of admiration for Sega's hardware curios from the mid-nineties. The PlayStation changed gaming (and Ian tips his hat to its brilliance on page 50), but the 32X – an odd, mushroom-shaped lump that boosted the Mega Drive's ageing hardware – perfectly epitomises a period when the industry was in an unpredictable state of flux. Besides, the 32X got the system-exclusive game, *Kolibri* – a shooter where you control a murderous hummingbird that systematically exterminates all rival wildlife. I think we know who the true winner is here.

**Ryan Lambie**  
Editor

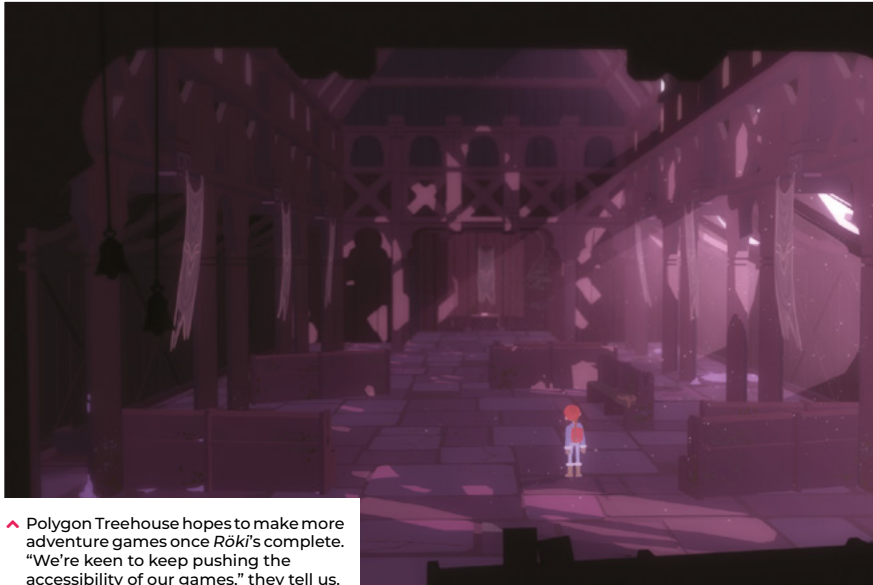


# WHERE THE WILD THINGS ARE

Polygon Treehouse talk to us about **Röki**, Scandinavian monsters, and making a big game with a small team

♥ The game's use of contrasts gives its storybook world a real sense of scale and drama.





▲ Polygon Treehouse hopes to make more adventure games once *Rōki*'s complete. "We're keen to keep pushing the accessibility of our games," they tell us.

**F**rom its earliest beginnings, *Rōki* has been an exercise in making a little go a long way. Cambridge-based indie developer Polygon Treehouse doesn't have a vast team of designers and asset builders to fall back on, but they do have bags of talent and years of industry experience (for more about their history at the now-shuttered Guerrilla Cambridge, check out our interview with them in issue 16). And so, with a comparatively tiny team, they've created a dark yet inviting fantasy world that, thanks to some clever usage of 3D and a frankly stunning art style, feels huge and lived-in. Giant monsters slumber on snow-covered mountain tops; mysterious creatures lurk deep in the woods – they're all images that come to life thanks to a beautifully minimalistic art style rather than

highly detailed models and textures. "We're great believers in working with creative restrictions," says art director and studio co-founder, Alex Kanaris-Sotiriou. "We knew that to make *Rōki* feel like a big adventure – with a team a fraction of the size – we were going to have to be more innovative in our approach to creating our fairy-tale world and characters."

About a young girl who journeys into an increasingly forbidding world in search of her lost brother, *Rōki*'s steeped in Scandinavian folklore, while its adventure game trappings are inspired by the developers' enduring affection for such genre staples as *Monkey Island* and *Day of the Tentacle*. With the game on the cusp of release, we caught up with Kanaris-Sotiriou to find out more about *Rōki*'s making and influences.

**How did you settle on Scandinavian folklore as the theme for your first game? Do you have a personal connection to that mythology?**

Yes and no. We both watched the *Moomins* cartoon as youngsters (our heroine Tove and her brother Lars are named after Tove Jansson and her brother respectively). There was something about the evocative landscapes and the odd, bewitching characters that gave the stories a great sense of place, and felt menacing yet welcoming at the same time.

Rewind to a couple of years back, we had several ideas on the table for our debut indie title, but they all faded into the background when we rediscovered Scandinavian folklore as adults. To be clear, we're not talking about the Norse gods, but rather the mischievous, tragic, odd, and sometimes monstrous creatures [in Scandinavian folklore]. Sure, a lot of them are pretty scary on paper, but we found there was an edge of sadness and humanity to their origin stories that really captivated us. So much so that a cast of characters started to emerge, and we never looked back. It's telling that we didn't name the game after its protagonist, but one of the monsters!

Another inspiration was the realisation that a lot of folklore tends to revolve around children – either them getting into trouble or potentially saving the day. As such, we were particularly drawn to the idea of meeting monsters through the untainted and unprejudiced eyes of a child. We felt this would help break some stereotypes and avoid the 'stab bad monster with sword' reaction an adult might be conditioned to have.

## "IT'S TELLING WE DIDN'T NAME THE GAME AFTER ITS PROTAGONIST"

**Where a game's set is important, but when it's set is also key, so did you talk a lot about the period *Rōki* takes place in?** We did, and we decided to leave the chronology relatively ambiguous. The game's about the collision of modern-day life and the fantastical world lurking behind the curtain. This contrast between the two worlds was really important. Fairy tales are set in 'olden times', but the idea of plunging a kid from the here-and-now into a hidden world of folklore was much more exciting and relatable. ➔



▲ Although inspired by point-and-click adventures, Tove's controlled directly with a pad. "All the interactions are context based, which streamlines the gameplay," Kanaris-Sotirou says.

That's also why we set the game in the wilderness – it helps blur the line between our two worlds, and lets us focus on the mysteries and characters of where they overlap.

**The game has the look of a 2D picture book, but also a pleasing sense of depth. Have you modelled a lot of the assets in 3D, or is the sense of depth an illusion?**

So the game is entirely in 3D but is rendered in a clean graphical style. We wanted to play to our strengths; we've worked in 3D art and animation for our whole careers so it was a given we'd start there. What we established was a fully 3D art style that has no textures or traditional lighting but rather focuses on shape/silhouette, pure colour choice, and motion in order to depict our world.

From a production-hat point of view, this strips out two massive time sinks for

creating our world – traditional texturing and lighting – meaning we can make what feels like a big adventure with a small team. As an added bonus, the art style we derived from this approach feels different and fresh, and has already resonated with players and become a big draw for the project.

Whilst *Röki* is inspired by the classic point-and-click adventure games we loved growing up (*Monkey Island*, *Day of the Tentacle*, etc) the game isn't point-and-click. One of our goals was to update the genre for modern audiences. To that end, you explore and interact with the wilderness in 3D, [directly controlling] Tove with the gamepad – this instantly gives us a real feeling of freedom and dynamism when exploring the ancient forest.

**I read Tom [Jones]'s blog post, where he listed *Flashback* as his favourite childhood game. Is there a hint of that game's smooth animation in Tove's movement, do you think?**

We'll take that comparison gladly, thank you very much! I think the shading style goes some way towards that comparison, but we have really tried to push the fidelity of motion in our game as far as we can, again taking some non-traditional routes.

As well as the core animation, which we try and push the quality on in its own right, we also heavily use dynamic physics elements to soften the transitions and give a sense of reactive realism to our stylised character's motion. We also heavily leverage 'squish' and joint scaling to give our characters an extra sense of weight and pliable charm.

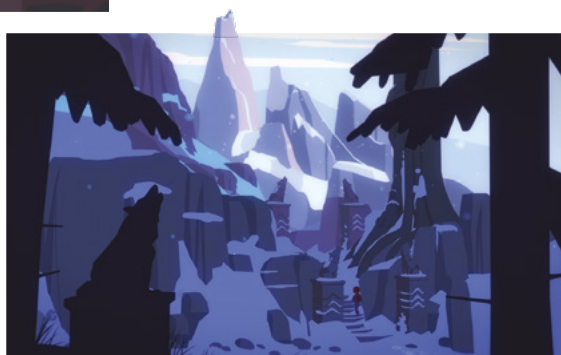
**You already had the character designs and style of the game locked down when it was unveiled in 2017. Has the look of the game changed much since, or have you largely concentrated on developing other elements?**

Establishing *Röki*'s non-photo-real art style was the foundation for the game. We essentially crossed that off our 'to do' list when the game was initially revealed. We committed to it publicly, so there was no going back and tinkering with it! We've gone and layered some more sophistication in since, but it essentially remains unchanged. We felt pretty comfortable that we'd nailed both a unique look, and one that solved a big production issue.

Having this 'banked' was nice as it allowed us to focus on other areas of the game, like design, narrative, and audio, knowing that this big-ticket item was sorted, and was being received very well.

**You've written in the past about the importance of using reference materials. How long did you spend in Scandinavia to get those materials?**

We spent some time in Norway around voice recording sessions (we're working with Scandinavian actors) and took the opportunity to explore and snap as much reference material as we could. The museum of cultural history outside Oslo was an inspiring place, packed with accurate recreations of cabins, and has







an amazing stave church which directly inspired one of the locations in the game.

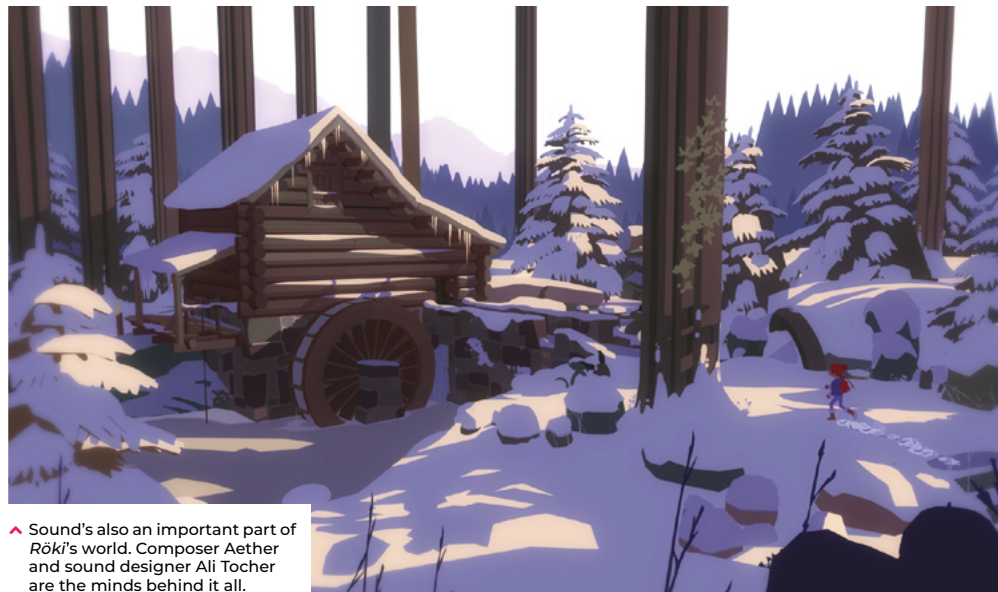
**Is it a challenge to come up with puzzles that require thought, but aren't too obtuse?**

It's inspired by our love for those [adventure] games we played growing up, but we wanted to try and modernise the genre for *Röki*. One of our key goals was to make a 'frustration-free' adventure game that could be played by fans of the genre, but also by people who might have been put off before and new audiences not so au fait with the traditional – sometimes oblique – genre conventions.

## "WE'RE NOT GOING TO GIVE PLAYERS ALL THE ANSWERS ON A PLATE"

The puzzles were another key part of this philosophy. Designing puzzles is really tricky; too easy and they're not satisfying to solve, too hard and they're frustrating. One of our golden rules is to make sure they followed real-world rules, so the player isn't having to make wild leaps of logic to solve them. The other thing that we do is to have a guide or oracle-style character that the player can visit on their adventure if they get stuck, and who will offer subtle hints so as to not break immersion.

We've also given Tove a journal which she updates as she discovers new areas and challenges. As the game opens up, it acts as a handy guide to keep track of what happened where, and to return to for



^ Sound's also an important part of *Röki*'s world. Composer Aether and sound designer Ali Tocher are the minds behind it all.

guidance if they need it, along with offering extra lore for the attentive.

**Although the game's story-led, is the world fairly open for the player to explore?**

The game's split into three acts. The first introduces our protagonists in a cosy, fairly self-contained environment. The second act opens up a lot more, allowing you to explore a large area from a central hub deep in the heart of the ancient fairy-tale forest. We're keeping the location of the third act under our hats for now, but safe to say it will offer another change in place and pace in a climactic location we're pretty darn excited about.

We've tried to link the exploration within the game with the narrative. One of the things that got picked up on at E3 was that we've peppered story notes around the world that you glean by exploring and examining the elements of the forest. Gradually, the player will build up a picture of the events that have unfolded. We like this archaeological and exploratory approach to narrative, especially when compared to lengthy exposition-heavy conversations with NPCs. Driving the narrative in this way also adds to the sense of discovery and interaction for the player.

**Do you envision *Röki* as a bleak tale, or uplifting? Or maybe a bit of both?**

Great question. One we will only answer in part to maintain some mystery and so

as not to influence player interpretation too much! So, as well as having this fairy-tale adventure full of excitement and wonder, we wanted the game to have a vivid emotional core. This stems from Tove and her family, who are in a bit of a dysfunctional status quo spot as the game opens. The inciting incident is Tove's journey into the wilderness to rescue her brother. She'll have to confront her past, as well as monsters and puzzles, in order to save him. So as we travel deeper into the wilds, we also get a deeper understanding of what has happened to her and her family, and how she feels about it all.

We're quietly confident this blend offers a coherent emotional arc and plenty of subtext – but we're not going to give players all the answers on a plate.

**What's left to do on *Röki* before release?**

We're gonna throw some more monsters at it! In all seriousness, one of the things we've been layering in is more reactive elements in the game world that really bring the deep forest to life. As Tove runs past toadstools they'll shrink back into the ground, butterflies take flight as she approaches, and she can make snow trails in the deeper areas of snow-drift. It's these little reactionary touches that make the game world come alive, and we're keen to see how far we can push it. 🐾

*Röki* is out in 2020 for PC and Switch.



# Smash and grab

Dennis Gustafsson tells us about the voxel tech behind his sandbox action game, *Teardown*

## Info

**GENRE**  
Action/sandbox

**FORMAT**  
PC

**DEVELOPER**  
Tuxedo Labs

**PUBLISHER**  
Tuxedo Labs

**RELEASE**  
2020 (Early Access)

▼ Part of *Teardown's* appeal is the open-ended nature of missions. "Anything is allowed as long as you get the job done," Gustafsson says.



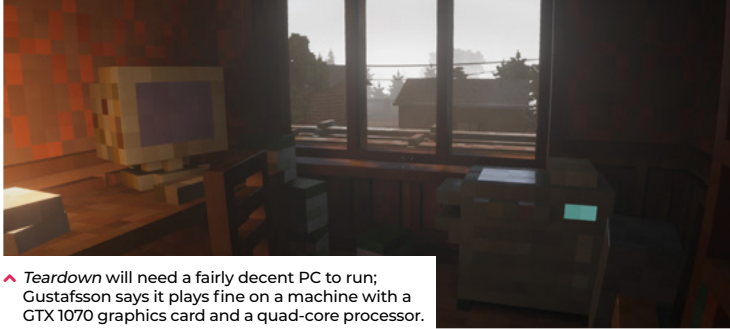
**T**he satisfying splinter of glass. The pleasing way walls break apart a layer at a time, with plaster falling off to reveal bricks, which in turn crumble into tiny cubes with each strike of your sledgehammer. This doesn't happen every day, but we watched the trailer for *Teardown* and immediately thought, 'We want to play this. Right now.'

The work of Swedish developer Dennis Gustafsson, *Teardown* presents a potentially intoxicating mix of wanton destruction and problem-solving. Each level presents a voxel-based sandbox that involves planning and then carrying out a series of heists against the clock. Just about every element in *Teardown's* contained spaces can be damaged or smashed up in some way; you can fire a gun at a power line and watch the whole thing collapse, knock a hole in a wall with a stick of dynamite, or throw a desk through a window and admire the messy results.

There's a point to all this property damage, though: once you start stealing the items you need to complete each level, a timer will kick in, and you'll have only a few seconds to grab everything and escape before a security team arrives. It's vital, then, that you make the path between each item you want to steal as straight as possible, which means the game involves several minutes of knocking down walls, creating makeshift walkways and shortcuts by moving around furniture, planks of wood, or even vehicles, before you spend the second phase rushing around, stealing items against the clock.

In a gameplay video Gustafsson uploaded in early October, the level's objective is to steal a series of keycards from what looks like an industrial estate; later stages will, however, feature other objectives and items to steal. "Most levels will feature the same two phases of planning and running," Gustafsson tells us, "but there will be a lot of variation in the actual goal. One mission might, for instance, be to destroy objects instead of stealing them. This may sound similar, but plays very differently because if you do your planning right, you don't have to be physically close to a target in order to destroy it."

All of this might make *Teardown* sound like a 3D puzzle game – a gleefully anarchic riff on *Portal*, perhaps – but Gustafsson classifies it rather differently. "I think a puzzle game should have one or several designed solutions, which *Teardown* won't have," he tells us. "We specifically try to design levels with no particular solution in mind and leave all of that to player creativity. I see it more as an action platformer with



▲ *Teardown* will need a fairly decent PC to run; Gustafsson says it plays fine on a machine with a GTX 1070 graphics card and a quad-core processor.

build-your-own-level elements in the sandbox phase."

Gustafsson has a long history in the game physics field – Meqon, a company he co-founded in 2001, specialised in developing simulation middleware – and the idea for *Teardown* began to evolve from some physics-based ideas he was tinkering with about 18 months ago. Although Gustafsson knew he wanted to create a sandbox game that "used destruction for gameplay," he also knew he didn't want to make a first-person shooter. "A lot of people see a shooter as the perfect application for this technology, but I personally have no interest in shooters, and I also don't think the destruction and physics would really affect gameplay that much," Gustafsson says.

To create *Teardown's* smash-happy world, Gustafsson has built his own physics and graphics engines, with ray-traced lighting that, although fairly processor-hungry, won't require an expensive new RTX graphics card to run. This makes the game's hazily-lit, destructible world look good enough to eat – but it's also given Gustafsson more than a few technical hurdles to clear in order to get the game to this stage. "One major challenge is that there aren't a lot of voxel editing tools out there, so the content creation pipeline is not as smooth as I would like," he says. "Everything has to be modelled on the inside, which can be quite challenging. In a polygon game, you just deal with the surface, but since everything is procedurally destructible here, each object needs an inside, with its own materials."

There are limits to *Teardown's* voxel destruction, too – partly to prevent the game from becoming unplayably broken. You'll be able



▲ As well as destruction, *Teardown's* also about efficiency: once a level's finished, you can view a map to see how you can complete it more quickly next time.

to blast the wheel off a truck, for example, but its handling will remain the same if you try to drive it. Similarly, the damage modelling on buildings has been simplified so that a roof won't collapse until everything underneath it has been destroyed. "This can look a bit weird at times," says Gustafsson, "[but] it can also be beneficial to the player that the behaviour

is predictable, since destruction is used for gameplay. If the roof started falling in when you destroyed some random support beam

### "Each object needs an inside, with its own materials"

by mistake, that would likely be very confusing and hard to work with."

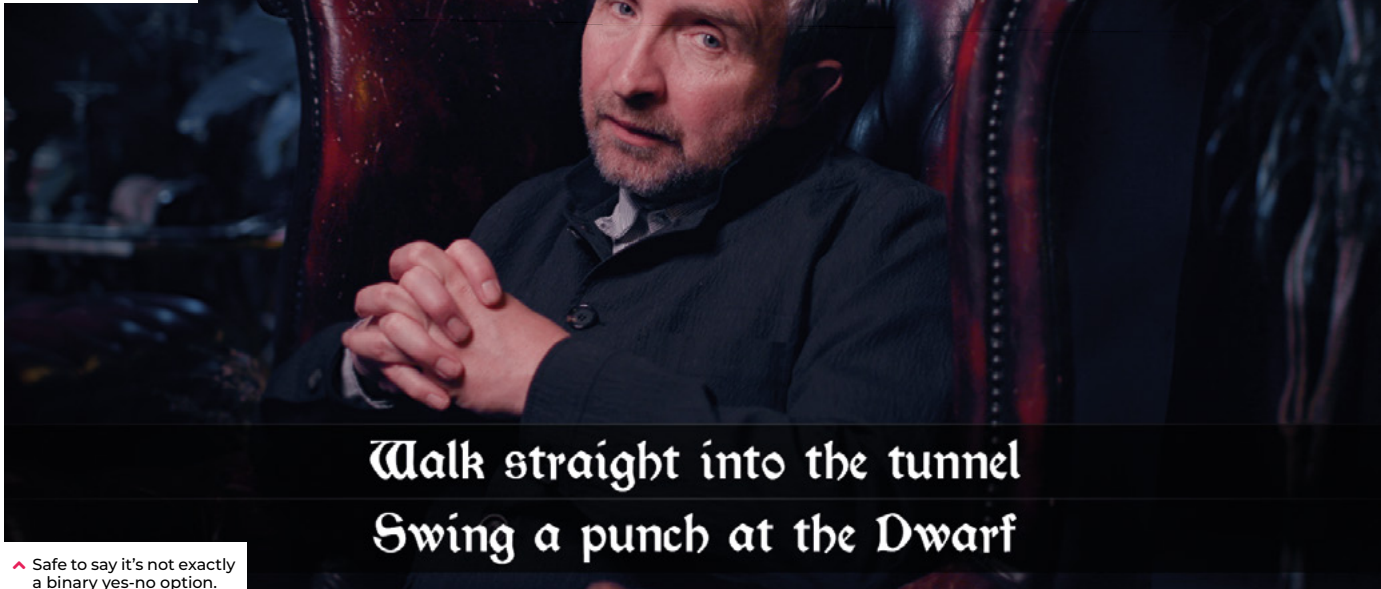
Visit Gustafsson's Twitter feed, and you'll uncover a joyous carnival of destruction: a video shows a construction vehicle tearing the back off a car, turning it into a makeshift pickup truck. Another clip shows how you can knock down a telegraph pole, attach it to a lorry, then drive off, stretching the electricity cables like elastic. It looks ready to play already, though Gustafsson says there's more to do before the game's debut on Steam Early Access next year. "The basic engine and toolset is there, but needs a lot of polish and optimisation. I'm working on vehicles right now," he says. "They'll have a central role in the game: regular cars, construction machines, and boats. Most of all, there's a lot of content to be created. I hired several level designers to help me with that so things are moving a little faster than before, but we really just got started, so there's a lot of work to be done." 🗨️

### THE FUTURE: VOXEL-SHAPED?

"I think we'll see more voxel games in the next few years, but I don't think they will replace polygons any time soon," Gustafsson says, when we ask him what he thinks about the future of voxels. "Polygons are a pretty good representation for 3D objects unless you need to model the inside, so I don't see them completely going away. Voxel destruction is a lot of fun, but completely destructible worlds are probably a bad fit for most games since they affect level design and gameplay in unpredictable ways. It can quickly become a nightmare scenario for both game design, level design, and testing. I think voxels will be used mostly for niche games and maybe for sampling real-world objects. There are a few companies doing cool stuff with really small voxels – Atomontage and Mutate primarily – and it will be interesting to see what they will do with the technology."



◀ *Teardown's* ray-traced lighting gives the voxel world a pleasingly realistic look, and won't require an RTX graphics card to run.



Walk straight into the tunnel  
Swing a punch at the Dwarf

▲ Safe to say it's not exactly a binary yes-no option.

# Deathtrap Dungeon

And this time with no Kelly Brook in sight

## Info

### GENRE

Choose-your-own-adventure

### FORMAT

PC / Mac / mobile

### DEVELOPER

Branching Narrative

### PUBLISHER

Branching Narrative

### RELEASE

Soon

▼ Actor Eddie Marsan, seen here (probably) not cheating at *Deathtrap Dungeon*.

Last seen in the dark, forgotten past of the mid-nineties, *Deathtrap Dungeon* – the most popular of the *Fighting Fantasy* series of choose-your-own-adventure books – is returning to video gaming. This time, rather than a wonky 3D hack-and-slash title with Kelly Brook on hand to sell it, new studio Branching Narrative has opted for an FMV approach; a sort of *Jackanory*, but with more maleficent beasts.

Those hoping for a recreation of *Knightmare* may be left wanting, as *Deathtrap Dungeon* brings one Eddie Marsan in as its narrator and guide for the player. The award-winning actor has plenty of movie and TV credits to his name, and brings that

extra bit of oomph to proceedings – a removal of cheese, if you will – that you might not otherwise see. “Eddie’s contribution has been astounding,” says Matt Spall, co-founder of Branching Narrative. “We thought long and hard about who should deliver the script, as well as the setting it would be delivered in, and ultimately settled on a ‘story room’ feel, a place that you’d feel safe and warm, but at the same time, could be taken somewhere into your imagination, very much the same way the games do.”

Marsan came up as a potential ‘host’ of the game, thanks to his packed CV and solid acting chops: “Once we knew Eddie was intrigued I sent him a copy of the original book, along with some dice, for him to get a feel for it,” Spall continues. “He ended up playing the game with some of his kids, acting as narrator and seeing the intrigue, thought processes, and differences of opinion from them – I think it had a positive effect on his decision to take part.”

But why return to *Deathtrap Dungeon* in the first place? It has a reputation, sure, but it’s not the most obvious choice for a license to use. “[Its popularity as a book] represents a kind of ‘perfect storm’ for us as a dev studio,” Spall explains. “We did some experiments late in 2018 around uses of interactive video for gameplay, and an opportunity that clearly jumped out to us was around the huge existing library of great interactive literature, not only in traditionally released paper form, but also online from people writing using tools like Twine.”





Try to talk to them?  
Attack them with your sword?  
Try to slip by them unnoticed?

▲ It's simple, but there's no denying the allure of a good choose-your-own-adventure (video) gamebook.

As well as the name value of the brand, there's also the fact that something as (relatively) simple as *Deathtrap Dungeon* – especially when approached as a bunch of choices presented by a human face – can be highly accessible for players of all backgrounds. “Approachability is a huge factor for us, and it’s something that we’ve been working around,” Spall says. “We’re very aware that there’s a large fan base around role-playing games, and the resurgence of Dungeons & Dragons and tabletop gaming in general has certainly guided a number of our decisions. At EGX, where the game was shown to the public for the first time, we were astounded at the broad appeal the game has got, attracting a diverse group of players.” Its casual approach means it’s easy for people to get into, and Spall says he’s quietly hopeful the game will appeal to families or other mixed-ability groups.

It’s also nice to hear that series creator Ian Livingstone has taken a hands-on approach to the project, providing not just consultation but

**“Once we knew Eddie was intrigued, I sent him a copy of the original book”**

an actual redesign of decades-old mechanics. “Ian has been helping us build a revised, simplified battle mechanic for the game,” Spall says. “The player will now be able to choose between the multiple round battles from the original game, and a revised system that can still inflict lasting damage, but takes a lot less time out of the continuing adventure. Ian also came along to the video shoot, and we have

some footage we’re considering dropping in as an Easter egg in the game... or not!”

There’s always going to be cynicism around

an FMV title, of course, and it’s not wholly unwarranted. Spall says he and the team are aware of this, though, and have hopes *Deathtrap Dungeon’s* increased complexity over other FMV titles will work well for it. “The primary difference is in the additional layer of role-playing mechanics,” he says. “The mechanics in Ian’s original book apply additional jeopardy to the story flow, affecting the player’s propensity to take risks based on how high, or depleted, their skill, stamina, luck, and provisions are.”

While this might be the first game from Branching Narrative, Spall is matter-of-fact about where the studio is going next: “We’ve got two more projects currently in the pipeline,” he explains. “One built on another well-known gamebook, very much in the vein of *Deathtrap Dungeon*, and another that we’re working on with a comedy writer that’ll be a much more frenetic affair.” Now imagine if we finished this piece with a wonderful pun about the studio *choosing its own adventure* – wouldn’t that be great? 🐾

◀ Well it's always going to be fight your way out, isn't it? No? Just me? Oh.



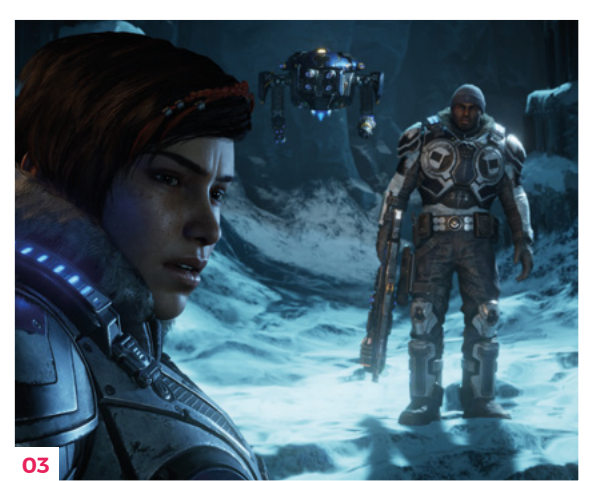
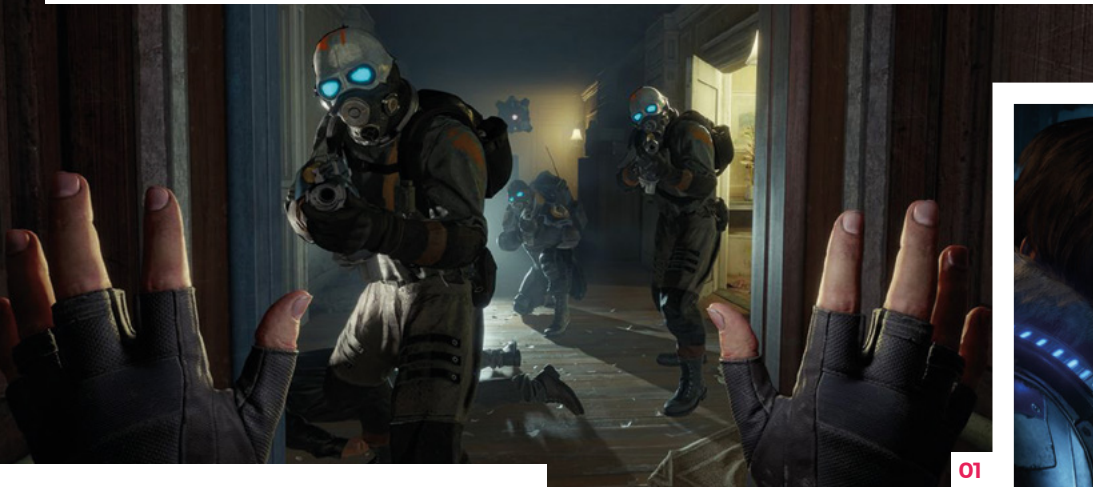
Take part in the Run of the Arrow  
fight your way out

## LOOKING AHEAD

Serious question, though – can you look ahead through the pages and, in essence, cheat? Not that any of us did that with the choose-your-own-adventure books, of course... “Looking ahead in the game is something we considered,” Spall admits. “But in reality it only worked part of the time as there are so many potential paths through the game it ultimately wasn’t a big advantage. What we are allowing the player to do is to keep a virtual finger in the pages where they’ve been, building, in essence, what Ian Livingstone called ‘the five-fingered bookmark’. We’ve built a map that reveals itself to the player as they progress through the dungeon, then at any point, the player can choose to go to any part of the map they’ve already been to, and pick up with the stats an inventory they had last time they were there.”

# Headlines

from the virtual front



## 01. Threality?

*Half-Life 3*... not confirmed. Valve has instead confirmed *Half-Life: Alyx*, a brand new, full entry to the *Half-Life* series, this one a prequel to the second game starring everyone's favourite sidekick, Dog. Wait, no, the other one. And the big kicker here? It's VR-only, made for Valve's own Index hardware but with compatibility for the Oculus and Vives of the world built in too.

The project started back in 2016, and sees Valve using the talents of *Half-Life* veterans along with a few new faces – including some from Campo Santo, which Valve picked up back in 2018. "In all honesty, back in 2016 when we started this," explained Valve's Robin Walker, "*Half-Life 3* was a terrifyingly daunting prospect, and, I think, to some extent, VR was a way we could fool ourselves into believing we had a way to do this."

The game releases in March, if all things go well.

## 02. Howling

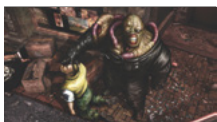
A new dev company, WolfEye Studios, has been set up by Arkane Studios founder Raphaël Colantonio and executive producer Julien Roby, with the two previously having worked together at Arkane for just over a decade. The new studio will operate remotely, without a central office, and will be focused on indie titles rather than increasingly daunting triple-A fare.

"The world has changed since 1999 when I started Arkane Studios, so while it is way easier to be taken seriously by investors and publishers after our run at Arkane, there are new challenges that keep it interesting," Colantonio told Gamasutra. "The market has changed, our tastes and desires too. I'm not the same person that I was back then, but there is one thing that hasn't changed: I want to create a game that is very dear to me and my friends at WolfEye."

## 03. Gears of Inclusivity

The Coalition's Rod Fergusson used his keynote at the Montreal International Game Summit to speak in part about the studio's attempts toward inclusivity in its development mantra, citing the motto: "Unless you consciously include, you will unconsciously exclude."

"If you just do what you're doing without thinking about how to include others, your normal biases are going to kick in, and you're going to forget people just because they're not part of your social circle, not part of your demographic," Fergusson said. "You're not thinking about them. It's just a reminder that if you want to include and grow your audience, you have to be very explicit about how you do that."



*Resident Evil 3* remake  
rumoured for 2020 release

Bizdev VP Greg Rice has  
left Double Fine



05



04



06

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



## 04. NODE (RE) ACTIVATED

Ever-growing UK developer/publisher Rebellion announced it has acquired Amiga-era legend, The Bitmap Brothers, with the latter's entire portfolio now owned by the Oxford-based former.

This marks the latest in many moves by Rebellion to grow and pivot over recent months and years, with the studio moving into movie and TV production, as well as more recently announcing the launch of a board-game wing.

Rebellion CEO and co-founder Jason Kingsley said: "We're delighted with the addition of The Bitmap Brothers to the Rebellion portfolio. The Bitmap Brothers are renowned for making great games and for bringing gaming into the mainstream with inimitable style.

"We've known Mike Montgomery for many years, and we're honoured by the faith and trust that he has shown in us by passing on the torch. We'll strive to be vigilant custodians of one of gaming's great names."

## 05. (Empty) Stadiums

Google's launch of Stadia has gone off without a single hitch, and everything is perfect! Wait, no, that'll teach us to write these stories before things have happened. No, Stadia's launch has been... a mixed bag. For those it worked for, it's been a potential sign of things to come (as with all previous game-streaming services). For those it hasn't worked for? Not so much. Some day-one purchasers couldn't get Stadia working over a week after its launch, which is unfortunate.

We hadn't even hit 19 November before learning about all the promised features Stadia wouldn't actually launch with – 4K HDR games on anything other than Chromecast Ultra, the State Share feature, even achievements aren't in there day one. And for a lot of things, it's a rather vague timeline for when we'll actually be getting them. The future isn't now, just yet.

## 06. Quick sell

Epic has announced a solid get for its stable, picking up Swedish asset library Quixel for an undisclosed fee. The new acquisition brings with it a huge library of Megascans: items, objects, and *things* rendered in high resolution for use in all manner of creative pursuits – including, you guessed it, games. The library of Megascans will be added to the Unreal Engine library, and will be free to use.

A post on the UE blog by Epic chief Tim Sweeney read: "Building photorealistic 3D content is an expensive endeavour in game development and film production. By coming together with Quixel to make Megascans free for all use in Unreal Engine, this level of artistry is now available to everyone from triple-A studios to indies."

Quixel co-founder Teddy Bergsman added: "As part of Epic Games, we're now able to accelerate this vision as we grow the Megascans library, speed up the development of Bridge and Mixer, and improve integrations with all major 3D software and renderers."

*Alien: Isolation* out now  
on Switch, wahey!



Ninja releases a comic book; has  
Jesus-y overtones (seriously)

# Looking



## Yakuza: Like a Dragon ↗

It's a wonderful time of year for *Yakuza* fans, with Sega re-releasing versions of the third to fifth games on PS4 on a rolling basis and a full-on proper sequel hitting soon. In January, *Yakuza 7*, as we're informally calling it, will land in Japan – with a western release following later in 2020. The new game sees a big shift for the series, with mainstay protagonist Kazuma Kiryu stepping aside, and newbie Ichiban Kasuga taking centre stage.

There's also a big shift in battle style, moving away from the *Virtua Fighter*-lite of previous titles and instead presenting an RPG-like turn-based battle system. Additionally, character relationships now utilise a system very similar to those in the recent *Persona* games, with the player able to level up their friendships between characters, thus unlocking new jobs and abilities. Basically, it's all going a bit *Yakuza: JRPG Edition*, and honestly, after 15 years of a pretty by-the-numbers action-RPG-lite, changes as broad as this are as welcome as they are surprising. Here's hoping the experiment pays off.

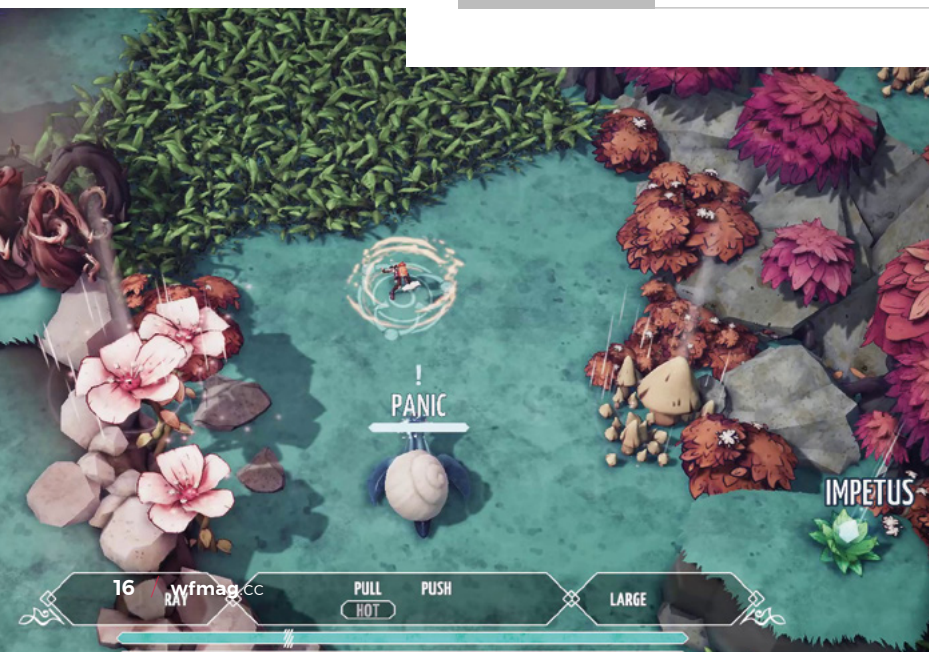
## Wetware ↘

It looks twee with its stop motion-like animation, but *Wetware* hides a darker interior. You are tasked with hacking into a drone which has come into your possession, but the techniques you use are considered unethical by some – even harmful. Some might even consider what you're doing torture of an AI. See? *Dark*. And definitely intriguing.



## ↖ Nanotale - Typing Chronicles

*Typing Chronicles* is out on now on Early Access, and the noises around it are positive ones. A mix of adventure RPG and... well, typing, it brings exploration and study – you play as an archivist – together with puzzle-solving and use of the keyboard for everything. That includes typing out words to use your magic, which is always great.







## Doom 64 ↗

With retro port maestros Nightdive Studios at the helm, we've little doubt *Doom 64's* multiformat re-release will be a solid one. What's more enticing is that this is probably the least-played of the core *Doom* series, with it only ever appearing on the N64 22 years ago. This means that for a lot of us, it's the first real chance to play the *Doom* that took the established formula and played about with it – if only a bit.

## Unto The End ↘

There's a real *Another World/Prince of Persia* vibe to this one, being made by a husband and wife team. *Unto The End* champions its skill-based 2D combat, which takes in both melee and ranged weaponry, and sounds like it might be, as they say, 'challenging'. And to top all that alluring loveliness off, it also looks bloody fantastic.



## Airplane Mode ↗

Taking a leaf out of the *Desert Bus* book of ridiculousness, *Airplane Mode* sits you in economy and has you endure a full, real-time six-hour flight. It's the detail that makes this more than just a basic gag, though, as you're able to read a book or in-flight magazine, watch 'hit movies of the 1930s', chow down on questionable high-altitude food, and plenty of other elements familiar to anyone who's ever been smushed into one of these tubes of convenience.

## Eldest Souls ↘

There's a willingness to overlook the rather on-the-nose use of the word 'Souls' in the title, given *Eldest Souls* has been making all manner of good impressions over the past few months. Entering a dark and ancient Citadel, your task is simple: kill a bunch of gods. This plays out in a boss rush style, with

multiple super-challenging battles the main attraction. While definitely hard – and definitely the sort of thing in which you'll die a lot (who'da thunk it) – you pick up new abilities on defeating each god, so maybe it might not actually be that hard aft... no, it'll be really hard. It is really hard. It's one of *those* games.



## Interface

Survival Tactics: evolving the battle royale genre

# SURVIVAL TACTICS:

## EVOLVING THE BATTLE ROYALE GENRE

▲ *Fortnite's* success is so astronomical that it's easy to forget its origins as a co-op survival game in the vein of *Minecraft* and *Left 4 Dead*.

WRITTEN BY  
ALAN WEN

From humble modding roots to global phenomenon, everyone wants a piece of the battle royale boom. We meet the studios finding ways to change the genre

Since *PlayerUnknown's Battlegrounds* became the surprise hit of 2017, selling over ten million copies while still in Early Access, the popularity of the battle royale genre has continued to grow. With over 250 million registered players across a whole host of platforms, *Fortnite* is currently the biggest video game in the world, netting Epic an estimated £1.85 billion in revenue for 2018. These are eye-watering numbers for a genre named after a cult Japanese movie from 2000 that quietly developed in the background of the modding community for much of this decade, beginning with the 'Survival Games' *Minecraft* servers in 2012. This eventually led to *PUBG*, launched in 2017, which saw creator Brendan Greene develop a battle royale mod for open-world survival game *DayZ* – itself a mod of tactical military shooter, *ARMA 2*. It was, considering the genre's current ubiquity, a surprisingly measured and organic growth before reaching its final form.

In the wake of the genre's seemingly overnight success, it's no surprise that everyone else wants in on the action. In the past year, mainstream studios have parachuted into the fray, from *Call of*

*Duty: Black Ops 4's* 'Blackout' to EA adding a battle royale mode to *Battlefield V*, as well as launching an entire new game, *Apex Legends*. But while these games essentially bring big-budget gloss to a genre known (and even admired) for its jankiness, these are also all inherently shooters. *Apex Legends* arguably delivers the most polished take on the battle royale to date – as well as implementing excellent traversal and an inspired ping system that vastly improves communication for those of us who'd prefer not to put on a headset – but it nonetheless follows the formula of its forebears. You've got a mass of players (*Apex* cuts this from the 'standard' 100 to 60) dropping into a map in a fight to the death, with the last one standing named the victor; loot is random in terms of its location as well as in its power and rarity; then there's the open island map that shrinks over time, gradually forcing players into ever tighter spaces for direct confrontation.

It's enough of a unique proposition that *PUBG* Corporation – the studio behind the eponymous game – felt the need to file a lawsuit against Epic Games in January 2018, claiming *Fortnite* was a copyright infringement of its own game. While the suit has since been dropped, it goes



some way to showing how new the battle royale genre felt, and how important it was to those in a position to make a lot of money from it.

### SHOOT TO KILL

Little surprise, then, that mainstream studios like Treyarch or Respawn are quite happy to simply iterate and refine the battle royale formula, albeit with the excellent gunplay mechanics they're renowned for. Essentially, battle royale is a new popular genre, just like the MOBA, the survival game, or the hero shooter was before it. Still, a refreshing number of developers are finding ways to reinterpret the battle royale. After all, it's vital that designers find new ways to make their games stand out in an increasingly crowded genre.

In April 2018, Finnish developer Housemarque – which previously made acclaimed arcade-inspired games like *Resogun* and *Nex Machina* – announced its new project: the multiplayer, third-person shooter, *Stormdivers*. The game shares a number of commonalities with the battle royale genre, even if its creators haven't explicitly referred to it as such. According to producer Tuomas Hakkarainen, *Stormdivers'* genesis began

as early as 2015 under the working title 'Killing Games' – it was an original pitch from one of the studio's artists, who described it as a third-person shooter riff on *Smash Bros*. "By the time it was playable, *DayZ* already existed and also influenced the development," says Hakkarainen. "However, 'Killing Games' was much more fast-paced and arcade-like by design."

When *PUBG* blew up, it naturally became a heavy influence on Housemarque. By then, *Stormdivers* was already being described online as a battle royale – this was, incidentally,

before any in-game footage had been revealed – so the studio decided to just go with the flow. The developer still aims

to differentiate the game from the competition, however, most notably by replacing the battle royale's slowly shrinking circle of death with a more dynamic storm. "The storms in *Stormdivers* are much more lifelike and unpredictable," explains Hakkarainen. "The shape of the storm is never just a simple circle. The nano-storm shrinks from different areas with different speeds, depending on its intensity."

In other words, rather than just following a timer alerting you when the playing area is ▶

▲ *Tetris 99* genuinely has all the drama of a battle royale, as players are gradually whittled down to one lone victor.

**"In the past year, mainstream studios have parachuted into the fray"**

## TIMING IS EVERYTHING

The battle royale genre didn't begin immediately after the release of the 2000 Japanese film from which it takes its name. Rather, it was shortly after *The Hunger Games* movie came out in 2012 that the idea of a battle royale game took hold, with *Minecraft's* 'Survival Games'. Before *PUBG* came out, meanwhile, there was *Btooom! Online*, a Japanese mobile game based on a manga, which in turn was inspired by the *Battle Royale* film. Funnily enough, while the battle royale genre now thrives on mobile more generally, *Btooom! Online* was actually a flop.

## Interface

Survival Tactics: evolving the battle royale genre

► While realistic military sims were one of *PUBG*'s reference points, other battle royales have doubled down on its more irreverent qualities.

## LAST ONES STANDING

With the battle royale genre becoming so saturated, casualties are going to be inevitable. High-profile failures have included Boss Key's *Radical Heights*, which didn't even get past its 'X-Treme Early Access' phase, while the ambitious, 1000-player *Mavericks: Proving Grounds* saw its developer Automaton Games going into administration this year. The prize for biggest disaster, however, goes to *The Culling 2*, which was received so badly that it was quickly dropped by developer Xaviant, while the original *Culling* was retooled as an Early Access, free-to-play title. Both games had shut down by May 2019.

▼ *Fall Guys* does away with the killing aspect of the battle royale genre. Its titular competitors get knocked down and just bounce back up again.



about to shrink, players need to keep an eye on the storm and their surroundings, which also keeps them on the move. There's also an emphasis on traversal, which is why every character has a glider – adding verticality and aerial battles to the mix – while a class-based system gives characters their own abilities, from the Scavenger's ability to turn temporarily invisible to the Juggernaut's teleportation.

Unpredictable environmental events like an eclipse that lowers visibility or a tornado that whips up loot into the air, but also supercharges your glider, are all designed to keep players on their toes. Or, as Hakkarainen succinctly puts it: "The Housemarque DNA – fast-paced movement and proactive playstyle – can still be found in *Stormdivers*."

**"It's been a tale of woe in making fantasy combat actually work"**

### A BREAK FROM GUNPLAY

The downside for Housemarque is that, while *Stormdivers* doesn't yet have a release date, its rivals are already charging ahead. Some of its outstanding features, like character classes and traversal, have already been implemented in *Apex Legends*, while the constant rollout of new seasons in *Fortnite* (most recently with the launch of *Chapter 2*) is creating more changes and events than most players can keep up

with. *Stormdivers* is also still fundamentally a shooter, which means it will always be compared in some way to its high-profile rivals.

This is where a game like *Spellbreak* seeks to change things up by ditching modern or sci-fi military aesthetics for high fantasy. In game terms, firing a gun might not be much different than casting spells using projectiles, though Proletariat CEO Seth Sivak acknowledges the team had experimented with a wider range of combat early on. "It's been a tale of woe in making fantasy combat, specifically melee, actually work," he says. "It turns out that magic arrows were the things people liked using in our early prototypes, and that eventually evolved into magic spells."

The developer hasn't merely replaced bullets with lightning bolts, though, as the over-the-top feeling of being a powerful battlemage means the game can deviate from the constraints of a traditional shooter, whether it's dishing out large Area of Effect blasts or throwing a giant boulder at your opponent.

*Spellbreak* also employs RPG elements, so not only do you have eleven different playable classes with their own passive and active abilities, but you can also combine elements:



➤ *Spellbreak* mixes the battle royale with a sprinkling of RPG elements.

a fire spell and poison cloud can create a large poisonous fireball, for example. The way players become more powerful over the course of a match resembles the progress in a MOBA, although *Spellbreak* still follows the conventions of battle royale – a shrinking playing area, random loot, and last player standing can all be found here.

More importantly, *Spellbreak* seems to be attracting a player base that's new to the battle royale genre. "We've found that our fantasy setting, RPG elements, and art style appeal to a wide range of players who might not otherwise have tried a battle royale game," says Sivak. "It's been vital to establishing such a large player community at this early stage of development."

Nonetheless, like *Stormdivers*, the maximum number of players per match in *Spellbreak* is set at a modest 40 – assuming you can manage to find enough players. It's still early days for Proletariat, which is selling the game exclusively on the Epic Games Store at a whopping £44.99 – a big ask for what's essentially a game in Closed Alpha, when the majority of battle royale games are operating as free-to-play.

## SOMETHING DIFFERENT

Ironically, the same month *Apex Legends* dropped and demonstrated what a refined triple-A standard battle royale could be like, the very notion of what a battle royale game *is* was entirely redefined. *Tetris* remains one of the most popular games ever, played by people of all ages and backgrounds, though mostly as a solitary line-clearing pastime. So the idea of it becoming a 99-player battle royale to promote the Nintendo Switch Online service sounded almost like an early April Fools' joke.

Yet competitive multiplayer has existed for the puzzler since as far back as when you could connect two Game Boys with a link cable. *Tetris 99* merely takes the series' niche hardcore multiplayer techniques and introduces them to a wider audience.

The idea of combining the competitive side of *Tetris* with the battle royale genre came from Arika, a Japanese developer already known for its *Tetris: The Grand Master* arcade series. In an interview with Japanese website 4Gamer,

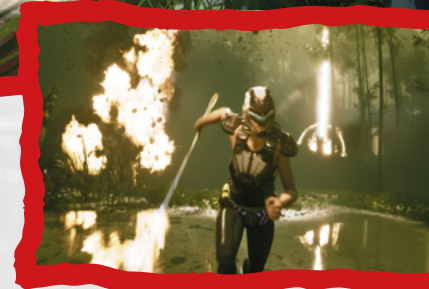
**"Tetris 99 flows with the same rhythm and drama of any other battle royale"**

director Ryuichi Nakada says planning for the game started in April 2018, while early on he had already envisioned the game playing out with a standard *Tetris* panel while your fellow competitors' screens lined up on either side. "I didn't actually get the go-ahead to start doing research into the battle royale genre until afterwards," he says.

Yet despite the obvious mechanical differences, it's surprising how much *Tetris 99* flows with the similar rhythm and drama of any other battle royale, from how building blocks and queuing up devastating 'I' or 'T' pieces is akin to gathering resources before the inevitable skirmish, to the way game speed increases as fewer players remain – mimicking the way a shrinking map intensifies confrontation in a battle royale.

Even the badge system, which multiplies the amount of garbage you can send to your rivals, is essentially like collecting rare powerful loot from a defeated opponent, though *Tetris 99* also uniquely benefits from a counter system that allows you to send garbage to multiple players that are targeting you at the same time.

These ultimately add to making *Tetris 99* a more skill-focused game encouraging aggressive play – after all, there's no equivalent of toilets or bushes to hide in, especially when every player's screen is visible. Not just subverting the expectations of battle royale, *Tetris 99* even subverts expectations of the puzzle genre, often considered a more casual pastime. ➤



➤ While *Stormdivers* seems like a battle royale gamble, Housemarque haven't bet all their chips on it, as the studio is also working on another unannounced triple-A project.

## Interface

Survival Tactics: evolving the battle royale genre

► 'Door Dash' was the first minigame devised for *Fall Guys*. "It's ridiculously simple, yet the first time we playtested it, people were slamming at their desks for one more go," says Jeff Tanton.

### MASS PARTICIPATION

Ultimately, *Tetris 99*'s successes are how it remains a universally compelling game, even with these new mechanics, and how it demonstrates battle royale's appeal beyond the shooter mechanics other developers are eager to jump straight to. For Jeff Tanton, creative director at Mediatonic, battle royale was a genre he was wary of getting involved in – to the point he had specifically instructed his team not to pitch him titles in the style. "And then one of my designers comes back to me and says 'Look, it's a battle royale... but!,'" he laughs.

In truth, *Fall Guys* isn't really so much a battle royale as it is inspired by the high-concept television game shows that have existed for years before, notably *Takeshi's Castle* (host Takeshi Kitano has a starring role in the *Battle Royale* film, coincidentally), *It's a Knockout*, and *Total Wipeout*. Just like those shows, *Fall Guys* involves a large



mass of players running through multiple rounds of tightly constructed and easy-to-understand minigames, the number of players naturally shrinking after each round of eliminations until the final lucky few run the final obstacle course of 'Fall Mountain', after which only one will be crowned the winner. There's more of a comparison to *Mario Party* or *WarioWare* than battle royale shooters, then, but they nonetheless share a commonality that made the idea viable.

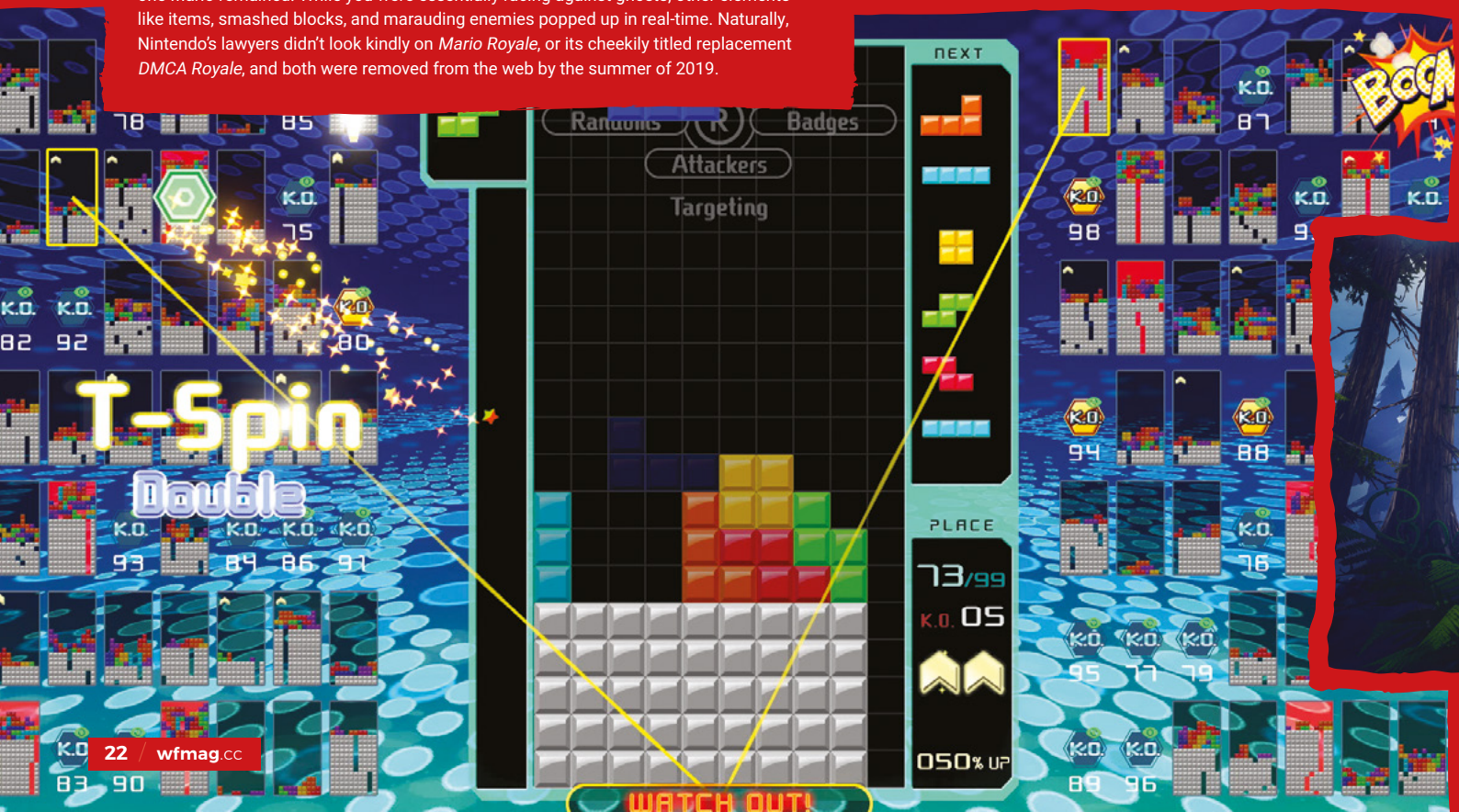
"Battle royales inherently have violence within them, but there are a million other places players can go to if they want to shoot something," says Tanton. "So for us, two things appeal: mass participation and short time frames. Battle royales have made that commonplace and acceptable, so that's been massively influential for us, being able to pitch *Fall Guys*, and for people to understand why that would be appealing."

Much like *Tetris 99*, *Fall Guys*' simple controls and objectives are immediately accessible to a wider audience that may not be interested in the standard battle royale/shooter mix.

▼ Play *Tetris 99* in the Switch's handheld mode, and you can use the touchscreen to target specific players.

## FUNNY GAMES

While *Tetris 99* is published by Nintendo, the firm's beloved mascot/terrible plumber Mario has also had the battle royale treatment, albeit unofficially. The browser-based *Mario Royale* asked 75 players to get through as many *Super Mario Bros*-themed levels until only one Mario remained. While you were essentially racing against ghosts, other elements like items, smashed blocks, and marauding enemies popped up in real-time. Naturally, Nintendo's lawyers didn't look kindly on *Mario Royale*, or its cheekily titled replacement *DMCA Royale*, and both were removed from the web by the summer of 2019.





*Fall Guy's* premise also has an instant appeal for Mediatonic; its developers jokingly refer to it as a battle royale game they might not be terrible at. The design of the titular fall guys helps level the playing field, with their pudgy mascot physique making them equally terrible at running, climbing, and jumping; a nod to the aforementioned game shows, where contestants also dress up in ridiculous costumes that impede them during their physical challenges. "These games are funniest when people are falling over and failing," says Tanton. "So we're not trying to create elite super-machines, but rather something that's adorable, uniquely terrible, but [that we] still so badly want to win."

**"These games are funniest when people are falling over and failing"**

Of course, when compared to *Fortnite* and other battle royale shooters with their hundreds of millions of players, *Fall Guys* could be regarded as a minor deviation. *Tetris 99* has attracted 2.8 million players – an impressive figure, considering there are about ten million Switch Online subscribers – but even uptake that high is barely a dent

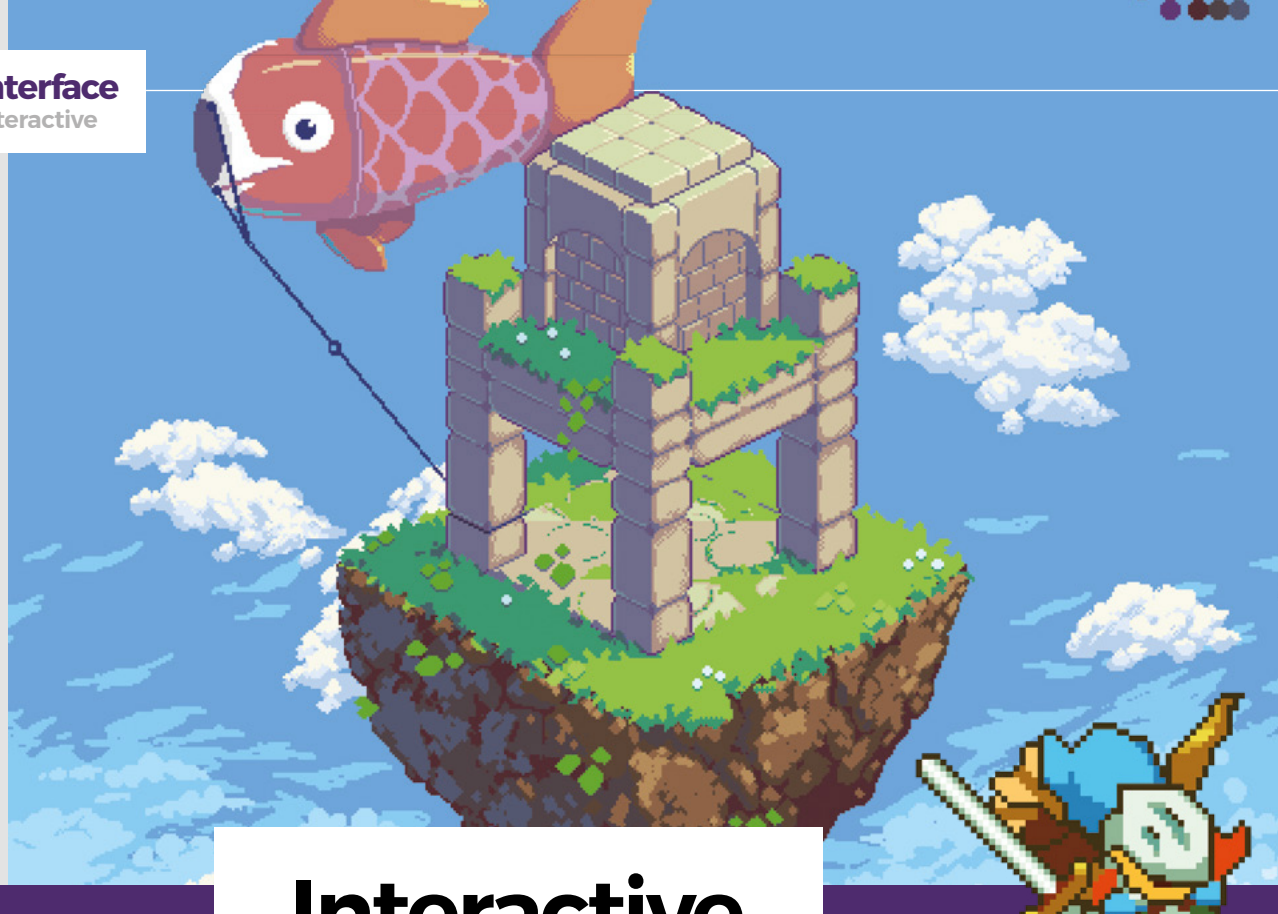
in *Fortnite's* 250 million player accounts. What it does say, though, is that there may well be an audience there for the upcoming – and entirely unrelated to *Tetris 99* – *Tetris Royale*.

Ultimately, while there's a rush to cash in on this still relatively fresh genre, there are these small positive signs showing developers they needn't stringently follow *PUBG's* formula to define what the battle royale can be. Tanton goes further: "You can probably lose the 'battle' aspect of it," he suggests. "It can even be cooperative and not competitive; it doesn't need to be about whittling people down from 'x' number to one. Ultimately, for me, it's about mass participation, and the time you put in is always worth it. If you're knocked out a minute into a game, that's OK as you've only dedicated a minute. But if you make it for 15 minutes, perfectly synchronised, the longer the game goes on, the more you're invested in it. The longer you play it, the more you get out of it, and you're never left disappointed." 🗨️

▲ Developer Proletariat also plans to incorporate other RPG elements into *Spellbreak*, including quests, guilds, and even NPCs.



◀ *Spellbreak* is available exclusively through the Epic Game Store – evidently, Epic don't feel threatened by more competition, and are happy to foster it.



# Interactive

## The art of Thystle

Pixel artist William Beaujon tells us about his debut project and his approach to sprite design



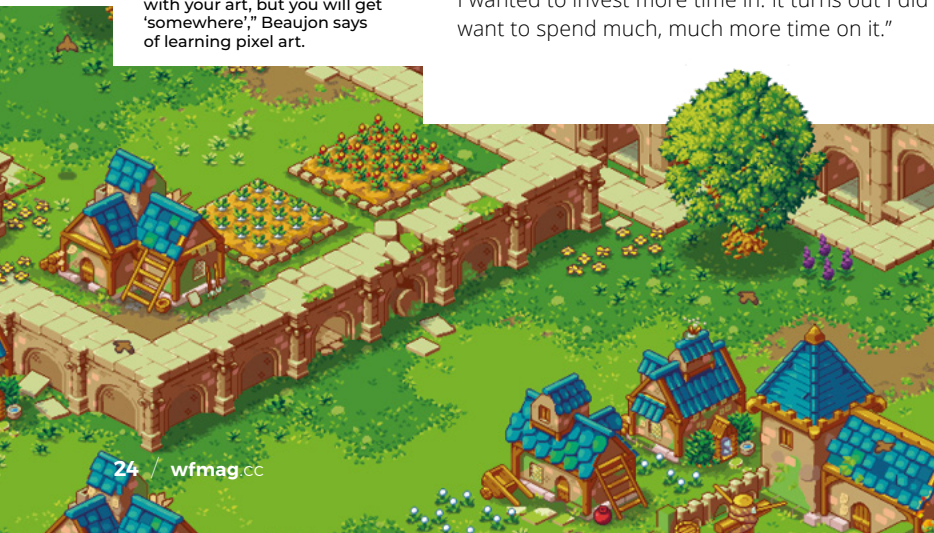
Are you a solo developer working on a game you want to share with Wireframe? If you'd like to have your project featured in these pages, get in touch with us at [wfmag.cc/hello](http://wfmag.cc/hello)

▼ "If you sit down and take your time, going at your own pace, you might not get 'there' with your art, but you will get 'somewhere,'" Beaujon says of learning pixel art.

If you want to learn a new skill, it's sometimes best to dive in at the deep end and pick it up as you go along. Take William 'Doaklyn' Beaujon, for example: the Orlando, Florida-based pixel artist is currently developing his first-ever game in Unity. But rather than start with something simple like a *Flappy Bird* clone, he's making *Thystle*: a real-time strategy game in the mould of *Warcraft 2* and *Age of Empires*. "I have a prototype I built earlier in the year, but it's super rough," Beaujon tells us. "It was an attempt to test the waters and see if an RTS was something I wanted to invest more time in. It turns out I did want to spend much, much more time on it."

Set in a lush fantasy world of flying islands and gently time-worn buildings, *Thystle* is, Beaujon says, a 'what if' amalgam of mechanics and scenarios from his favourite strategy games. "In *StarCraft II*, you used to be able to pick up Siege Tanks and drop them wherever you wanted," Beaujon says. "They removed that mechanic because it became a strategy that every Terran player did in every match, and the game's probably better for it being gone. In *Thystle*, I have planned a catapult-like unit much like the Siege Tank, and I want [it] to be lifted and dropped places, but only after a certain upgrade, thus it's something you *can* do, but it requires an investment so it doesn't become ubiquitous."

Tying *Thystle's* fantasy and strategy elements together will, of course, be Beaujon's bold and fresh pixel art. Before he started experimenting with sprites, Beaujon was a student of drawing and painting at university; it was only towards the end of his studies that he began to think about moving his talents into the digital realm. "I kind of just fell into it," he says. "I knew by the end of college that making art for galleries just wasn't for me... Eventually, I realised that the best way to take advantage of the skills I learned in college was to make 2D games. I was really







▲ For consistency, Beaujon often draws a sketch before turning it into pixel art. "I need everything to be consistent in terms of style and level of detail," he says.

scared of pixel art at first – everything I made looked silly, and I was really frustrated."

Despite those initial frustrations, Beaujon stuck with it; patience, he says, is a useful trait when you're a pixel artist. "Patience is definitely important," he tells us. "I know it sounds clichéd to say 'Take a break', but for me, getting up and going

for a walk is an integral part of letting some of that frustration subside and allowing acceptance for the difficulty of art-making to take hold."

Like fellow designer Thomas Feichtmeir (see page three), Beaujon believes that the challenge of working within a set of restrictions – a colour palette and low resolution, for example – lies at the core of pixel art's appeal. "Since starting pixel art, my understanding of colour has levelled up drastically," he says. "In traditional painting, you're usually blending colours, and so you end up with probably millions of them. But a lot of that becomes noise, which in pixel art you have to be careful about because it looks more noticeable. By being restricted to rendering an object in, say, two colours, you're forced to consider more carefully how they're being used."

Beaujon also adds that pixel art's greater immediacy – what he describes as its "hand-made feel" – is what allows it to endure in a modern games industry of hi-res textures and increasing realism. "Even though high-definition games come with their own level of insane craftsmanship, the overall direction often feels detached... When I play them, I might be blown away by what I'm seeing, but I don't really feel like I'm playing anyone's artistic vision. In contrast, pixel art allows an immediacy for the game designer to almost literally draw their ideas into

the engine without being hamstrung by rigging, skinning, adjusting polygon flow. This immediacy helps to bridge the gap between idea and reality."

Having first begun to experiment with Unity a few years ago, Beaujon says he's found a similar

level of immediacy in this area of game design, too. "I do find it easy to get things up and running. There are

guides on Unity's website specifically for using it with pixel art."

With *Thystle's* prototype and art style established, Beaujon is now concentrating on developing the units and combat system, with the aim being to get a demo ready for the next six months. Meanwhile, he's also honing another skill: animation. "By now, I know the basics – easing, squash/stretch, follow through – and just knowing those seems to have served me well so far," he says. "One thing is for sure: making this game will give me plenty of practice..."

► Pixel art is a useful shorthand for a solo developer, Beaujon says. "It doesn't always come out pretty, but you can more easily attain a solitary vision for a project."



## INSPIRATION

"For *Thystle*, I'm trying to capture the feeling of capricci, which are paintings of classical ruins infused with fantasy elements," Beaujon says of his art influences.

"The main artist I take inspiration from for this is a French painter named Hubert Robert. There's something about the warm glow, mixed with the cosy feeling of being surrounded by these hulking, long-abandoned structures that I'm trying to capture.

"Other artists that I particularly love are Goya for his amazing (and sometimes quite dark) imagination, Gustave Moreau for his hazy use of colour and depictions of mythological elements, and Odilon Redon for his calm take on fantasy and dreams.

"I owe a lot to artists I've found on Twitter in recent years too, such as @jmw327, @soapdpzel, and @kaynigmatic (animator for *River City Girls*). If it weren't for them – and my admiration of their work – I may not even have been motivated to learn pixel art in the first place!"

# Hello, can you spare a minute to talk about games?



**STEVE MCNEIL**

Steve is a preacher now.

**“How do we gamers share our world with those who feel it’s not for them?”**

I’ve just had the honour of recording an episode of *Richard Herring’s Leicester Square Theatre Podcast\**. I had a great time, but it was a bit odd for several reasons: Firstly, it wasn’t at the Leicester Square Theatre, it was at The Deco in Northampton. Secondly, the other guest that night was the Reverend Richard Coles and, to date, we’ve not found there to be much overlap in our audiences, demographically speaking. Thirdly, and most relevant here, the most common thing people said to me afterwards was that, while they were no longer gamers, they’d been interested enough by the things we’d covered in our chat to grab a copy of my book.

Gaming is still woefully underserved by traditional media in terms of coverage and, for those who consider themselves non-gamers, one imagines they simply believe this to be because it’s not a thing for them, or that it is in some way niche. Of course, the games industry is larger than music and movies combined, and its history littered with many personalities and blunders that make for great reading.

And yet, ‘games’ still has the perception of being different to its entertainment siblings.

Of course, this is in no way news to many of you. Gamers frequently bemoan the fact that games are treated so differently in the media when compared to movies or music. It’s rare to meet someone who “doesn’t like films” because, obviously, that’s absurd. Cinema’s a broad church, and there’s something for everyone to enjoy. Ditto music. But not so games, for many.

Why is this? Certainly, the requirement to actively engage is a huge barrier. The success of the Nintendo Wii was due in no small part to it allowing people who couldn’t find L3 on a DualShock if their life depended on it to feel in control of a game in a way not possible since we drifted away from joysticks with one button. Ditto, smartphone gaming. I’ve yet to meet someone who “doesn’t play games” who hasn’t poured hours on their commute into *Candy Crush* or something similar.

So how do we gamers share our world with those who feel it’s not for them, and help draw them into the many things it has to offer? I suppose we need someone to actively spread the good word of games in a way that draws people in. Perhaps my pairing with Richard Coles was prophetic, and I am destined to be video games’ prophet. Although, given the number of people that left in the interval after the Reverend left, I’d hazard that unlike John Lennon being “bigger than Jesus”, I remain very much smaller.

Still, maybe me and Richard Coles aren’t so different after all. Although, even if I fully commit now, I’ll never be able to catch up and do as many drugs as he managed in the 1980s. Still. We’re both, in our own small way, attempting to convince people of the value of the thing we love – I’ll leave you to decide amongst yourselves which is more important.\*\* 🙄

\* RHLSTP!

\*\* It’s games



▼ Steve (right) with a 1990s telly personality. Rumour is the latter’s had ‘some success’ since then.

# Toolbox

The art, theory, and production of video games

## 28. CityCraft

Tips for making an easy-to-navigate virtual city

## 30. Finding funding

An indie developer's guide to financing

## 32. Making a licensed game

The value of making games based on existing IPs

## 36. Metrics: an explainer

A guide to metric terms, and their importance

## 38. Anew Dev Diary #10

Why a game's success hinges on solid art direction

## 40. Source Code

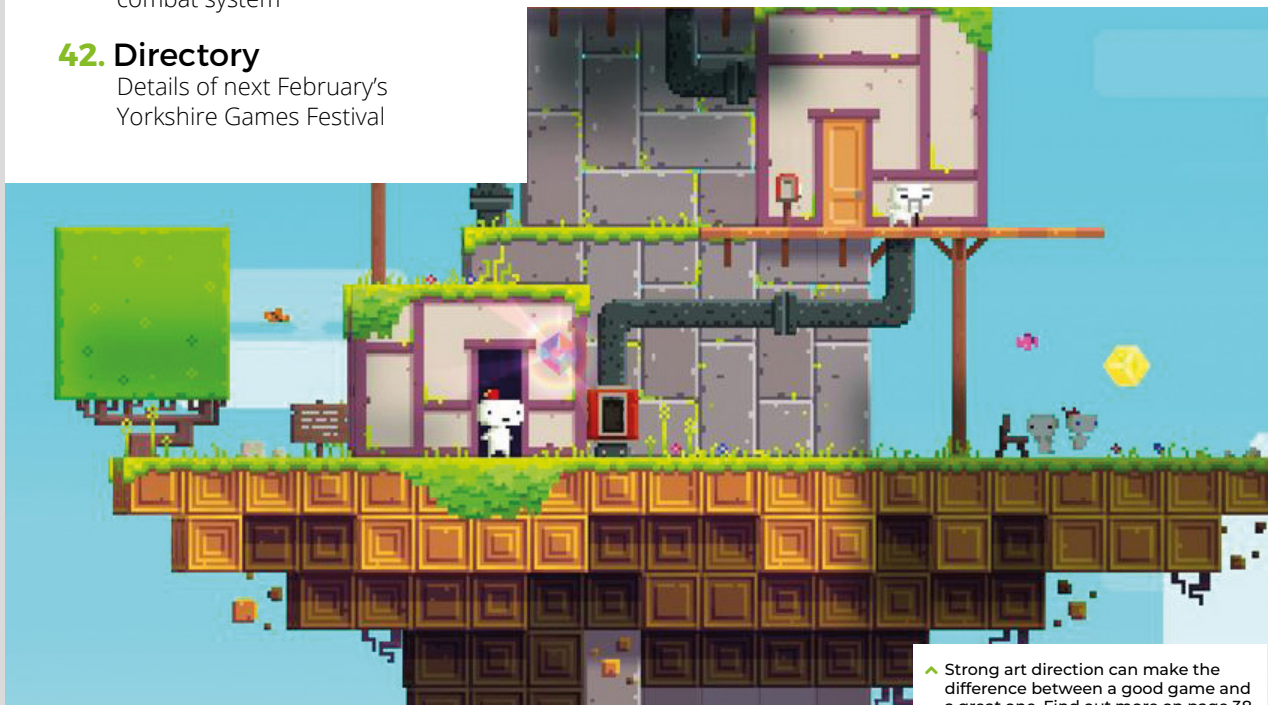
Code your own turn-based combat system

## 42. Directory

Details of next February's Yorkshire Games Festival



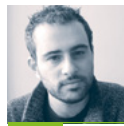
^ Find out more about the pluses and minuses of making licensed games. See page 32.



^ Strong art direction can make the difference between a good game and a great one. Find out more on page 38.

# Making navigable virtual cities

Some pointers on creating urban spaces that are easy to read, and effortless to navigate



**AUTHOR**  
**KONSTANTINOS DIMOPOULOS**

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

## Silent Hill Maps

Maps may be a common navigational aid in games, but this doesn't mean they have to be boring. The original *Silent Hill* featured realistic yet evocative maps that didn't restrict themselves to conveying the layout of the city. Instead, they kept track of objectives, and allowed the player to note things on them. They effectively functioned as a journal, GPS, quest tracker, and storytelling device all at once.

▼ The Arc de Triomphe, shown here in a colourised aerial photograph from 1921, is an archetypal example of a landmark situated on a node.



**G**etting lost is an intrinsic part of the metropolitan experience. But while aimless exploration can result in some intriguing video game experiences, more often than not, we want to ensure that players are able to navigate our cities; ideally, they should only get lost if it's part of the intended experience.

We don't want bored or irritated players running around in confused circles, hating our cities, and this is why we have to guide them. We should show them the finest corners of our creations, help them find their way around, allow them to use our environments to their advantage, and let them play without relying too much on immersion-breaking UI elements. Ideally, we want players to understand, appreciate, and really get to know our cities.

## THE WAY OF VIDEO GAMES

There are several methods for helping players traverse virtual worlds. From the subtle to the blatantly obvious – like huge floating arrows pointing to the next objective – there are far too many to list here. Some of the more common

ones include a variety of radar-like systems, in-game versions of GPS tracking, maps with markers and waypoints, compasses, and suggested routes rendered on the ground.

Lighting and sound design have also been used to suggest desired directions, and are generally considered to be more subtle ways of guiding players. When players are, for example, faced with a T-junction, the better-lit, noisier branch will usually be what they head towards. Similarly, the use of colour, recognisable patterns – like wide roads that lead to squares, or an increase in environmental detail around important places – can make spaces easier to grasp. Visual tricks like objects that draw attention to important spatial elements, and recognisable symbols, can make exploration a more fluid experience, too.

As living parts of the game world, NPCs can provide directions or, better yet, ask players to follow them to particular locations – *Shenmue's* opening sequence offers a fine example of this technique. Another option is to provide distant views of a city, allowing players to take in its structure; *Dark Souls' Anor Londo* was wonderfully introduced from above as players were flown into it.

## THE WAY OF URBANISM

Planners and engineers have long been interested in guiding people through real-life cities, too. With transportation and communication being so vital, and often intertwined with civic functions, facilitating them has been a concern throughout history – as has ensuring that gathering places and important locations are easy to find. Naming roads, devising



street numbering systems, providing signs and public maps, ranking road networks, and arranging landmarks are just some of the tools still widely used today.

Architect and design theorist Christopher Alexander's classic work *A Pattern Language* offers several suggestions on creating urban environments that stimulate social interaction, and offer intuitive, welcoming, and easily navigable spaces. It's something that's easily applicable in game design. In *World of Warcraft*, clustering game-related activities together around certain centres brought vibrancy to its cities, and at the same time forced players to familiarise themselves with the important sections of each town by moving between vendors, auction houses, banks, trainers, and quest givers. In *WoW*'s major cities, high-level services are tightly clustered, and districts are given clear boundaries. Alexander, after all, claimed that a neighbourhood without a boundary is a weak one that lacks identifiable character.

Urban planner and author Kevin Lynch also came up with some famous and widely referenced tools we can use to make our cities legible and easier to navigate. He settled on the five crucial elements people experience when moving around cities – the same elements level designers can use to help players create their own mental maps of virtual spaces. These are:

**PATHS:** Routes along which people move throughout the city, connecting landmarks, districts, and places. Paths can be roads, highways, railways, and so on.

**EDGES:** The distinct, usually physical boundaries and the breaks in continuity of the urban tissue. These borders could be made from railways, city walls, waterfronts, and other elements.

**“NPCs can provide directions or ask players to follow them”**

**DISTRICTS:** Cohesive areas characterised and defined by common traits. Such a trait could be aesthetic (think of La Boca's colourful buildings in Buenos Aires), architectural (like La Défense in Paris), functional and economic (a red light district, an industrial area, or a working-class suburb), and even an area's age (the old town).

**NODES:** These are important focal points that help orientation, like squares and junctions.

**LANDMARKS:** The equivalent of what level designers often describe as 'weenies' – major points of interest, are easy to spot towering above the average city building. Famous landmarks include the Acropolis, the Empire State Building, and obelisks. Landmarks can be major, minor, and even personal, and we should always try to highlight them.

Augmenting the above with things like scale, gradients and slopes, light, and sound will allow players to construct a mental map of your city, and thus make navigating it more satisfying and efficient. Imagine, for example, a player following a road to your city's holy centre: the buildings grow taller and more imposing, and the sounds of daily life subside, as the player climbs a sacred hill bathed in ethereal light. <sup>W</sup>



> Architecture is an excellent way of differentiating districts from each other, as with *Mafia III*'s French Colonial buildings.

^ Crazy Taxi's frantic pace didn't give players time to construct a mental map; hence the big floating arrow pointing to the taxi's next stop.

## Further reading

Here are four books that will help you through the process of designing a lively, easy-to-navigate, and memorable city:

*The Image of the City* by Kevin Lynch (The MIT Press)

*Good City Form* also by Kevin Lynch (The MIT Press)

*A Pattern Language: Towns, Buildings, Construction* by Christopher Alexander, Sara Ishikawa, and Murray Silverstein (OU Press)

*An Architectural Approach To Level Design* by Christopher W. Totten (CRC Press)

# Choosing the right development deal

Should you self-publish, or take a more traditional route? Reid lays out the options open to indie devs



**AUTHOR**  
**REID SCHNEIDER**

Reid is the producer of *Splinter Cell*, *Battlefield Vietnam*, *Army of Two*, *Batman: Arkham Origins*, and *Batman: Arkham Knight*. Follow him on Twitter: [@rws360](#)

## W

ith more people playing games and more indie developers making them, the market's seeing an ever-greater influx of content.

This poses a challenge for both developers and publishers: publishers want quality games that also stand out in a crowded market; developers need to be sure they can execute their vision, which can often be much harder than expected.

As the market has grown and matured, so multiple avenues for funding a game have gradually opened up. So with this in mind, where should a budding indie developer turn for financing? Every option has both pluses and minuses, which I'll layout here. This is information I wish we had when we started *Typhoon*!

## TRADITIONAL PUBLISHER DEAL

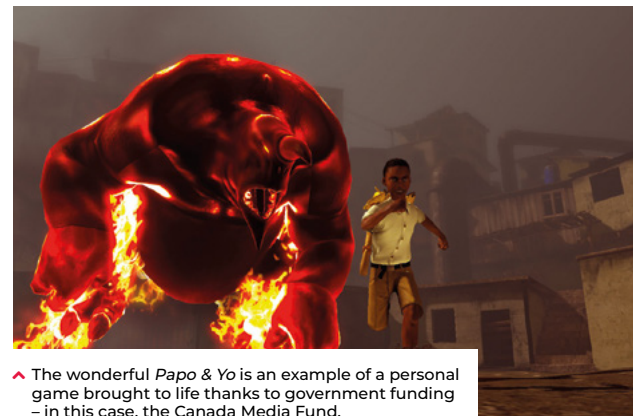
With traditional publisher deals, the publisher generally puts down an 'advance' – money the developer uses to fund the development of its project. These deals are frequently seen in 'work for hire'-type relationships, where a developer's building a game based on a license. We are, however, starting to see more publishers – including EA and Take-Two – set up divisions that work with smaller developers on original properties; examples of these include EA Partners or Private Division at Take-Two. Once a publisher recoups all its costs (developer advance, marketing, QA, PR), the developer gets a 'royalty', which is some percentage of the title's revenue. The percentage can vary depending on how much money the developer contributed to

the project versus how much the publisher will need to add to get the game finished. In these relationships, spending money always correlates to risk for the publisher.

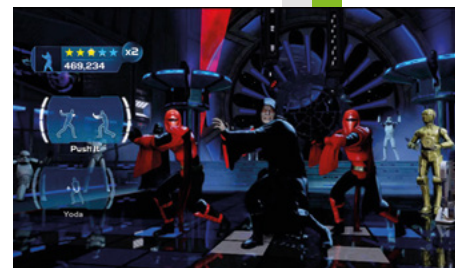
The positive side of a deal like this is that if a publisher picks up a title and invests money in it, then they have a vested interest in its success. The negative is that when publishers invest, developers can sometimes lose control of their IP, or worse, find themselves subjected to a litany of creative opinions. If you've read any of my previous columns, you'll know I believe that projects need to have a single visionary behind them who, while taking feedback from collaborators, retains overall control. In short, design by committee does *not* work. I've been there, and it's a veritable race to the bottom. Also, when the game is released, nobody will blame the publisher for a weaker title: the developer owns it, for better or worse\*.



▲ *The Last Guardian* developer Fumito Ueda's next game will be coming to our screens, thanks to funding from Kowloon Nights.



▲ The wonderful *Papo & Yo* is an example of a personal game brought to life thanks to government funding – in this case, the Canada Media Fund.



▲ Is there a button that makes this stop?  
Please make it stop.

## FIRST-PARTY DEVELOPMENT DEALS

With first parties like Sony, Microsoft, Nintendo, and now Google competing for users, they're signing up an increasing number of developers to make exclusive games for them. First parties know that while technology sparks interest, content is what sells systems. Publishing agreements like these can be awesome for developers, as they give them an opportunity to reach a wide audience: if a first party is publishing your game, you'll likely be featured prominently on their digital storefront or in retail.

The downside of these deals is that developers can be forced to do work they may not necessarily believe in. For example, does anyone remember the multitude of games that Microsoft published to push Kinect?

While they were quirky, few were particularly memorable. (Probably the most egregious example was *Kinect Star Wars*, developed by the late Terminal Reality. This game had some positives, but its dance-offs weren't among them. Darth Vader and Emperor Palpatine body-popping? *Epic.*)

**“When publishers invest, developers can sometimes lose control of their IP”**

## SELF-FUNDING

Even a few years ago, self-funding just wasn't possible for most indie developers. The reasons for its growth are two-fold: digital storefronts enable developers to sell their games without the expense of pressing discs, and professional-quality game engines are available to indie developers at the click of a button. The problem is that a busy market makes standing out from the crowd really tough; the upside is that a developer has full control of the game they want to make.

The question, then, is how to self-finance an indie game. There are a few avenues for this:

- 1 Your company could sell equity (or shares) in its business to investors. This takes work, but provides funding opportunities outside

traditional routes. If you take this route, bear in mind that private investors will want to know what's going on with your game and how their money's being spent. You may find yourself in a situation where people will want answers early and often.

- 2 Look for a government grant. In Canada, we have funds like the CMF, which have been used to birth cool games like *Papo & Yo* and *Outlast*. Government grants can also require a lot of paperwork, however, and there can be issues with IP ownership. In short, go in with your eyes open – there's no such thing as free money.

## GAMING FUNDS FOR PROJECTS

Investment funds, like Kowloon Nights\*\* and former Sony chairman Jack Tretton's IGV, can give developers capital to build their projects. These funds typically don't take over the developer's IP, but rather serve as a way to get games made. The downside is that competition among studios for this is high, and understandably, investment funds will only back experienced teams. In short, if you're new to the business, this isn't likely to be an avenue that will work for you. Also, these funds aren't publishers – the onus is still on the developer to market and sell their game.

In closing, there are no right answers. The only way to get a project funded is through resilience, hard work, and dedication. Getting a game funded isn't for the faint of heart, and unfortunately, there's a high chance of it not working out. All that being said, *don't give up*. Even if you don't make a massive hit, you'll still have learned along the way. 🙌

\*Full transparency: Typhoon's first game is being published by 505, and we have a great relationship with them. While we don't always agree on everything, they've been awesome partners. Typhoon still owns the *Savage Planet* IP, and both parties are invested in its long-term success.

\*\*Full transparency: Kowloon Nights is the sister company of Makers Fund, an investor in Typhoon.

# Becoming a superfan: how to make a licensed game

To make a great licensed game, learn about your audience and embrace your inner nerd, Stuart writes



**AUTHOR**  
**STUART MAINE**

Over his career, Stuart has worked with brands including *Angry Birds*, *SpongeBob SquarePants*, *Warhammer 40,000*, *Strictly Come Dancing*, *Transformers*, *UglyDolls*, *Looney Tunes*, and *Mickey Mouse*.

**R**egardless of genre or platform, pretty much every game can be divided into being 'licensed' or 'unlicensed'. We call games licensed if they use someone else's intellectual property (or IP), as in, 'They have the license to use that brand without being sued by whoever owns it'.

To clarify, an IP is a brand that someone has established using movies, TV, games, books, and so on: Star Wars is an IP, as are Harry Potter and Dracula. Most IP is owned and controlled by a parent company, and sooner or later, that company is going to want a video game set in their universe. This leads to a development team being told: "We're making a game based on brand X!" – which is where you come in.

## THE VALUE OF AN IP

If you work at a game studio, you're likely to work with someone else's IP at some point in your career, and even if you're an indie developer, there are strong reasons why you should get this experience. Working with an IP will give you a grounding in making audience-focused decisions, working within constraints, and delivering a polished product on time.

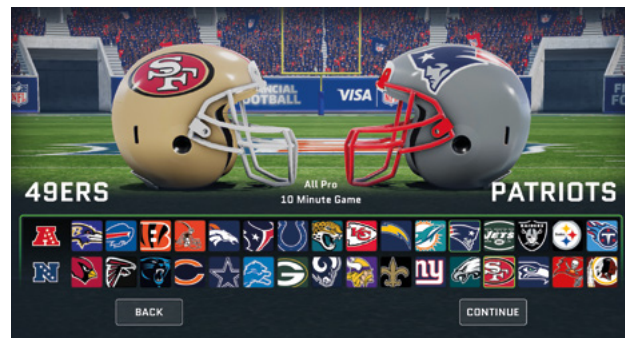
But the big benefit of working with an IP is that your game is going to get noticed. With huge numbers of games released every

day, one of the biggest problems the industry faces is ensuring new games get seen. You might think your 'Colourful Warriors Punch Bad Guys' is the best game ever, but getting news sites, influencers, and an audience to notice you is going to take a huge amount of effort. On the other hand, if the same game was released with the Power Rangers brand it will instantly receive attention. Of course, games without an IP can be a success, it just takes luck (*Fortnite*) or a big marketing push (*Destiny*).

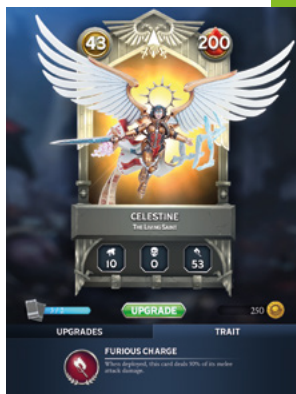
## THE RISKS

While the attention is great, there are challenges when working with external IP. These include

- ✓ With Visa's *Financial Football*, the publisher secured the IP for us. Now we had the complication of needing to satisfy publisher, IP holder, and fans.



- ✓ If you already know the IP (such as Warhammer Combat Cards for me) try to remember why you loved that brand in the first place.







^ As demonstrated by *Diablo Immortal*, bringing a PC game IP to mobiles can alienate its original audience. Instead, focus on the much larger mobile audience.

getting things approved by the – usually non-gamer – IP holders, working within the constraints of their universe, and most importantly, making the right decisions when you’re not the game’s audience.

**“The big benefit of working with an IP is that your game is going to get noticed”**

Getting this right is key to making a game which is loved by fans of that IP, such as *Transformers: Devastation*, or *Batman: Arkham Asylum* (it helps if you deliver a genuinely fun game, of course). On the other hand, games like *Aliens: Colonial Marines* failed to resonate with the IP’s fans, meaning those players didn’t recommend the game to others, and the whole point of using an IP was lost.

**BECOMING A SUPERFAN**

There are two parts to making a game that the IP’s fans love – understanding the IP and understanding your audience.

I believe that as a developer, just knowing about an IP isn’t enough. You need to unleash your inner nerd and become a ‘superfan’ of that brand. To be a superfan, you have to immerse yourself in that universe, learning and absorbing as much as you can, so that you quickly progress through just knowing about it and cross over into fandom.

You see, reading a few websites and making a mood board will only get you a superficial

knowledge of the IP. In order to make a game the fans genuinely want, you have to understand why the audience loves it, what they dislike about the IP, trends and changes in the brand over time, who their influencers are, and so on.

And you can’t do this ironically, or while mocking the IP because it’s just for kids or only for geeks. We have a rule on the wall in our team area, which says ‘We embrace nerdery’. For as long as the project lasts, you need as deep an understanding of the IP as you can manage. You need to be a superfan.

**UNDERSTANDING YOUR AUDIENCE**

The main reason for becoming a superfan is to help bridge the gap between you and that →

**RESONANCE**

In the past, licensed games could use IP to drive initial sales, then not care if players kept playing the game or not (because they already had their money). With more and more games being developed to be ‘live’, and serviced with extra content to keep players engaged for a long time, resonating with your audience is incredibly important. You need fans to stick around, giving good reviews and forming the heart of your community.



^ Working on several games for an IP means never getting its theme out of your head. Ohhh, who lives in a pineapple under the sea?

IP's audience. You may be younger or older than them, or the brand may be targeted at a different country or gender, or linked to fashions and trends you have no idea about. Of all the licensed games I've worked on, only a couple were aimed at 'me', but I managed to dig into the core of each audience anyway. Let's look at how:

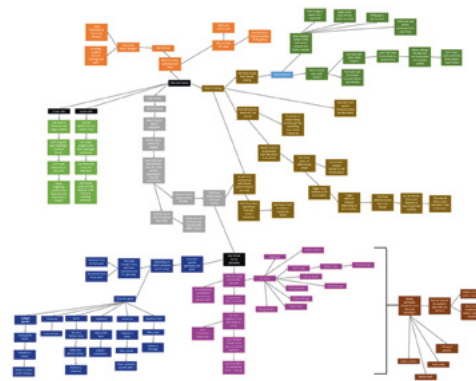
### Brand research

As mentioned earlier, the first step is becoming a superfan of the brand itself, otherwise, your starting point for the second half will be flawed.

- Watch the shows/movies/internet episodes, and listen to podcasts.
- Play any board or video games, and check out critical reviews and fan opinions to see what those games got right or wrong.
- Read books/comics/websites to absorb the language used by the IP, and also the common terms used by its fans.
- Visit conventions – you can find a fan gathering for pretty much any IP.
- Talk to fans and ask them questions (more on this later). However, you need to agree this with the license holder, as most licensed games are covered by a strict NDA (Non-Disclosure Agreement).

### Audience research

Knowing the IP inside-out is only half the story – you also need to understand its audience. Unless you happen to be a 40-plus American mother, it can be tricky to design a game around



▲ **Figure 1:** Empathy mapping produces spider diagrams which pose simple questions then keep asking 'Why?'. Digging down produces fundamental truths which you can build from.

their likes, dislikes, and play patterns. This is where research comes in.

Here are some common techniques, and while I don't have space to go deeply into them, this list should at least let you get online where you can do more research.

- Mind or empathy mapping. The practice of creating complicated spider diagrams which branch out again and again (see **Figure 1**). The closest points to the centre are questions you want to answer, which then branch out as you dig into more and more detail.
- Another approach is to create 'personae' of your audience. These are like role-playing game characters, except instead of magical feats, you work out their name, sex, age, likes, what they do during the day, what they play, eat, and listen to, and so on. The goal is

## CROSSOVERS

Some licensed games are crossovers featuring multiple IP together. Examples include *Angry Birds Transformers*, *Team Sonic Racing* games, and all of the 'Lego X' games. It can be difficult to balance multiple IP equally, so you may need to pick one as the primary brand, with the others as 'guests'. Naturally, I'd default to making your main brand the one belonging to the company which is paying for the game.

➤ Games containing multiple IP, such as *Epic Mickey 2*, require constant negotiation between IP holders. Build their trust through a deep understanding of their brands.





## Love Nikki - a Dress-Up Game to Rule Them All

to create a 'real' fan of your IP which you can refer back to as you make decisions.

- Qualitative research is gathering detailed answers from a few people. You can chat to them or ask them to fill in surveys, but you're basically trying to replace guesswork ('I think they like X') with facts ('I know they like X'). However, unless you ask thousands of people, the results you get will be subjective, so combine this approach with some of the others.
- Quantitative research means looking at stats from hundreds or – ideally – thousands of your players. This can reveal useful trends and patterns which the fans might not even realise, such as 'Fans of IP 'X' are also fans of IP 'Y''. You can gather this information by running Google surveys, or searching for surveys and reports from other industries – there's a surprising amount of free data out there.

### KNOW YOUR IP

Two accusations levelled at licensed games is that they're rushed or lazy.

The first problem is difficult – licensed games often have to hit a hard deadline – so try to design a game which can be built from a solid, fun core outwards. This will mean you can ship a small, enjoyable game anytime – it just gets deeper and wider until you run out of time.

But the second accusation – that licensed games are cheap cash-ins to grab fan money – is entirely within your control.

Understand your audience and embrace what they love about the IP and you can help your team make good decisions which the fans will approve of, rather than just making 'generic game X' and draping the license over the top of it.

Showing that you know the IP inside-out will also reassure the license-holder that their IP is in safe hands. Trust me, this can make the lives of everyone on the project a lot easier.

So, if you find yourself working on an IP you've never heard of, you can either shrug and plod on through the next year of your life, or you can fully embrace your inner nerd, learn something new, and maybe deliver a great game. 🎮

◀ Sites like Deconstructor of Fun (pictured here analysing the dress-up RPG, Love Nikki) provide information on gamers, but consider other areas – such as the toy industry – for surprising insights.

### OBSCURE LORE

One thing I've learned over many licensed games is that you can't be too obscure or go too deep with your references. While I'd recommend staying 'mainstream' for your big uses of the IP, such as who your antagonist is, or where your game is set, you should include as many obscure references to the IP's lore as possible. Even if only a few fans recognise your niche reference, they're likely to share it with everyone else (on Wikis, for example). This obscure lore helps establish that your game is authentic, not some quick cash-in.

✓ Research site **quanticfoundry.com** has some great – and free – blog posts on gamer demographics and audience motivations.

# Metrics: its key terms explained

DAU? ARPU? D7 or L7? Eric provides a guide to metrics terms, and why they're important for game design



**AUTHOR**  
**ERIC MCCONNELL**

Eric McConnell has been an engineer, game designer, and product manager at companies such as Rockstar Games and Zynga. Currently he is a product manager at Google where he works on Google Assistant games.

**W**

hen I joined the video games industry, I distinctly remember meeting product managers and data analysts for the first time.

They spoke about DAUs and CPIs, D7 versus Stickiness, and how our latest event pushed ARPPU to a new peak. I felt like there was a secret business language I wasn't aware of – an alphabet soup of metrics. If LTV sounds like a new cable channel, then fear not: I'm going to explain some of the most common metrics for you here.

## HOW MANY ARE PLAYING?

Active user metrics measure how many unique users played a game over a given period (see **Figure 1**). Graphing these metrics is a great way to measure marketing or user acquisition efforts.

DAU stands for Daily Active Users. This measures the sum of unique users over a 24-hour period. This doesn't take into account any repeat usage for a given unique user.

WAU stands for Weekly Active Users – the sum of unique users for the last seven days. If a user

played your game multiple times in the last seven days, they'll still be counted as one towards WAU.

MAU stands for Monthly Active Users. It's the sum of unique users for the last 28 days, and measured the same way as WAU. MAU can be measured over 28, 30, or 31 days.

Other metrics in this category can include new vs. repeat users, payers vs. non-payers, and active users within different game progression points.

## HOW MUCH?

Engagement metrics measure how much users are playing a game over a given period. These are ideal for measuring how effective a game's features and core loop are at engaging users.

Stickiness (see **Figure 2**) is a rough estimate of how many days, on average, users are playing a game over a week or month. It's measured by finding the ratio of DAU to WAU or DAU to MAU. If DAU/WAU is 0.33, then users, on average, played your game on ten days out of the month.

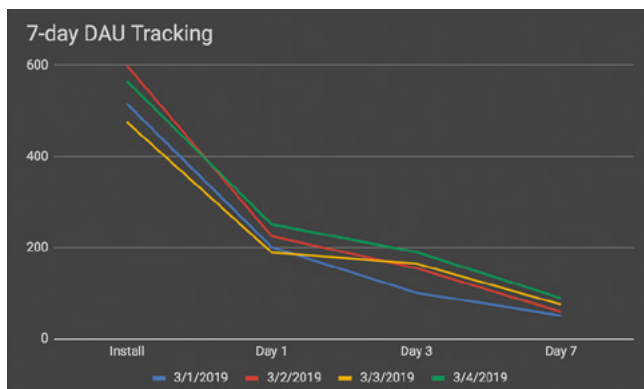
L7 and L28 are another, more accurate way of measuring how many days a user has played your

	Mon	Tues	Wed	Thur	Fri	Sat	Sun	Mon
Player 1				1	1	1	1	1
Player 2		1	1	1		1	1	
Player 3	1		1	1		1		1
Player 4					1	1	1	
Player 5	1							
DAU	2	1	2	3	2	4	3	2
WAU	-	-	-	-	-	-	5	4

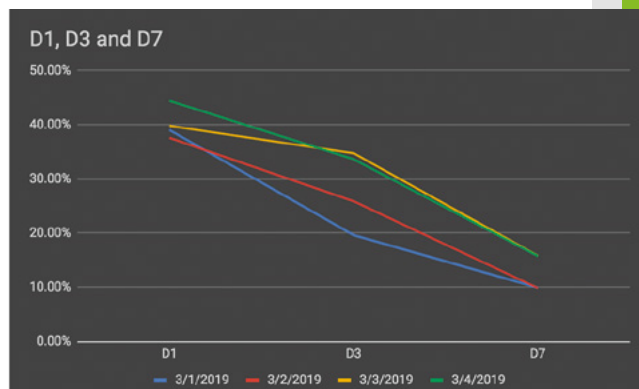
▲ **Figure 1:** Comparing DAU to WAU in a given eight-day period.

	Mon	Tues	Wed	Thur	Fri	Sat	Sun	Mon
Player 1				1	1	1	1	1
Player 2		1	1	1		1	1	
Player 3	1		1	1		1		1
Player 4					1	1	1	
Player 5	1							
Stickiness	-	-	-	-	-	-	0.6	0.5
L7	-	-	-	-	-	-	3.4	4.25

▲ **Figure 2:** Stickiness (DAU/WAU) and L7 are two effective engagement metrics.



▲ **Figure 3:** Install and DAU tracking for a four-day period.



▲ **Figure 4:** The D1, D3, and D7 for the same four-day period.

game over a week or month. L7 is calculated by adding up the DAU for the last seven days and dividing it by the WAU: Sum (DAU of each day) / WAU. L28 is done the same way, but the sum is over the last 28 days and the denominator is MAU. An L7 of 2.5 means that on average, users that played a game at least once over a week played it for two and a half days in that period (see **Figure 3**). Every game has a core mechanic with a metric attached to it. This is the best way to measure engagement agnostic of days or weeks.

## HOW OFTEN?

Retention metrics measure what percent of unique users return to your game between two time periods. High retention means your users are returning to play often; low retention means a large portion of your users are churning. High retention is important for achieving high active user numbers – it's like a snowball rolling down a hill.

D1, D7, and D28 represent return rates for users that started on a specific day. For all the users that start on a particular day, that day is D0. D1 is the percent of users that started on day 0 and played on day 1, the day after day 0. D7 is the percent of users that started on day 0 and played on day 7, the day seven days after day 0. D28 is the same as D7 but for the day 28 days after day 0 (see **Figure 4**).

Weekly Return Rate represents the percentage of users that played in one week and returned the following week. Generally, this is measured on a rolling basis, meaning that it looks at the users who played your game at least once between 14 and seven days ago, and what percentage of those users played again the week after.

Monthly return rate is rarely a core retention metric unless you're dealing with MMOs or games

with monthly subscriptions. Week one to week two return rate is possibly the most important retention metric, because it tells you how new users feel about your game in relation to others.

## WHAT ARE THEY PAYING?

Monetary metrics measure the financial health of your game, and can help determine the effect of a sale on user spending, the impact of new premium items, and forecast future revenue based on user volume.

ARPU stands for Average Revenue Per User. It takes the total revenue from in-app purchases (IAPs) and divides it by the total of unique users. One great use for ARPU is to measure the uplift in conversations and purchases during a sale or marketing campaign.

ARPPU stands for Average Revenue Per Paying User. It measures users that have paid at least once in their lifetime. ARPPU will be greater than or equal to ARPU.

LTV stands for Life Time Value. It measures the overall revenue you'll receive, on average, from an individual user. This is an important metric, as it will help focus strategy, determine user acquisition cost, and drive revenue forecasting. If LTV is high, then you need to focus on acquiring more users. If LTV is low, then you need to focus on converting non-payers or finding more ways to monetise your current users.

CPI stands for Cost Per Install. This is how much it costs for you to get a new user. CPI and LTV have an important relationship, as LTV should be higher than CPI or else it doesn't make sense to pay to acquire new users. In a world where organic installs – users installing your game of their own volition – can't be relied on, CPI will show how much user growth will cost your game. 🌐

**“Every game has a core mechanic with a metric attached to it”**

## Bringing It All Together

Individual metric analysis can give you a health report on a small segment of your game. Using multiple metrics together can give you an overview of how things like price changes or new features affect your user base. This isn't an exhaustive list, as there are hundreds of ways to view and slice revenue-based metrics. But now you're armed with an understanding of basic metrics terms, hopefully it looks a little less like alphabet soup!



▲ Colour, contrast, form, framing – all import aspects of art direction that help focus the player's attention.



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# Indie reflections: Making Anew Part 10

Art direction is a vital consideration for any indie game. Jeff provides a few pointers

**E**stablishing the overall art direction for your indie game is a crucial step in the development process. It's a decision that will influence your game's design, budget, schedule, and more. Understanding how art direction fits into development will make your game more likely to succeed – so here's a brief look at some key things to consider.

## CHOOSE YOUR PALETTE

Art direction is the overarching design aesthetic – the guidelines that dictate how your game should look. This might sound similar to creative direction, discussed in issue 13, but creative direction governs *all* aspects of the game (art, sound, story, gameplay, systems), while art direction specifically focuses on visuals. It determines how characters are designed and animated, the world's architectural style, the colours used in lighting and textures, whether assets are 2D or 3D, and overall visual fidelity.

Consider what type of art makes the most sense for your game. Listen to your instincts and find a visual style that best represents your game's storytelling, gameplay, and emotional goals. Art direction should support your creative

vision in ways the player will see and understand.

Next, do some research. How have other successful developers working in similar genres approached the look of their games? Fire up your console, play through your game library, and analyse the competition. Effective art direction is difficult to plan and execute, so you may base your game's art direction on that of successful games in the same genre. Or, you may intentionally choose an atypical or wholly original art direction – this will likely help your game stand out, but may present challenging design risks and consequences.

Set yourself up for success by choosing an art direction that your team's passionate about. Your artist or team will spend hours creating characters, environments, and props, so they should have input on the art direction. If your artist loves pixel art, is skilled in its creation, and your game lends itself to this visual style, it might make sense to pursue this direction. If your artist has a life-long fascination with 2D hand-drawn animation, then let them use that style for your game. Likewise, if your game is rooted in more realistic, representational forms, and your artist is eager to create photorealistic 3D art assets, that direction may work best.



▲ Retro-styled games like *Fez* have a strong, personal art direction that effectively sets the tone for the game world.

While interest in a certain style of art is important, you should also consider your art team's experience and skills. You have a finite amount of time and money to make your game, so you don't want to spend too much of either taking your art team into unfamiliar creative territories. The key is to balance the creative passions of your team with their ability to execute the game's design in a reasonable amount of time.

The art direction you choose will have a direct impact on your game's budget, team size, and production schedule. For example, in making a photorealistic, open-world, first-person shooter, you'll likely need a large art team to create the necessary assets to fill out the world on schedule. Complex, realistic, 3D art assets are expensive and time-consuming to produce. You may be able to produce art assets faster at a lower cost if your game features a hand-drawn look.

While creating pixel art certainly isn't easy, there's a reason the indie game market is flooded with games in this style. Lo-fi pixel art can be significantly less expensive to produce than highly detailed 2D or 3D assets. The retro aesthetic is also a bit more forgiving overall, as far as expectations go, across all aspects of game design (visual fidelity, animation complexity, world design, enemy AI, and so on). A small development team on a shoestring budget could shave years, and tens of thousands of dollars, off its production by choosing this type of art direction.

**“Consider what type of art makes the most sense for your game”**

## ANEW'S ART DIRECTION

When planning the art direction for *Anew*, I established several goals: develop a unique, personal art style; incorporate 2D and 3D elements that aesthetically function well; use modern lighting, post-processing, and visual effects techniques to add flair to a classic style/genre; encourage the player to explore the world through beautiful, mysterious visuals; and anchor all artistic design in a mix of surrealist and abstract impressionist art styles. By meeting these criteria, *Anew* would be unique in contrast to other action-exploration platformers.

For research, I played various indie platformers and Metroidvanias, studied some of my favourite films, pored over modern art and photography books, read biographies of Kubrick and Dalí, all



▲ Certain areas in *Anew* are strongly influenced by late seventies and early eighties sci-fi movies.

while listening to a lot of 20th-century orchestral music. Together, these inspirational references helped shape *Anew's* art direction.

The only feasible way to populate our large, open-world game with the many necessary art assets was to create them in 2D, using a stylised aesthetic. I developed several techniques in Photoshop to efficiently create characters, props, weapons, and other objects that appear to have depth and dimensionality – almost as if they were created in 3D – but made in a fraction of the time that a true 3D polygonal asset would have taken to finish. An illusion

of detail in *Anew's* art style gives it a high-quality feel. Approximately 80% of the art in *Anew* is in this 2D style, with the remainder created in 3D using Maya. Making 2D and 3D art work together seamlessly in our 2.5D environments has proven to be a formidable challenge!

It's also important to note that *Anew's* art direction has evolved as production has progressed. I originally envisioned the game to look like a living piece of concept art. Early art assets reflected a flatter, rougher aesthetic, but gradually, the direction changed and the fidelity, depth, and dimensionality of the game world (textures, lighting, animation, visual effects) increased. I adjusted my approach to consistently adhere to this new rule set, and redesigned many of the older, flatter assets created early in development. Your initial art direction isn't set in stone, and later adjustments may happen as the game develops.

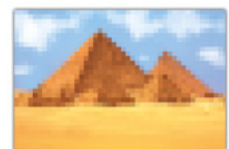
As you think about your game's art direction, I encourage you to conduct research, experiment, and give its visual style the thought and consideration it needs. 🌐



▲ Hi-res polygonal characters can increase the production values in your game, but they are costly and time-consuming to create.

## Sources of Inspiration

Looking for ideas on art direction in games? Check out some of the beautiful 'making of' art books available, such as *The Art of The Last of Us*, *The Legend of Zelda: Hyrule Historia*, *The Art of BioShock Infinite*, and *The Art of the Mass Effect Universe*. They're packed with inspiring images and behind-the-scenes glimpses. And, if nothing else, they look great on a coffee table.



▲ Your game is set in Egypt. Which version can you afford to build?

Source Code

# Create a turn-based combat system



AUTHOR  
RIK CROSS

Learn how to create the turn-based combat system found in games like Pokémon, Final Fantasy, and Undertale

In the late 1970s, high school student Richard Garriott made a little game called *Akalabeth*. Programmed in Applesoft BASIC, it helped set the template for the role-playing genre on computers. Even today, turn-based combat is still a common sight in games, with this autumn's *Pokémon Sword and Shield* revolving around a battle system which sees opponents take turns to plan and execute attacks or defensive moves.

The turn-based combat system in this article is text-only, and works by allowing players to choose to defend against or attack their opponent in turn. The battle ends when only one player has some health remaining.

Each **Player** taking part in the battle is added to the static **players** list as it's created. Players have a **name**, a **health** value (initially set to **100**) and a Boolean **defending** value (initially set to **False**) to indicate

whether a player is using their shield. Players also have an **inputmethod** attribute, which is the function used for getting player input for making various choices in the game. This function is passed to the object when created, and means that we can have human players that give their input through the keyboard, as well as computer players that make choices (in our case simply by making a random choice between the available options).

A base **Action** class specifies an action **owner** and an **opponent**, as well as an **execute()** method which has no effect on the game. Subclasses of the base class override this **execute()** method to specify the effect the action has on the **owner** and/or the **opponent** of the action. As a basic example, two actions have been created: **Defend**, which sets the owner's **defending** attribute to **True**, and **Attack**, which sets the owner's **defending** attribute to **False**, and lowers the opponent's **health** by a random amount depending on whether or not they are **defending**.

Players take turns to choose a single action to perform in the battle, starting with the human 'Hero' player. The **choose\_action()** method is used to decide what to do next (in this case either attack or defend), as well as an opponent if the player has chosen to attack. A player can only be selected as an opponent if they have a **health** value greater than 0, and are therefore still in the game. This **choose\_action()** method returns an **Action**, which is then executed using



It may look crude, but Richard Garriott's *Akalabeth* laid the groundwork for *Ultima*, and was one of the earliest CRPGs.

its **execute()** method. A few **time.sleep()** commands have also been thrown in here to ramp up the suspense!

After each player has had their turn, a check is done to make sure that at least two players still have a **health** value greater than 0, and therefore that the battle can continue. If so, the static **get\_next\_player()** method finds the next player still in the game to take

their turn in the battle, otherwise, the game ends and the winner is announced.

Our example

battle can be easily extended in lots of interesting ways. The AI for choosing an action could also be made more sophisticated, by looking at opponents' **health** or **defending** attributes before choosing an action. You could also give each action a 'cost', and give players a number of action 'points' per turn. Chosen actions would be added to a list, until all of the points have been used. These actions would then be executed one after the other, before moving on to the next player's turn. ☺

**“Even today, turn-based combat is still a common sight in games”**



With their emphasis on trading and collecting as well as turn-based combat, the *Pokémon* games helped bring RPG concepts to the masses.



Download  
the code  
from GitHub:  
[wfmag.cc/  
wfmag28](https://wfmag.cc/wfmag28)

# Turn-based combat in Python

Here's Rik's code snippet, which creates a simple turn-based combat sequence in Python. To get it running on your system, you'll first need to install Pygame Zero – you can find full instructions at [wfmag.cc/pgzero](https://wfmag.cc/pgzero)

```

import random, time

class Action():
    def __init__(self, owner, opponent):
        self.owner = owner
        self.opponent = opponent

    def execute(self):
        pass

class Attack(Action):
    def __init__(self, owner, opponent):
        super().__init__(owner, opponent)

    def execute(self):
        self.owner.defending = False
        if self.opponent.defending:
            hit = random.randrange(10,20)
        else:
            hit = random.randrange(20,40)
        self.opponent.health -= hit
        print('{} is hit! (-{})'.format(self.opponent.name, hit))

class Defend(Action):
    def __init__(self, owner, opponent):
        super().__init__(owner, opponent)

    def execute(self):
        self.owner.defending = True
        print(self.owner.name, 'is defending!')

class Player():
    players = []

    def __init__(self, name, inputmethod):
        self.name = name
        self.inputmethod = inputmethod
        self.health = 100
        self.defending = False
        self.players.append(self)

    def __str__(self):
        description = "Player: {} \n {} \n Health = {} \n
        Defending = {}".format(
            self.name,
            '-' * (8 + len(self.name)),
            self.health,
            self.defending
        )
        return(description)

    @classmethod
    def get_next_player(cls, p):
        # get the next player still in the game
        current_index = cls.players.index(p)
        current_index = (current_index + 1) % len(cls.players)
        while cls.players[current_index].health < 1:
            current_index = (current_index + 1) % len(cls.players)
        return cls.players[current_index]

    def choose_action(self):
        print(self.name, ': [a]ttack or [d]efend?')

        action_choice = self.inputmethod(['a', 'd'])
        if action_choice == 'a':
            print('Choose an opponent')
            # build up a list of possible opponents
            opponent_list = []
            for p in self.players:
                if p != self and p.health > 0:
                    print('[{}] {}'.format(self.players.
                    index(p), p.name))
                    opponent_list.append(str(self.players.
                    index(p)))
            # use input to get the opponent of player's action
            opponent = self.players[int(self.inputmethod(opponent_
            list))]
            return Attack(self, opponent)
        else:
            return Defend(self, None)

    def human_input(choices):
        choice = input()
        while choice not in choices:
            print('Try again!')
            choice = input()
        return choice

    def computer_input(choices):
        time.sleep(2)
        choice = random.choice(choices)
        print(choice)
        return choice

# add 2 players to the battle, with their own input method
hero = Player('The Hero', human_input)
enemy = Player('The Enemy', computer_input)

# the hero has the first turn
current_player = Player.players[0]
playing = True

# game loop
while playing:

    # print all players with health remaining
    for p in Player.players:
        if p.health > 0:
            print(p, end='\n\n')

    # current player's action executed
    action = current_player.choose_action()
    time.sleep(2)
    action.execute()

    # continue only if more than 1 player with health remaining
    if len([p for p in Player.players if p.health > 0]) > 1:
        current_player = Player.get_next_player(current_player)
        time.sleep(2)
    else:
        playing = False

for p in Player.players:
    if p.health > 0:
        print('**', p.name, 'wins!')
```

Directory

# Yorkshire Games Festival 2020

Bringing together the best of the northern gaming scene in Bradford

## BASED IN THE NORTH? HAVE A GAME TO SHOW OFF?

The Yorkshire Games Festival is looking for titles to demo at its Northern Games Showcase, which aims to show off the best the northern gamedev scene has to offer. If you'd like to get your game involved, email [Jack.Weedon@scienceandmediamuseum.org.uk](mailto:Jack.Weedon@scienceandmediamuseum.org.uk).

The fourth annual (ignoring 2018) Yorkshire Games Festival returns next year, with the event running from 5–9 February in Bradford. The event's pitched at gamers and developers alike, bringing events and activities, opportunities for networking, and talks from a whole host of gaming professionals and experts in the field.

Speakers announced so far including Friend of Wireframe, Mike Bithell, whose recent release *John Wick Hex* is sure to be a captivating subject; level designer Zi Peters from Sumo Digital; senior QA analyst at Team17, Chloe Crookes; and plenty more developers, publishers, journalists, and other such expert voices.

Away from the talks, there'll be plenty of other attractions, from upcoming games to go hands-on with – Team17 is giving *Moving Out*, its mix of *Overcooked* and... moving house, its first showing outside of London – through to dedicated 'meet the developer' networking sessions and career surgeries.

It's a real Northern Powerhouse of an event and definitely worth the price of admission: £0. Yep, it's free. If you want to attend the game talks, which run Thursday 6 February and Friday 7 February, tickets are priced at £40 for one day, or £80 for two – concessions are available.

"The next Yorkshire Games Festival is going to [build] on that strong relationship we're developing with the industry and bringing those voices to the next generation – a generation of creatives who can't typically head to events elsewhere around the country," says festival director Kathryn Penny. "It's a unique meeting of minds, making the next festival the best yet."

More details can be found on Yorkshire Games Festival's official site, along with the ability to purchase tickets: [wfmag.cc/YGF2020](http://wfmag.cc/YGF2020)



► Talks from industry experts will enlighten and entertain in equal measure.

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# The rise of the Redwall-esque

WRITTEN BY  
JACK YARWOOD

Fantasy, fur, and flashing blades: Jack explores the influence of the Redwall novels on games

**N**oble mice and brave woodland creatures have become an increasingly common sight in recent video games. We've seen epic tales of good versus evil, such as *Ghost of a Tale* and *Tails of Iron*. We've seen games that take place in historic or fantastical settings, like *Armello* and *Tooth and Tail*. We've seen furry heroes rising from humble beginnings to overcome insurmountable odds, as seen in *Small Saga*, announced in the summer of 2019.

It's a growing trend that has led to frequent comparisons with the work of Brian Jacques, the British novelist responsible for the *Redwall* series, first published in the mid-1980s. But what has led to this increase in prominence? Is it really

borne out of the long, influential shadow that *Redwall* has cast over a generation of creators, or are fans simply exaggerating this connection based on their own relationship to the books?

Andy Schatz is the lead designer of *Tooth and Tail*, a real-time strategy game from Pocketwatch Games. It features a cast of anthropomorphic animals warring over who should become the food during a drastic shortage of supplies. It's one of several projects that have attracted comparisons to the *Redwall* books; according to Schatz, however, it initially started out with a much more generic concept in mind. "*Redwall* wasn't the origin of the world concept," Schatz tells me. "When we first started on the game, we actually started with the mechanics. We were using spaceships at first."



PALACE GARDENS  
PALACE GARDENS (NORTH)  
Lose remaining AP.



▲ In *Small Saga*, Verm and his furry companions will go up against a lot of challenging enemies, including this rather nasty-looking household cat.

## A TAIL OF INSPIRATION

Pocketwatch's original goal was to create an RTS for players who find the genre's learning curve a little too intimidating. From there, the team began searching for a theme that would appeal to a broader audience – which is where all those animals came in.

"The function part of it was really a fun aspect," Schatz says. "One of the big problems of designing a real-time strategy

game is when you see a unit on-screen for the first time – you have no idea what it means from a strategic perspective. Like, 'How would I counter that thing? What is it?' Especially in sci-fi themed stuff. So having everything based on animals, where you already have an idea of what the animals are and what their strengths and weaknesses may be, was a really compelling thing."

**"Redwall did immediately come to mind as a touchstone"**

Once Pocketwatch decided on the idea of using animals as units, Schatz found himself drawing on *Redwall* for inspiration, and so he went back to the books for research.

"*Redwall* did immediately come to mind as a touchstone," Schatz says. "Especially when we [thought], 'We can make this feel like if you took *Redwall* and set in an era with guns and brutal warfare.' You know, a First World War-era *Redwall*. It's a really compelling thought. So once we settled in with what we were doing with the animals, the time frame, and the overall feeling of it, it was really easy to latch onto *Redwall* as a starting point."

In spite of the books' influence, the game's world is not that similar to *Redwall*. *Tooth and Tail* employs other creative influences to distinguish itself from Jacques's work,

borrowing from historical figures and events to flesh out the world; Teddy Roosevelt and Rasputin, for example, inspired the characters of

Bellafide and Archimedes respectively.

Another important distinction is that *Tooth and Tail's* politics is more complex and nuanced than the *Redwall* books, where the creatures' morality is usually black and white. "The thematic underpinning of *Tooth and Tail* is that all politics is personal, in the sense that people's political beliefs tend to be drawn from personal gain and personal empowerment, ➔

▲ Players in *Armello* can go on quests to earn prestige and find other loot.

## REDWALL ORIGINS

The first *Redwall* book was published in 1986 and focused on the inhabitants of Mossflower Woods, including a young mouse named Matthias, as they fight back against the army of the evil Cluny the Scourge. The final book in the series, *The Rogue Crew*, was released in 2011, and was the 22nd *Redwall* novel to be released before Jacques's death that same year.

### OFFICIAL TIE-INS

Redwall has recently had some official video games, too. These include *The Lost Legends of Redwall*, a series of six episodic adventure games using the Redwall license. It's important to note, however, that only two of these episodes have been released to date – *The Scout* and *Escape the Gloomer*.

more so than a belief in what's right," Schatz says. "So it was an interesting story where it seems like, 'Well, this capitalist guy, he got really screwed, so he's going to rise up against the bad guy.' But then his actual reasoning for what he wants to replace their government with is actually not great."

### MAGIC & OTHER INFLUENCES

*Armello* is another game that shares similarities with *Redwall*. It's a digital board game, where up to four players control a different animal clan and compete to storm the central castle to dethrone a corrupt king. The game operates on a turn-based system and functions much like a traditional board game, with card draws and dice rolls dictating the outcome of the player's moves.

For *Armello* developer League of Geeks, the original idea of using anthropomorphic creatures came from studio co-founder Blake Mizzi. Mizzi was a fan of the *Redwall* books, which contributed to his decision to propose a game based on an animal kingdom. The studio's other co-founders were less familiar with *Redwall*, but were eager to pursue Mizzi's vision for the game.

"The founders were looking for something to differentiate ourselves from other fantasy games," says Ty Carey, co-founder and art

director at League of Geeks. "And with Blake having proposed an animal kingdom, we immediately saw the value in that decision.

I was excited by the opportunity presented by the variety of animal shapes, sizes, and characters. For instance, it's nice to see a line-up and the scale differences of a rat to a bear, which provide a great contrast and rhythm."

### THE 'REDWALL' LOOK

*Armello* and *Tooth and Tail* both feature the incredible artwork of Jerome Jacinto, a former *Redwall* fan artist turned professional freelancer. He's been involved with several games that focus on the lives of animal characters, including 2018's *Ghost of a Tale*, a 3D adventure game about a small mouse named Tilo trapped inside a well-fortified prison. Jacinto first discovered the *Redwall* books quite by accident many years ago, when walking into a bookstore and encountering Troy Howell's cover art for *Martin the Warrior*.

"I thought, 'This is the most badass mouse I've ever seen,'" Jacinto says. "I bought it out of my amazement for that cover art, and to see what it was all about. *Martin the Warrior*, being my first *Redwall* book, left the strong impression of the *Redwall* universe being very grounded, gritty, and unforgiving to any woodland creature not willing

▼ Players in *Tooth and Tail* choose one of four flag-bearers, and can then select from a group of units to fill out their ranks.





▲ Jerome Jacinto has also worked on projects outside of gaming, including this *Redwall*-inspired guest story for the webcomic, *Beyond the Western Deep*.

## TALESPIN

*Ghost of a Tale* is a game from animation director and game developer, Lionel Gallat (SeithCG). As outlined in the project's original Indiegogo campaign, Gallat was inspired by *The Dark Crystal*, Disney's *Robin Hood*, *The Secret of NIMH*, and *Redwall* while making the game. The level design, meanwhile, was influenced by *Dark Souls*, with one-way elevators and hidden pathways connecting the multiple different areas of the prison keep.

to fight for their own survival. It was a breeding ground for character growth, and how these characters develop over their stories is what appealed to me."

Following that initial discovery, Jacinto has found himself in high demand in the games industry for his work, which draws inspiration from official *Redwall* artists like Howell and Russian illustrator, Anton Lomaev. The first studio to approach Jacinto was League of Geeks.

"We worked on the card art over a couple of years," explains Carey, "and during that time had put our feelers out and kept a close eye on any artists who understood how to draw anthropomorphised characters – which is far harder and specialised than it might seem. Most artists aren't drilled in the many differing animal skeletal structures, for example, and you can't just use generic proportions if you want to draw authentic animals. Jerome made some incredible fan art of *Armello*, which he posted to Twitter, and it was so good we couldn't let his talent go to waste. Jerome ended up [creating] heaps of our cards. They're all through the game!"

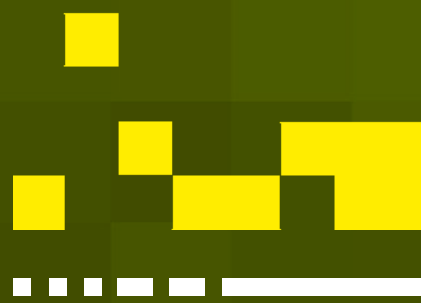
Pocketwatch Games was another studio that sought out Jacinto's work. The real-time strategy genre's remote camera often means it's difficult to express the personality of individual characters; to compensate, the studio decided to use Jacinto's detailed portraits to give players more of an attachment to their units. "I'm not sure I can describe [why], but his work is immediately

appealing," says Schatz. "It's really expressive. It's dynamic. And he clearly understands how to draw animals, which is a unique challenge. There's a lot of really great artists who aren't nearly as good at animals, because they haven't studied the anatomy of an animal. And every animal anatomy is going to be a little different from one another, so it is a unique skill set to have."

*Tooth and Tail's* mature and anatomically correct approach to portraying its creatures could be what invites all those comparisons to *Redwall*

– even though, for Schatz, Jacques's books don't necessarily seem quite so mature when read with adult eyes. "I really do love *Redwall*," he says, "but I went back and started re-reading it when I was working on *Tooth and Tail*, I was like, 'I don't remember this being as young-adult →

**"I thought, 'This is the most badass mouse I've ever seen'"**



▼ Much like Odd Bug Studio's previous game, *The Lost Bear*, *Tails of Iron* will contain a mixture of natural and industrial environments to explore.



## Interface

The rise of the Redwall-esque



▲ Designer Lionel Gallat's movie animation background really showed in his debut game, *Ghost of a Tale*.



▲ *Small Saga* surpassed its £33,000 Kickstarter earlier this year, with 2398 people backing the project on the platform.

as it is," Schatz says. "It was definitely written for a young audience. But my memory of it was animals, swords, death, and political intrigue. And all of that stuff feels like it's aimed at an older audience, or is something that an older audience would be interested in. It's *The Lord of the Rings* and *Game of Thrones*."

### A GRIM FAIRY TALE

With that in mind, it's easy to see why *Tails of Iron*, the upcoming 2D adventure RPG-lite from Manchester-based studio, Odd Bug, has attracted the same 'Redwall-esque' comparison since its announcement. After all, it also fits into the 'rodent with a sword sub-genre,' and features a particularly brutal depiction of the lives of animals.

*Tails of Iron* focuses on Redgi the rat, a small rodent who must defend his kingdom against an army of invading frogs. To do so, he must navigate a dangerous world and survive enemy encounters using all the tools available to him. For the team at Odd Bug, the *Redwall* link has been flattering to hear, but it isn't something they'd necessarily intended. Instead, Kenneth Grahame's novel, *The Wind in the Willows*, and David Petersen's comic series, *Mouse Guard*, were bigger inspirations.

"I'm ashamed to say I've never read the *Redwall* books," admits Jack Bennett, co-founder and game designer at Odd Bug Studio. "However, as an adult, I have watched the animated series. And that's not to say I wasn't aware of the *Redwall* universe as a child. I think that the imagery of small creatures living in a 'civilised' world is something that is really easy to connect with, which makes it a good 'canvas'

to tell meaningful stories on."

Daniel Robinson, character artist and animator at Odd Bug, explains further. "Creatively, I chose to make the characters anthropomorphised, as the world of *Tails of Iron* is very brutal, and I felt that the main character, Redgi, couldn't be a cute rat on all fours. Instead, he needed to be a rat who is strong in tone, and wields a sword and shield with confidence. The human form supports [that], and helps relate the player to him more."

Despite *Redwall's* minimal impact on the game, the studio doesn't seem to mind the continued comparisons, however, especially given the company they find themselves in. They do stress, though, that the world of *Tails of Iron* is far more brutal and bloodier than players might expect.

"I think *Tails of Iron* would be classed as the *Grimms' Fairy Tales* version of *Redwall*," says Bennett. "The world of *Tails of Iron* is a lot darker and bleaker than most of these games. Rats and frogs have been locked in combat throughout the generations, which has had an impact on the world's inhabitants and left it a much more brutal place. I think the combat is [also] much more gruesome than what you'd normally expect from a fairy-tale world. We're going to be showing decapitations and bellies sliced open. There's going to be a lot of blood."

"Obviously, being referred to as 'Redwall-esque' in the first place is awesome," he elaborates, "but I think people referring to *Tails of Iron* [as such] means they recognise the surface-based similarities. They see that the world is populated by small, 'civilised' mammals and that it's set in a medieval-ish time period.

## RATS IN REALITY

Odd Bug had another more personal reason for making a game about a cute rat named Redgi. "*Tails of Iron* was created in honour of my pet rats, who always kept me motivated during hard times," explains Daniel Robinson. "All the main rats in *Tails of Iron* are real, and Redgi the rat was very brave. The main story of *Tails of Iron* is about banding together and never giving up, [which] reflects our team at Odd Bug Studio."



► Players will have one normal objective to complete in *Tooth and Tail*, alongside an additional heroic target that requires more work.

At first glance, I'd agree that it does describe *Tails of Iron*, but I think when people get to play the game, they will recognise that it's a different world with a very different tone. I don't know how long Martin the Warrior would last in the world of *Tails of Iron*."

### A CITY OF MICE

Like *Tails of Iron*, *Small Saga*, the upcoming RPG game from indie developer, Jeremy Noghani, feels like another case where the *Redwall* connection may have been overstated. Similar to *Odd Bug*, Noghani was aware of *Redwall* growing up, but it was actually a much wider range of influences that helped him arrive at the idea of creating a game about civilised mice.

"The game's biggest influence is probably Kentaro Miura's *Berserk*, a manga that's also about a vengeful, cape-clad swordsman trying to fight impossible deities," Noghani says. "You can see that influence on Verm's character design. Robin Jarvis's *The Deptford Mice* is another children's fantasy-rodent book series that no doubt had an influence, especially with regards to the London sewer setting and gritty tone.

For games, *Final Fantasy IX* and *Golden Sun* would be the two most notable inspirations, both for their gameplay and art direction."

Unlike the other games that the 'Redwall-esque' tag has been applied to, *Small Saga* has a modern-day setting, taking place in a medieval-style kingdom known as Rodentia located beneath London. For Noghani, the modern-day setting provided the chance to have fun with the contrast in size between the human and rodent world. Mice wield objects like lighters and penknives as weapons, and wear tiny thimbles to protect themselves against terrors such as towering domestic cats.

"I think a contemporary setting provides a sense of plausibility," explains Noghani. "We know the story's fiction, but by including real places and objects, the world feels tangible. It also provides a better opportunity to incorporate social commentary; humans have a huge impact on the animal world, so why not depict that?"

*Redwall* has clearly been an influence on many of these games, but from speaking to the developers behind them, it becomes clear



they're contributing to a much longer-running tradition in art that predates the publication of *Redwall*. So why is *Redwall* so commonly cited as a reference point? According to Schatz, it's due to the expectation it provokes. Unlike Disney or the work of American animator, Don Bluth, *Redwall* still seems to appeal to a more grown-up and mature audience, sitting comfortably alongside other, more adult-orientated fantasy works by J.R.R. Tolkien and George R.R. Martin.

"I think *Redwall* is probably gaining more and more [attention]," Schatz tells me. "I suspect it's having a little bit of a resurgence in public awareness, because like I said, it's the only type of anthropomorphism that really appeals to a more broader, grown-up audience. So I suspect that we'll see a lot more people finding that comparison apropos." 🐹

► Russian mystic Grigori Rasputin inspired the character design of Archimedes in *Tooth and Tail*, one of the game's flag-bearers.

**"I think *Tails of Iron* would be classed as the *Grimms' Fairy Tales* version of *Redwall*"**



## System Profile

# Sony PlayStation

Happy 25th birthday to the one that changed it all

It's been a quarter of a century since plucky upstart Sony brought a console to market in one of the most successful acts of corporate revenge ever seen.

535 million gaming devices sold later, you do wonder if maybe Nintendo second-guessed itself at all. By now, we all know the story: Nintendo brought Sony in to create a CD-ROM-based add-on for its own SNES, the Big N broke the contract, Sony brass was infuriated, the SNES-CD became the Sony PlayStation, and quite frankly the entire landscape changed forever.

You probably wouldn't have thought that on 3 December 1994, though – when the PSone launched in Japan. There was a hell of a lot of hype around Sony's machine, sure, and the company's ability to wrangle positive press coverage as well as advertise effectively and impactfully put it in good stead. But this was Sony – games consoles were made by Nintendo and Sega, sometimes even Atari. Not Sony. Sony made camcorders, the Walkman, and Trinitron televisions. A quarter of a century is a long time to change your mind on things, that's for sure.

What did the PlayStation do differently? CD-based consoles were already out

there – Sega's own Saturn had hit shortly before Sony's machine – the 3DO, Commodore's CD32, even the TurboGrafx-16 had a CD add-on in the late 1980s. So not that. 3D graphics? Arguably they hadn't run as well as this on a home console before, but they weren't anything *new* per se. The controller? Don't be silly. The here and now teaches us a lesson on how things turned out, but 25 years ago – on paper – the PlayStation wasn't doing anything *that* outlandish to warrant its now legendary status, at

least not if you were a consumer. If you worked behind the scenes at Sony or any number of development studios, it was clear to see this was an actual new kid on the block. Rather than the ingrained practices of the Segas and Nintendos of the world, Sony brought a fresh approach to many aspects of development and developer relations.

The attitude from day one was one of openness and collaboration; Sony couldn't make games by itself, and it knew this, so it was vital to make strong, lasting partnerships with established dev studios, and maybe to bring the odd one here and there into the fold.

It also proved a massive boon to the dev side of things that Sony used a relatively inexpensive devkit solution for the PlayStation. Initially, the PSX devkit was planned to only work with R4000-based machines – one of the earliest 64-bit processors and a very expensive piece of kit. Plans changed, however, thanks to the involvement of Psygnosis and collaborator SN Systems, the latter of which created software



▲ Doom's PSone port is still a standout version.



▲ Ropye it may look now, but Gran Turismo was a revelation in 1997.



^ Solid Snake's sneaking seriously surprised some.

**“To those behind the scenes at Sony or dev studios, this was clearly a new kid on the block”**

that would eventually be used on two PC-compatible hardware cards. The PSX could now be developed for in conjunction with any PC using the cards, meaning the bar for entry took a quick, and very welcome, nosedive.

All of this led to the PlayStation we know and love; the chunky grey box of dinosaur demos, *Metal Gear Solid*, and *ISS Pro Evolution*. There's no denying the marketing helped – oftentimes it helped a lot, and did indeed (even if it is an oft-repeated snippet) 'make gaming cool'.

Without quality games backing it all up, however, the machine could have just been another forgotten dud, like so very many other machines of the eighties and nineties. But with good marketing backed by good games, brought to life through great relationships and a refreshed approach

to how a platform holder treated developers, it couldn't really have gone any other way.

A quarter century on, and the reverberations from Sony's corporate revenge are still being felt. And it's probably going to be at least a few quarter centuries more before we see a story even vaguely similar play out again in the world of video games. The PlayStation really was a once in a lifetime event. ☺

**Meanwhile...**

It's easy to get lost in the timelines of the past – 25 years is a long time ago, after all – so it's of little surprise that people forget there was another console launch in Japan on the same day as the PlayStation: Sega's 32X, the ill-fated add-on for the Mega Drive. Hindsight being powerful a tool, it's easy to see why this stop-gap solution to extending the Mega Drive's lifespan failed as spectacularly as it did. See, not only was it out the same day as the PSone, but Sega's own next-gen console, the Saturn, had already been out for a couple of weeks in Japan. What a lark.



発売日:1994年12月3日 価格:16,800円

16ビット機を32ビット機に。メガドライブ用アップグレードブースター。

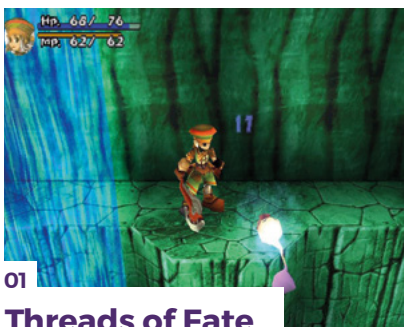


^ *Tomb Raider*, so closely associated with the PlayStation, actually released first on Sega's Saturn.

# Platinum efforts

## 10 overlooked PSone gems

Because not every list can have Tekken 3 in it



01

### Threads of Fate

1999

The problem with Square's output on the PSone is that *Final Fantasy* existed, so its other RPGs tended to be overlooked. *Threads of Fate* definitely fell into that category; a solid, entertaining romp that allows you to play as two distinct characters, Koji Sugimoto's lone directorial effort is a solid, well-made JRPG that's still worth a go today.

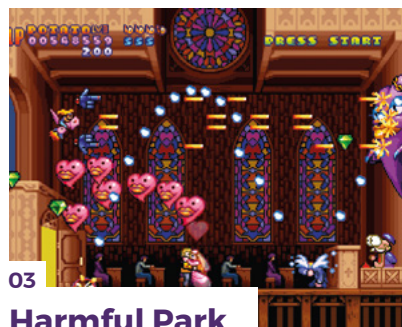


02

### Incredible Crisis

1999

Reasonably described as 'wacky', *Incredible Crisis* sees your everyday Japanese family engage in some minigame action on their way to buy presents for grandma. Think proto-*WarioWare* and you're on the right track. Somewhat fittingly, *Incredible Crisis's* developer Polygon Magic now (in part) operates as a production company for stage and screen.

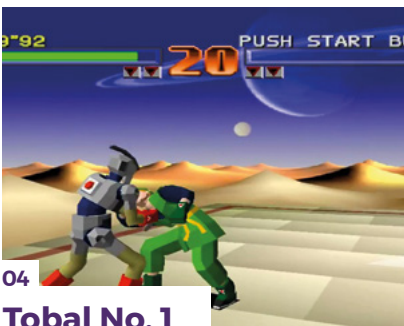


03

### Harmful Park

1997

You may have seen this game's cover and laughed (a pancake on a plate with 'pure shooting' written on it), but the game hiding behind the comical cover is... actually great. We're not talking high-level arcade shoot-'em-up here, but *Harmful Park* is a well-designed and – importantly – fun shooter featuring gorgeous sprites and some genuinely funny design choices.

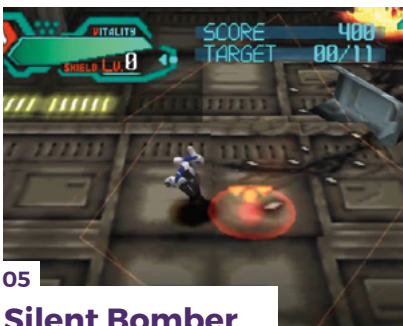


04

### Tobal No. 1

1996

If *Tekken* hadn't existed, the *Tobal* series would have been the format's go-to fighting game franchise. DreamFactory's brawler saw a bunch of characters – designed by *Dragon Ball Z* creator Akira Toriyama – freely running around their 3D arenas in an effort to... well, it's a fighting game, so to batter each other. A smart game of surprising depth, its sequel upped the ante nicely, and both are worth a look.

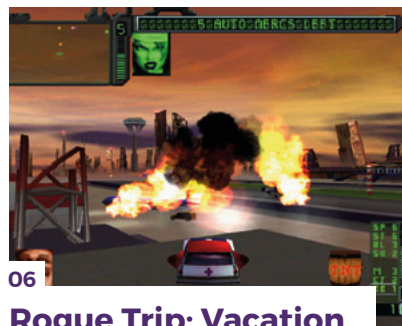


05

### Silent Bomber

1999

Pure arcade fun, *Silent Bomber* made the inspired decision to take a top-down shooter and cross-pollinate it with *Bomberman*. The result is a game where you have to drop your bombs around enemies (or throw them), before detonating. Simple? Yep. Engrossing, fun, and with a large enough pinch of tactical depth? Absolutely. It's criminal this one never got the sequel it deserved.



06

### Rogue Trip: Vacation 2012

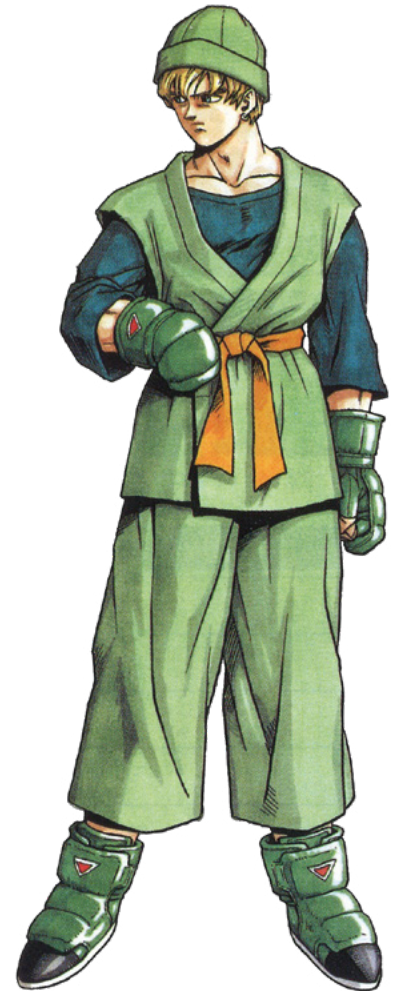
1998

As *Twisted Metal* went off to be hobbled by 989 Studios, series creator SingleTrac stuck with the theme – vehicular combat and dark humour – and took it in a different direction. The combat here is framed around providing a taxi service, with players picking up passengers while shooting their competitors – foreshadowing the upcoming Uber/black cab wars of 2021.



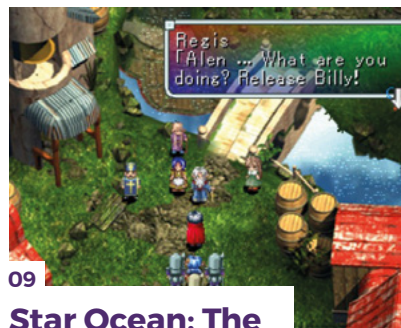
07  
**Hogs of War**  
2000

Rik Mayall. What do you mean we need more words? Sigh. OK, *Hogs of War* riffed on the *Worms* template – random creatures having a barney in some solid multiplayer sessions. The pigs managed to make the 3D world work for them in a way the annelids never could, and this is still fantastic fun. It also had Rik Mayall in it, and that means it deserves to be played by all.



08  
**World's Scariest Police Chases**  
2001

Overlooked because it came out when the PSone was dying off, as well as because it was based on a low-rent TV show, *World's Scariest Police Chases* was actually a fine spiritual successor to *Chase H.Q.* Straight-up police chases acted as your entire motivation, and a mix of arcade-style handling and ever-increasing challenge made this one surprisingly good.



09  
**Star Ocean: The Second Story**  
1998

Another title that fell by the wayside thanks to *Final Fantasy's* PSone dominance, *Star Ocean: The Second Story* was a deep, detailed, and sometimes innovative JRPG that deserved a bit more kudos than it received. The years since have been kinder, but even then it tends to be the SNES original that gets the props. #GiveTheSecondStoryAChance.



10  
**Omega Boost**  
1999

Polyphony Digital famously broke off from making games about cars to make a game about motorbikes on PS2, but even earlier than that, it had gone further down the less obvious route and made a (beautiful) game about giant stompy robots with guns up the wazoo. *Omega Boost* was a fine rail shooter and belongs on anyone's list of must-play PSone games, even without the *Gran Turismo* team behind it.

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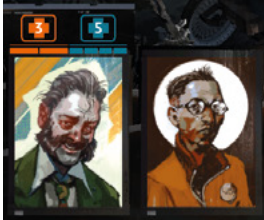
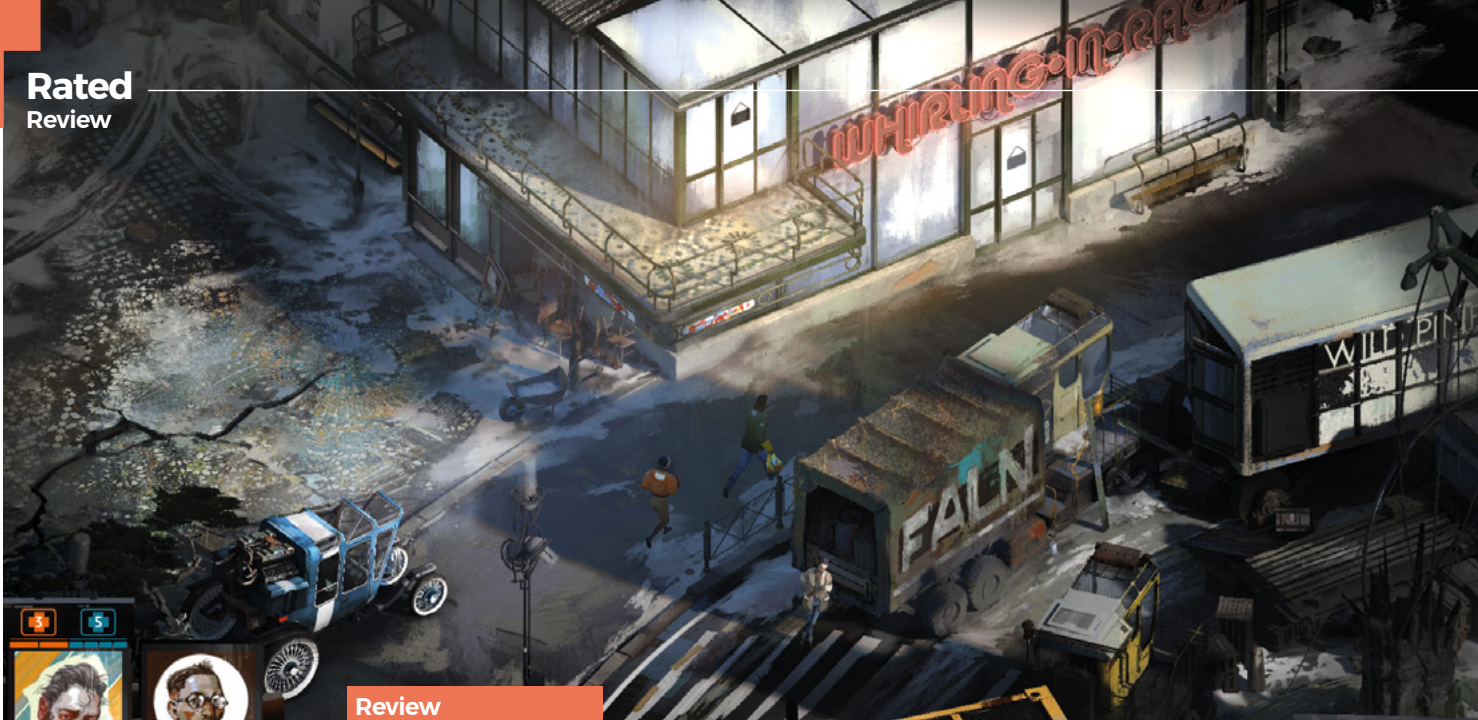
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Rated  
Review



Review

# Disco Elysium

▲ The murder you're tasked with investigating appears tied up in a labour dispute that's brought traffic to a standstill.



## Info

**GENRE**  
RPG  
**FORMAT**  
PC (tested)  
**DEVELOPER**  
ZA/UM  
**PUBLISHER**  
ZA/UM  
**PRICE**  
£34  
**RELEASE**  
Out now

### Disco is the future, can you dig it?

**T**o call *Disco Elysium* an RPG murder-mystery wouldn't be incorrect, but it would somewhat undersell the breadth of what's going on in a game where the player character's brain gets into arguments with itself, the skills you've selected have the potential to send him into revelatory pseudo-mystical reverie, and his tie periodically implores him to grab a drink and get messed up.

The game opens with your protagonist awakening in a trashed hostel room after a multi-day bender, with no memory of who he is or what's led him to this low point. You quickly discover that you're a detective (albeit a rather unconventional one) and that, out the back, there's a body hanging from a tree. Your job is to find out who killed them. You'll probably want to find out who you are along the way, too.

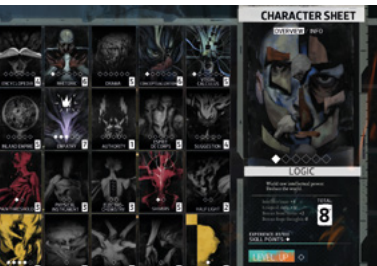
Defining how you go about solving these mysteries are your skills. Having skills in an RPG is as established as butter on bread, but the way *these* skills have been implemented, well, that's something else. The function of each skill in *Disco Elysium* is complemented by a de facto character whose voice will become more prominent in your detective's mind as you sink more points into them. Inland Empire can roughly be described as intuition, informing your character when it picks up on a bad feeling or prompting you to follow a particular conversation topic or route on the basis of a hunch. When it speaks, it sounds like a mystic,

having an affinity for grandiose proclamations about the universe and paranormal connections. Logic determines your detective's ability to spot inconsistencies and, as you might expect, is cold, detached, and a little arrogant.

The way you balance these skills has a huge impact on the way you experience the game. Skill checks mean you will inevitably have to follow different paths to pry information from other characters, or access new areas, depending on where you've invested your points. The dialogue you see will be different depending on whether you've built an empathetic detective sensitive to picking up on people's feelings, or a brute who prefers to intimidate, with the voices of those corresponding skills coming to the fore of your detective's mind, while the proclivities of the skills you've neglected tend to stay hidden beneath the surface. How this myriad of potential voices has been woven into something that's not only coherent, but unfailingly compelling, I can't begin to imagine.

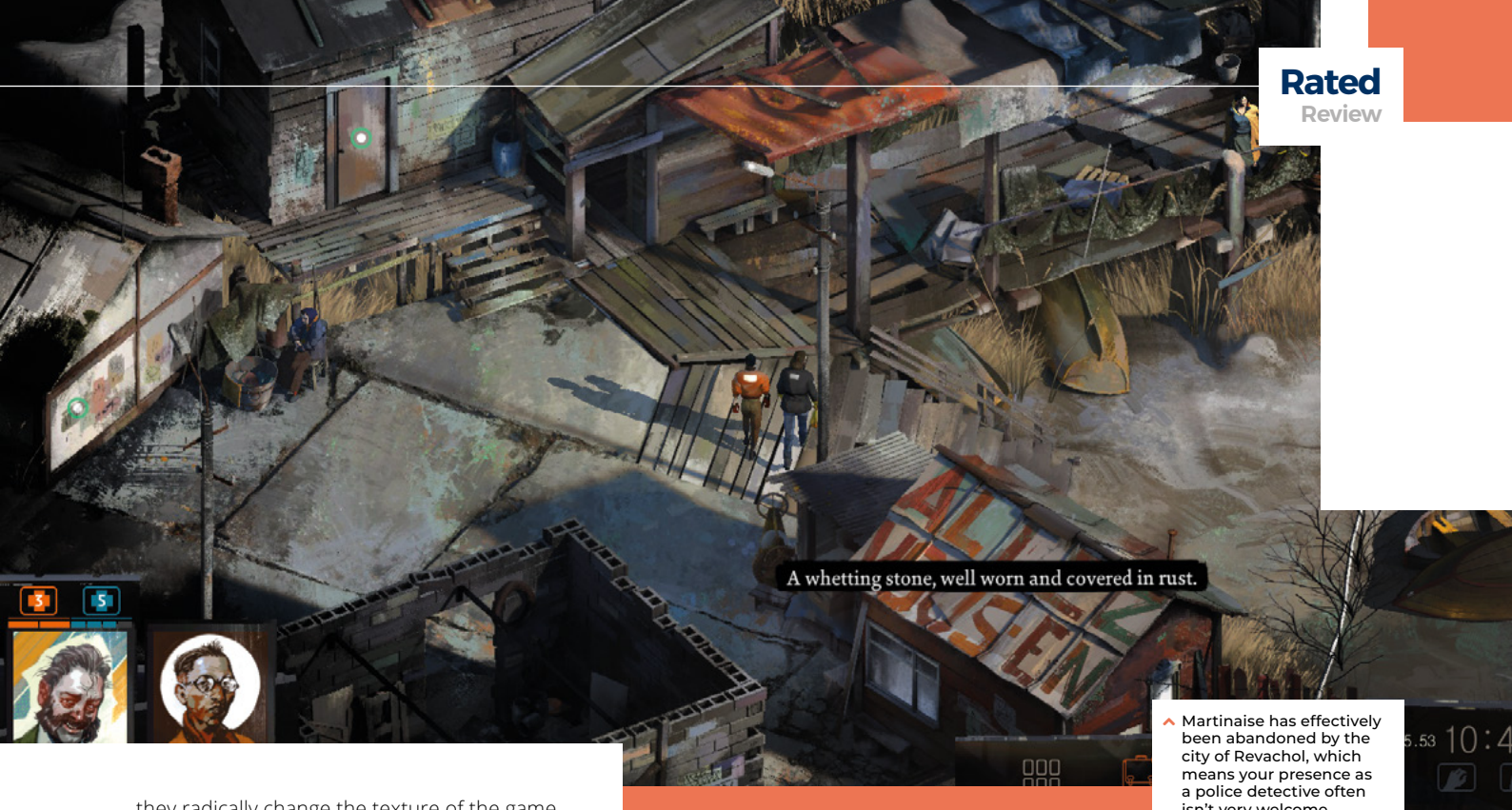
This gives the game a huge degree of variability. Whether it's the skills you invest in, the conversation options you choose, the drugs you do or don't consume, or the side quests you complete, the possibilities feel unfathomably huge, and your choices will matter. This works to the game's benefit, but there are plenty of other games that respond well to player choice. That alone is not what makes this game special. Choices here are more than keys with the potential to open or close quest lines;

REVIEWED BY  
Paul Walker-Emig



▲ This eclectic collection of skills is the most interesting and original I've ever seen in an RPG.





A whetting stone, well worn and covered in rust.

▲ Martinaise has effectively been abandoned by the city of Revachol, which means your presence as a police detective often isn't very welcome.

they radically change the texture of the game. Just walking through the city can be dramatically different, depending on what you've upgraded. I began pumping points into 'perception' – having the effect of your detective spotting more stuff around him – and 'shivers' – which helps you to "hear the city" – about halfway through the game. Suddenly, the simple act of walking from one place to another felt more contemplative, and the city's previously hidden secrets were revealed to me: impressionistic thoughts gave the place context, while ghosts of past traumas drifted into my detective's mind.

Choices in *Disco Elysium* aren't just an expression of player agency. They're used to make you ruminate on how different thoughts, ideas, or modes of engaging with the world can both reveal and distort it. Early on, you can ask a lorry driver what he's carrying in his van. In response, he'll make what is clearly a joke about how his lorry is full of illegal contraband. Your Authority skill jumps into action, insisting that you arrest this criminal immediately. This is a warning from the game that you can't always trust what your skills tell you; it's an amusing misunderstanding, and a comment on the paranoid mindset of those that wield power.

This is far from the only instance of your usually helpful skills muddying the waters – they will later start having disagreements about how you should handle situations, another example of what could have been a bog-standard RPG skill system being taken in all kinds of innovative directions.

**“Disco Elysium’s influence will be all over the games that follow in its wake. It really is that good”**

Tonally, *Disco Elysium* is difficult to talk about, given the many permutations that define how you experience it. Deliberately surreal and irreverent in its early stages, the game encourages you to embrace the unusual: “You’re playing an oddball, it’s OK to pick the weird dialogue options,” it seems to say. There are opportunities to continue in that vein, tilting the game towards being a kind of dark comedy, but *Disco Elysium* also gradually reveals another side, as a washed-up, alcoholic protagonist with a propensity for failure – who might initially be interpreted as a punchline – becomes a more complex, or even sympathetic, figure. This move

happens often. Characters that, at first glance, might appear to be broad stroke archetypes gain an extra dimension, as the game starts to situate them in the context of its location's history: the neglected

district of Martinaise. The game harbours a deeply cynical view of politics in its early stages, but later supplements its critique with a solidarity for the downtrodden that suggests some kind of hope for change. That the game is able to hold so much in tension – to be earnest, cynical, silly, contemplative, angry, sentimental, provocative, and more – speaks to just how rich and sophisticated it is.

I've never played a game quite like *Disco Elysium*, but I suspect I will again in the future, because its influence will be all over the games that follow in its wake. It really is that good. 🌐

## HIGHLIGHT

Supplementing *Disco Elysium*'s skill system is 'the thought cabinet'. Thoughts unlocked during conversation can be slotted into your detective's brain for him to ruminate on, sometimes at the expense of a stat debuff. After he's finished contemplating it, you'll usually get some kind of bonus.

## VERDICT

Offbeat, original, smart, and intricate, *Disco Elysium* starts strong and grows in your estimation by the hour.

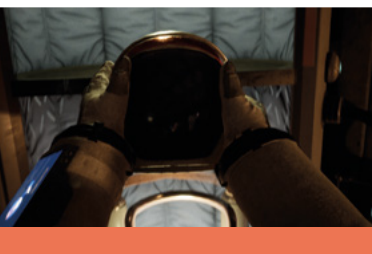
94%



HIGHLIGHT

*Deliver Us The Moon* might evoke mystery most of the time, but certain countdown sequences ratchet up the tension and spectacle by testing out your reaction times. One bombastic set-piece midway through sees you blown out into space, grabbing several O<sub>2</sub> canisters as you fight to get back.

Things often dip into a first-person viewpoint during important moments.



Review

Solving puzzles isn't quite as hand-holdy as you might be used to.

# Deliver Us The Moon

One giant leap of a thoughtful space adventure

## Info

**GENRE**  
Sci-fi thriller, action-adventure  
**FORMAT**  
PC (tested)  
**DEVELOPER**  
KeokeN Interactive  
**PUBLISHER**  
Wired Productions  
**PRICE**  
£19.99  
**RELEASE**  
Out now

REVIEWED BY  
Aaron Potter

## VERDICT

A strong story and sense of place renders this melancholic sci-fi thriller a worthwhile journey.

76%

**W**hile most Kickstarted games have a habit of shooting for the moon, KeokeN Interactive's bold thriller has interpreted the concept quite literally. Set in the year 2059, at a time when fossil fuels have completely run dry, *Deliver Us The Moon* casts you as a humble astronaut tasked with saving a dust-ridden Earth suddenly deprived of its sole energy resource. What follows is a thoughtful and wonderfully ponderous third-person adventure, heavily inspired by numerous classic hard sci-fi works but still boasting a human story of its own.

Completing your ambitious mission revolves around investigating what's happened to a unique lunar-based gizmo known as the MPT, which up until five years ago did a good job at transmitting to Earth the hefty amounts of Helium-3 needed before eventually going dark. Such a premise proves delectably intriguing for the four- or five-hour journey ahead, always being a great excuse to undertake *Deliver Us The Moon's* healthy mix of exploration, item scanning, and puzzle-solving.

Helping you do this is a suite of useful tools no astronaut should be without. Your plasma cutter, for example, allows you to slice open boxes containing vital oxygen within areas of the space station and moon base that are lacking life support, while a floating orb-like device called the 'ASE' can be controlled remotely and is small enough to access tight spaces. Clever mechanics such as these are what really elevates *Deliver Us The Moon* into much more than just a simple

explorathon dabbling with some deep themes – and most never outstay their welcome.

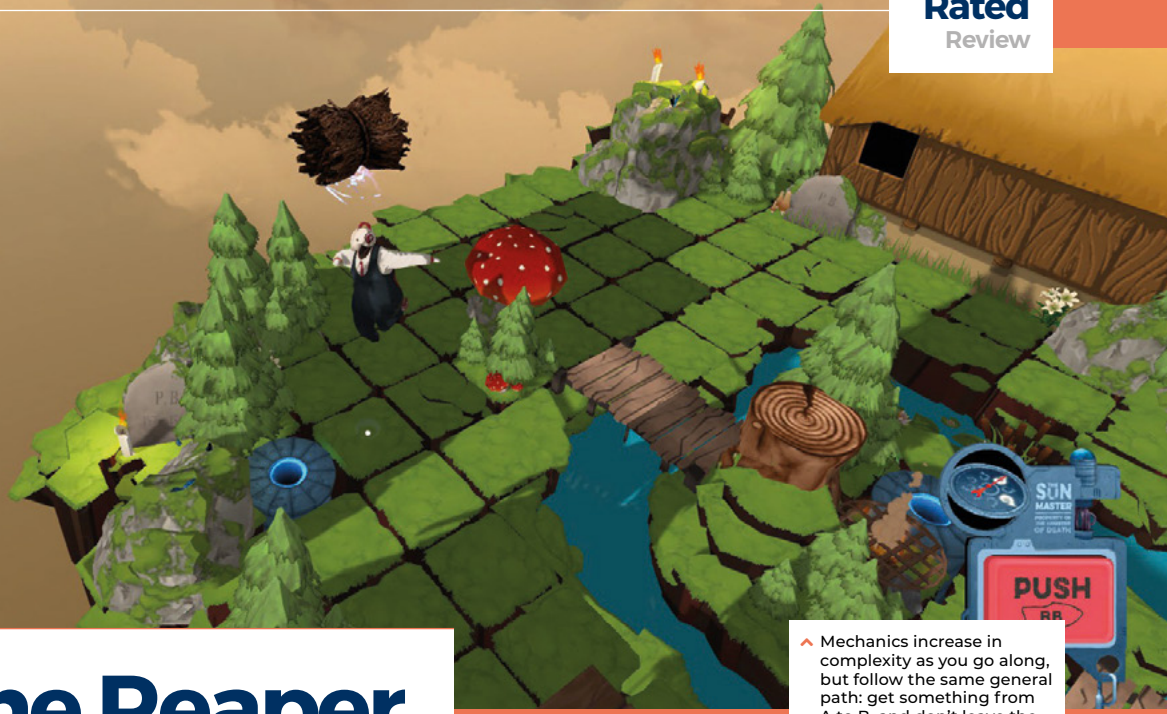
Now, of course, setting your game primarily on the moon runs the risk of having environments feel repetitive, but thankfully KeokeN Interactive has done a good job ensuring that this isn't the case. Whether it's the believably lived-in crew quarters featuring the sprawled out personal belongings of staff, the Helium-3 mining facilities, or the cratered surface of the moon itself, there's a decent amount of visual variety offered, always backed up by a musical score that moves between haunting and hopeful. These ideas might have been explored countless times in books and film, but here the thought of being alone in the vastness of space is just as elegantly handled.

Sadly, no moon is without its fair share of cheese, and it's in the latter half of the game where the story suddenly takes a huge bite, swiftly taking a turn into trope town. You see (and avoiding spoilers), while well-paced and wildly atmospheric for the most part, *Deliver Us The Moon's* answer for why the MPT transmitter fell offline wasn't as inventive as I had hoped. However, while the journey may have been better than the destination, it did nothing to dampen my enjoyment of the game's mysterious early hours.

Despite this bumpy landing, *Deliver Us The Moon* serves as a nice trip to the stars that is unafraid to tackle some of the sci-fi genre's most gripping themes. The puzzle-solving is satisfying, but it's everything else that kept me inspired from beginning to end. 🌕

HIGHLIGHT

It was always going to be the dancing, wasn't it? It's not something you control, nor does it have any real bearing on the actual What You Do bits of the game, but Felix's hops, skips, and prances around each level make it a minor joy just to navigate as you're crunching the numbers on how the hell to solve this latest conundrum.



▲ Mechanics increase in complexity as you go along, but follow the same general path: get something from A to B, and don't leave the shadows.

Review

# Felix the Reaper

Just want to dance your life away

This is the first game in a long time – at least that I can think of – where the term ‘fox-trot’ can be used when talking about it, and you’re *not* shooting endless waves of foreigners for a definitely apolitical reason. *Felix the Reaper*, see, is a puzzle game about an employee at the Ministry of Death – Grim Reapers, Inc., basically – who also happens to love dancing. Isn't that just lovely? Well, yes and no – yes, in that it's lovely, and an imaginative, cute, and funky shell with which to wrap around a fiendish, taxing game of moving objects and light. No, in that *Felix the Reaper*, while darkly comical, really does hammer home that ‘dark’ aspect at times – you’re an agent of death, quite literally, and your job means you don’t just encounter it regularly; you make sure it happens.

Each puzzle acts as a step towards the death of a specified target. You’re not free to choose – they have been marked for the afterlife, and it’s your job to figure out how to get them there from the diorama-like level you enter into. An early step might involve getting the target drunk, say, or moving a bucket of oil into the position it needs to be to cause the most havoc. The final step, though, is always death: each earlier step working together to form one gigantic tragic inevitability. It’s a smart way of tying things together, and works well in driving you forward from one puzzle to the next.

Said puzzles require you to – usually – get an item from one place to another. Felix is stuck in

the shadows, unable to operate in the sunlight, so your path has to be planned according to the shade.

You’re able to rotate the sun through set positions, which changes your shadow paths available, and objects can be lifted and placed around levels to create new, temporary shade for extra paths to get through things. Shady pathfinding, then, but in a good way. And that’s about it for what you actually do, but of course – as with any good puzzle – it’s all about how these simple mechanics come together that really taxes your grey matter.

Spatial awareness is one of those things that’s hard for me. I can do it, eventually, but it involves some real strain in the old noggin to build up a head of steam. And *Felix the Reaper* does a number on your spatial awareness – even when you’re able to see in advance what moving the light will do to your shadows, it still keeps you thinking, confuses and confounds, and brings sweet relief when eventually, finally, you brute force your way through.

It’s not full of a-ha moments like *The Witness*, say, and there are times when mechanics being explained beforehand would have been useful (hello, stacking!). But generally speaking, *Felix the Reaper* is a smart little distraction, and one with incredible presentation – and a wicked sense of humour – throughout. Good stuff that (dead) man. 🐾

**“Each earlier step in the puzzle works together to form one gigantic tragic inevitability”**

Info

- GENRE**  
Puzzle
- FORMAT**  
PC (tested) / PS4 / XBO / Mac
- DEVELOPER**  
Kong Orange
- PUBLISHER**  
Daedalic Entertainment
- PRICE**  
£21.99
- RELEASE**  
Out now

REVIEWED BY  
Ian Dransfield

VERDICT

Frustration and frivolity in equal measure, *Felix* is a top puzzler.

77%

# The Outer Worlds

Planet-hopping has never been quite so verbose

## Info

**GENRE**  
Action RPG

**FORMAT**  
PS4 (tested) /  
XBOX / PC

**DEVELOPER**  
Obsidian  
Entertainment

**PUBLISHER**  
Private Division

**PRICE**  
£49.99

**RELEASE**  
Out now

REVIEWED BY  
Richard Wakeling

## HIGHLIGHT

As is often the case in RPGs driven by player choice, it's immensely satisfying when you can circumvent combat in *The Outer Worlds*. A room full of marauders is no bother when your engineering skill is high enough to shut off their flow of oxygen, killing eight enemies in one fell swoop.

✓ The dining area on your ship, *The Unreliable*, is a common mingling space for the crew, although not everyone gets along.

**T**he *Outer Worlds'* conclusion isn't exactly out of this world. Just when it feels as though the final act is about to step into high gear and propel you towards an exciting finale, you're left staring at the end credits, hoping Microsoft greenlights a sequel.

This hope is borne from the fact that a deflating ending is one of the rare missteps *The Outer Worlds* makes across its 25-hour playtime. Developer Obsidian Entertainment has long been famed for its high-quality storytelling, and *The Outer Worlds* is no exception. It takes the familiar structure of Bethesda's *Fallout* games – or, more specifically, Obsidian's own *Fallout: New Vegas* – and tightens up those first-person RPG trappings with a focused and pulpy 1940s-style sci-fi adventure.

Your introduction to *The Outer Worlds* begins when the escape pod you're strapped into lands on top of the guy who was supposed to be your

chauffeur, killing him in an instant. This style of gallows humour permeates throughout the rest of the story, adding some genuine levity to a game about corporate control and cult-like obedience of the masses.

Thawed from a 70-year rest, your goal is to rescue the thousands of other colonists left abandoned in permanent cryosleep by mega-corporation The Board. How you get there, and whether you actually go through with it, is entirely up to the choices you make.

There's no binary morality system at play here, coating *The Outer Worlds'* branching narrative in myriad shades of grey. As such, the choices it presents are incredibly tough to make, with no easy way to gauge what's right or wrong – if such constructs even exist. You might have your heart set on choosing one faction over another until one of your companions chimes in with their own fully formed opinion. Maybe you'll discover a crucial piece of information on a

✓ Each companion you recruit on your travels has a unique special attack that adds some much-needed panache to combat encounters.





▲ Environments aren't particularly large, but they make up for this by being densely packed and full of character.

hacked computer log, or learn something new by using your acts of persuasion. All of this stems from the quality of Obsidian's writing, with a compelling cast of multi-faceted characters that make each conversation, and the dialogue options you choose from, rewarding in and of themselves.

Some of *The Outer Worlds'* most memorable characters emerge from the crew of misfits you assemble over the course of your planet-hopping escapades. From the naive, asexual engineer Parvati – who needs your help opening up to a love interest – to the blunt but surprising Vicar Max, and no-nonsense medic Ellie. They each have their own abilities in combat, but choosing which companions you want to take out into the field is as much about spending time with them than it is anything else. Each one has a loyalty mission of sorts, too, gradually building camaraderie that harkens back to the best moments of *Mass Effect 2*.

Of course, a significant chunk of their appeal derives from their standing in this world, and it's here where character development and world-building beautifully coalesce. Almost everyone in the Halcyon System has a story to tell about corporate mistreatment or mismanagement, shining a satirical light on capitalism and ugly consumer culture. Most of their tales are humorous in their absurdity without being implausible enough to escape parallels with some real-world examples of greed and cruelty. The game's environments manage similar feats.

There's the town of Fallbrook that's partly built inside a craggy cave. The mega-corporations haven't got their fingers in this particular pie; light bulbs hang from wires stretching across the street, and the soundtrack's western guitar twang establishes its outlaw tone, with an Old West-style tavern sitting in the centre of town.

**“Almost everyone in the Halcyon System has a story to tell”**

Byzantium, on the other hand, is a Tory dystopia full of affluent citizens and people with names like Hortense Ingalsbee, who think they're better than everyone else because they inherited their vast fortune from a grandparent. It's just disappointing that there's no real incentive to explore the dangerous wilderness outside of these singular towns and cities, unless you want to find more ammunition.

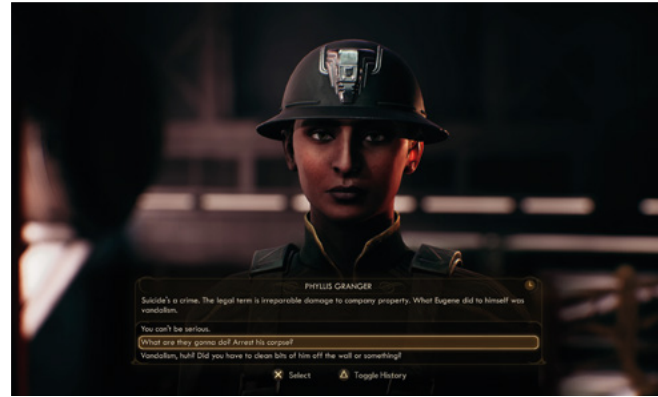
*The Outer Worlds* also stumbles somewhat when it comes to combat. Your character build

will have an effect on your proficiency in any firefight, and it's entirely possible to navigate your way around certain combat encounters by sneaking, hacking, lock picking,

or using the power of speech. When you are confronted with a gunfight, combat is relatively undemanding. There's a decent selection of firearms, and each one packs a meaty punch, but the AI isn't dynamic enough to inject combat with a palpable sense of excitement.

The only tactical consideration you have to make involves different ammo types dealing more damage against particular enemies. You can also activate Tactical Time Dilation, essentially meaning you can slow down time for a few seconds. It has neither the same strategic value nor sense of violent impact as the *Fallout* series' V.A.T.S system.

Fortunately, you spend much more of your time running your mouth than you do pulling your trigger finger. *The Outer Worlds* plays to Obsidian's strengths, focusing on depth and a story where player choice actually matters. It is inherently familiar, but this almost doesn't matter when it picks up the ball Bethesda dropped and runs with it, presenting a compelling and immersive RPG. 🎮



▲ The town of Edgewater is your first pit stop when exploring the Halcyon System, and offers a stark introduction to the way corporations operate.

**VERDICT**

A pulpy sci-fi romp and the quintessential Obsidian RPG.

**84%**

Rated  
Review

## HIGHLIGHT

The game perfectly captures the otherworldly tone of Lovecraftian fiction, and there's something really special about feeling like you're one of the many characters that populate the Mythos world. It's a living, breathing, horrible place.

Review

# Stygian: Reign of the Old Ones

Cthulhu looks downright wholesome compared to this

There are truly bizarre things hiding behind the doors of Arkham.

## Info

### GENRE

RPG

### FORMAT

PC (tested)

### DEVELOPER

Cultic Games

### PUBLISHER

1C Entertainment

### PRICE

£23.99

### RELEASE

Out now

### REVIEWED BY

Cameron Kunzelman

## VERDICT

A compelling story in a well-worn framework, held back by clunky combat design.

# 63%

# T

here's nothing more terrifying than being transported to a new dimension ruled by heartless gods and the ghoulish cultists that worship them, so we can

probably say that, at least on a conceptual level, *Stygian: Reign of the Old Ones* is a scary game.

Borrowing liberally from the fiction of H.P.

Lovecraft, *Stygian* casts the player as one of the survivors of a strange planar shift that has left the town of Arkham and its surrounding area in a place between worlds. Your character can

pursue a number of early 20th century careers, including actor, criminal, or investigator, each with their own set of skills and abilities. Like the classic *Fallout*, *Stygian's* character creation lets you make whatever weirdo you want and throw them into a dark and hostile world.

*Stygian* doesn't hold back on the darkness

and hostility, either. Roaming

Arkham, you'll find bankers driven to madness and horrible mafiosos and cultists who yearn for even-more-awful transformations, and

you interact with them both through traditional RPG dialogue options and a somewhat clunky tactical combat system.

While those conversations tend to be as absorbing here as they are in any other RPG, the combat system is not. Every time I had to make my way through the turn-based deadly combat, I let out an audible groan. It's slow, awkward, and I really felt like I was being punished for specialising in melee weapons as opposed to the handguns



The game's story is told through dialogue, scripting, and storybook interludes.

that were much more abundant through the bulk of the game than I thought they would be during character creation.

With that in mind, what should draw you to *Stygian* is the world itself. It draws heavily on Lovecraft's Cthulhu Mythos, with Arkham's locations populated by characters who expand

on the fictional universe.

They'll speak at length about those mafiosos or the traumas plaguing the city. They'll tell you where you can find dastardly horrors, or they might prompt

you to learn more about some familiar names from Lovecraft's canon, such as Randolph Carter.

This dense referentiality is fun for fans of the weird fiction genre, and there's very little in the game that won't offer a bit of fun familiarity for those into classic, story-heavy RPGs. What a shame, then, that the combat system is so unbalanced that it drags the game down significantly. I wish there was a good Lovecraftian metaphor to summon up here. 🗿

**"It draws heavily on Lovecraft's Cthulhu Mythos"**

HIGHLIGHT

While the writing itself is fairly standard fantasy fare, Ed Kelly's exceptional voiceover work elevates the text and imbues those tired generic tropes with emotional resonance. Outside of Supergiant Games' groundbreaking output, rarely has a narrator managed to generate such restrained yet genuine pathos with their performance.

▲ A rare moment of peace: gazing at the distant mountains, still untouched by the Corruption.

Review

# Children of Morta

Come for the carnage, stay for the mountain views

**A**s much as rogue-lite sensibilities have permeated the medium this past decade, even spreading to genres they had no business approaching (looking at you,

*Bloodborne* Chalice Dungeons), there's one thing this eminently versatile approach to game design has never managed – or cared – to deliver: a traditional narrative, the type that comes with a beginning, a middle, and an end. Dead Mage's latest action RPG addresses the issue by inserting story fragments randomly across playthroughs. These take the form of hidden journal entries, encounters with far-reaching consequences, and short interludes triggered after certain conditions have been met. A simple solution, only made possible because, unlike others of its ilk, *Children of Morta* is not interested in a long-term relationship: you'll see everything it has to offer within 20 hours.

You'll spend most of that time switching between different Bergson family members to explore the environs of their stunning ancestral home, seeking counsel from reclusive deities, and battling creatures sent into a murderous frenzy by the mysterious Corruption that has been slowly poisoning the land. Each tightly focused excursion (runs rarely take more than 30 minutes) uncovers valuable secrets and unlocks further progress but, more importantly, allows you to expand the diverse skill set of your growing cast.

Prior to that, *Children of Morta* fails to impress. Early combat entails little more than the repetitive clicky-clack of left mouse-button attacks broken only by the occasional dodge, an attrition battle

waged against your patience, rather than a test of skill. Persevere, however, and each character blossoms into a distinct and engaging fighter with an array of abilities that transform skirmishes into exciting real-time puzzles. Typical sword-and-sorcery templates abound in the Bergson family roster: Kevin, the stealthy, rapidly striking assassin; Joey the hulking blacksmith that can withstand massive amounts of damage; and young Lucy, the fireball-hurling elemental whose attacks become increasingly vicious the longer she stands still. Gradually, the game's secret rhythm reveals itself, a mesmerising oscillation between methodical scavenging and bursts of sudden chaos demanding full awareness of your chosen champion's strengths and weaknesses.

Surprisingly, it's neither the tiresome early grind nor the subsequent glorious bloodshed that stays with you, but a sense of warmth generated by pixel art at its most expressive and one of the most enchanting hubs ever seen in video games.

Framed by the luscious greens of an unkempt garden and the royal-gown purples of its sunsets, every inch of the Bergson mansion is lovingly cramped with history-laden paraphernalia: the stacked tomes of a bookworm, the vials and decanters of an alchemist, the iridescent fauna lazily trawling the depths of a lavish aquarium. It's the home of a real family; a place where John and Mary will cast off their parental worries and break into dance, or a sumptuous feast will bring everyone together, away from the encroaching darkness. *Children of Morta* conceals the number-crunching and makes you care more about these people than your next permanent upgrade. 🐾

Info

GENRE

Action RPG / Roguelike

FORMAT

PC (tested) / Mac / PS4 / XBO / Switch

DEVELOPER

Dead Mage

PUBLISHER

11 bit studios

PRICE

£18.49

RELEASE

Out now

REVIEWED BY

Alexander Chatziioannou

VERDICT

A gorgeous, warm, and engaging action roguelike that doesn't overstay its welcome.

79%

HIGHLIGHT

*Kine's* overworld screen is a sprawling city full of purple hues that only gets more vibrant as you roll your way through the puzzles. Players will zoom down into the puzzle from the hub in a seamless fashion. Charming hand-drawn lines then show you how far you've come and what areas are left to traverse.

Each puzzle has you rolling and stretching across a variety of objects to reach a book of sheet music, which bookends every level.

Review

From desks to recording studios, tunnels of love to calendars, you'll explore a wonderful series of puzzle play spaces that serve *Kine's* story.

# Kine

## Codes and Keys

**K**ine is a 3D puzzle game telling the story of Euler, Quat and Roo: robot instruments with bodies made out of musical equipment.

Their peculiar cymbal limbs and accordion torsos extend and fall like friendly tetrominoes, obscuring your view and clicking and clacking against dioramas of obstacles, making musical notes as they move.

Beyond the set dressing, *Kine* has you completing spatial logic puzzles by moving these absurd objects around in a 3D space to reach a defined objective. Fans of *Stephen's Sausage Roll* or *English Country Tune* will be right at home here.

The constant puzzling is complemented by vibrant textures and a scraggly, charming art style. Solo developer Gwen Frey's experience as an animator shines through in the way each character jangles and moves, right down to the satisfying manner in which the protagonists are catapulted into the next scene after each puzzle.

I say scene for a reason: the way Frey carefully ties the filmic narrative of *Kine* to the puzzles is its greatest success. From lovers' tiffs to Kafkaesque paper-pushing, I struggle to think of other games in this genre with such raw inspiration teeming from every conundrum. Yet the beauty is that all these clever parts form such a cohesive narrative whole. The puzzles in *Kine* service a story about ambitious young creatives trying to make it in a difficult music industry. It's a relatable tale full of dry wit and biting commentary. Sonic stars are born right in front of your eyes.



*Kine's* soundtrack is a cornucopia of soothing jazz, with characters and new areas introduced by finger-snapping drum fills. A welcome break from the intensity of modern gaming, it's best played cosily with a hot drink, and all the better if you pick it up on Switch – it quickly became a brilliant antidote for my busy mind on weeknights.

Alas, eventually you'll start having to use all three of our tinny heroes at once, which considerably ups the ante. When *Kine's* complexity hit its apex, my lizard brain started to look past the endearing charm of its world. Perhaps I'm just an idiot, but the more constrained spatial difficulty of later puzzles led me to bouts of impatient trial and error, and I started to feel distant from the experience. There are some seriously tricky puzzles here that will delight those who love having their brain cells tickled, but may leave casual players feeling a bit miffed. Given that the story's tied to the puzzles, it's primed to frustrate folks who prefer charm over challenge.

If you're a clever clogs, you could probably finish *Kine* in an evening, but curious puzzlers will no doubt get days or even weeks of mileage out of this indie charmer's clever puzzles and bubbly story. 🎵

### Info

**GENRE**  
Puzzle

**FORMAT**  
Switch (tested)  
/ PC / PS4 /  
XBO / Stadia

**DEVELOPER**  
Gwen Frey

**PUBLISHER**  
Chump Squad

**PRICE**  
£14.99

**RELEASE**  
Out now

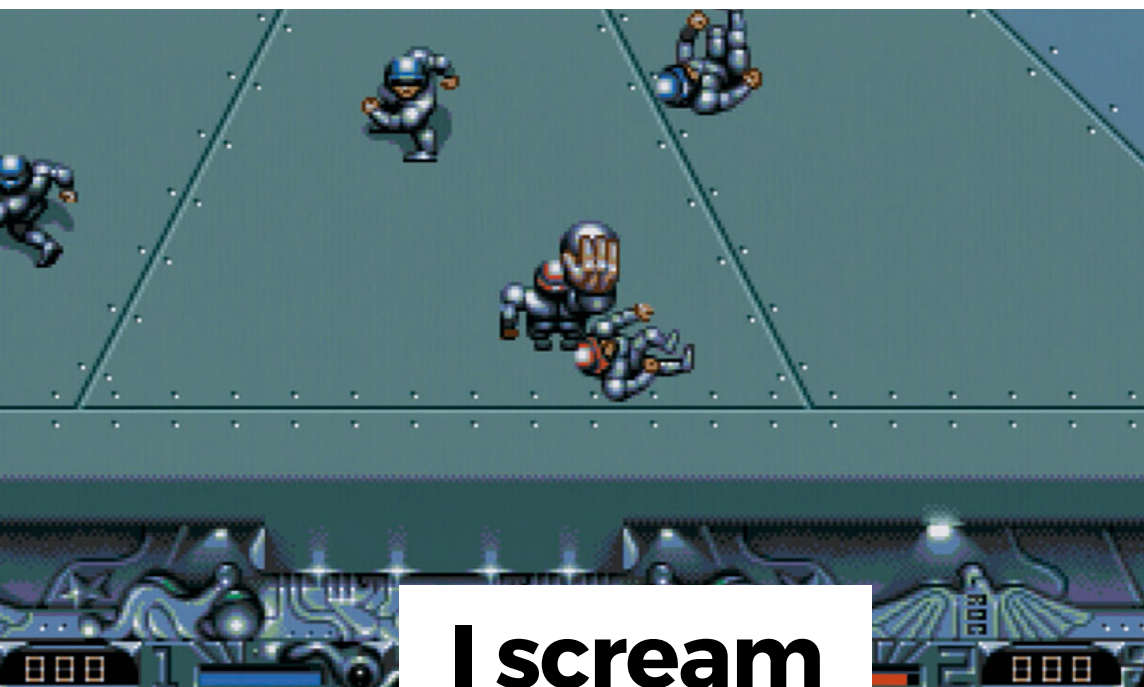
**REVIEWED BY**  
Jordan Oloman

## VERDICT

Like *La La Land* for maths nerds, *Kine* ties together a clever narrative with satisfying puzzle action.

# 74%





# I scream

It's a festive tradition to break out Speedball 2

**W**

hen the year starts to wind down; as it gets colder and you're staying indoors more often; when there's more time to reflect, think, and revisit

games of your past, what do you do? Not play *Speedball 2*? Oh. Right. Well, you might not relate to this then, because it's exactly what I do – and exactly what I've been doing: making my way through the league once again in the Bitmap Brothers' Amiga classic (which was developed in parallel with the Atari ST version, of course).

I'd jump to saying 'the game doesn't matter because the nostalgia is so strong', but the fact is that it does matter. If *Speedball 2* remained little more than an ancient curio linking me to my youthful days, a game that tingled the warmest parts of my mind but also one that had aged badly, this wouldn't be a yearly tradition. I'd play it for a bit, a couple of times in a decade, then reminisce about it online instead. No, *Speedball 2* is still a lot of fun, and as such, it becomes something I end up playing for far longer than I intend.

The old adage applies: simple, but with depth. Is that an old adage? Feels like it should be. Hm. Regardless, *Speedball 2* is as straightforward as 'score more points than your opponent by throwing the ball in the goal, hitting a couple of different point markers, or beating the opposition to a pulp'. And that's

about it. But layered on top are the little tricks and tweaks to matches – pick-ups that can teleport the ball to your centre forward or freeze opponents in place, score multiplying loops, even a ball-electrifying nodule that allows you to knock down any opposing player who stands in the orb's path. There's training and a transfer market, in which you can build up the stats of your woeful starting line-up, or buy in experienced veterans to pad out your weaker areas. It's just... great.

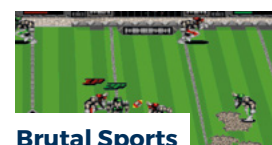
I've still never managed to win the entire league with my starting line-up, the motley crew of dullards and dimwits, lacking their scars and... well, any recognisable features. I've specced them up, I've built them into better players, I've always got so far, but then the injuries start to mount, and it ends up being cheaper – or at least quicker – to just buy a whole new player. Jams, usually, or maybe Midia if I'm short on cash. Bodini

if I need a reliable, wall-shaped man in goal. Not Weiss, though – he's a waste of money beyond the first half of the first season.

It always happens eventually, and I always regret it after the fact. But I just keep on doing it, every time I play the blasted thing. I've played *Speedball 2* too much, that's what I'm getting at. When does nostalgia stop being cute and start being something that actually encroaches on your life? Ah well, I hear there's ice cream somewhere at least. 🍦

**"I've played  
Speedball 2 too  
much, that's what  
I'm getting at"**

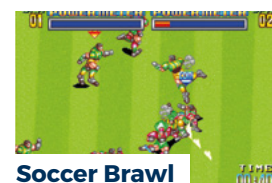
## Wireframe Recommends



### Brutal Sports Football

AMIGA, PC, JAGUAR

In which you punch the head off an opposition player, then score a goal using said head. Video games are most definitely the purest form of art.



### Soccer Brawl

NEO GEO

Classic arcade fodder for the Neo Geo, in which an approximation of football is played out in combination with *Speedball*-style armour and bewilderingly violent tackles.

Fun in short bursts.



### Mutant League Hockey

MEGA DRIVE

Here's hoping EA will pivot the NHL license into this more ghoulish territory and bring back this wonderful, stupid game of skating and smashing skulls.



# Final Fight

Making room by making a sacrifice

CAPCOM / 1989 / ARCADE, MULTI

**T**he beat-'em-up special attack had been doing the rounds a while by this point – headbutts and elbows in *Double Dragon*, running attacks in *River City Ransom*, the excellent spin-kick in *Double Dragon II*, and so on – but, by my count, it was *Final Fight* that actually made the act of using a special move one that also hurt you a bit. Surely that's just annoying? Well, not really, because while it's framed as a powerful attack you can (almost) always engage, it's more of a desperation manoeuvre than anything else. So, in the context of the situation, it makes sense that this exertion would leave you more worn out than the usual array of unceasing street vengeance.

I should probably step aside from bringing actual logic into the beat-'em-up genre, what with it being one in which the heroes are invariably men who fight other men (from less fortunate backgrounds) and eat a lot of chicken out of bins. See, *Final Fight*'s health-draining special was one of those features that was so quietly brilliant, that made so much sense, that it was quickly adopted by plenty of other scrolling brawlers that followed. When you become a standard feature, you know you're onto something good.

It's the everyday story for mayor Mike Haggar. You're being assaulted by five blokes with names like Slim and Curd and Gnat, or whatever, who engaged in combat after walking out

of their terraced houses and watching you shirtlessly beating their friend Chunk half to death. On a regular day, what with your biceps being measured in metres rather than inches, you'd be able to repeatedly punch all of these local boys into the need for seriously expensive healthcare solutions. But today there's one too many, and their attacks – while needling and not necessarily threatening individually – are coming together to put your next term as mayor under threat. No bin-chickens in sight, your stonewashed denim-sporting partner off smashing up a phone box to see if he can find a steel pipe in it (even though they aren't used in the construction of phone boxes), things do indeed start to get desperate.

Tapping Jump and Attack together, our hyperviolent public servant

extends his tree trunk-like arms out and, with all the grace of a five-year-old after two months of ballet class, spins on the spot. The whirling dervish thanks all the men who were trying to avenge their half-comatose friend, each left in a sprawled heap next to the remnants of a bin, the phone box, and a pile of tyres. There's mild additional damage done to his overall health, but it has been fully effective and has cleared ol' Mike of the immediate threat. Situation under control, he can now go back to doing what he does best: violently assaulting the electorate.

What a wonderful feature it is. 🍷

**“The whirling dervish thanks all the men who were trying to avenge their half-comatose friend”**

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