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Playing with Power

We discussed it for a very long time, but we came to the conclusion that women can't handle that amount of stress." This was the explanation offered by an *Escape from Tarkov* developer in 2016 in response to a question about the lack of playable women in Battlestate Games' hardcore military shooter. The statement garnered renewed attention in recent weeks as *Escape from Tarkov* emerged as a wildly popular title on Twitch. Given a second chance at making a positive impression, Battlestate clarified that playable female characters not only clashed with the game's lore, but would also require too much work to implement.

Needless to say, this statement drew criticism in the gaming press and kicked off the latest round in the evergreen debate about politics, video games, and whether the former should have anything to do with the latter. Well, I have unfortunate news for those clutching their controllers and noisily insisting that politics has no place in games: there's no such thing as an apolitical game.

I'm far from the first person to make this claim; in fact, researcher Holly Nielsen recently did so in these very pages, writing in response to Ubisoft's attempts to depoliticise *The Division 2*. Yet, the simple assertion that games – like all art – are inherently political maintains its dubious status as a litmus test in gaming culture to separate 'social justice warriors' from 'real gamers'.

Of course, some games are explicitly *about* politics. *SimCity* is a game about city management. *Civilization* is about empire-building. *Call of Duty* – white phosphorus and all – is about war, famously described by Clausewitz as the continuation of politics by other means. That said, video games don't need to be 'about' politics or advance a certain agenda in order to be political. In fact, they can't help but be.



JESS MORRISSETTE

Jess Morrisette is a professor of Political Science at Marshall University, where he studies the politics of popular culture.

As Miguel Sicart once observed, "Games can be political. (Dishwashers can be political too: how much electricity does yours use?)." Politics, at least as we understand it in the field of political science, is about relationships of power and authority. It's who gets what, when, and how. This encompasses everything from formal political processes that unfold in the halls of power to the informal politics of the workplace or family. In turn, games are embedded with values that replicate or challenge, explicitly or implicitly, existing structures of power in society.

Moreover, a range of political forces shape the circumstances under which games are created and ultimately consumed. The emergence of *Tetris* as a global phenomenon is inextricably linked to the Soviet economic and legal systems that produced it – to say nothing of the space race imagery that appears in many ports. When CD Projekt Red releases *Cyberpunk 2077* later this year, any consideration of its merits as an RPG will coexist alongside the economic reality of the crunch necessary to push it out the door. Similarly, when we play *Cyberpunk 2077*, we will bring to the table all our own experiences as individuals living within the power structures that shape the quasi-dystopian world of 2020.

At the centre of the *Escape from Tarkov* controversy is a question of representation. What kinds of characters are considered the default, and why? Whether Battlestate's decisions resulted from retrograde prejudices about women in combat, the unassailable lore of a fictional military conflict, or the very real, practical demands of game development, *Tarkov* – and the storm surrounding it – is inescapably political. For video games to truly flourish as an art form, it's time we stopped thinking of politics as a dirty word and started thinking about it as the beginning of a conversation about power and how it shapes the medium. ☹

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WELCOME

One of my favourite things about working on Wireframe each fortnight is seeing how developers can take established genres and turn them into something new and unexpected. In some instances, it might be a case of elevating the Metroidvania with gorgeous artwork and obsessive attention to detail, as Moon Studios did with *Ori and the Blind Forest* back in 2015, and are looking to do once again with this year's eagerly-awaited *Ori and the Will of the Wisps*.

Or it might be taking the rotating puzzle-piece mechanics of *Tetris* and marrying them to the free-roaming 2D critters of *Lemmings* – which solo developer Kevin Andersson has done to endearing effect in *TaniNani* (see page 24). At the further extreme, there's a borderline experimental game like *SuperMash*, which procedurally slams together different genres to make new experiences. Want to combine a 2D shoot-'em-up with a JRPG, or a *Metal Gear*-style stealth-'em-up with a platformer? Well, you can in *SuperMash*.

As Andrew King points out in his review on page 60, these combined genres don't necessarily result in video game gold, but I'm genuinely glad *SuperMash* exists. I love a rock-solid sequel as much as anyone, but it's bold ideas like these that make the games industry so fascinating to explore in 2020.

Enjoy the new issue, readers.

Ryan Lambie
Editor



MAKING A Masterpiece

MOON STUDIOS LOOKS TO IMPROVE
ON GREATNESS WITH ORI AND
THE WILL OF THE WISPS

A

few times when speaking to Thomas Mahler, CEO of Moon Studios, he drops in the word 'masterpiece'. He's chatting about the team's

upcoming *Ori and the Will of the Wisps*, the gorgeous Metroidvania sequel to 2015's superb *Ori and the Blind Forest*; his personal motivations, those of the team, and why – after a decade in existence – the studio will have put out just two games when *Will of the Wisps* launches later this year. Saying you want something you've made, before it has even been finished, to be a masterpiece would feel arrogant – maybe just a bit presumptuous, or pretentious, maybe – in other circumstances. Here? It fits. It just fits.

Ori and the Will of the Wisps might turn out to be a missed opportunity. Something might go wrong. It might just not be that great – *might, might, might*. But it probably won't be: the pedigree is there from the first game, and the fact Microsoft, publishing partners with the team (though not outright owners – Moon retains its independence), has offered a hands-off, take-your-time approach to the development process... well, it's all making

the right kind of noises. Will this sequel be a masterpiece? We won't know that until it's out. But Mahler saying he and the team, distributed around the world as it is, are aiming for it to be one – in this case, it doesn't make us baulk.

As you might have guessed, we had a bit of a chin-wag with Mahler about *Will of the Wisps*: the influences, his hopes and aspirations, that 'masterpiece' chat, and why the game will be the *Super Mario Bros. 3* to the original's *Super Mario Bros.*

"We shipped in 2015 and, since then, we've become a studio of 70 people"

How has the mood at Moon changed since your first game?

We are a completely different studio now – when we started on *Blind Forest*, we were about 20 people. We shipped in 2015 and, since then, we've become a studio of 70 people, and we have multiple projects in development. So it's very much a different studio. Part of what we did over the past few years was just scaling the studio, building the studio to a place where we could work with that many people – still in a distributed fashion.

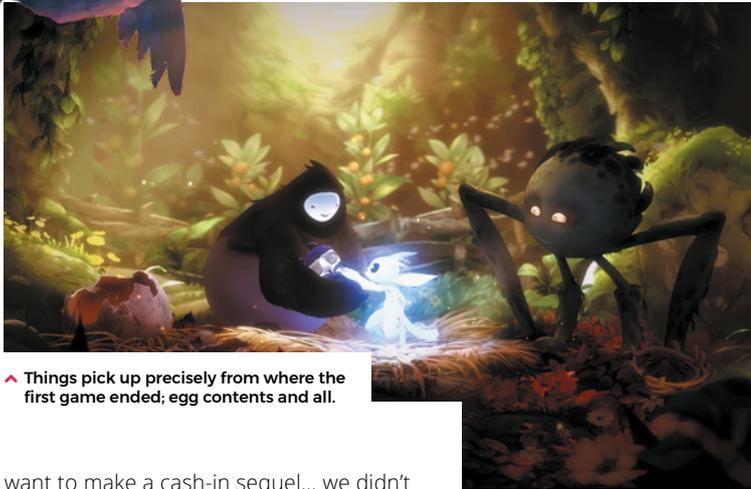
The idea for the studio is still the same; that we try to get this elite talent together, and people who are super-passionate about making these games and want to push and really make a dent in this industry and make masterpieces. But it's a much more mature operation now.

How much did these changes feed into the core design of the sequel?

When we started *Will of the Wisps*, the idea was this: we knew we had something good with *Ori and the Blind Forest*, we were very happy with the platforming controls and so on, and *Blind Forest* was very much about being a platformer. When we started that project, I was frustrated with the fact that if you played your typical Metroidvanias, they usually don't have very complex or even good platforming controls – they're usually just very basic. If you look at something like *Castlevania: Symphony of the Night*, even *Hollow Knight*, things like that, it's very basic; the platforming itself isn't on the same level you'd see in something like a 2D *Mario* game. So, for *Blind Forest*, that was our challenge – we wanted to be up there with Nintendo when it came to the level design and the platforming controls.

For *Will of the Wisps* it was different – we saw we had a lot of good stuff, but what was very clear to me is that we didn't →

▲ Ori's journey aims to be more open and replayable than last time around.



^ Things pick up precisely from where the first game ended; egg contents and all.

want to make a cash-in sequel... we didn't want to make a boring sequel – we're not that kind of studio. We've always been looking for partners who allow us to do this, and Microsoft has been excellent with that – [they've] really understood our mission to be the kind of studio that Blizzard used to be in the late 1990s and early 2000s, where you know these are a bunch of crazy people who just polish the hell out of their games and try to make masterpieces. Whenever they ship something, it's going to be exciting.

I've been making comparisons to *Super Mario Bros. 3* – if you look at those games, the first *Super Mario Bros.* was a very basic platformer. It was good, it revolutionised how a platformer worked, with scrolling and really nicely designed levels and so on – then they had the challenge of what to do with *Super Mario Bros. 3*. They added all these other elements that really benefited the game – now you had the overworld map, a little bit of non-linearity, you had the suits, you could fly, there were so many elements added that just made the whole experience deeper and more satisfying. You could play the game again and maybe not use the Tanooki suit, and experience the game in a different way. It was a natural evolution, by adding more stuff and more elements... and that's what we did with *Will of the Wisps*.

How do you design good platforming 'feel'?

Constant iteration. Every level of *Ori* is designed so that every jump feels really good... For the controls, though, it is

constant iteration. On *Blind Forest*, we spent over a year and a half just honing the controls, making sure that it felt really good for every jump, every ability, that everything you could do felt really good. For *Will of the Wisps*, we pushed it even further – we looked at the tightness, the thresholds and everything, and just tried to make it even tighter... It's just designers sitting down with programmers and trying that jump

"We didn't want to make a boring sequel – we're not that kind of studio"

a hundred times, changing values by 0.02 percent – it's crazy, but a lot of times we get to the point where it's like, 'OK, that actually feels good'. There's a certain art to it, there are certain values where the human brain is just, 'Yes, this feels right'. The only way you get there is by trying and failing, trying another value, failing, trying again, until you have it all working together.

Are there any fundamental aspects that have changed?

It's still a Metroidvania, but it's more open. I would say *Blind Forest* was a lot more linear; with *Will of the Wisps*, it really opens up at some point, and you can do what you want. I think that'll be really interesting to see how people play the game, what they tackle first, or if they get lost in exploration.



^ How most of us feel on encountering a regular house spider, we're sure.

But the core itself – it's a platformer, it's about tight level design – there's a lot of precision platforming in there, that we still have. It's just intermingled a lot more with all the new aspects.

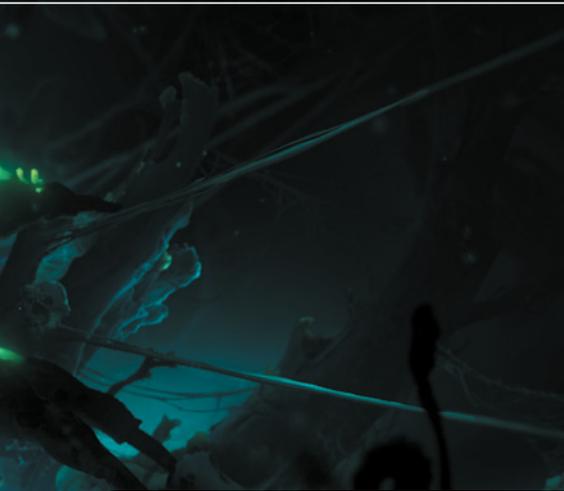
What changes from a tools and pipeline perspective have you made? How does working on a sequel change things?

The thing with these projects is that by the end of production, the tools are really refined; it gets a lot easier to design levels and put pieces in and so on. But generally speaking, we wanted to take it to the next level – we didn't want anyone to feel like it was just a straight-up sequel; I wanted people to feel like this could be *Ori 3*, and we'd skipped over the second game, because it's such an extensive new thing.

Engine-wise, we're working really closely with Unity on the core side because



^ Sometimes you just need a minecart section. And sometimes you need an upside-down minecart section.



there's a lot of optimisations we have to put into the engine, to make the game look like that and feel like that and still maintain a super-stable performance where it runs at 60 frames per second on consoles, and at 120 or 240 hertz on PC. Our tools and the engine has changed so much that we started calling it the Moon-ity engine – most of the things we do in Unity is actually our own stuff now. It's just constant iteration on those tools and trying to perfect the workflow for everyone. We have a lot of social tools in our pipeline, because we work in a distributed fashion – with 70 or 80 people it's always a challenge.

Two games in ten years – what are your thoughts on this boutique approach?

We like it. I'm super-appreciative of Microsoft that they've allowed us to work in this way – they didn't just ask for a sequel in a year, they've never been like that. We approached them and pitched a sequel, but the last thing we wanted to do was a quick sequel. We wanted it to be substantial. I think it's similar to Playdead – I think they've existed longer than us and they've made *Limbo* and *Inside*, that's it. I like that approach, because we always try to create masterpieces. Games where we're like, 'If that ships, that will make a dent'; [a game] people would really connect with, and a project we'd done everything we could have to make it something masterful.

Would you say the original *Ori* is a masterpiece?

It was our first effort – we're proud of what we did, for sure. It was so hard to build the studio, to work remotely with those 20 people, and have these huge ambitions, then ship it. Just going from being a cinematic artist who did

prototypes on the side, to pitching that, to getting picked up by Microsoft – there's a lot of stuff that if you asked gamers, they would never know. A lot of what it takes to actually build a studio – to build a company. We were very proud of *Blind Forest* and what was shipped there... it's a hard question. To me, I'm proud of what we shipped. It's a good game. It's a very good game. Obviously, there are things I felt could have been better, otherwise, I wouldn't have done a sequel.

How can you maintain a level of emotional impact and involvement for a sequel?

We have the story about this orphan, basically, who lost his mother and then went through all this stuff, [and] had this experience. Then for *Will of the Wisps*, it was more about siblings this time around, and how that affects your life; so, taking the human aspect of someone's life, *Ori* is very much an allegory.

We tell these fantastical stories with forest spirits and weird creatures and so on, but really, in the end, it's all about the human aspect. The reason why people connected to those characters we had in *Blind Forest* is simply because, well, when *Ori's* mother dies, immediately what you have in your head is if you went through that experience, if you lost someone that you love, that's what pops into your head.

For *Will of the Wisps*, we did a similar thing – it's not just about following the story up, it's about asking what the human core is here: how can we tell a story and connect it again and really make ourselves vulnerable again, and tell a story where people can really connect the dots with their own lives.

If you can make those connections, and really connect to someone on that level, then I think something magical happens. I'm pretty sure by the end, when people finish *Will of the Wisps* – well, I already know, and it sounds like a bit of a loaded thing to say, but I already know – the ending will hit them really hard. 🙄

***Ori and the Will of the Wisps* will launch 11 March on Xbox One and PC**



^ Combat has been a big focus for the team at Moon Studios, with responsiveness and satisfaction key.



^ It's gorgeous, enchanting, and likely to be the sort of thing that has you in fits of tears by the end of it. Huzzah!

REMOTE CONTROL

Is a distributed development team something Mahler recommends to everyone? *Maybe*. "It highly depends on the studio," he says. "For us, it obviously works really well, but then we've spent ten years building that – building the tools and pipelines and so on. We tried to stay small – 70–80 people is not super-small anymore, but it's still nothing compared to Blizzard, where I used to work, where they had 150 people just in the cinematics department.

"I always wanted to have a studio that feels more like a family, where you really know exactly what everybody's doing, friendships grow through it, people really gel with one another because... it's almost like you want it to feel like a band. People come together and they can jam, and maybe something good comes out of that, [and] they really feel like they're building something great here."



Grapes of **wrath**

The action adventure and social sim that counts as one of your five-a-day: it's Garden Story

Info

GENRE
Fruit-'em-up

FORMAT
PC / Mac / Linux

DEVELOPER
Picogram

PUBLISHER
Rose City Games,
VIZ Media

RELEASE
TBC

The soothing tone, the acres of green space viewed from above; there's much about *Garden Story* that, at first glance, looks akin to *Stardew Valley*. But while the game has its nurturing side – tending to crops, gathering resources, and crafting tools are all part of the package – developer Picogram is more keen to emphasise its action-RPG elements. Taking control of a plucky grape named Concord, it's your job to restore an island ravaged by a mysterious, corrupting force called the Rot; so as well as farming and foraging, you'll be journeying into the murkier recesses of the map, bashing enemies, collecting loot, and solving light puzzles.

"I set out to make something influenced strongly by the few Game Boy Advance *Zelda* games I played a lot as a kid," Pico tells us. "Mechanically, Concord plays a lot like an action RPG character, but I'm throwing in a bunch of my favourite village sim mechanics, like gathering,

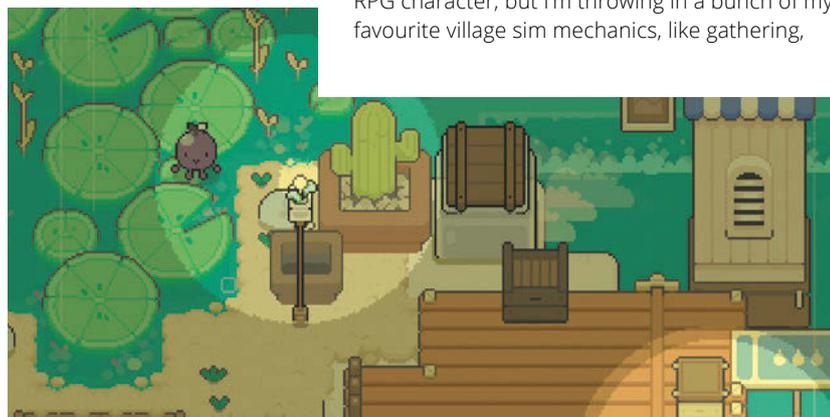
requests, and libraries. If *Zelda*'s my foundation, *Animal Crossing* and *Stardew Valley* are the gray on top."

Where social sims like *Animal Crossing* and *Stardew Valley* were open-ended, then, *Garden Story* has a specific goal to achieve: reunite the four disparate regions left disconnected and ravaged by the Rot. There's a mystery to solve, too: the origin of the malaise that threatens the island, and how it can be repelled. Not that the game forces you to plough through the narrative and uncover all the secrets within a handful of hours or so; in a nod to its social-sim forebears, *Garden Story*'s the kind of game you can relax into and enjoy at your own pace.

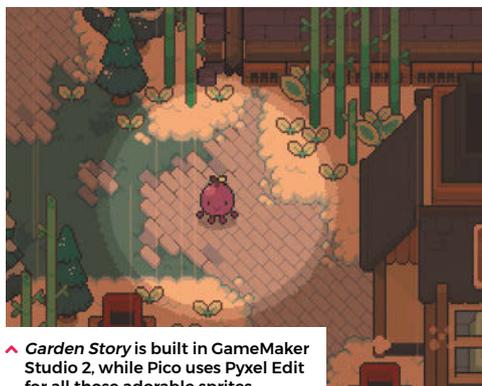
"While I would describe the Rot as the 'enemies' of *Garden Story*, I've tried to push the narrative focus more on the Grove's different villages reconnecting," Pico says. "Conflict is an obvious choice for urgency and action, but perhaps not best for a game like *Garden Story*, where I emphasise community and comfort more. It's hard to place the game into a specific play-length, but I've run through the story objectives in about six hours. Of course, I was cheating my way through, and who knows how grindy I'll make some of those objectives in the end."

The appropriately named *Autumn Town Demo*, released for a few months late last year, gave a taste of *Garden Story*'s variety: chatting to the locals – a charming rabble of frogs, fruits, and vegetables – smashing gooey enemies for resources, and completing tasks left on the village notice board. There's a clean simplicity

✓ Although it looks a lot like *Stardew Valley*, *Garden Story*'s more inspired by *Zelda* and JRPGs, although its story unfolds on a much smaller canvas.



garden story



^ *Garden Story* is built in GameMaker Studio 2, while Pico uses Pyxel Edit for all those adorable sprites.



^ *Garden Story* is "a huge jump up from the projects I've done before," Pico says. "It's all sorts of energising and terrifying, but people I trust say I'm doing a good job."

to the game's presentation that extends to its controls and interface. The Dowsing Rod item, in particular, is pleasingly like a Swiss Army knife; you can use it to fish objects from the water, as well as strike out-of-reach foes and snag the loot they leave behind. *Garden Story* already looks and feels reassuringly polished – which is all the more impressive given that it's Pico's first commercial release, and a project he's building almost entirely by himself (albeit with composer Graham Nesbitt handling the chilled-out music).

"Garden Story's a game you can relax into and enjoy at your own pace"

"It's surely a juggle," Pico says when we ask him about working as both the game's artist and programmer. "It's hard to say where I stop thinking of mechanics and start thinking of art instead. One of the big perks to solo development is that I'm able to think about all portions of the game side-by-side. It can be a bit overwhelming at times, but it definitely creates an oddly faster development process."

Similarly, balancing all the things the player can do is a tricky task – though Pico hopes that *Garden Story* will ultimately offer something for just about everyone. "There's definitely no promise that each section of the game will be

equally entertaining to different people, but they can still choose what to focus on," he says. "Each town has requests unique to its needs, and the player can kind of pick and choose which community feels like home. For example, Winter Glade is always in need of kindling to keep the town warm, while Autumn Town's broken foundations need constant repair."

As for developing a social sim-action RPG hybrid by himself, well, Pico adds that an element of uncertainty's all part of the process. "The first thing I learned in development is that

you can't be sure about anything – sorry to everyone with anxiety who works in games. I love sweating the small details, so I want to keep

the Grove full of optional content. While I want a straight-action RPG play style to be viable for people who want to do that, I'm still developing the kind of game that I'd like to see on the market more."

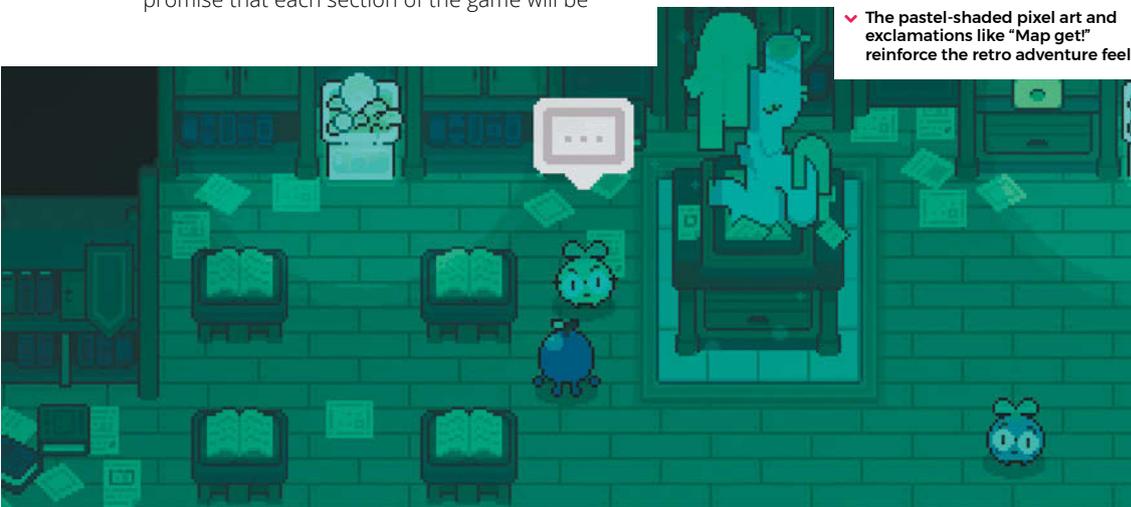
Garden Story still has a way to go before completion ("I'm just coming up on my Beta milestone, and that's a wild ride," Pico says), but having sampled just a morsel of the game's wholesome, soothing mix of nurturing and adventuring, we can safely say we're hungry for more. 🐾

BITE-SIZED DELIGHTS

If you're keen to get a taste of Picogram's style of game design, there are a couple of game jam projects you can try out at picogram.co. Our favourite? Undoubtedly *P.E. Noire*, an entertainingly deadpan point-and-click browser game about a hard-bitten hall monitor on the hunt for a student who specialises in forging sick notes. "I'm shamelessly inspired by the noir-themed comics of Bill Watterson's *Calvin and Hobbes*," Pico says. "I totally ate that up when I was a kid, and that kind of whimsical self-awareness really shaped my sense of humour growing up."

Once you've played that, give *Goodbye Doggy* a spin – it's a poignant yet heart-warming little piece about a family grieving for their lost pet. "I strongly believe that warmth is one of the best things a game can convey to a player," Pico says. "I'm really glad that *Goodbye Doggy* resonated in that way with so many people. Now everyone, please stop sending me pictures of your dead pets – my heart can't take it."

^ The pastel-shaded pixel art and exclamations like "Map get!" reinforce the retro adventure feel.





The Kondo effect

Thinking outside the box in Unpacking

Info

GENRE
Tidy-'em-up
FORMAT
PC
DEVELOPER
Witch Beam
PUBLISHER
Witch Beam
RELEASE
Late 2020

▼ This game might inspire you to clean your own kitchen afterwards – it's nice to be neat.

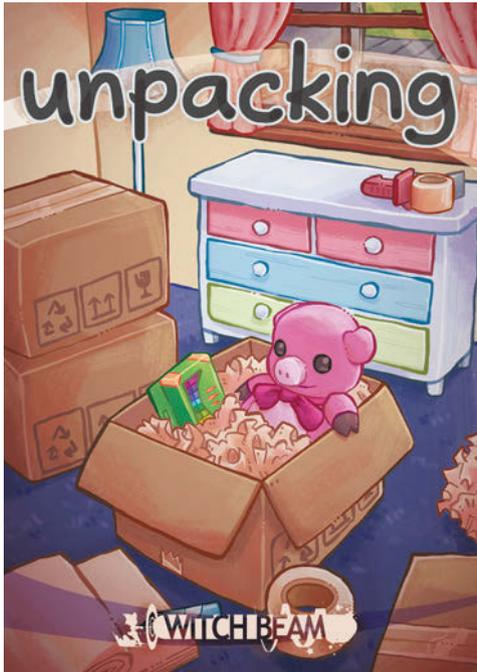
In *Unpacking* you're presented with a series of rooms, each containing a pile of boxes to unpack. The clue's very much in the name, it seems. An early demo version developer Witch Beam has been showing off features a child's bedroom and a kitchen, and as you unpack each box, you need to decide on logical placement for each object. You can rotate objects, place some items on top of others, stash them away in drawers – eventually, by the time your boxes are unpacked, just about every viable spot in the room will be filled. Once you've unpacked all your boxes, anything placed improperly will glow red until you find a proper place for it: in the kitchen, for instance, you'll want to put the rice cooker in an alcove, not on the draining board. There are no high scores, no timers, no side objectives – you can take your time and get the room looking exactly how you want it.

Unpacking's creators, Wren Brier and Tim Dawson, were inspired by a real-life move.

"It was when I moved in with Wren, actually," Dawson says. "The packing process was kind of complicated because I'd been living at my previous place for five years, so I had loads of crap built up. But we did a big cull before we moved. When we got to this place, we had a nice set of curated boxes that contained possessions I really wanted. We had this pile of boxes that contained stuff I not only owned but liked." The pair hadn't labelled the boxes, so the contents of each one was a surprise as they opened them, which led to exciting discoveries on each opening. "As we were putting it all away, it felt kind of game-like," Dawson recalls. "So we were talking a lot about hypothetical games." Brier remembers suggesting the idea of an unpacking game "kind of as a joke," but the concept gained traction between the two. "We were looking for something to work on together as a side project while we pursued our actual jobs," Brier says, "but this one kind of took off and became our actual jobs."

Unpacking is a Zen experience, and a celebration of tidiness and rediscovering your possessions. The complete absence of a scoring system strengthens the game's sense of purpose – it's about appreciating the act it depicts, rather than mastering it. "I never thought about a score system", Brier says. "It just didn't occur to me to think about. It was always about the joy of unboxing things." Dawson says that, while he briefly considered potential metrics to "evaluate" the player like a scoring system or a timer, ultimately it didn't make sense for *Unpacking*. "It's that kind of thing where you assume 'Oh, at some point we'll add a score





▲ *Unpacking* is looking like a very nostalgic game, but you'll spend a lot of time cleaning adults' rooms too.

system', but it never fitted very well," he says. He describes the actual act of playing the game as being "like popping bubble wrap."

Instead of score-chasing, *Unpacking* focuses on telling a story. While originally it was going to be about unpacking possessions belonging to a variety of folks, the pair eventually decided that it would be more engaging to follow a single person's life from childhood onwards, unpacking rooms within each of their homes as they grow up and move. "The idea is that we're trying to follow each of the moves," Dawson says. "You only see the unpack, but from that, you can connect the dots and imagine what happened in-between homes." Where some items can and can't go will be part of the storytelling process, too. In the child's bedroom, for instance, you can't leave the diary lying out – it needs to be hidden, which tells us that the character wants to keep it a secret. Dawson describes this as a "stealth storyline," where you'll be able to absorb the life of the person you're unpacking for without necessarily realising that you're being told a story.

There are two guiding principles to the process of unpacking in the game: every object must have at least two spaces in the room where it can go, and every item must be put 'away'. This means that you can't leave objects scattered on the floor, for instance, but

"Instead of score-chasing, *Unpacking* focuses on telling a story"



▲ You can't just leave your toys scattered around the ground – don't try to argue that you're busy playing with them.

there's scope to personalise the experience depending on your own sense of how the room and the objects within it should fit together. "Initially, when we made our first rooms, I just went by what I do, and how I like to organise a kitchen," Brier says. "And that was not exactly how other people organise their kitchens, and people would get upset that they couldn't put things where they wanted. We realised we had to relax the rules and give people more options. We learned a lot from playtesting."

When Dawson and Brier show their game at conventions, the most frequent comment they get from players is that it feels like the game was made specifically for them. "They always understand immediately what to do," Brier says. "It's so clear when you're presented with a room with some boxes in it that what you're meant to do is unpack them. This has been clear to people from kids seven years old and up. Anyone and everyone can understand what to do in the game." *Unpacking* is intentionally an uncomplicated, easy experience, and it's shaping up to be extremely satisfying. 🗨️



▼ Placing the cheese grater on top of the fridge is probably going to be judged as improper.



Headlines

from the virtual front



02



03

01. Run out

Super Lucky's Tale developer Playful Studios has laid off a significant portion of its full-time team, in a move its founders say will help move 'to a more streamlined production model'.

"Continued changes in the global video game marketplace require Playful to evolve its approach to the development and production of our current and future projects," a statement from co-founders Paul and Katy Drake Bettner read. "The studio will be pivoting to a more streamlined production model based on distributed game development and dynamic, project-based teams."

Full numbers of those laid off hadn't been made public at the time of writing.

02. Atari... hotels?

Yep, that's about it. Shut down the news forever, we're done. A bunch of Atari-branded hotels – with gaming spaces included, of course – are planned to open around the US, with the project headed up by Napoleon Smith III, one of the producers on the *Teenage Mutant Ninja Turtles* movie reboots. Obviously.

Eight hotels are planned to be constructed later this year across the entire US, and the properties will include VR and AR areas, as well as dedicated esports rooms. "When creating this brand-new hotel concept, we knew that Atari would be the perfect way to give guests the 'nostalgic and retro meets modern' look and feel we were going for," Smith said. "Let's face it, how cool will it be to stay inside an Atari?!"

03. Buttery smooth

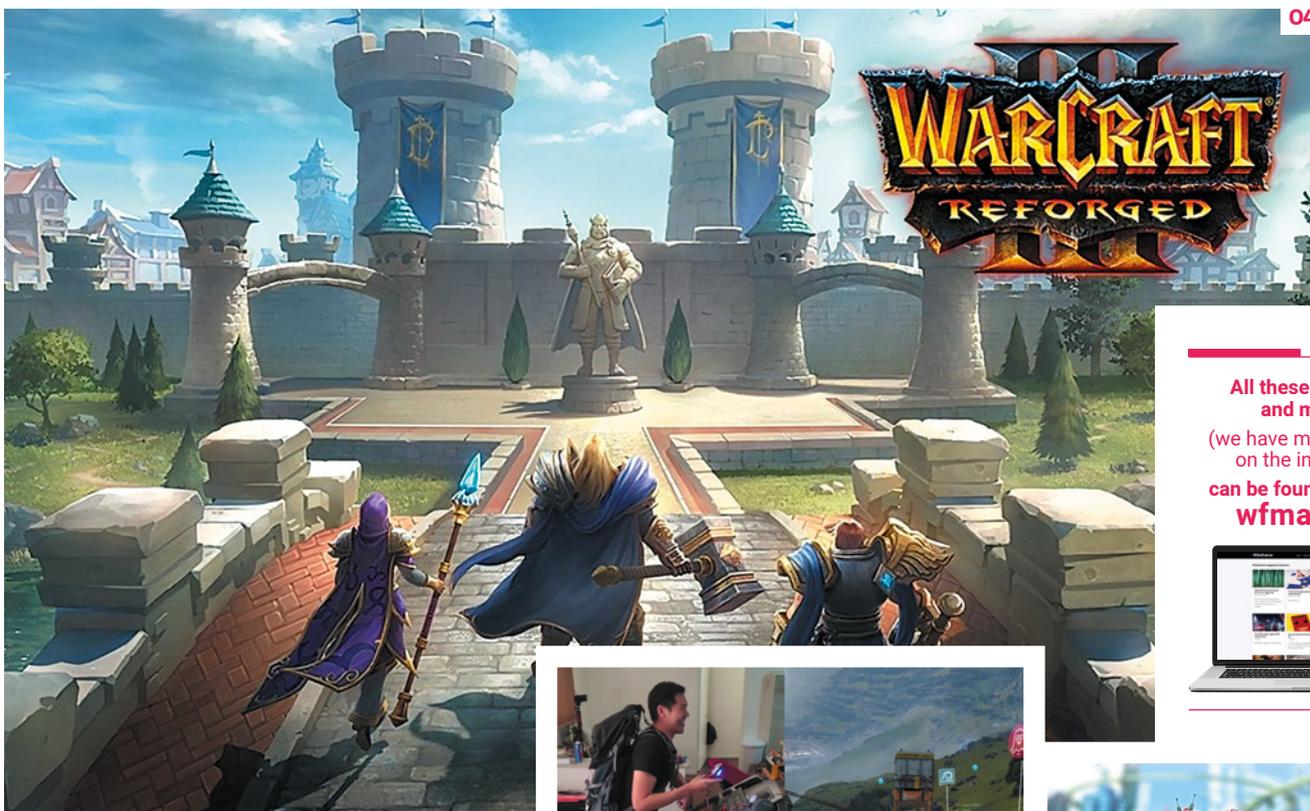
Xbox chief Phil Spencer has been talking ambitions for the next generation of consoles, and instead of hailing the rise of the 8K, the exec is instead talking up the benefits of higher frame rates. This, in case you're unaware, is smart talk – everyone can benefit from better frame rates (be they 240hz monitors or just consistent 60fps), whereas very few can hit those high-resolution notes currently.

Speaking with Stevivor, Spencer said: "I think we've reached a point with Xbox One X in the generation where games look amazing, and there's always work we can do to look more amazing. But I want games to feel as amazing as they look... As we were looking at the future, the feel of the games was definitely something that we wanted to have more focus on, not just throwing more pixels up on the screen."



Sega's PC games will use fully recyclable packaging in future

Valve hiring psychologist; this is all absolutely fine



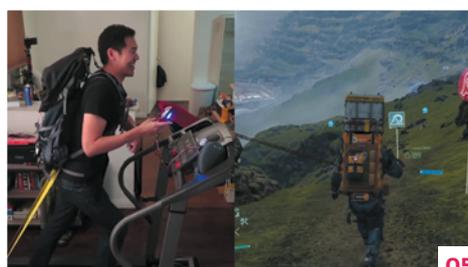
04

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



04. Reforging

Blizzard's just not having that great a time of things when it comes to community relations recently. Adding to its pile of despair is the recent launch of *Warcraft III: Reforged*, a remake/reskin of the original 2002 RTS. Announced in 2018, the reworked game should have been a high-def upgrade of a still-popular title that paved the way for the likes of *DotA* and the entire MOBA genre. Instead, it's proving a disaster – to the point where the publisher has been offering no-questions-asked refunds. The biggest of the community's peeves is the updated EULA, which allows Activision Blizzard to claim ownership of anything a player creates in the game – so if a new *DotA* were to emerge from *Reforged*, it would immediately be property of the publisher. That's... rough.



05

05. Running simulator

Death Stranding already has a lot about it that's discussion-worthy. Instead of rehashing the talking points surrounding the game, though, YouTuber Allen Pan decided to go a different route: making a treadmill controller for the game. Obviously. By tinkering with a PS4 controller and a treadmill, Pan was able to make something that... well, it worked. Simulating Sam Porter Bridges's endless trudge through the post-apocalyptic United States, as well as doing a good impression of the heavy loads the man has to carry, it's really worth a watch: wfmag.cc/DStread.



06

06. Wonderful

As you'll see later this issue, we decided to do a write-up on the Wii U and its best exclusives. No sooner had the piece been submitted, than PlatinumGames launched a crowdfunding drive for *The Wonderful 101* to be remastered and brought to modern consoles. And not long after that, it had raised around £1m on Kickstarter. As such, we're going to put this down as one of the most irritatingly timed but all-round brilliant conspiracies that has ever existed. The new version of the game will release on Switch, PC, and PS4, and we can't wait.

Plague Inc. devs: 'Don't use our game as advice tool for coronavirus outbreak'



Senior *Hearthstone* devs working on new, secret project. OooOooh...

Survivor

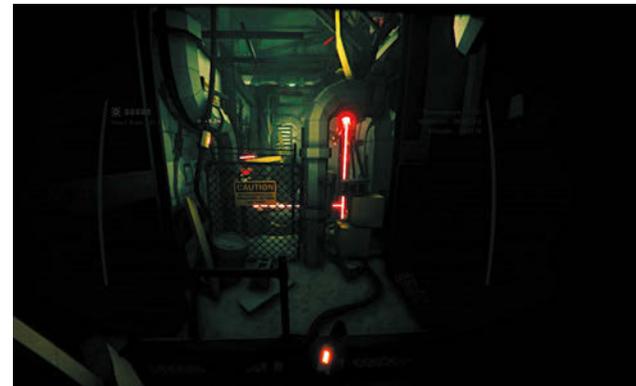


Last Oasis ↗

The ever-growing pile of survival titles on offer makes us wonder whether the games industry's preparing humanity for the ecological disaster that threatens us all in the real world. If so, *Last Oasis*, due out this year, offers a novel solution to scratching out an existence on a ruined planet: form clans, and trundle around the parched landscape in wooden, mobile bases. Inspired by the kinetic sculptures of Dutch artist Theo Jansen, these bases are a captivating subject for a video game all by themselves: spindly, multi-legged, and vaguely insect-like, they can be modified to fight enemy factions or harvest crops. Then there's the MMO wrapper that surrounds these perambulating war machines: expect a fair smattering of travel, trading, and territory control, and keep an eye out for a breed of giant worms called The Long Ones. Resembling something out of Frank Herbert's *Dune* (or Kevin Bacon's *Tremors*), these slithering monstrosities are capable of smashing your painstakingly constructed base into matchwood. The world developer Donkey Crew has created for *Last Oasis* looks fantastic in all the right ways; if they can get the MMO bit right, we should be in for a treat.

Artificial ↘

Lone developer Ondrej Angelovič is crafting a great-looking first-person adventure here: it's a survival tale that sees you avoiding deadly lasers and solving physics-based puzzles in an underground facility on the verge of collapse. Created in Unity with low-poly models, Angelovič's sci-fi outing is proof of what can be done with clever lighting and imaginative stage design.



← Hidden Through Time

Crazy Monkey Studios previously brought us the comically violent *Guns, Gore & Cannoli* games, but *Hidden Through Time* sees them in quieter, less manic territory. It's a hidden object puzzler, enlivened by the studio's charming hand-drawn artwork and the added appeal of a built-in level editor. So as well as, say, combing through an ancient Egyptian scene for hidden coconuts and crabs, you'll be able to make and share your devious creations with the rest of the world.





Inkulinati ↗

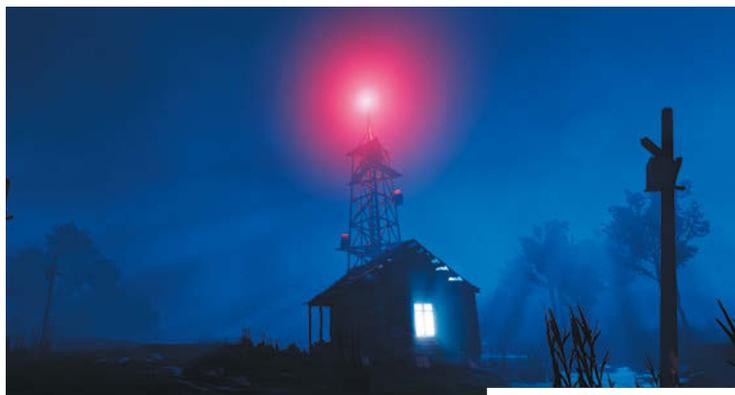
A turn-based strategy game where rabbits, dogs, and other animals fight to the death with swords and arrows? Why yes, we do like the sound of that. Add in a visual style that can only be described as *Python*-esque (developer Yaza

Games have taken inspiration from an assortment of medieval manuscripts here), and *Inkulinati* has all the makings of the quintessential indie game: the kind of one-off diversion you'd never find anywhere else.



Weaving Tides ↗

At last: a fantasy game about the process of making carpets. Flying around on the back of your dragon with a long thread dangling from its tail, you're asked to flutter over and under criss-crossed fabric – all the better to solve the various environmental puzzles dotted around each stage. You can also use the same dragon-based weaving process to flip pesky enemies on their backs, or destroy them by tying them in knots. An epic yarn that'll leave us in stitches. (*You're fired* – Ed.)



Nightwalk ↗

German developer OneVision Games specialises in making ambient experiences with a sci-fi edge – their previous titles include *Essence*, released in 2017, and *Ascendance*, which came out the following year. *Nightwalk* is one of several games the studio has at various stages of development, and will, once again, be more about weaving a soothing, exploratory narrative rather than a pulse-pounding exercise in tension. As well as *Nightwalk*, OneVision also has the games *Cosmosa* and *Dystoa* pencilled in for a 2020 release. We can only assume they never sleep.

Mutropolis ↘

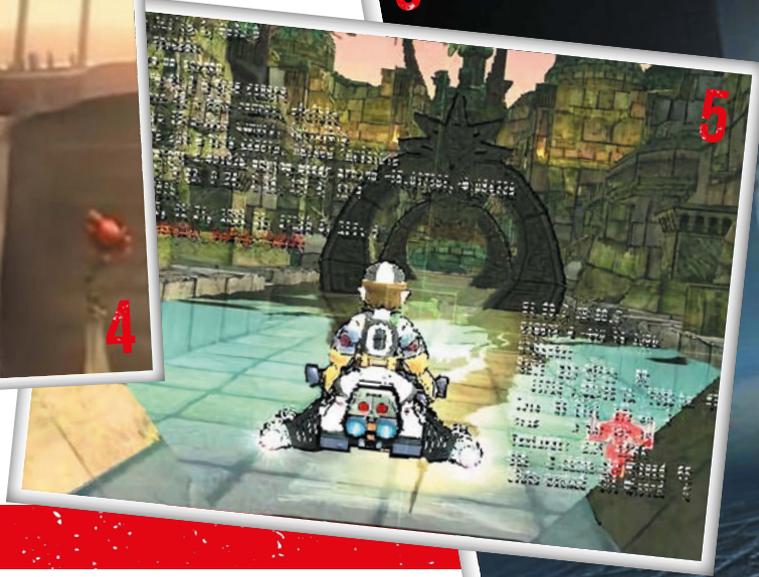
This point-and-click adventure offers up a far cosier post-apocalypse than the dusty *Last Oasis* (see opposite). It follows the trials of Henry, a 50th-century archaeologist who pokes through the detritus of a centuries-old society – in the future, objects marked 'Made in China' are prized historical artefacts. Expect lots of gorgeous (and award-winning) painterly artwork, and a roster of enjoyably eccentric characters.





LOST AND FOUND

THE STORIES OF CANCELLED VIDEO GAMES





EXPLORING THE WORLD OF CANCELLED VIDEO GAMES, AND HOW WE SHOULD PRESERVE THEM

WRITTEN BY **STUART MAINE**

Making video games is tricky. They require a unique blend of artistic vision, technical know-how, and also luck. Games often take years to create, yet consumer tastes and business realities evolve extremely quickly. As a result, there are many reasons why a game that's in development might be cancelled; many are canned during the initial prototyping stage, since the entire point of creating prototypes is to rapidly iterate through ideas. Most prototypes don't look anything like the final game – with placeholder assets used for speed – which means they're often cannibalised to create the next prototype, and aren't often archived.

If an idea has potential, then a small section of the game may be created – often called a 'vertical slice' – with as close to finished art and gameplay as possible. If stakeholders review this and decide not to go ahead with the project, the vertical slice is often thrown away and may only survive if a developer makes a copy of it.

Games are also cancelled simply because of financing: full-sized

development teams are expensive, so if a game's production goes on too long (due to unforeseen problems or 'feature creep' moving the goalposts), or if whoever's paying the bills runs into trouble, then money can soon run out. This creates a race against time to secure new funding before the team disperses, either onto other games at the developer or, in the worst case, to find new jobs.

Finally, and most frustratingly, games are occasionally cancelled after completion, but before release. It's been true for a long time that simply making a game isn't enough to guarantee success: marketing is also a critical part of the equation. Major publishers can easily spend as much on promoting their games as they do making them, so if a company doesn't think it's worth spending that extra money, they can decide to cut their losses and never release the game.

While it's frustrating for players looking forward to a game that's announced but never released, it is, of course, the dev team that really suffers – as pointed out by Richard McClaghry, industry veteran ➔

1. A once-promising Lucas-verse game we'll probably never get to play: *Star Wars 1313*, an action-adventure that withered with LucasArts' closure in 2013.

2. No article about cancelled games would be complete without a mention of Hideo Kojima and Guillermo del Toro's *Silent Hills*. Even its demo, *P.T.*, has vanished into the ether.

3. *Dangerous Games' Team SAS* was canned in the early 2000s. Its 'autonomous AI playing the game without you' approach was innovative for its time.

4. A handful of grainy images and snippets of footage are all that publicly remain of *LMNO*, a collaboration between publisher EA and director Steven Spielberg.

5. *Ion Runner*, an unreleased "jetbike shooter-ish thing", was in development at Attention to Detail until the studio's closure in 2003.

6. F.3.A.R. studio Day 1 began work on Victorian-era Batman game *Gotham By Gaslight*, but THQ failed to secure the rights to the comic.

CANCELLED



SOUTH PARK SHOOTER
Ubisoft

Ubisoft was working on a *South Park* FPS using the *Ghost Recon* engine many years before *The Stick of Truth*. A four-player co-op title focused on puzzle-solving, with environment-changing weapons, it was cancelled owing to disagreements between Ubisoft and *South Park*'s creators.



GO! GO! BECKHAM!
Rage Games

A Game Boy Beckham tie-in did emerge, but this GameCube version – which would have seen players kicking footballs at enemies – never ended up releasing. Why? Because the Game Boy version flopped, taking the GC version down with it.

and managing director of Well Played Games, who worked on several unreleased games including *Travelling Mama* and *SkySaga*. "It's always difficult when a game is canned, because a lot of the time it's outside of your control," he says. "You and the team have invested a lot of emotional energy into the game, working on it for months. You get really bought in and work hard to make it great."

Peter Kain, former project manager at Radiant Worlds, concurs: his studio's free-to-play MMO *SkySaga: Infinite Isles* (which McClaughry also worked on) was suspended indefinitely in 2017 after approximately three years in development. "I often think 'what if?'," Kain says. "If a few decisions or events happened differently, would the game now be out and doing well?"

"Game development is a turbulent industry," observes Ken Hall, now a creative director on the upcoming MMO *Destiny's Sword*, and formerly an art director on the cancelled shooter, *Team SAS*. "Stuff happens; companies, projects, and jobs come and go. But even with these expectations in mind, losing *Team SAS* was particularly difficult."

In development at Dangerous Games (previously Rage Bristol) around the year 2000, *Team SAS* had the involvement of SAS

**LOONEY TUNES:
GALACTIC GAMES**
Blitz Games

The cast of *Looney Tunes* would have taken part in a bunch of ridiculous sporting events in this unreleased PSP title, which disappeared alongside Blitz Games when the studio went bankrupt. It was never even announced, so was unlikely to ever be rescued.

veteran and author Andy McNab, and a cunning innovation in the midst of its fiery action: four soldiers moved through the levels under AI control, which the player could drop into and take over at any point. Despite Andy McNab's involvement, the game played fast and loose with reality; there were score multipliers, one character carried a mini-gun, and a Hind helicopter gunship kept turning up as a boss. Certainly, the developers at Dangerous Games thought they were onto a winner with *Team SAS*. "We had an amazing team, and an incredible celebrity in Andy McNab," Hall says. "Andy wasn't just consulting, either; he donned a skinsuit and gave our motion capture a dynamic realism that no actor could match. We had weathered the collapse of Rage Games, our parent

company at the time, and bought the rights to *Team SAS* back from the receivers; [it] had even become one of Xbox Magazine's 'most anticipated' titles."

Despite all of this, the game was cancelled when a new publisher couldn't be found quickly enough to keep the team together. Today, all that remains of *Team SAS* are scans from magazines and a demo build for Xbox test kits.

RUNNING ON EMPTY

Ian Mayor, now senior narrative designer at Ubisoft Reflections, has a cancellation story of his own: a promising sci-fi action game called *Ion Runner*. In development at British developer Attention to Detail, perhaps best-known for its *Rollcage* titles, *Ion Runner* was a "jetbike shooter-ish thing" that Mayor praises for its "satisfyingly heavy-floaty handling model."

Regrettably, the game failed to find a publisher, and the studio went bust in August 2004. "It had a lot going for it, and remains a fond memory," Mayor says. "The game's fate was sealed because no one had a handle on what it was. It was conceived as – and could have been – a *Panzer Dragoon*-like on-rails shooter, but the temptation to take the main character off the bike and add platform elements really muddled the vision. The studio, like lots of smaller devs, was in trouble anyway,



BINGO BLITZ PopCap

So lost that we can't find an image of it, *Bingo Blitz* played as a mix of match-the-object and racing game – the more matches you made, the faster you went. Associated with a specific team member at PopCap, when they left the studio, the game died.

▼ *Team SAS* was previewed in various magazines in the early 2000s, with ex-SAS soldier-turned-author Andy McNab's involvement generating interest.



and who knows what might have been with a little more time and a bit more vision. But it was a great team and a charming project to work on."

AD-HOC ARCHIVING

Whatever the reason for a game's cancellation, there's always the question of what should happen to the unfinished assets left behind. When a project ends, there are often remnants which survive, even if it's just a personal copy made by a team member. If archiving a copy like this is something of a legal grey area, then later releasing that material to the internet is even more dubious. It does happen, though, particularly if the original studio or publisher is no longer around.

Developers might keep playable (though often rough and unfinished) builds, documents, videos, and concept art, either for their CV or just to remember a game they may have sunk years of their life into. But should we be making more effort to archive these materials, or are they basically irrelevant, considering the game was never released anyway?

James Newman, professor of digital media at Bath Spa University and head of collections at the National Videogame Museum, certainly believes in the importance of archiving. "As a museum, one of our driving principles is to reveal ➔



SKYSAGA: INFINITE ISLES Radiant Worlds

Mixing MMO with *Minecraft* should have been a winner, but *SkySaga* only managed to reach the stage of closed beta before being taken in-house by its Korean publisher, never to be seen again. Probably.



^ Dedicated fans have found and restored games such as the unreleased *Resident Evil 1.5* from demos and prototypes, usually without permission from the original developer.

POSSESSION

Volatile Games

In this mix of third-person combat and RTS, players controlled a zombie master who would be able to control hordes of the undead. Funding appears to have been the main reason this one never released, with not enough cash secured to get it finished.

what we call the ‘hidden histories’ of video gaming,” Newman tells us. “That means we spread our net extremely wide when it comes to collecting and exhibition, and we’re just as interested in the games that don’t make it to completion as we are in best-selling blockbusters. As historians and researchers, we’re interested in the contexts in which video games are created, developed and, sometimes, cancelled.”

It’s not just a cancelled game’s code that’s of interest, either, Newman adds: it’s also the material that goes around it, whether it’s a design document or an old cover-mounted demo from a magazine. “Digging into the design documentation or examples of in-development test builds are absolutely the kinds of materials we’re interested in collecting and showcasing,” he says. “Another really interesting area for us is games distributed on magazine cover discs and cassettes. In the case of games that are subsequently cancelled, the videos or playable demos on these cover mounts offer us a fascinating record of what might have been.”



STAR TREK: INFINITE SPACE Gameforge

A F2P MMO with players commanding fleets of starships in top-down battles, *Infinite Space* was ultimately cancelled owing to creative differences and a muddled vision – alongside rumours of an understaffed studio unable to realise the project’s scope.

LEGAL ISSUES

Archiving unreleased games is a worthy goal, but contracts and licences often complicate matters. Say you once worked on a *Star Wars* game that was later cancelled, for example; while your team or studio or even publisher may no longer exist, the archived material you’ve left behind still legally belongs to Lucasfilm. While such parties typically turn a blind eye to individual developers keeping an archive, they definitely pay attention if a build is released to the internet and



TRAVELLING MAMA / HELLO KITTY Blitz Games

A *Cooking Mama* spin-off for Kinect that was almost finished, *Travelling Mama* was cancelled, reborn with a *Hello Kitty* license slapped on top of it, then cancelled again. Rough.





HEIST

Acclaim

Playing through levels several times, events would trigger for subsequent playthroughs at the time they'd been triggered in the previous run – think *Braid's* time-based puzzles, maybe.

A good idea, but one that died with Acclaim in 2004.

fans decide to continue working on it. (In the case of the once-defunct MMO *City of Heroes*, however, publisher NCSoft doesn't seem too bothered that it's now back up and running thanks to a group of dedicated fans.)

A developer sometimes releases a cancelled game itself, which is what Volition Software did with its unfinished Sony PSP game, *Saints Row: Undercover*. At other times, a publisher will give their blessing to an emulated version, particularly if they don't plan to do

anything with that brand. More commonly, the publisher or licence holder will act to shut down any fan projects, and while this might seem harsh, it comes down to IP ownership and the law. Oversimplifying hugely, if a company doesn't take action to protect its properties, it makes it harder for them to do so in the future; so while these projects may seem harmless, they can still be considered a problem. "It goes without saying that, as a museum, we couldn't condone any illegal activity, but that isn't the same as saying we shouldn't recognise that some fans do work on releasing otherwise unreleased games," Newman says. "Certainly, if we want to appreciate the stories of video game-making, the cultures and practices of fandom, and the relationships between players, developers, and publishers, these kinds of situations are key." 🗨



XCOM ALLIANCE

Microprose

Microprose acquired the *XCOM* licence and set out to create a squad-based FPS using Epic's (then-unreleased) Unreal Engine. That ambition would be its downfall, with the new tech causing struggles and, ultimately, cancellation.



OVERBOARD 2

Psygnosis

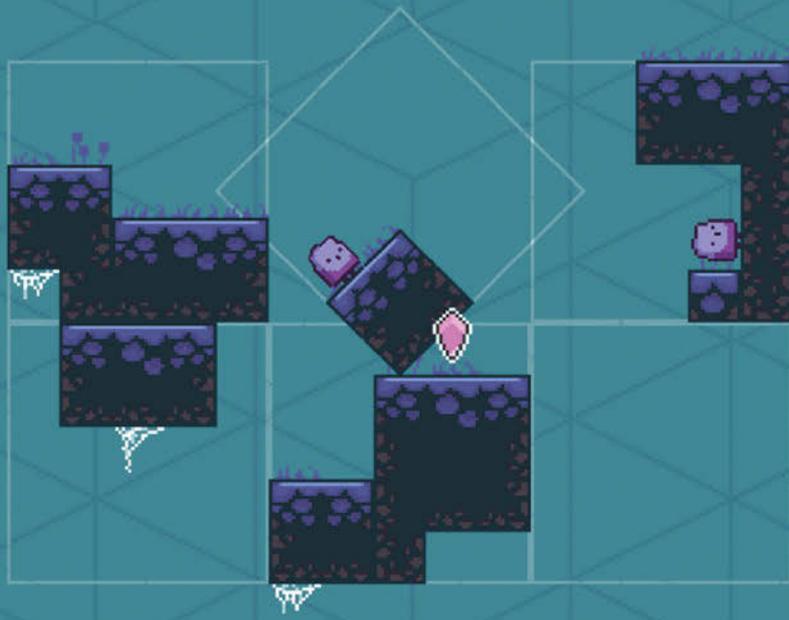
The original is an overlooked gem, so it's sad to hear a sequel – where players would have walked on land as well as ships – was in the works and then canned. Pivoted to another project, it was all ultimately cancelled when Sony shut down Psygnosis.



MOBILE FORMULA 1 GAME

Unknown studio

Something different with the Formula 1 licence on mobile, this game involved a unique drag control feature for acceleration and braking. Ultimately, though, it wasn't much fun to play and was canned as a result.



^ At an earlier stage of development, the crystals were originally puzzle pieces. Andersson changed the design when players mistook them for tiny, white pigs.

Interactive

TaniNani

Swedish developer Kevin Andersson tells us about the ingenious level design behind his pixel puzzler



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

^ A resident of Malmö, Sweden, Kevin Andersson has been a level designer since 2009, and now makes games at his own studio, WhyKeV.

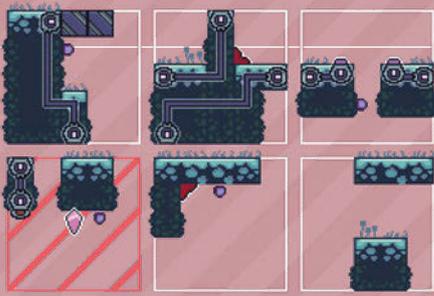


The idea for a video game can strike just about anywhere, and for Swedish developer Kevin Andersson, the first stirrings of *TaniNani* emerged while he was sitting on a bus. “Ever since I started to learn how to program my own games, I’ve done these ‘weekend jams’ where the goal was always to learn something new,” Andersson tells us. “Occasionally, I’d try and make something very small with interesting mechanics. So one time when I was riding a bus for several hours – because back then me and my girlfriend worked in different cities – I tried to make the core mechanic of *TaniNani*. After three hours, I had the mechanic of moving the tiles around and making the characters walk on the walls. On the ride home, I made another mechanic that ended up in the final version. I’d say that after seven hours, I had the core loop of the game with mechanics that would cover three chapters in the game.”

Brought to life with charmingly minimal pixel art, *TaniNani*’s core loop involves manipulating the six chunks of a level to reunite two cute, pastel-coloured creatures. There’s also a secondary goal of collecting a single crystal on each stage – a process that rapidly becomes

more difficult as the chunks of platforms give way to barriers that have to be disabled by grabbing keys, and other devious challenges that’ll probably leave you scratching your head for hours. Like *Lemmings* and other classic puzzlers before it, *TaniNani* doesn’t give you direct control over the pair of critters roaming about on the screen – instead, you serve as a kind of caretaker, tasked with shepherding the creatures around the screen and ensuring they don’t plunge to a horrendous death. What keeps *TaniNani* feeling fresh is the pleasing way its level pieces can be separated and then clicked back together in different arrangements, and the cleanliness of the design – no matter how complex the puzzles become, each stage is only ever separated into six moveable pieces, so there’s always a sense that the solution to even the trickiest of puzzles is only just out of reach.

“There’s always something charming when a game presents a mechanic and then slowly introduces different rules for how you use that feature,” Andersson says. “A lot of the projects I was working on [before] were more complex and bigger in general, so a game like *TaniNani* was very appealing to finish after working on games like that for several years. It was a good amount of work for one person to finish. A game



^ Your goal in each level is to reunite these two through careful manipulation of levels, and not direct control.

centred on one core mechanic was something I wanted to focus on."

TaniNani also gives Andersson a chance to showcase his level design skills – something he's been honing since childhood. "Before starting with my studies, I used to make levels in the *Halo 3* editor, Forge, and play the levels with my friends," Andersson tells us. "Gaming was always a big part of my life, so when the time came to decide what to study in upper secondary school, it wasn't a difficult choice when I saw one with a focus on game development."

Andersson's ten-year history of designing levels, first at Gothenburg-based studio Zoink, and later at his own studio Elden Pixels, provided a solid grounding for the challenges represented by *TaniNani*. "Even though I've always designed levels, it's always scary to try and get the levels in a good balance for the player," he says. "Some players get the mechanic quite fast and don't want to get bored, while others need more time to play around with it. I think it got to a good point, and there's also the option to skip levels, because once you unlock a new chapter, you can try any of the twelve new levels if you get stuck. People seem to enjoy the option to come back to a level in a later session."

When it came to pacing the game's difficulty, Andersson followed the time-honoured process of establishing a new puzzle mechanic at the start of each chapter, giving the player a few stages to get used to it, and then gradually upping the challenge. "I want to make sure that the player understands the new mechanic

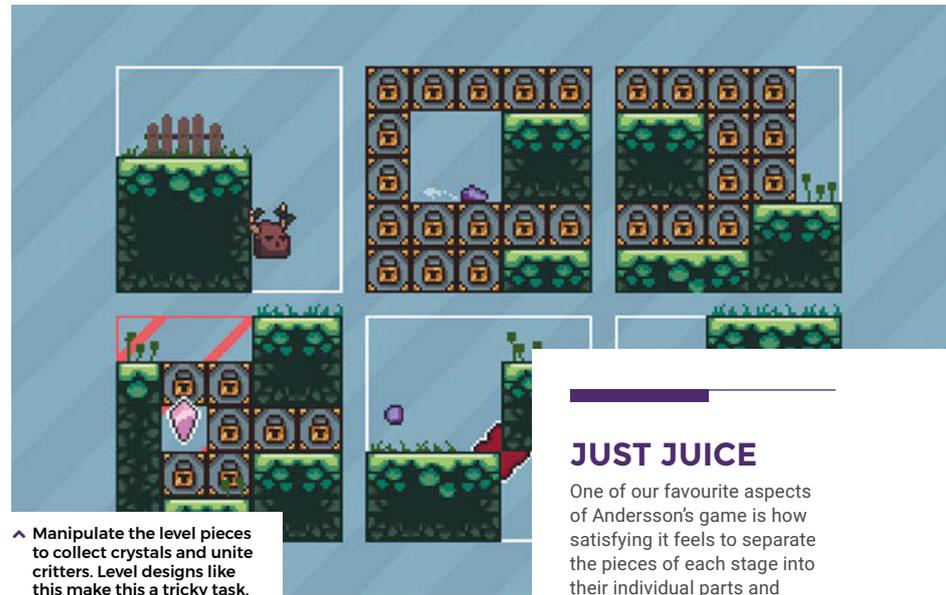
"A game centred on one core mechanic was something I wanted to focus on"

and, in a way, make it unavoidable, to see how it works on the first three levels. These earlier levels should also have bigger geometrical shapes to make the level more readable. But once the player has understood the new mechanic, it's fun to add some of the mechanics from previous chapters. I think it's in this phase where the player feels the smartest because

they've understood the mechanic and know how to combine it with the other ones while moving around the tiles. This is one of the feelings I want the player to get

from time to time while playing *TaniNani*."

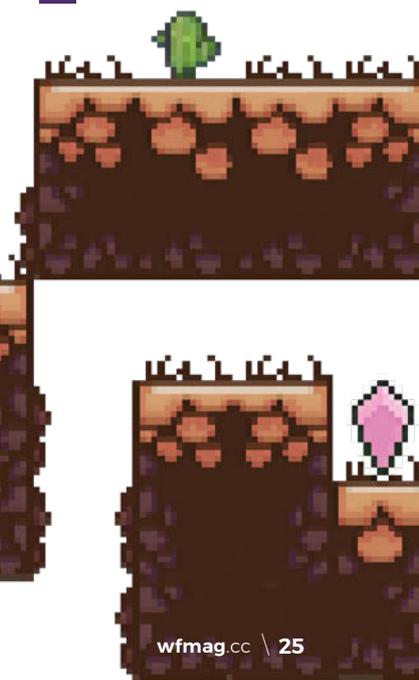
TaniNani emerged on Steam and iOS in January 2020, and Andersson already has plans for the game's future, including ideas for a level editor – "I have an idea that won't require sharing levels that I think could work, but we'll have to see if it appears in a future update to the game," he says – and plans for a port to Android. "Many people have asked for an Android version, so that's on my schedule – I don't know when it will be released, though. I'll see how the game is received by the players, but so far it's been really wonderful. I've had some great comments from players around the world, and game developers I admire." @



^ Manipulate the level pieces to collect crystals and unite critters. Level designs like this make this a tricky task.

JUST JUICE

One of our favourite aspects of Andersson's game is how satisfying it feels to separate the pieces of each stage into their individual parts and slotting them back together in a different order. "It actually took a while before it felt good," Andersson says of crafting that snappy puzzle-piece feel. "You could always see the potential, but at one point, I sat down and decided that I had to fix the feel of moving the pieces around. So I spent time on something that's often called 'juice' – which more or less is adding camera shakes and minor animations to make everything look more fresh. This can be a rabbit hole that you can work on forever so you have to be careful because it can be addictive once you get started."



Be careful what you wish for



STEVE MCNEIL

Steve wanted something. Then he got it. Now he wants something else.

In my first year of secondary school, the teacher of our technology class* set us a project to create whatever we wanted, presumably because he'd rather drink alcohol in the evenings than write lesson plans. I designed and built a small, clamshell device where the top half was a screen, and the bottom half was where you put mini-VHS cassettes so you could watch your favourite shows on the move. It contained a TV tuner, a radio tuner, a mobile phone transmitter, and the ability to play games. I had, as you've no doubt surmised, invented the smartphone, over 20 years before Steve Jobs.

I hadn't, of course. It was two blocks of wood held together by a door hinge, painted black, with a piece of perspex glued to the top bit. But the desire was the same – a device which I could do *everything* on.

Ever since I first got a Super Nintendo, I wanted a Mega Drive. Sure, the SNES was better**, but the moment I had *Mario*, I wanted *Sonic* as well. In the last few years, my career 'in games' has meant I've been lucky enough to justify to my long-suffering partner that I need every piece of gaming hardware, and had assumed therefore that when the next generation lands this winter, I'd be grabbing both an Xbox Series X and PS5 at launch.

I've generally leant towards Sony until recently, but Xbox Game Pass Ultimate has been a revelation, vastly superior in my opinion to PS Now in both game selection and usability, and the thing that made me assume I'd probably be favouring Microsoft this time around. But then I found out Microsoft intend to have no first-party exclusives on their newest console. Instead, all titles which are released on it will also work on Xbox One and PC. Sure, for the 'best' version I might need to play on Series X, but if I'm looking at a hardware outlay of £0 instead of £500 (or whatever it's going to release at), that's a lot of presents I can buy my wife to distract her from my gaming addiction.

It's a shame, as the philosophy behind Microsoft's approach is one I admire. I switched from MacBook to Chromebook recently, and the ability to access all my work from anywhere, on any device, is hugely liberating. Microsoft's new approach to gaming, combined with Google's online workspace, essentially exceeds my childish wood-and-perspex vision of the future. Everything ever, anywhere, whenever I want it.

Microsoft (and the cloud), have given me everything I ever dreamed of. And as their reward, this winter I will be giving their rival, Sony, £500 instead. 🙄

* Woodwork, but in the 1990s

** Don't @ me

“It was two blocks of wood held together by a hinge, with a bit of perspex glued to the top bit”



^ Xbox Game Pass really is an Ultimate deal. Really, it is.

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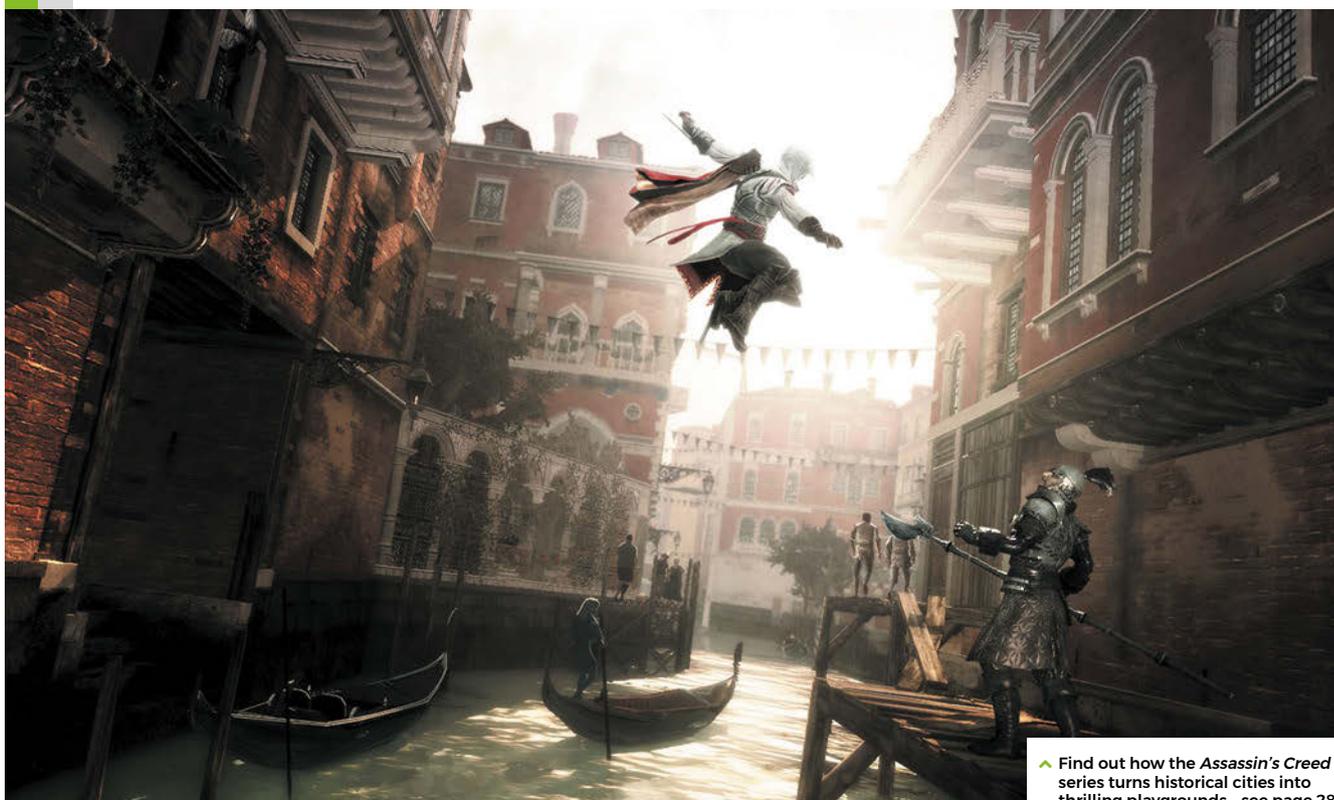
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A new games industry drive to foster greater diversity



▲ Use Blender and the Three.js library to make a cross-platform shooter. Follow our guide on page 30.



▲ Find out how the Assassin's Creed series turns historical cities into thrilling playgrounds - see page 28.

Urban playgrounds: studying the past

The history of urbanism is filled with places to play in; here's how to discover and use them



AUTHOR
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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

Surviving Renaissance cities, Mayan ruins, European medieval settlements, and centuries-old metropolises like Rome are, unsurprisingly, some of the most popular tourist destinations in the world. Walking on what remains of older cities, experiencing the changed but still living spaces of yore, and imagining how people lived there, is something many of us find fascinating. Experiencing the life and spectacle of legendary cities like Baghdad, Athens, or Tenochtitlan firsthand, meanwhile, is a fantasy that only video games can come close to delivering.

World-builders, writers, and game designers should, therefore, study the cities of the past, not just because it can help them analyse and understand cities in general, but also because history can provide us with pre-prepared experiences. The cities of the past are rich, overflowing with stories and mythologies. And,

if the success of the *Assassin's Creed* series is anything to go by, exploring old cities is the kind of premise that players will come back to again and again.

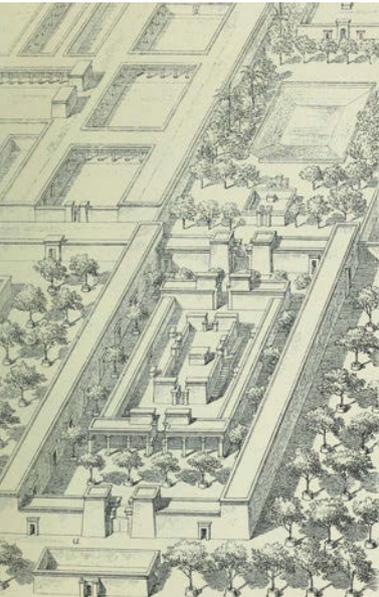
THE CREED METHOD

The *Assassin's Creed* games have been mining this historical richness and diversity for over a decade now – and successfully, too, for the most part. The first important lesson the *Assassin's Creeds* can teach us is how to pick a great city to base a game on. The series has so far done a stellar job in this respect; Ubisoft carefully chooses the cities it recreates before diving into an increasingly impressive amount of research.

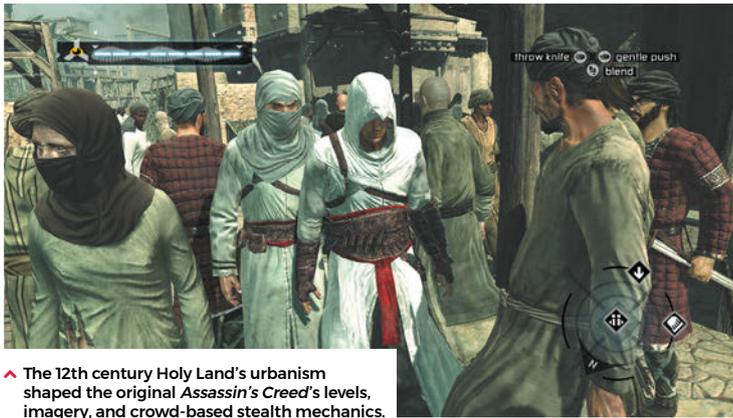
The cities of *Assassin's Creed* are always famous, and were truly important in their time. They all feature distinct, recognisable elements, and usually have lots of information and visual data readily available on them. They also tend to not have appeared too often as game settings, and occasionally include well-preserved places like Venice, Florence, or even the Acropolis, which can be physically visited and scanned. Even selected eras like, say, the Crusades in the first game, combine familiarity and novelty. They feature widely known locations that have almost never been visited in a contemporary video game.

The good news is that, no matter how many cities Ubisoft decides to feature, there's an abundance of other fantastic settlements scattered throughout history. Besides, even commonly revisited cities such as London, New York, or Paris are large and varied enough to allow for several radically different approaches.

▼ An ancient Egyptian palace could be replicated intact for a video game level, or you could use it as the loose basis for a futuristic pleasure garden.



▲ Iconic historical artefacts and landmarks can fit in anywhere, including in the *Broken Sword: The Shadow of the Templars'* Parisian finale.



▲ The 12th century Holy Land's urbanism shaped the original *Assassin's Creed's* levels, imagery, and crowd-based stealth mechanics.



▲ Fighting in the most beautiful – and lovingly recreated – city of the world can almost feel like a lost opportunity. It's *Assassin's Creed 2's* Venice.

I honestly don't think ancient Rome's possibilities will ever be exhausted, for example (and Rome really hasn't starred in enough games – a situation I find frankly baffling).

From ancient Greece to Victorian London, *Assassin's Creed* is not only the richest series of games when it comes to historical urbanism, but has gone as far as constructing a simple narrative device – a sci-fi gismo called the Animus – to link all those cities and eras into one cohesive narrative universe. The series' gameplay is rightly focused on parkour, and climbing the buildings that show off its magnificent cityscapes; meanwhile, each city's environment has both inspired its host game's mechanics, and been subtly altered to fit its needs where necessary – in *Assassin's Creed: Syndicate*, for example, London's streets have been widened to allow for spectacular carriage races.

Architectural landmarks have been faithfully recreated throughout the series, as so much of the games' appeal is based on their detail and accuracy; about the fantasy of visiting vibrant, living versions of old cities. The more important and famous a landmark is, the less abstractly it's recreated, with latter games attempting to faithfully render edifices like London's Big Ben or Paris's Notre-Dame.

The wider urban tissue is always abstracted and systematically condensed, though not equally across the city as a whole. So, in *Assassin's Creed: Syndicate's* London, the major landmarks and immediate surroundings have been modelled almost exactly. Their relative locations and topologies are also preserved for the most part, while all the locations in between have been abstracted and simplified. Wisely, though, the series' research hasn't focused solely on the built environment, and

making sure the buildings are correct for each period; fashion, activities, and era-appropriate transportation are also taken into consideration.

HISTORICAL OPPORTUNITIES

Happily, Ubisoft hasn't covered every major city in history just yet. Ancient Sparta, Ur, Machu Picchu, Ottoman Constantinople, Renaissance Geneva, and millennia-old African settlements could all serve as unique, atmospheric settings for games. Mexico's Tenochtitlan, built on an island in Lake Texcoco, would make a superb video game location. It was the largest American city of its era, and a stunning aquatic metropolis.

Connected to the mainland via elegant, retractable bridges, it was itself interlaced by a dense system of canals.

Or how about setting a game in a Roman city like Timgad?

All the required information is readily available – including a more or less complete city plan – and its modest size would probably make a 1:1, open-world recreation feasible for a smaller development studio.

Of course, open-world games aren't the only way of approaching historical urbanism. Whether you're making a point-and-click adventure, a 3D action game set in confined levels, or a city-building sim like *Pharaoh*, *The Settlers*, or *CivCity: Rome*, careful research into the history of cities will always result in richer environments.

What's really lovely about ancient urbanism is the lack of complete and concrete knowledge regarding all its details; it leaves ample room for the imagination – and for subtle anachronisms. It can provide a cohesive, believable canvas for a fresh, memorable game. 🗺

“How about setting a game in a Roman city like Timgad?”

Historical Inspirations

We don't always need to copy or modify a whole city to create a game setting. Sometimes all we need to do is steal a few ideas, replicate an interesting public space, get inspired by a particular city festival, or simply lift a landmark, an attitude, an architectural detail, or a unique spatial configuration. Just as *Dishonored's* Dunwall borrowed London's chimney-stacks, and Terry Pratchett's Ankh-Morpork used half a dozen cities as its (undisguised) inspiration, we too can cherry-pick from the rich reserves of urban history. Parisian palaces, early Chicagoan skyscrapers, Venetian canals, and Roman apartments can all be used to enrich your game's environments.

Make a 3D shooter with Blender and JavaScript

Here's how to code a cross-platform shooting game with the Three.js library



AUTHOR
MARK VANSTONE

Mark Vanstone is the technical director of TechnoVisual, author of the nineties educational game series, *ArcVenture*, and after all this time, still can't resist game coding. education.technovisual.co.uk

▼ Three.js makes it very easy to set up and code a 3D game environment including camera controls, models, and lighting.

If you're looking for an easy to learn, flexible, browser-based 3D library that works on desktops and mobile (yes, even iOS!) then the Three.js library is well worth a look. You don't need any previous experience with 3D programming, you certainly don't need a degree in maths, and all the tools are free to download. (If you want to view the games made with Three.js on an Apple mobile device, you may need to switch on 'experimental features', which you will find under Settings > Safari > Advanced.)

This guide's source code, along with comments and all the assets you'll need, is available for download at wfmag.cc/wfmag32. Once you have everything you need, let's walk through the process step by step, starting with our development tool set.

First, you'll need a text or code editor of some kind; I've been using Visual Studio Code for some time and I'm quite happy with it, but if you're more comfortable with another editor, that will be fine, too. We'll assume you're using Chrome for the sake of this guide, but any other modern web browser will run the game just as well. The final tool in our toolbox will be Blender, the 3D modelling and animation software available for free at blender.org.

The game we'll be creating in this guide will consist of invading alien spaceships hurtling over a 3D landscape. The player will be sat in a gun emplacement armed with four plasma cannons, ready to shoot the aliens as they fly past. We'll be able to control the rotation of the cannons with the mouse (or touchscreen on a mobile device) and fire by tapping the screen or clicking the mouse button. We'll keep a score of hits and display that to the player at the bottom of the screen.

For our game to work in a browser, we'll need to load it from a web server. This can be



```

<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <link rel="stylesheet" type="text/css" href="style.css">
    <script type="text/javascript" src="js/shoot3d.js"></script>
    <script src="js/three.min.js"></script>
    <script src="js/GLTFLoader.js"></script>
    <script src="js/OrbitControls.js"></script>
    <title>Shoot 3D - wireframe Magazine</title>
  </head>
  <body>
    <div id="container">
      <canvas id="gamearea"></canvas>
    </div>
  </body>
</html>

```

◀ Figure 1: Our index.html file needs to link to the JavaScript files we'll be creating later in this guide.

an online server if you have access to one, but while we're developing the game, we can run it from a local server – and luckily for us, there's

“For our game to work in a browser, we'll need to load it from a web server”

a convenient extension for Chrome that can do this. In the Chrome Web Store, you'll find a Web Server extension you can add to Chrome (wfmag.cc/web-serve) which enables you to view any local directory as if it's coming from a web server. While this extension is running and pointing at your development directory, you'll be able to run your game by browsing the address **127.0.0.1:8887** (this is the default address, but you can change it if you want to). To test this, create a new file, **index.html**, and in it type the following:

```

<!DOCTYPE html>
<html>
  <head>
  </head>
  <body>
    3D Rocks!
  </body>
</html>

```

Save the file and browse to it via the Chrome Web Server, and if all's gone to plan, you'll see a message telling you how good 3D is.

Now let's fill in our HTML framework with some details to get us started. Have a look at

Figure 1 to see how we include a style sheet file, our own JavaScript file (we'll call this **shoot3d.js**), and three JavaScript files from Three.js which can be downloaded from the website at **threejs.org**. We can have all of our JavaScript files in a subdirectory called **'js'** to keep things tidy. The Three.js files we'll include are the main library, **three.min.js**; **GLTFLoader.js**, which will handle loading 3D models for us; and **OrbitControls.js**, to give us mouse and touch control of the scene. The other thing we need in our HTML framework is an area to display the 3D scene, which is an HTML5 canvas object.

OBJECTS AND STYLES

We need to create a **style.css** file which will include our layout and styling for the screen objects, and also the **shoot3d.js** file inside the **'js'** directory. Put the following styles in the **style.css** file: ➔

▼ Figure 2: The shoot3d.js file needs to contain the setup code for our 3D scene.

```

var s3d = {};

function setup3D(w,h){
  s3d.scene = new THREE.Scene();
  countclock = new THREE.Clock();
  s3d.camera = new THREE.PerspectiveCamera( 45, w / h, 0.1, 2000 );
  var gamearea = document.getElementById('gamearea');
  s3d.renderer = new THREE.WebGLRenderer({ canvas: gamearea, antialias: true });
  s3d.renderer.setSize(w, h);
  s3d.controls = new THREE.OrbitControls( s3d.camera, s3d.renderer.domElement );
  s3d.controls.target.set(0,0,-5);
  s3d.controls.enableZoom = false;
  s3d.controls.enablePan = false;
  s3d.controls.update();
  var plight = new THREE.PointLight(0xfffff,1);
  plight.position.set( 0, 0, -10 );
  s3d.scene.add( plight );
  addSkyBox();
  loadObjects();
}

```

Toolbox

Make a 3D shooter with Blender and JavaScript

```
function addSkyBox(){
  let images = ["posx","negx","posy","negy","posz","negz"];
  let materialArray = [];
  for(let m = 0; m < 6; m++){
    materialArray.push(new THREE.MeshBasicMaterial( {
      map: new THREE.TextureLoader().load(
        'images/sky/'+images[m]+' .jpg'
      ));
    }
  )
  for (let m = 0; m < 6; m++) materialArray[m].side = THREE.BackSide;
  let skybox = new THREE.Mesh( new THREE.BoxGeometry( 2000, 2000, 2000),
    materialArray );
  s3d.scene.add( skybox );
  skybox.position.set(0,0,0);
}

function loadObjects(){
  var loader = new THREE.GLTFLoader();
  loader.load( 'models/guns.glb', function ( gltf ) {
    s3d.scene.add( gltf.scene );
    s3d.gun = gltf.scene;
  }, undefined, function ( error ) {
    console.error( error );
  });
}
```

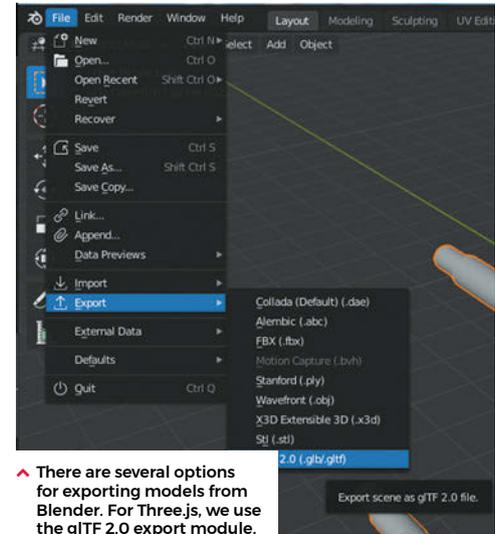
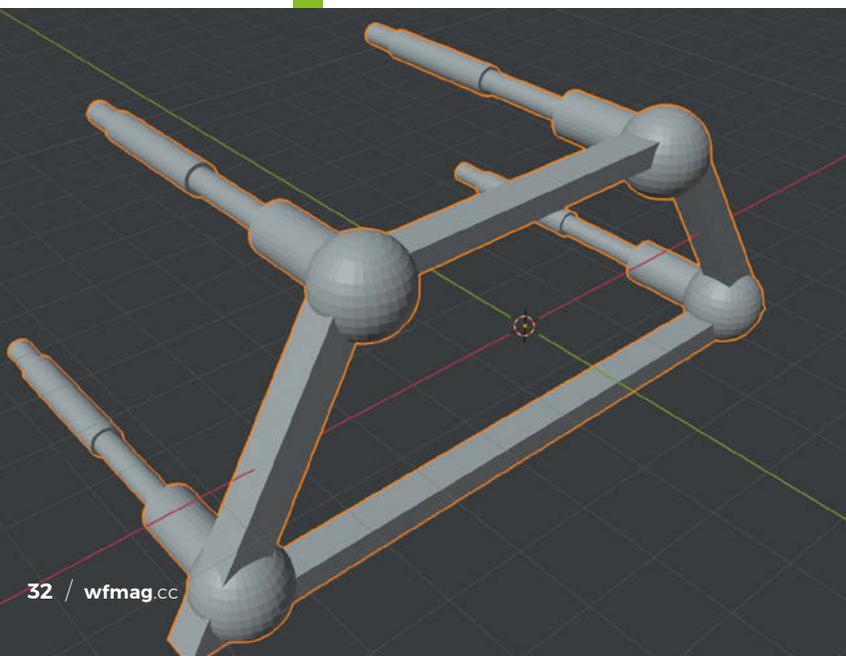


Figure 3: Our skybox will give the player the illusion of moving their guns around in a 3D landscape.

```
body {
  background: black;
  color: white;
}
#container{
  position: relative;
  text-align: center;
  width:1024px;
  margin:auto;
}
```

This gun model is made of simple 3D shapes, cubes, spheres, and cylinders. You may want to add a few details to the model for your game.

This will take care of our gamearea canvas position. This can be moved around, made larger or smaller, or even respond to changes of screen size or orientation, but let's keep things simple for now. In our `shoot3d.js` we can add our setup code for the 3D scene. In **Figure 2**,



you can see we define a global object, `s3d`, to hold references to the elements we're going to create. In the `setup3D(w,h)` function, we create a new scene, add a clock object, and a camera. We then attach a renderer to the gamearea canvas and add some controls to the camera. After adding a light to the scene, we call two functions: one to add a skybox to the scene so that we're surrounded by the view of the landscape, and the second function to load the other 3D model objects into the scene.

DYNAMICALLY CREATE OBJECTS

There are two ways we can create 3D objects in Three.js: we can create them with code, or we can load them from a file. The `addSkyBox()` function creates the geometry of a box and applies textures to the inside of each face. This will create the illusion of a photorealistic landscape when the camera is placed inside the box and rotated. The `loadObjects()` function loads in 3D models; in this case, our guns model that will be fixed to the camera. We will add some more to this function later, but for the moment, have a look at **Figure 3** to see how we create a skybox and load an object.

You may have noticed that we're loading a GLB file as our model. This is a file specifically for GL scenes and can be produced by Blender. The current version of Blender is 2.81a at the time of writing, and comes with a module to export glTF and GLB format files. You can create your 3D models in Blender and export them using this module, which will then load straight into our Three.js scene. You can try this by loading the file `guns.blend` (again, you



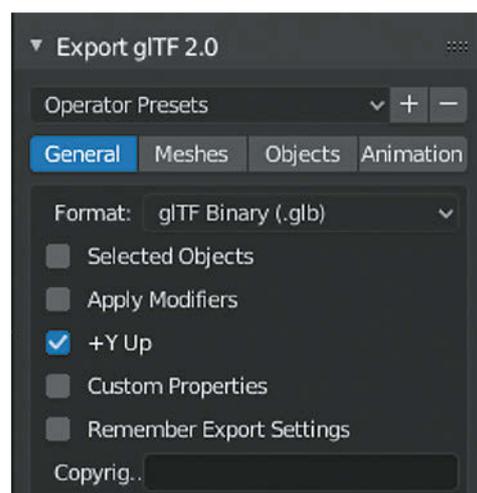
can download this from Wireframe's GitHub repository, wfmag.cc/wfmag32, and then going to the Export option in the File menu and select glTF 2.0 (GLB/glTF). You can use either GLB (binary) or glTF (JSON) formats for Three.js.

You can make your own set of gun barrels or add extra detail to the ones provided. There are a couple of other things to note when making models in Blender for Three.js: if you want your

“There are two ways we can create 3D objects in Three.js: with code or loaded from a file”

frame to line up with the camera, make sure the frame is oriented to the x-axis (red) so that the camera will be looking down the green y-axis (which gets switched to the z-axis in Three.js). Also, make sure the materials you use are Principled BSDF, or they may not show up in the scene. Luckily, this is the default material type in Blender, so you shouldn't go too far wrong.

Now that we have some code to set up our scene and create and load the basic models, we need to set the whole thing in motion so that we can see if our work so far has been worthwhile. We just need to add a small script to our HTML file at the end of the body. We want to wait until the page has loaded and then set things going, so write:



```
<script>
    document.addEventListener
    ('DOMContentLoaded', function(){
        setup3D(1024,640);
        animate();
    });
</script>
```

This will run our `setup3D()` function and then call an `animate()` function, which we should write in `shoot3D.js`:

```
function animate() {
    requestAnimationFrame( animate );
    s3d.renderer.render( s3d.scene, s3d.
    camera );
}
```

^ A closer look at the hapless aliens we'll be blasting in our 3D game.

< When Blender exports with glTF, the y-axis is switched with the z-axis so that it's compatible with the Three.js coordinates system.

When we now run our code via our local web server, we should see our skybox and the guns pointing out in front of us. Unfortunately, if we click and drag to move the camera, we'll see that the guns just hang in mid-air and don't follow the camera view, so our next task is to fix that.

We're going to add an event handler, which will happen just before the scene is rendered; surprisingly enough, the event is called `onBeforeRender`, and we can declare this just after we've loaded our gun model in the `loadObjects()` function with the following code:

```
s3d.scene.onBeforeRender = function(){
  if(s3d.gun){
    s3d.gun.position.copy( s3d.camera.
position );
    s3d.gun.rotation.copy( s3d.camera.
rotation );
    s3d.gun.updateMatrix();
    s3d.gun.translateZ( - 5 );
  }
}
```

This will copy the camera's rotation and position (and quickly shimmy back along the viewing line so that we can see all four guns) just before the scene's rendered. Now if we run our code, we see all four guns, and if we click and drag to rotate the camera, the guns follow.

ADDING BULLETS

This is starting to look like a game now, but you can't have a shoot-'em-up without some shooting, so let's make some plasma bullets. What we want is for a ball to emerge from each gun barrel when the player presses fire. We could take the really mathematical route to work out the position and direction of the bullets, or alternatively, we can use the easy way. All we need to do is place an invisible cube at the end of each barrel, parent it to the guns model, and make it invisible. Then we have 3D objects that will provide us with coordinates of the end of the barrels, no matter how we've rotated the camera and guns. We can set up these cubes just after we load our guns model. Have a look at **Figure 4** to see the way we create these cubes.



The next thing to do is to add an event listener for firing the bullets. We actually need to add two of these listeners, because if we want to catch desktop **mouse** events, we need to listen for a **mousedown** event; if the game's running on a mobile device, though, we want to listen for a **touchstart** event. So let's add the following lines to the top of our JavaScript code:

```
window.addEventListener("mousedown", fireGuns);
window.addEventListener("touchstart", fireGuns);
```

“You can't have a shoot-'em-up without some shooting, so let's make some plasma bullets”

Having done this, we will need to write a function to do the firing called **fireGuns()**. We need to create four plasma bullets, so we loop four times and make a bullet for each barrel with each one starting at the location of the invisible cubes we made earlier. We also align their z-axis to match the camera so that it's easy to send them off in the direction we're looking. Have a look at **Figure 5** to see the **fireGuns()** function and the **newBullet()** function, which it uses to make each bullet. You will see that we're adding the bullets to an array, which we need to define at the top of our JavaScript code by writing:

```
var plasmaBalls = [];
```

BOTH BARRELS

With our bullets created from a mouse click or screen tap, we now need to make them fly off into the distance (hopefully towards a target). This is quite straightforward to add, as we already have a section of our code that updates things just before the render's done. So just after our code that updates our gun, we can add the following:

```
delta = countclock.getDelta();
plasmaBalls.forEach(b => {
  if(!b.col) b.translateZ(-
    speed * delta); // move along the local z-axis
});
```

We're using a variable, **speed**, which we can define at the top of our JavaScript code and perhaps set it to 500 to start with. You may want to change this later. We should now have

```
function loadObjects(){
  var loader = new THREE.GLTFLoader();
  loader.load( 'models/guns.glb', function ( gltf ) {
    s3d.scene.add( gltf.scene );
    s3d.gun = gltf.scene;
    s3d.gunbarrels = [];
    s3d.gunbarrels[0] = newGunBarrel(2.8,1.8,-8);
    s3d.gunbarrels[1] = newGunBarrel(-2.8,1.8,-8);
    s3d.gunbarrels[2] = newGunBarrel(-5,-1.8,-8);
    s3d.gunbarrels[3] = newGunBarrel(5,-1.8,-8);
  }, undefined, function ( error ) {
    console.error( error );
  });
}

function newGunBarrel(x,y,z){
  var gb = new THREE.Mesh(new THREE.CubeGeometry(1, 1, 1), new
  THREE.MeshBasicMaterial());
  gb.material.transparent = true;
  gb.material.opacity = 0;
  s3d.gun.add(gb);
  gb.position.set(x,y,z);
  return gb;
}
```

▲ **Figure 4:** Creating invisible cubes at the end of each barrel allows us to track the gun's coordinates as they move.

```
function fireGuns() {
  for(gb=0;gb<4;gb++){
    newBullet(s3d.gunbarrels[gb]);
  }
}

function newBullet(gb){
  let plasmaBall = new THREE.Mesh(new THREE.SphereGeometry(0.5, 8, 4),
  new THREE.MeshBasicMaterial({
    color: "red"
  }));
  plasmaBall.position.copy(gb.getWorldPosition(new THREE.Vector3())); //
  start position - the tip of the barrel
  plasmaBall.quaternion.copy(s3d.camera.quaternion); // apply camera's
  quaternion
  s3d.scene.add(plasmaBall);
  plasmaBalls.push(plasmaBall);
}
```

▲ **Figure 5:** The **fireGuns()** and **newBullet()** functions will allow the player to fire balls of plasma.

a live set of gun barrels with four plasma balls flying off into the distance each time we click or tap. After a bit of shooting, we're going to end up with quite a lot of bullets to keep track of, but we'll deal with this issue a bit later.

Now's the time to bring on the star of the show: the alien spaceship. For this example, we'll have just one recurring alien, but there's no reason why a whole fleet of different aliens can't be added in the same way, as we'll see shortly. First, go back to Blender and create your alien ship. There's a BLEND file available in our GitHub repository if you get stuck or want to skip the building step. Export the model from Blender in the same way the guns were ➔

```

// This bit goes in the loadObjects() function
loader.load( 'models/alien.glb', function ( gltf ) {
    s3d.scene.add( gltf.scene );
    s3d.alien = gltf.scene;
    s3d.alien.position.set((Math.random()*1000)-500,300,1040);
    s3d.alien.shields = 300;
    }, undefined, function ( error ) {
        console.error( error );
    });

// this next bit goes in the onBeforeRender section
if(s3d.alien){
    s3d.alien.rotation.y += (300-s3d.alien.shields)/1000;
    s3d.alien.position.z -= 2;
    if(s3d.alien.position.z < -1000 || s3d.alien.shields < 0){
        s3d.alien.position.z = 1040;
        s3d.alien.position.x = (Math.random()*1000)-500;
        s3d.alien.shields = 300;
        s3d.alien.rotation.y = 0;
        cleanBullets();
    }
}

```

> Figure 6: The code we'll need to load and move our alien spaceship models.

exported. In the `loadObjects()` function, we can add the code to load the alien ship model in the same way we loaded the guns model. When that's done, we'll also need to move the alien across the sky, which we can do in the same `onBeforeRender` section as we used for the guns and bullets. **Figure 6** shows how to do this.

You can see from the code that we're setting up a property in the alien object called 'shields', which we'll use to track how many times the alien has been hit by our bullets, and destroy it if this value reaches zero. We're also setting the initial x-axis position with a random number so that it starts at a different point in the sky each time. There's also a call at the bottom of the code to `cleanBullets()`, which will run through our `plasmaBalls[]` array and trim any bullets that have either exploded or have gone outside the skybox.

Two things remain to be done to make our game playable. The first is collision detection to see if our bullets have found their target, and the second is a system to keep a tally of hits and display the score on the screen. We can

put some collision detection in the code section where we move the bullets. For the purposes of this guide, we can do a very simple collision test. All we need to do is to check if the coordinates of the bullet are inside the bounding cube of the alien – that is to say, the bullet's x-coordinate is

greater than the x-coordinate of the alien minus half its width, and also less than the alien's x-coordinate plus half its width, and so on for the y- and z-axis. If we find

a bullet inside the alien bounding cube, we set a sequence going to change the colour of the plasma ball, add to the `score` variable, and reduce the `shields` property of the alien object.

KEEPING SCORE

The score can be displayed on screen by having an overlay object in our HTML and a text `<div>`, which we write the score into. We can do this with:

```
setInterval(displayScore,1000);
```

Here, `displayScore()` changes the `innerHTML` of the score `<div>` to reflect our `score` variable.

“Three.js has everything you need to get building and sharing quickly”



^ Once hit, the alien ships will spin out of control, making it harder to strike them again. We almost feel a bit sorry for them, really.

Have a look at the full code listing on GitHub to see the **collision** and **score** handling. You'll also see how we can add some simple sound effects with the Audio object. This is just a starting point for getting an exciting 3D game running in a browser without a gigantic amount of time required, and although Three.js isn't specifically designed as a game engine, it has everything you need to get building and sharing your games really quickly and easily. There are many more aspects of the library that haven't been covered here as even with all these pages there's a lot more space we'd need, but if this guide has left you eager to learn more – and if you want to upgrade your basic starting point of a 3D shooter to something a bit more involved and complex – there's lots more information available at threejs.org. 





▲ When your player, NPC, weapon, and ambient sounds come together in just the right way, it creates an immersive gameplay experience for the player.



AUTHOR
JEFF SPOONHOWER

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

Indie reflections: Making Anew Part 11

Used thoughtfully in your game, sound can tell stories all by itself, as Jeff explains

Writer/director George Lucas once famously described sound as “50 percent of the movie-going experience.” *Trainspotting* director Danny Boyle went one step further, and mentioned in an interview, “For me, it’s obvious that 70, 80 percent of a movie is sound. You don’t realise it because you can’t see it.” These insightful words apply not only to films, but also to games. Let’s discuss the power of sound design in shaping gameplay experiences.

LISTEN UP

Thoughtfully crafted audio enhances player immersion, helps direct the player through the game world, and provides important gameplay feedback. Let’s look at several types of audio in the overall game audio mix and discuss their functional and aesthetic importance.

Player sounds are audio sources that originate from the player character, such as footsteps, running loops, jumps and landings, vocal quips, and damage grunts. These sounds are heard often during gameplay and enhance the player’s sense of agency, ground the player character in the environment, and define the player character’s personality. Player sounds typically

have a one-to-one relationship with visual and gameplay elements on screen. When the player jumps, we hear a jumping sound; when the player takes damage, we hear a grunt. Without these sounds, the player feels emotionally and physically detached from the game world.

Non-player character (NPC) sounds emanate from various sources in the game world, such as enemies, friendly companions, vehicles, weapons, and environmental interactions. Typically, NPC sounds are positional: they’re attached to objects and exist in the game world relative to the player character’s position. Say, for example, you’re infiltrating an enemy base as Solid Snake in *Metal Gear Solid 2*. You suddenly hear the now-famous alarm ringing from your left speaker. This positional sound offers important gameplay feedback, alerting you to the presence of a nearby enemy soldier in a specific place. What would it feel like to swing an energy sword in *Halo*, or fire a fully upgraded sniper rifle in *Battlefield* without its powerful, uniquely crafted sound effect? Well-designed NPC sounds help create tactile, believable characters, objects, and environments.

Another important element of audio in games is ambient sound. Ambiances are longer,

✓ Big visuals require big sounds – a perfect example is this living room-rocking explosion from *Call of Duty: Modern Warfare 3*.





seamlessly looping soundscapes that establish a mood, emotional tone, or sense of space in your environments or levels. Ambiances are typically implemented at lower volumes and placed in the background of the audio mix, with player and NPC sounds at the forefront of the player's attention. The gentle sound of rustling leaves in *Limbo*; the low drone of the Normandy's engine room in *Mass Effect*; the creepy, subtle whispers and creaks in *Resident Evil* – these ambiances are critical in establishing mood and subtextually suggesting hidden meaning or backstory.

Last, but certainly not least, is dialogue. Spoken words convey textual information, such as plot exposition, character development, and guidance with world navigation and mission objectives. Dialogue is arguably the most efficient way for a game designer to directly communicate important information to the player.

Of course, there are no immutable rules dictating the implementation of the sound design elements mentioned above. They can be used frequently or sparingly, and in an infinite variety of ways. The original *Mega Man* games on the NES have rudimentary player and NPC sound effects and no ambiances at all; *Shadow of the Colossus* uses richly designed character sounds and ambiances to suggest a great deal about the story and world. These games have different approaches to sound design but are both fun, immersive, and beautiful experiences in their own right.

ANEW SOUND

After many years of working on triple-A projects as an animator, cinematic artist, and sound designer, I was excited to have the opportunity to work on my own indie game, *Anew: The Distant Light*. One of the most liberating aspects of pursuing a passion project with a team of two has been the ability to steer the creative direction of the game how I see best – including sound design. From the start, I decided to personally handle the audio for *Anew* and design its sound in ways atypical of larger projects.

Of course, I had to nail the basics, creating a wide variety of high-quality, gameplay-appropriate player character and NPC sound effects. Throughout production, I budgeted a

significant amount of time to plan, create, and implement these sounds across a large cast of characters and objects. The player, their weapons and gear, and each of the enemies and environmental set pieces that fill the game world of *Anew* required creating and implementing hundreds of original sound effects.

The environmental ambiances in *Anew* are intended to emotionally resonate with the player and help establish spaces that feel immersive and unique. The geography of *Anew's* game world is vast and varied, from mountains, deserts, above the clouds, and below the depths of a frozen lake, to the molten core of an alien moon. For each environment, I created ambiances that incorporate a variety of natural sonic elements from sound effects libraries,

to otherworldly synthetic alien sounds created by software and hardware synthesisers. The desert zone needs to feel like a desert – arid, lonely, and

dangerous – through resonant, echoing wind sound effects. The surreal areas that convey narrative information to the player are designed to feel dreamlike through metallic dissonances, rumbling sounds, and electronic tones. These ambiances also serve as guideposts to provide functional gameplay direction. On returning to previously explored regions, the player recognises its unique sonic treatment and creates a mental map of the game world, aiding navigation.

These are just a few examples of how I've approached the sound design in *Anew*. In a future article, I'll describe the specific tools and techniques I used in their creation. Remember, the true power of sound design in games is its ability to support visual and gameplay components, as well as reveal hidden, meaningful elements to the player in ways that are not immediately obvious. However you choose to design the sound in your game, both of these conceptual approaches will enhance its gameplay experience and elicit an emotional response from the player. 🗣️

“Anew required creating hundreds of original sound effects”

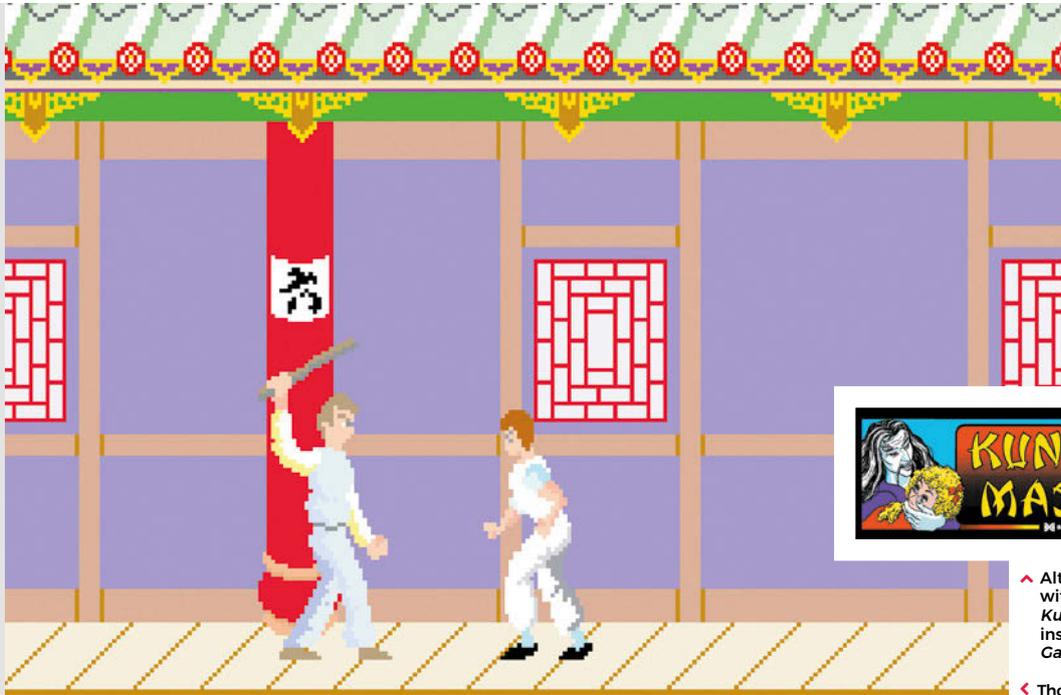
▲ Sound design can act as a powerful subtextual expositional tool. In *Shadow of the Colossus*, the emotional state of the hero is revealed through sound and music.

Sound check

Check out soundworkscollection.com for a wealth of in-depth original interviews, articles, and features with some of the best sound designers working in games and film. Novice sound designers and seasoned pros alike can benefit from ongoing research and education.



▲ A tremendous amount of time and energy was spent creating high-quality player sounds in *Anew* that help forge a strong player/player-character bond.



- ^ Although released to tie in with Jackie Chan's *Spartan X*, *Kung-Fu Master* was originally inspired by the Bruce Lee film, *Game of Death*.
- ◀ Thomas battles his way through the martial arts mob to rescue his girlfriend, Sylvia.

Source Code

Code a **Kung-Fu Master** style beat-'em-up

Punch and kick your way through a rabble of bad dudes in a simple scrolling beat-'em-up



AUTHOR
MARK VANSTONE

Kung-Fu Master hit arcades in 1984. Its side-scrolling action, punching and kicking through an army of knife-throwing goons, helped create the beat-'em-up genre. In fact, its designer, Takashi Nishiyama, would go on to kickstart the *Street Fighter* series at Capcom, and later start up the *Fatal Fury* franchise at SNK.

In true eighties arcade style, *Kung-Fu Master* distills the elements of a chop-socky action film to its essentials. Hero Thomas and his girlfriend are attacked, she's kidnapped, and Thomas fights his way through successive levels of bad guys to rescue her. The screen scrolls from side to side, and Thomas must use his kicks and punches to get from one side of the level to the other and climb the stairs to the next floor of the building.

To recreate this classic with Pygame Zero, we'll need quite a few frames of animation, both for the hero character and the enemies he'll battle. For a reasonable walk cycle, we'll

need at least six frames in each direction. Any fewer than six won't look convincing, but more frames can achieve a smoother effect. For this example, I've used the 3D package Poser, since it has a handy walk designer which makes generating sequences of animation much easier.

“For a walk cycle animation, we'll need at least six frames in each direction”

Once we have the animation frames for our characters, including a punch, kick, and any others you want to add, we need a background for the characters to walk along. The image we're using is 2000×400 pixels, and we start the game by displaying the central part so our hero can walk either way. By detecting arrow key presses, the hero can 'walk' one way or the other by moving the background left and right, while

cycling through the walk animation frames. Then if we detect a **Q** key press, we change the action string to kick; if it's **A**, it's punch. Then in our `update()` function, we use that action to set the Actor's image to the indicated action frame.

Our enemy Actors will constantly walk towards the centre of the screen, and we can cycle through their walking frames the same way we do with the main hero. To give kicks and punches an effect, we put in collision checks. If the hero strikes while an enemy collides with him, we register a hit. This could be made more precise to require more skill, but once a strike's registered, we can switch the enemy to a different status that will cause them to fall downwards and off the screen.

This sample is a starting point to demonstrate the basics of the beat-'em-up genre. With the addition of flying daggers, several levels, and a variety of bad guys, you'll be on your way to creating a Pygame Zero version of this classic game. 🎮



A basic beat-'em-up basis

Here's Mark's code to make a classic 1980s-style scrolling beat-'em-up in Python. To get up and running you'll need to install Pygame Zero – full instructions are available at wfmag.cc/pgzero

```
# Kung-Fu Master
import random

HEIGHT = 450
gameState = count = 0
bloke = Actor('walk1_0001', center=(400, 250))
blokeDir = "l"
backPos = -500
dudes = []
action = ""
actioncount = 0

def draw():
    screen.fill((0,0,0))
    screen.blit("background", (backPos, 30))
    screen.draw.text("Pygame Zero Kung-Fu Master", center =
(400, 15), owidth=1, ocolor=(255,0,0), color=(255,255,0) ,
fontsize=30)
    if gameState != 1 or (gameState == 1 and count%2 ==
0):bloke.draw()
    for d in dudes:
        d.draw()

def on_key_down(key):
    global action, actioncount
    actioncount = 10
    if gameState == 0:
        if key.name == "A": action = "punch"
        if key.name == "Q": action = "kick"

def update():
    global count, backPos, blokeDir, action, actioncount
    if gameState == 0:
        bloke.image = 'stand' + blokeDir
        if action == "punch": bloke.image = 'punch'+blokeDir
        if action == "kick": bloke.image = 'kick'+blokeDir
        if actioncount <= 0: action = ""
        if keyboard.left: moveBloke(3,"l")
        elif keyboard.right: moveBloke(-3,"r")
        if random.randint(0, 100) == 0: makeDude()
        updateDudes()

    count += 1
    actioncount -= 1

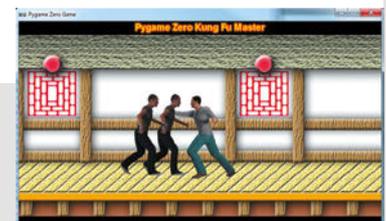
def moveBloke(x,d):
    global backPos, blokeDir
    frame = int((count%48)/8) + 1
    if backPos + x < -3 and backPos + x > -1197:
        backPos += x
        moveDudes(x)
        bloke.image = 'walk'+d+'_000'+str(frame)
        blokeDir = d
```

```
def makeDude():
    d = len(dudes)
    if random.randint(0, 1) == 0:
        dudes.append(Actor('duder_0001', center=(-50,250)))
    else:
        dudes.append(Actor('dudel_0001', center=(850, 250)))
    dudes[d].status = 0

def updateDudes():
    global gameState
    frame = int((count%48)/8) + 1
    for d in dudes:
        if (bloke.image == 'punch'+blokeDir or bloke.image ==
'kick'+blokeDir) and bloke.collidepoint((d.x, d.y)):
            d.status += 1
            if d.x <=400:
                if d.status > 10:
                    d.image = 'dudedefallr'
                    d.y += 5
                else:
                    d.x += 2
                    d.image = 'duder_000'+str(frame)
            if d.x >400:
                if d.status > 10:
                    d.image = 'dudedefalll'
                    d.y += 5
                else:
                    d.x -= 2
                    d.image = 'dudel_000'+str(frame)
            if d.x > 398 and d.x < 402 and d.status == 0:
                gameState = 1

def moveDudes(x):
    for d in dudes:
        d.x += x
```

> Our *Kung-Fu Master* homage features punches, kicks, and a host of goons to use them on.



THE GENERATION GAME

Because we're moving the background when our hero walks left and right, we need to make sure we move our enemies with the background, otherwise they'll look as though they're sliding in mid-air – this also applies to any other objects that aren't part of the background. The number of enemies can be governed in several ways: in our code, we just have a random number deciding if a new enemy will appear during each update, but we could use a predefined pattern for the enemy generation to make it a bit less random, or we use a combination of patterns and random numbers.

Directory

#RaiseTheGame

As a UK-wide industry census releases, a new diversity pledge launches with some big names backing the undertaking

GET INVOLVED

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

The University of Sheffield – with Ukie supporting – recently put together The UK Games Industry Census report, an analysis of diversity across Britain and Northern Ireland's workforce, drawing from data of over 3200 anonymised respondents.

The data

The census' main conclusions showed just ten percent of the UK's gaming workforce comes from black, Asian, and minority ethnic (BAME) backgrounds. While this is higher than the national average, representation drops as seniority rises.

Along similar lines, just 28 percent of the UK gaming workforce is female, and two percent non-binary, with the remaining 70 percent male. Representation of female workers is well below the national average at every level.

The census also found some 21 percent of respondents are LGBTQ+, which is said to be 'an extremely high proportion', and 28 percent of the UK workforce holds non-UK nationalities (compared to 17 percent in the working-age population).

The pledge

At the same time the results of the census were published, a collaborative pledge was launched

in the shape of #RaiseTheGame. The focus is on improving equality, diversity, and inclusivity across the industry, with EA, Facebook Games, Jagex, King, and Xbox operating as founding pledge partners.

The pledge aims to sign up at least 200 UK game businesses by 2021 and inspire actual, measurable, and meaningful cultural and behavioural change at these companies. Annual reviews of companies will take place, and the census will be repeated every two years to see how much things are actually changing.

Businesses such as Sports Interactive, Sold Out, Ubisoft, and Dovetail Games have already been announced as pledge partners, with plenty more in the wings. Each company taking the pledge needs to abide by three pillars, as follows:

1. Creating a diverse workforce by recruiting as fairly and as widely as possible.
2. Shaping inclusive and welcoming places to work, by educating and inspiring people to take more personal responsibility for fostering and promoting diversity and inclusion.
3. Reflecting greater diversity within games at every level, from game design and development through to marketing and community engagement.

Find out more

"Diversity isn't a nicety; it's a necessity if the industry is going to grow, thrive, and truly reflect the tens of millions of people that play games every day in this country," said Dr Jo Twist, CEO of Ukie. "A diverse industry that draws on myriad cultures, lifestyles, and experiences will lead to more creative and inclusive games that capture the imagination of players and drive our sector forward.

"By taking such a frank and honest look at our industry through the census and committing to the #RaiseTheGame pledge, which we encourage all businesses to sign up to, we can lay the foundations for the creation of a truly diverse and inclusive sector for all."

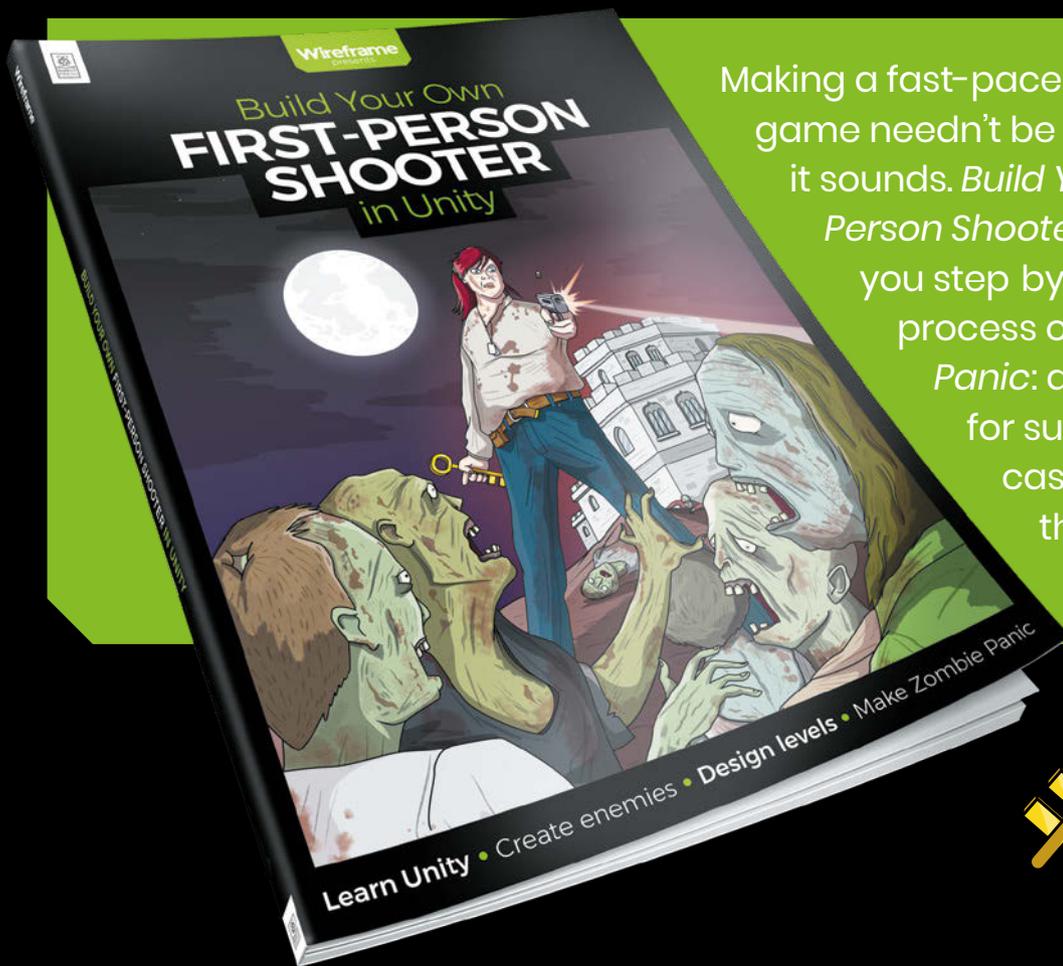
For more, check out raisethegame.com.



➤ A necessity, not a nicety: diversity and inclusion are at the top of the agenda in #RaiseTheGame.

Build Your Own FIRST-PERSON SHOOTER in Unity

Making a fast-paced 3D action game needn't be as daunting as it sounds. *Build Your Own First-Person Shooter in Unity* will take you step by step through the process of making *Zombie Panic*: a frenetic battle for survival inside a castle heaving with the undead.



IN THE PROCESS, YOU'LL DISCOVER HOW TO:

Set up and use the free software you'll need

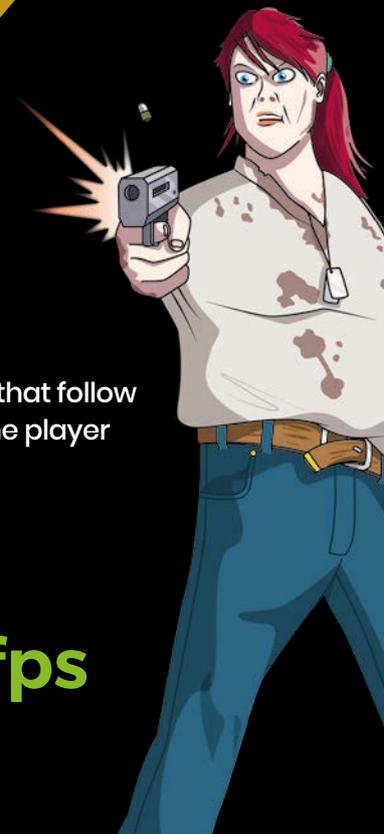
Create and texture 3D character models

Make enemies that follow and attack the player

Design a level with locked doors and keys

Extend your game further, with tips from experts

Available now: wfmag.cc/fps



THE DAYS TRILOGY

Healing through game design

We talk to Brazilian developer Joarez C. Santini about his experimental Days Trilogy, and the healing power of game development

WRITTEN BY JUPITER HADLEY



^ *The Cold Remains of Warmer Days* is a bleak game, but also sees a sense of hope and acceptance begin to bloom.



◀ Made for Ludum Dare 36 in 2016, *Forever Someday* was the first of what its creator calls “deep psychological experiences.”

FRESH WOUND

Forever Someday shows a player falling in love and then attempting to get over the breakdown of that relationship. Through a series of interactive sequences, you must figure out what to do in order to get through the scene and onto the next. They echo with loneliness, desperation, and the advice your friends have given you. Repetition is key here, as the game spirals through visual depictions of loneliness and heartbreak. *Forever Someday* was created a year after Santini’s break-up, when emotions were still raw.

Experimental games have lingered around the indie sphere for decades. They’re capable of pushing boundaries, encouraging conversations about how the medium relates to art, and redefining our assumptions of what a game can be. Through their work, developers are able to relate their feelings and experiences in a way that’s both abstract and universal.

The Days Trilogy, as it’s often referred to, does exactly this: it tells a personal story of depression, loss, and recovery, providing a sense of closure for its creator, Brazil’s Joarez Ceccato Santini, and a satisfying experience for players who’ve been through similar experiences themselves. The first game, *Forever Someday*, sees a male figure falling in love and enjoying life with their partner, only to see the relationship coming to a crashing end. Its follow-up, *The Color of Days to Come*, sees the same character falling for a girl, breaking up, and trying to overcome

the sadness that follows. The third, *The Cold Remains of Warmer Days*, wraps up the series with a story of recovery and acceptance.

Santini, who sometimes goes by the pseudonym The One That Never Was,

“LIFE DOESN’T GIVE YOU INSTRUCTIONS OF WHAT TO DO WHEN YOU’RE GOING THROUGH A BAD TIME, AND I WANTED TO PORTRAY EXACTLY THAT” 

took inspiration from his own failing relationship, and started making the games over the course of a few years for the Ludum Dare game jam. Each game uses cut-out graphics, like a collage of clippings from a newspaper. It’s a unique aesthetic, and one seldom seen even in the multifaceted world of indie gaming. “There are several reasons I used this style,” Santini explains. “One was that newspapers are used to report something of the day that has passed, like a memory representing something that happened in your life.”



With no instructions to speak of, *The Days Trilogy* places the player in a variety of situations and forces them to figure out what to do next – a conscious design choice on its creator’s part. “Life doesn’t give you instructions of what to do when you’re going through a bad time, and I wanted to portray exactly that,” Santini says. “Only your own experiences and your own actions can make you move forward.”

Some of the games’ sequences feature point-and-click exploration, while others have the player typing on the keyboard as if it’s a typewriter; this limited form of interaction was also completely deliberate, Santini says. “I try to explore the physicality of the gameplay to convey the feelings. For example, making repeated movements with the mouse to give the idea of effort, pretending that you’re typing on the keyboard to really sound like you’re writing, and so on.”

CREATIVE BLOCK

Making the series proved to be a valuable catharsis for the developer, and was ➔

Interface

The Days Trilogy: healing through game design

DESCRIBING HER

The Color of Days to Come is similar to *Forever Someday*, albeit even more bleak. There are scenes of the couple together, with simple actions that show there's no way of repairing their broken relationship. Abstractly, we see what the partner meant to the main character, and they slowly begin to move on.



▲ *The Color of Days to Come* sees the central character finally overcome their heartbreak.

borne out of a period where creating anything new felt impossible. "After the end of a five-year relationship with my ex, my depression got very bad, and that led to a creative block," he explains. "I wasn't able to make anything; I stopped developing games for several months. [Then] I realised I had to do something about that: I couldn't stop making games forever. So I thought I could use that bad feeling and create an experience with it."

The trilogy's imagery – which often echoes the work of early 20th century surrealists – was borne out of a desire to sum up difficult emotions visually, and without resorting to reams of text. "I looked at my own feelings and realised that I couldn't describe them in words," says Santini. "But the whole first game popped into my mind quite naturally, all of a sudden. I followed exactly the image I had of the game inside my head from the very beginning – I made this decision so that the portrayed feeling was really pure and real, with no other influences.

"With the second game, it was a little different: I started to write down

▼ *Forever Someday* uses simple 2D graphics to often powerful effect.



▼ Repetition's a common theme in *Forever Someday*, with clockwise mouse movements used to evoke a sense of loneliness and time passing.



my dreams every time I dreamt of something related to the break-up and my depression. From this, I analysed the feeling I had with that dream and turned it into a part of the game."

The final entry was created in a different head space. "In the third and last game, it was much more complicated, since it had been a long time since the break-up and I was already feeling much better," Santini says. "Because of that, I had no inspiration to make a last game, but I felt I had an obligation to develop it."

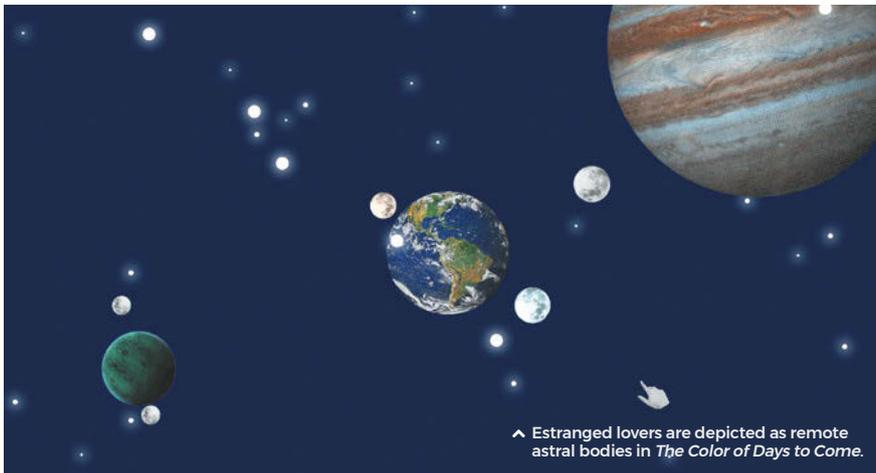
The need to craft a new story meant reliving painful memories, but by pushing forward and creating these deeply emotional games, Santini was able to document their thoughts and get them out into the open. "The first step to feeling better is to look within yourself

and understand yourself," Santini says.

"The games were important for me to get to know myself better and to know what I should do to improve [as a person]."

The games' public release also served as a form of therapy, with the developer receiving messages of support from people who'd gone through similar experiences. Although there's been more awareness about mental health issues in recent years, subjects like depression, medication, and the emotional impact of life-changing situations are still taboo subjects in mainstream society. But through indie games, developers are able to explore sensitive subjects in a personal way.

"I believe that indies have a freedom," Santini says. "They're able to convey their own feelings in their games. In the mainstream industry, there is no such



▲ Estranged lovers are depicted as remote astral bodies in *The Color of Days to Come*.



▲ In *The Cold Remains of Warmer Days*, the player breaks up painful memories so they can be stored safely away.

freedom, since teams are made up of many people with different views, and the games always aim for profit. Depression is a feeling that must be talked about: it can't be a taboo for society. While developing my games, I realised that many people around me also felt this way, and had already experienced similar situations."

MOVING ON

Santini refers to his games as 'psychological experiences', and they've appeared at game jams alongside arcade games, point-and-click adventures, platformers, and other traditional genres. "I still don't know where it fits into the indie space of games," he explains. "I see few games that talk about love (and the

end of love), most of them being simple and free games on the web. Games about depression also follow the same line. I would like the market to value developers who put their heart into expressing themselves. From the feedback I received about my [trilogy], I realised that people

"IT GIVES ME HOPE THAT THERE'S ROOM FOR DEEP PSYCHOLOGICAL GAMES IN THE INDIE SPACE"

liked it a lot, and they want to play more games like this. It gives me hope that there's room for deep psychological games in the indie space."

Putting such a raw, personal slice of life up for public consumption is a strange experience, Santini says, but not one he

▼ Through surreal imagery, *The Days Trilogy* expresses sensations that are difficult to sum up through words alone.



GOING BACK

In the last game in the series, *The Cold Remains of Warmer Days*, memories are destroyed with your mouse, then bottled up and locked away, so that the main character can overcome their heartbreak and move on. Partway through this game, you have to go back and seek out those memories, to write about them, and move forward completely, with the past addressed and shared with the world, just as the developer shares his experience through the game.

regrets. "It's an experience that requires attention and interpretation, even after the game has ended. I never let the ideas and suggestions of others affect my view of the trilogy, and I've always developed with total sincerity. I wanted to extract the feeling in its purest form without any external influences."

The developer's also making a new and more complex game: a walking simulator called *The Cozy Things*. "It takes place in a jazz bar," Santini explains, "and it's about comfort zones, getting out of that comfort zone, and having to deal with that decision. Although it's a 3D game, the style is similar to the [*Days*] trilogy – it might even be considered a spin-off."

Santini hasn't finished with *The Days Trilogy* yet, though, with a remastered version of the series currently in the works. The remaster improves on the original game jam titles, and – now free of time constraints – allows the developer to spend more time polishing scenes and adding extra content, with the goal to launch on Steam and itch.io in 2019.

Created quickly and pulsating with raw feeling, *The Days Trilogy* has allowed Santini to explore some difficult subjects – and, he says, it's something he wants to keep doing in the future. "Basically, [my plan is] to focus more on this style of experimental game, to launch them in the market, and hope they work out right." 🗣️



Banish the BOMBAST

Enough with the shouting: here's a selection of soothing titles for you

Games: you don't have to be so damn loud all the time. If you're looking for a selection of the most relaxing of titles, the most laid-back of experiences, the least taxing of tales, this handy list of Wireframe-approved soothing games is the one for you. You'll have to provide your own bubble bath and candles, though.



Everything PS4 / PC / Switch / multi

A game with a simple goal – find out about everything – and an unhurried pace, *Everything* isn't as overwhelming as it might first sound (what with the whole 'be everything!' spiel). Instead, it's a reflective, sedate journey of relaxation and a bit of learning along the way. Comforting.

Stardew Valley

PC / Switch / PS4 / XBO / multi

With so many things to do and only little time to get it all done in a day, why does *Stardew Valley* belong on this list? Because you don't have to do any of it. You can just muck about collecting sea-shells if you want, listening to one of life's finest soundtracks and wooing the locals to your heart's content. A soothing great.



House Flipper PC / Mac

Starting with a mess of a house that you need to clean up before selling on is intensely stressful in real life, I'm sure. Even affording a house in the first place is stressful. But *House Flipper* gets rid of all that worry by just letting you crack on, safe in the knowledge you cannot fail, even if the house you've done up ends up in worse shape than when you started. Bliss.

Everybody's Gone to the Rapture PS4 / PC

What's better than a walk through the idyllic British countryside? A walk through those winding country lanes when everybody in the world has suddenly disappeared, of course. Sure, there's an underlying mystery and a tale to be told, but you can do everything as and when you choose, with nothing really *urging* you on. Heavenly.





Journey PS4 / PC / iOS

One part of the game does have some mild peril – not to sound too much like the warning on a film – but 99% of *Journey* is just bewilderingly gorgeous, laid-back joy. We have to adjust our editorial beret before saying this, but it is true: *Journey* will stay with you, impact you, affect you, and utterly relax you. Placid.



Animal Crossing Nintendo devices / mobile

It's not that games have to be twee to be soothing, but the *Animal Crossing* series is proof that, really, a bit of tweeness doesn't hurt. Yes, you're at the mercy of a ruthless land baron in the form of Tom Nook for part of the game, but there's no ignoring just how wonderfully relaxed the whole experience is. Serene.



No Man's Sky PS4 / PC / XBO

You might have missed it between the screams of *that lot* online, but *No Man's Sky* has always been one thing over everything else: soothing. A considered, carefree romp through a universe (almost) all of your own, this is a title to turn on of a cosy Sunday evening and calmly pass a few hours with. Composed.

Universe Sandbox PC / Mac

The marketing for this one has shifted in a more stressful direction – that being the fragility of our planet, the universe, and everything else – but the core concept of *Universe Sandbox 2* remains a soothing one. Basically you can build stars, planets, an entire universe, and just let it... be. Or you can make it all explode. Soporific.



Euro Truck Simulator 2

PC / Mac

Every time it has to be pointed out: this is not a joke. *Euro Truck Simulator 2*, if you let it get its hooks in, is one of the most engrossing, relaxing video game experiences a person can have. You are literally a trucker, you deliver things from one place to the next, and it is absolutely, unironically fantastic. Calming.





System Profile

Wii U

BREAKING NEWS: NINTENDO IS FALLIBLE

Hands up who had no idea what the Wii U even was when Nintendo announced it back in 2011. It's fair to assume a lot of you thrust your paw skywards at that. It all started with the name: Wii U. The marketing spiel – games for everyone, but focused on *you* – was there, but that *name*. Nintendo showed off a gamepad with a touchscreen on it, told us a name that sounded like an augmented version of its then-still-going console, and then managed to actually be surprised when loads of us either didn't know what it was or assumed it was just a peripheral for the original Wii. While not quite on a par with the Virtual Boy, the Wii U did end up being quite a bump in the road for Nintendo.

The message honed, the audience filled in, the penny eventually dropped: this was an entirely new machine; more powerful than the Wii, able to output HD graphics, and with a tablet-like controller to augment play like never before. It's still a decidedly bold experiment in the design of gaming devices, and honestly, it still feels like the Wii U didn't quite get the respect it deserved in its oh-so-brief existence (launching late 2012, it was discontinued early 2017).

This was an inventive and bold device that happened to go head to head with the technological tyrants of the PS4 and Xbox One. But unlike the Wii, a generation prior, the mood of the public wasn't on side. There was no Wii Sports moment; no daytime television presenter extolling the virtues of balance boards. Instead, there was a device with an uncertain aim – it

▼ Tapping, below, was augmented by amiibo, above, for the full Wii U gimmick experience.





^ By launch, it was pretty much cleared up, but Nintendo's messaging around what the Wii U actually was initially left a lot of folks confused.



wanted those lapsed Wii owners back in, but it wanted to hammer home its hardcore credentials. It tried to make a play for committed online gamers, but it didn't offer enough of the big hitters to actually lure them in by the millions.

Some of the blame has to be directed at the big publishers, most of which abandoned the Wii U after little more than a cursory glance. None more so than EA, which publicly pledged its support for Nintendo's machine, then released a grand total of *three* games in the Wii U's entire lifespan. Others were less dismissive, but none ever really pushed the machine as a focus, and as such, the Wii U ports felt like afterthoughts. It wasn't all bad when it came to third-party titles – Nintendo itself very surprisingly revived everyone's favourite hair-wearing witch in *Bayonetta 2*, something few would have predicted.

“EA pledged support, then released three games in the Wii U's entire lifespan”

But there's no arguing with the numbers – emotion can cloud judgement as much as you like, but Nintendo had gone from a 100-million-plus selling cultural phenomenon of a console to a confused mess of a launch that only managed to shift 13.5 million units. All the good faith in the world can't save you from figures like that, and Nintendo is still a business out to make money. The Wii U was pushed lower down on the list of priorities, the 3DS picked up a lot of its slack, and attention internally doubled down on development of a successor.

We know how that's gone, of course – the Switch is currently doing very well (42 million units sold at the time of writing), and is roundly regarded as one of the best gaming devices ever made. But Nintendo



^ EA's support for the Wii U was promised, but ultimately lacking, and definitely contributed to the console's mainstream struggles.

isn't myopic in its approach, nor does it reject its past – even when it fails. Off-TV Play, a touchscreen, integrated Nintendo Network features, and more all carried over from the failed experiment of the Wii U to the Switch, so there are some thanks to be lobbed at the Wii U here.

NEW (NAUGHTY) NICHE

These days, the abandoned consoles fill a very different niche from the one Nintendo envisioned: a favoured tool for the casual hackers of the world. With a bit of tinkering, it's easy to open up the Wii U and make it a hotbed for emulating the classics, all (or at least most) playable on the gamepad's screen. It's also one of the best ways – outside of the original hardware – to play GameCube games, though we'll leave the specifics of that to you, your imagination, and your favourite search engine.

What it couldn't accomplish in life, the Wii U hasn't accomplished in death either – there's no way this would be the favoured outcome for the machine, for Nintendo, or any other platform-holder. But there are things to be salvaged from the wreckage of a near-complete failure of a console: it's a great emulation device, it does have some *wonderful* exclusives (see the next two pages), and it led us on the direct path to the Switch; one of Nintendo's best-ever machines, one of gaming's best-ever machines, and something that likely would have been very different were it not for this oddly named bump in the road. 🍷



^ A failure? Undoubtedly. But still home to some greats.

Wii U look at that

10 titles that are nowhere else... yet

A few Wii U exclusives worth a look



01
The Wonderful 101
2013

The third in a trilogy of titles from power couple Hideki Kamiya (director) and Atsushi Inaba (producer), *The Wonderful 101* joins *Viewtiful Joe* and *Ōkami* as another great. It's a fun mix of battling and puzzle solving, with players controlling a group superheroes. Platinum announced, as we were writing, a remastered version is coming to modern devices. Huzzah!



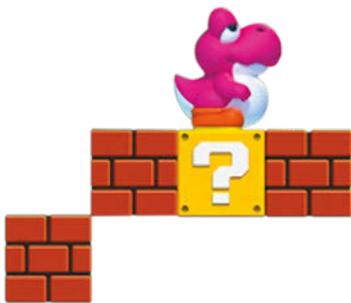
02
Super Mario 3D World
2013

A *true* Mario game, but one often overlooked probably because of its emphasis on multiplayer, *Super Mario 3D World* might not hit the heights of *Odyssey* on Switch, but it's still a fantastic game in its own right. Also, it introduced the ability to change into a cat, and that's something we should all reflect on as being a turning point for the series.



03
Splatoon
2015

Nintendo's attempt at cornering the online shooter market – in inimitable Nintendo fashion – is an ongoing concern thanks to its Switch sequel. The original *Splatoon* shouldn't be overlooked though, with the gamepad's on-screen map a boon over the sequel, and the general territory control action still being fun to play. Best of all? The servers are still up.



04
Kirby and the Rainbow Paintbrush
2015

The claymation aesthetic was the main standout for this fun exercise in path-drawing. Reception was mixed, though, with some finding the action a bit too hands-off – and the need to focus on the gamepad's screen annoying, given the sumptuous visuals. The rest? Well, we were just enamoured with it, really.



05
Xenoblade Chronicles X
2015

The tenth release in the *Xeno* franchise, *Xenoblade Chronicles X* had some bold aspirations, and an experienced team to bring it all to life. The story admittedly fell a little bit flat, but overall this one is a well-made and decidedly epic JRPG experience. It might not be the best in the series, but it's still a worthy addition and a must-play for any Wii U owner.

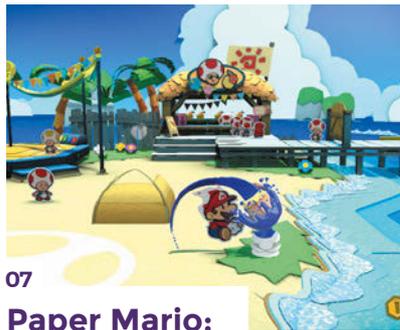


06

Affordable Space Adventures

2015

A fine little indie gem hiding away on the Wii U, *Affordable Space Adventures* tasks players with piloting a little ship as they try to escape a hostile planet. What makes it stand out is the use of the gamepad, on which is the ship's control panel – engines, lights, landing gears, and so on. Unique, and great fun.



07

Paper Mario: Color Splash

2016

A further step away from *Paper Mario*'s RPG roots it might be, but *Color Splash* is still a fun action-adventure title that's worth a look for any Wii U owner. Card battling is fun, the script is snappy and well translated, and it looks phenomenal – all of which comes together to make it a mandatory Wii U experience.



08

Fast Racing Neo

2015

Outside of Virtual Console re-releases, there was no official *F-Zero* game on Wii U. *Fast Racing Neo*, fortunately, fills that empty space admirably – offering fast racing (the clue's in the name), challenging courses, and a finely balanced colour/phase-shifting mechanic where switching to the correct colour at the correct time offers a boost. Lovely stuff.



09

Pikmin 3

2013

The series skipped the Wii entirely, with *Pikmin 3* waiting until the Wii U arrived – along with its gamepad, of course – to knock it out of the park with more of that tiny thing-flinging, puzzle-solving action. Gorgeous and made with real intelligence, it's a standout exclusive on Wii U that would almost justify picking up the console by itself. Almost.



10

Nintendo Land

2012

It's a minor miracle that this collection of minigames, made to show off the abilities of the Wii U and its gamepad, was as good as it was – but then I suppose that's Nintendo magic in action. It's the mix of creativity, known properties (*Mario*, *Metroid*, et al), and multiplayer that makes this so much more than the sum of its parts.



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Info

GENRE
Shooter / Strategy
FORMAT
Windows
DEVELOPER
Piranha Games
PUBLISHER
Piranha Games
PRICE
£39.99
RELEASE
Out now

REVIEWED BY
Nic Reuben

HIGHLIGHT

Despite some visual inconsistencies, eviscerating a stray limb with a well-placed laser is always every bit the satisfying spectacle it should be. A constant sense of feedback and reactive damage keeps the stakes of each fight amplified, from enemy mech damage to flaming trees and crumbling buildings.

✓ *MechWarrior 5* is never exactly pretty, but it occasionally hits you with something special.



MechWarrior 5: Mercenaries

Nu-Metal

In *MechWarrior 5: Mercenaries*, you're always made to feel as if you're in the role of the pilot controlling a mech, never just the skeleton of the mech itself. There's topsoil-shattering weight

between every creaking torso twist, every piston-straining step. A pushback response to every input, reminding you of the sheer size of the bipedal tank you're navigating. But you and the mech are also inseparable. Each stray rocket could lead to a metallic amputation and a longing for an autocannon to scratch that phantom itch. Each laser that sears your steel chassis is felt as a violent and potentially catastrophic interruption. This sense of heft and presence, of an immense power that is nonetheless fragile in the face of equally powerful opposition, is *MechWarrior 5's* most compelling draw. It's a draw that has to grapple with repetitive, procedural missions. That, and time navigating spreadsheets that could have been streamlined without losing much. Happily, it also frequently comes out on top.

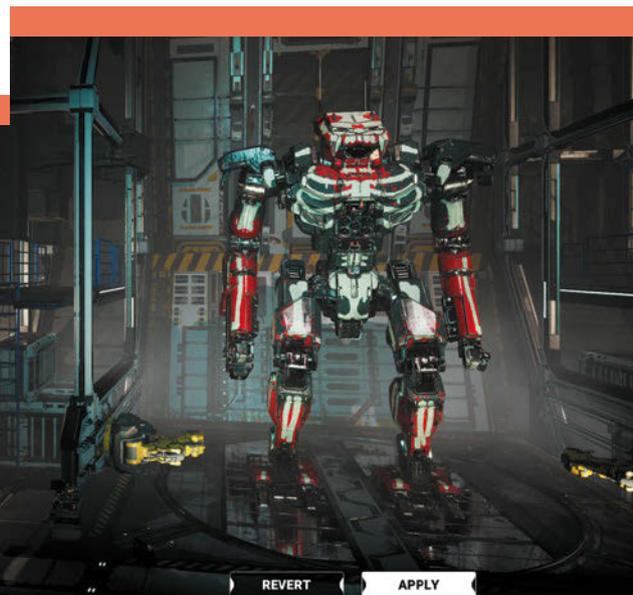
You begin the game as the son of a respected leader of a powerful mercenary mech company. Dad gets killed, you get your toys taken away, and have to start afresh with a handful of low-

tier mechs and limited funds, building up the reputation and strength of your new company. It's a thin plot conveyed through perfunctory dialogue, but it's also quite easy to ignore. You want to play with some shiny new mechs. The story wants you to get those shiny new mechs, so you avenge a guy you knew for about 15 minutes. Sure. I'll bite.

Your main hub is the chunky freighter which houses your mechs and pilots, and from which you can access a starmap, letting you know where to go for missions and marketplaces. Travel, repairs, and refits all take time, which is mainly significant because you'll have to pay out monthly salary and upkeep fees. Missions reward reputation, salvaged equipment, credits, and standing with the hiring faction. Earn enough reputation, and you'll unlock a new story mission. Finish this, and you'll get access to some more freeform planet-hopping.

It's a loop that would be much more compelling if there was much to differentiate the story missions from the optional procedural ones. That said, it does give you

✓ Yes, you can paint the mechs. Stop asking.





▲ Giant stompy robots haven't been much prettier.

plenty of opportunities to experiment with new mechs and loadouts. In single-player, you can select up to three other pilots to accompany you. Although battle commands are limited to some light positioning and targeting commands, the AI seems to do a decent job of helping you with objectives without getting themselves too shot-up in the process.

Expensive damage is unavoidable, though, and how you feel about it is going to depend on how much you enjoy the ritual of refitting and repairing your clumsy, stompy sons between missions. Repairs aren't too much trouble, but it can be frustrating to take a detour to the nearest neutral star system to replace specific lost weapons. Spreadsheets are, undoubtedly, part of the fun of the *MechWarrior* experience, but battles are often more intuitive than tactical, more scrappy than strategic, so spending too much time perfecting loadouts often feels superfluous.

If you do want to avoid all this though, there's always the option to jump straight into a custom map, with every mech, every weapon, and pilot available immediately. It's both a blessing and a curse. With the power curve and story removed, they're both revealed to be lacking to begin with. There's fun in the campaign's quest to slowly build up your company, getting the feel for each new tier of mechs along the way, sure. But not so much that, when I inevitably return to *MechWarrior 5*, I'd ever choose the campaign over the custom quick battles.

I mean this just as much as a compliment towards the battle's strengths as a criticism of the campaign's often underwhelming framing, though. That weight I mentioned before is present in almost every action: every burst, laser, and rocket feels significant. Mech armour sears and crumbles. Comm commands crackle over emptied shell-casings, and in case things weren't metal enough already, it's all scored by the glorious death march of frenetic fretboard noodling. Aside from the enemy mechs

themselves, you'll often be hounded by some extremely brave tanks. You can, of course, walk straight over them, as you can walk straight through cities, the wanton destruction around you no more than a minor inconvenience. I'm left thinking about the years of planning and work, sweat and tears, and sandwich breaks that went into building every wall and structure, and how easily you crush it underfoot like a burly mechanised beach bully kicking a sandcastle in a nerd's face.

If tactical isn't the right word, then there's undoubtedly a thoughtfulness here. Mechs can overheat if you push them too hard. Alongside weapon recharges that are long enough to require that you factor them into your approach, this means that clashes have a deliberate, measured rhythm to

"It gives you plenty of opportunity to experiment"

them that complements the heft and friction of manoeuvring.

If it's simulation, strategy, and story that defines this universe for you, you'll still want to go with Harebrained Schemes' *BattleTech*. Everything here feels a bit too close to the main event's periphery to satisfy the urge to ever truly inhabit a role in this world. It is though – strategic lightness and some occasionally thin-feeling environmental visuals aside – still one hell of a main event. 🤖

▼ You like stats? We've got stats.



VERDICT

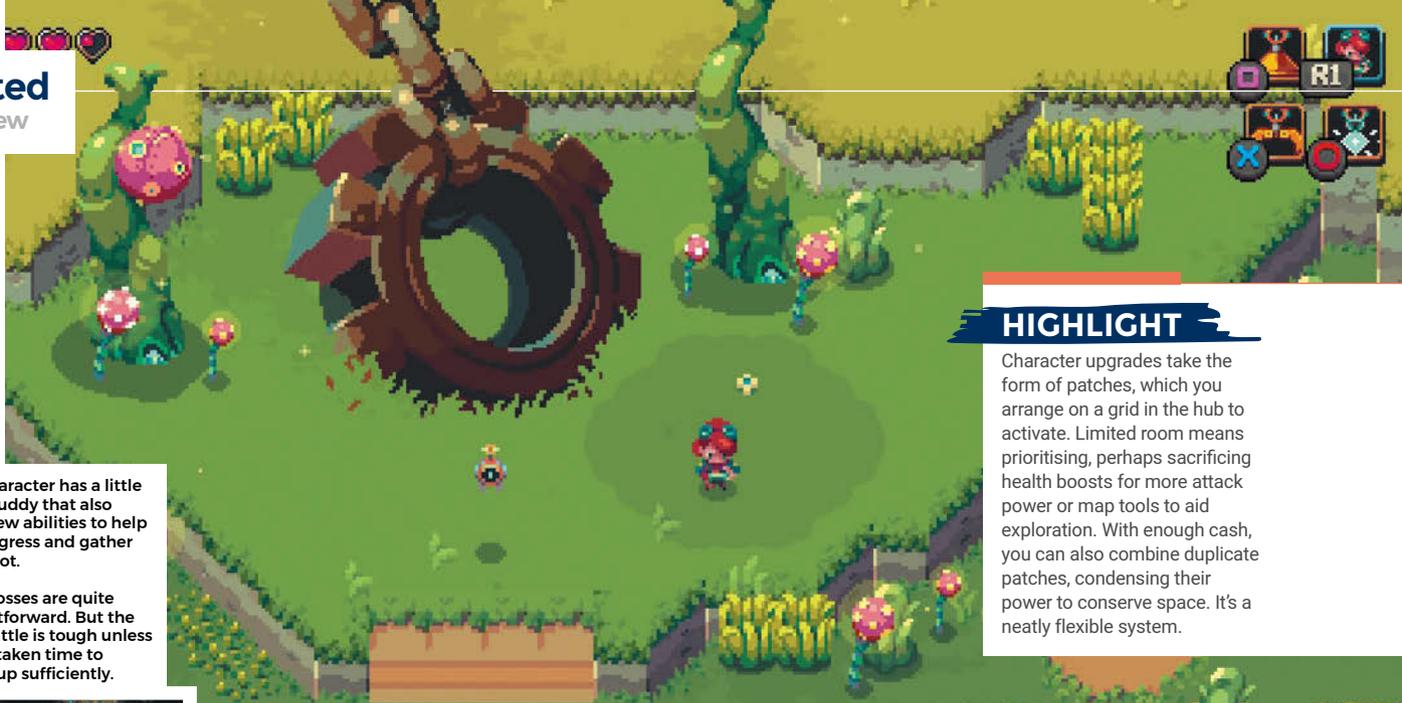
Even repetitive mission structure, uneven visuals, and thin simulation elements can't dampen how exciting it still is to go toe-to-toe with the heaviest metal on the market.

70%



▲ While component destruction is rewarded, it's often more trouble than it's worth to line up a precision shot mid-fray.

Rated
Review



- Your character has a little robot buddy that also gains new abilities to help you progress and gather more loot.
- ▼ Most bosses are quite straightforward. But the final battle is tough unless you've taken time to power up sufficiently.

HIGHLIGHT

Character upgrades take the form of patches, which you arrange on a grid in the hub to activate. Limited room means prioritising, perhaps sacrificing health boosts for more attack power or map tools to aid exploration. With enough cash, you can also combine duplicate patches, condensing their power to conserve space. It's a neatly flexible system.



Review

Sparklite

Contains 50% less fat than regular Spark

Info

GENRE

Action
adventure

FORMAT

PS4 (tested) /
XBO / PC /
Switch

DEVELOPER

Red Blue
Games

PUBLISHER

Merge Games

PRICE

£19.99

RELEASE

Out now

REVIEWED BY

Jon Bailes

VERDICT

For all the incentive to explore *Sparklite* offers, there's not enough to really discover.

57%

If you've any affinity for the stylings of SNES action RPGs, initial impressions of *Sparklite* are likely to be favourable. *Secret of Mana* is probably the most apt comparison to *Sparklite's* boldly coloured pastures and grottoes, and its mellow, catchy soundtrack. Or perhaps a 2D *Zelda*, not least when you're cutting through tall grasses and bombing rocks. It's an instant nostalgia boost.

There's a solid structure pinning it together too. Your floating, balloon-powered hub is a mini RPG town full of friendly faces ready to furnish you with gear. As you venture out to explore the five interconnected environments below, you'll find other characters, who return there to offer new services. You then renovate their stores and workshops to access even better stuff. All for a price, of course.

On the ground, you clear out screens of enemies, tracking down money and upgrades until you feel powered up enough to tackle the area boss. Battling the aggressive wildlife is breezy and rhythmic, as you time your dashes and spanner swipes between enemy shots and charges. And each area has a new gadget to find, such as a remote-controlled rocket or a self-shrinking tool, which opens up more routes and grants access to further treasure.

The twist is that every time you die, the world changes. Areas are still connected in the same way, via a central starting zone, but the layout

within each shifts shape and content and must be mapped afresh. This doesn't quite make *Sparklite* a roguelike, as you don't lose progress, but adds a random factor that, in theory, should make it worth exploring an area many times.

In practice, it doesn't quite work out. Once you've combed an area once or twice, excavated a few key locations, and defeated its boss, the only incentive to return is to grind cash. It's here that the low variety of enemies and scenery becomes an issue, along with an absence of cunning level design – none of the underground caverns or challenges you find require ingenuity to traverse, and those *Zelda*-like gadgets really just function as extra weapons or keys.

As you enter a treasure cave that's identical to one you'd mined elsewhere, it all starts to feel undernourished. It doesn't help when multiple minor glitches make you wonder whether something actually is missing. Either way, it mostly boils down to methodically visiting squares on the map, bashing up monsters, and picking up loot. Combat at least demands focus, but you soon get used to fighting the same foes.

Sparklite is a 16-bit tribute that merges, polishes, and updates old formulas, but doesn't have much below the surface. It's *Secret of Mana* without the epic RPG trappings. *Zelda* without the precise craft or puzzles. A reasonably satisfying core experience that needs more spark and is a little too lite. 🗨

“In practice, *Sparklite* doesn't quite work out”

Why do you say your involvement with the Front was for your kids' sake?

Are they proud of their mom being a terrorist?

Did they know you were involved with the Liberation Front?

What, you want your kids to live in a world in which they can be blown up by a maniac any minute?

Why do you say your involvement with the Front was for your kids' sake?

Let's talk about something else.

The explain slowly.

Well, I want to ensure that they can live in a world in which they have control over their own lives.

PAUSE

Rated
Review

-1

3

HIGHLIGHT

Interrogation gives you a team of staff that you can give assignments to. One of them is really bad at their job, and always gets things wrong, but is impossible to fire. So the only thing you can do with them is keep giving them the night off. It's not really a highlight, it's just relatable.

Review

Interrogation: You will be deceived

A cracking game

Interrogation casts you as the leader of a crack negotiator, working hard to take down a violent terrorist organisation called the Liberation Front, who keep blowing stuff up because they're angry about... having to pay taxes, or something. Pinning down exactly what their motives are is one of the things you have to decide, and it's deliberately quite muddy – more on that later.

Chapters start with an incident; a murder, a bomb threat, a hostage situation, which requires some key information or confession to be extracted from a suspect, often under a strict timer. Essentially it's a text adventure, in which you have to find holes in your suspect's story and pick at them, using either empathy or intimidation to pry them open enough to squeal.

There are no motion-captured actors in sight. Just monochrome, rotoscoped slideshow people who look suspiciously like they work in a game studio. This is a drab world, cobbled together from Polaroid snaps and concept art, a visual style that's somewhere between *Sin City* and *Dear Deidre's Photo Casebook*. There's no voice acting either. The audiovisual elements are but set dressing – nothing of substance may be found there.

Given that it all hinges on the words, the writing must be exemplary, right? Well, it's a mixed bag. There are flashes of brilliance – when you know that you've nearly got someone nailed to the wall, but they just won't crack. Or, when you manage to tease flickers of empathy out of an otherwise unreachable hostage-taker.

Other times, it's frustratingly bad. A particularly unsympathetic depiction of mental illness sticks out; in which someone with "a form of schizophrenia" is described as being especially vulnerable to extremist radicalisation, though no causal explanation is offered. Their depiction is cartoonishly evil, incongruous to the rest of the game. The script simply isn't smart enough to navigate these waters with any nuance, and I wish it hadn't bothered trying.

The Liberation Front themselves are a loose coalition of Normal People with a selection of differing and contradictory end goals. Membership includes priests, anti-fascists, communists, soup kitchen volunteers, conservative soccer moms, gun nuts, and misogynist dudebro libertarians in Hawaiian shirts.

The message is that anyone from any walk of life can be radicalised; the reality is that this comes off as fence-sitting 'both-sides' rhetoric, like the game is unwilling to pick an ideology for the villains for fear of being Too Political. If that's the case, one would suggest not making a game about political extremism in the first place.

It is a mechanically competent game with some great bits of genuine tension. You may often find yourself leaning back on your chair, desperate to chain-smoke, saying things like "I've nearly cracked this piece of dirt" out loud. Sometimes, it's an annoying clickfest, where, without any obvious routes to plough, you just click every option until something sticks, at which point you're not playing a game – you're prodding a script engine. 🗿



^ "The tragedy may have been averted if this rubbish was out on Switch"

Info

GENRE
Police procedural

FORMAT
PC (tested) / Mac

DEVELOPER
Critique Gaming

PUBLISHER
Mixtvision

PRICE
£15.49

RELEASE
Out now

REVIEWED BY
Dave Hurst

VERDICT

A microbudget police procedural with enough good ideas and scrappy indie charm to get past its glaring problems, but just barely.

54%

NOT ALL THOSE WHO WANDER ARE TAYLOR

PRESS TO START



Review

SuperMash

SuperMash tries to create, then find, the needle in the haystack

Info

GENRE
Genre-'em-up
FORMAT
PC (tested) /
Switch / PS4
/ XBO
DEVELOPER
Digital
Continue
PUBLISHER
Digital
Continue
PRICE
£19.99
RELEASE
Out now (PC)

REVIEWED BY
Andrew King

In some ways, *SuperMash* is a logical extension of the last decade of work in procedural generation.

Spelunky assembled new levels to explore each time you played, and hundreds of rogue-lites followed suit, scrambling their tilesets in pursuit of an endlessly replayable game. *No Man's Sky*, similarly, held the promise of a forever game, a galaxy that – through algorithmic creation – could be explored forever.

Spelunky was the game that made levels. *No Man's Sky* was the game that made planets. *SuperMash*, per its marketing, is the “game that makes games.”

As a teenager named Tomo, who works at a video game shop run by his older sister Jume, you are the new owner of a PlayType Game Machine, a gadget that can smooch two 16-bit genres together to create one new game. To do this, you'll select from a pool of six genres – stealth, action-adventure, JRPG, platformer, shoot-'em-up, and the copyright-skirting metroidvania – and jam them together to create new chimeric “mashes.”

One might be a shoot-'em-up where you occasionally pause from the blasting to cast an ice spell on a fighter jet in turn-based combat. Another could be a Metroidvania with portals transporting you into *Metal Gear* stealth sequences. One might take you to a

platformer, where in order to shoot fireballs you have to select that attack from a JRPG-style menu, mid-jump.

The bulk of *SuperMash* involves choosing the genres you want to mash, adding unlockable modifiers – one might stir in a beneficial glitch; another might introduce a new enemy type – and then playing them through to completion. Potential customers wander the store and will request specific mash-ups, which you can make and give to them to unlock new modifiers and tokens. Though the game takes place in a video game shop, it isn't Video Game Shop Manager, so you don't actually need to worry about Tomo and Jume's financial situation. The story and setting are just scaffolding for the mashy hook at the game's heart. You will spend roughly 90 percent of your time in *SuperMash* making and playing mashes, and about ten percent advancing through visual novel narrative segments.

So, how is the mashing you spend so much time doing? It averages out to just about OK. On a base level, each genre feels pretty good to play. The jumping is satisfyingly springy when you're platforming, and the JRPG bits use a basic, but tried-and-true, menu-based formula. Though there's variation from game to game, the action-adventure titles often manage to capture the exploration and progression that power a 2D *Zelda* game. Stealth works well, too, with a

They would have to do things like the trial to Find the Stone of Moods in under 5 Minutes as quickly as possible.

Each mash begins with a text intro, setting up the proc-gen story and win requirements. It quickly gets tedious, and I was skipping these after an hour.





^ The in-mash art often nails the aesthetic of each genre's 16-bit era.

button hold required to stealthily take down guards. I'm not a big fan of old-school shoot-'em-ups, but these shoot-'em-ups feel like old-school shoot-'em-up fans will like them. The worst of the bunch is metrovania, which seems to boil *Metroid*-style design down to "like a platformer, but there's no discernible goal, and the camera is a little farther away."

Some of the mash-ups are genuinely interesting, too. They're rarely, if ever, great, but there are flashes of proc-gen brilliance. One of my favourites cut the turn-based combat out of a JRPG, replacing it with stealth takedowns. It wasn't polished, but it presented an interesting idea that I would love to see expanded into a full game. None of the mashes are deep, though. The breadth of genres represented, and the randomness of their creation, ensures that these feel more like game jam games or rough proofs of concept than finished ideas.

"Some mash-ups are genuinely interesting. They're rarely, if ever, great"

There are also some annoying glitches that occasionally hampered my fun. The most serious problem was that one of the game's major features, which allows you to share mash codes and play your friend's mashes, broke my game whenever I tried to use it. Several times, I tried to input a code that a member of the team at Digital Continue showed off during their trailer in December's Indie World Direct, only to get stuck in the interface. The only option was to quit out of the game. I tried it again today, and it worked. It seems that this feature

needs an internet connection to work properly. The game didn't communicate this. It broke instead. Additionally, some stuff around the edges is rough. Customers constantly glitched as they entered and exited the store, hung up on each other or on level geometry.

The problems are real, but *SuperMash* manages to create some great, if undercooked, ideas. It's the closest thing I can think of in games to a collection of writing prompts. But, it feels like it desperately needed an editor, both for its story – which introduces threads that it ends too abruptly to do much with – and for its collection of games. I don't know if Digital Continue will get to make a sequel, but if they do, I hope they drill down on some of the cool ideas that their algorithm managed to surface. *SuperMash* isn't a game that makes games; not really. But, its interesting experiments may inspire the people who do. 🗨

HIGHLIGHT

Each game comes with a beautifully absurd name. The Prophecy Foretells of the Froggy? Sure. Attractive Ghost? Why not. Minigun Folklore? Hell yeah!

VERDICT

SuperMash is a game that makes levels. Some of them are good, but it would be massively improved with some pruning.

60%

✓ The procedurally generated mash names are often hilarious, as evidenced here.

**TRANSYLVANIAN
VENTURE
CAPITALIST**
PRESS START

Rated
Review

HIGHLIGHT

It's hard to say *Dragon Ball Z* is hilarious or any such compliment, but it has its moments – and many of these have been translated into a selection of goofier side quests in the game. Getting your driver's licence as Goku or tracking down the philandering Yamcha were particular highlights.

✓ When you change your hair-style, your friends have a tendency to stare.

Review

▲ Gohan hasn't quite learned how to use public transportation.

Dragon Ball Z: Kakarot

Open-world games can be a Saiyan in the ass

Info

GENRE

Action RPG

FORMAT

PS4 (tested) / PC / XBO

DEVELOPER

CyberConnect2

PUBLISHER

Bandai Namco Entertainment

PRICE

£44.99

RELEASE

Out now

REVIEWED BY

Jonathan Peltz

VERDICT

Little in the way of variety or innovation and a dull open world spoil what should have been a wish (to Shenron) come true.

58%

Dragon Ball Z: *Kakarot* is a comprehensive retelling of the original anime show, this time in the form of an action RPG, but one hampered by repetitive open-world design and a tedious structure.

Kakarot doesn't operate in a true open-world style, instead looking more to something like the *Yakuza* series for inspiration – that being a selection of interconnected areas separated by loading screens, all of which you're navigating by flying about. As you might expect, given this is based on a comic and TV show about a bunch of superpowered people (and aliens).

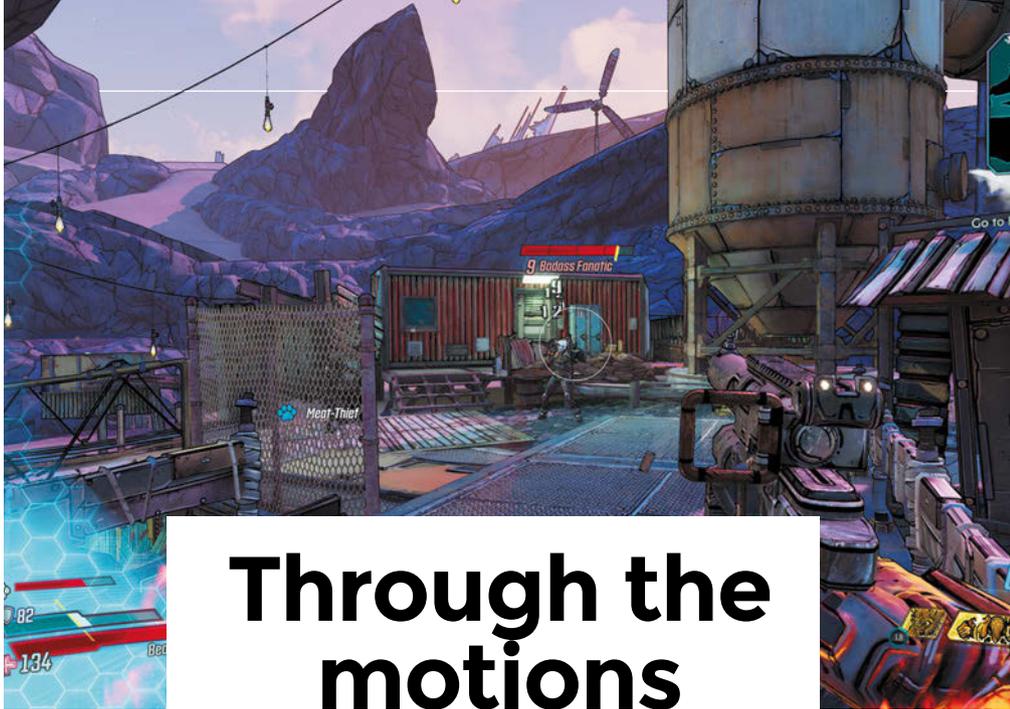
Those schooled in the world of *Dragon Ball Z* will take a lot away from *Kakarot* with its presentational elements. Not only are you met by an array of familiar faces, but the whole thing looks fantastic – its resemblance to the show is uncanny. There are areas where things look a mite less polished, especially in some outdoor environments, and I did meet a fair few glitches in my playthrough – like when young Gohan found himself stuck in a bit of furniture. While this kid is one of the strongest beings in the universe, apparently Ikea sofas are a bit too much for him.

The core of any *Dragon Ball* tie-in, though, is the battling – and it's a mixed bag at best with *Kakarot*. Fights are twitchy and responsive, with a hell of a lot of dodging along the way. While there are elements of customisation to be found, each character sees very limited fighting options, so any personalisation immediately

falls flat. Things are mixed up by non-story missions seeing multiple party members at your command, but there's no escaping the fact it's very samey. By the time you've put away Frieza (which isn't that far in), you'll already have settled on a battle strategy for every fight – and there are still dozens of hours left to play.

The game goes for a big RPG swing with its Community menu, a grid-like system where you boost stats by placing characters together in different categories and feeding them items you've acquired in order to bag some rewards. It could be a big, deep, and interesting aspect of the game, except I hardly touched it in my entire playthrough and saw little-to-no negative effects as a result. That's not exactly a glowing endorsement for what should be a core, strategic aspect of the game.

Those who come into *Dragon Ball Z: Kakarot* blind will find little to redeem the experience; this is very much fan service, and your enjoyment absolutely depends on your affection for the universe. While this revisiting of the mythology – in yet another video game – is where it all shines, generally speaking, the whole package feels like a missed opportunity. Just when you're picking up steam, the game throws you into another battle you've already fought, or pushes you to another section of the map that's at least one loading screen away. Just like the wait to get to the end of the Cell Saga all those years ago, *Dragon Ball Z: Kakarot*'s shine quickly wears off, and it soon becomes a tedious slog. 🗿



Through the motions

Ian finds there ain't no rest for the wicked in Borderlands 3

As one of nature's purest contrarians, I'm of the belief that *Borderlands* would have been better served to have stuck with its original, gritty, non-cel-shaded look we saw in teasers of the game about ten million years ago. And yet it's still a series that left me utterly enamoured, keying in to that specific part of the brain that craves *feedback* and *explosions* and *stuff*, and layering on top of it the ability to do all of this while a few friends play alongside me and consistently have to revive me because I am bad at games. Honestly, *Borderlands 2* is up there as one of my all-time favourite games.

So it came as something of a surprise to me that I just wasn't drawn in by the pre-launch hype of *Borderlands 3*. I just couldn't get myself to care,

and combined with an ever-growing disdain for the man in charge of Gearbox, it just didn't seem like something I'd want to bother with. I ended up with a code for the game, of course, and I've been playing it – across two formats, no less. But even now, it's still not doing it for me.

It was ably covered in our review back in Wireframe 25, but the basic fact is: things

haven't changed much. The first game was 2009 – it was new to me. The second 2012 – a refinement of what came before at a time when I could appreciate it. This one? Well, it's a seven-year gap, lots of

things have happened in the interim, and... I'm not feeling it. *And yet*, I can still see myself playing *Borderlands 3* on and off for a while to come.

Because it does still have that irresistible loop – go somewhere, shoot some things, get some stuff, repeat. The basics are honed; the brain-off satisfaction absolutely present. When you've got a spare 20 minutes, it fills a gap and brings with it a guaranteed chunk of fun. But it has changed – even if the game hasn't, really, the *experience* of it has changed. Previously I could – and would – play for hours on end, roping in friends and colleagues, laughing wholeheartedly at our ridiculous exploits (and me dying a lot).

Now? It feels trite. Empty. I feel like I'm going through the motions while playing it, and the game itself feels like *it* is going through the motions. It's a ten-year relationship that's run its course, but neither of us has the guts to actually put the bullet in the head that's needed for us to both just crack on with things elsewhere. Anyway, off to watch some numbers cascade out of enemies and get me some sweet, sweet loot. 🍷

“The basics are honed; the brain-off satisfaction absolutely present”



Wireframe Recommends



Torchlight II

PC, MULTI

Click-click-click-click forever, *Torchlight II* is another legend of the 'make stuff go away and get loot in return' metagenre. It's another one that's lost a bit of lustre over the years, but it's still fun.



Void Bastards

PC, X360

Not only is *Void Bastards* a looter shooter, but it's a well-made roguelike too – *and* it's actually got a good sense of humour. Which is a definite bonus here.



No Man's Sky

PS4, X360, PC

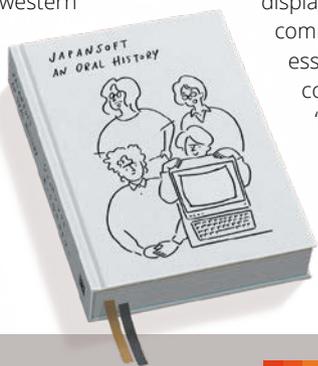
There's something so very pleasing about shooting a laser at some rocks until there's a) no rock left, and b) some extra stuff in your inventory. A classic relax-em-up.

Backwards compatible

WRITTEN BY RYAN LAMBIE

Booksmart

Released late last year, *Japansoft: An Oral History* is the latest in a series of downright corking books from publisher Read-Only Memory: beginning with the Kickstartered *Sensible Software 1986–1999* in 2013, their handsomely bound volumes have successfully combined wistful nostalgia and sharp design with keenly written substance. *Japansoft*, edited by former Edge editor Alex Wiltshire and largely based on interviews conducted by John Szczepaniak, offers a glimpse into a country's industry that – thanks in no small part to the language barrier – is explored all too rarely in western media. Sure, most of us know the origin stories behind Nintendo, and the industry-defining antics of Shigeru Miyamoto, say, or Yu Suzuki's work at Sega. But what about the experiences of programmers at RPG



specialists Nihon Falcom, or the goings-on at studios like Square and Enix, before they merged and became the giant they are today?

Japansoft casts a fascinating spotlight on the Japanese games industry's explosively creative eighties years, and it's positively stuffed with anecdotes: one that sticks in my mind is how teenage developers at ASCII (creators of such obscure MSX titles as *Nostramo* and *Theseus*) would hang around at department stores and practice their coding skills on the computers on display. In fact, this pastime was so common in parts of Japan that it essentially became a subculture, complete with its own name: 'naicon', a portmanteau of 'no computer'. Remarkably, it took almost five years for department store owners to notice the crowds of spotty teenagers loitering around



their expensive display computers, and the naicon were put into exile.

Beyond that little gem, there are behind-the-scenes stories from *Wonder Boy* developer Westone, tales of dreadful working conditions at Konami ("Once I had to stay at the office for three months, reveals *Metal Gear 2: Solid Snake* developer Toshinari Oka), and revelations from the production of *Alex Kidd in Miracle World* ("Part of me regrets the janken [Rock, Paper, Scissors] battles," says designer Kotaro Hayashida. Like Alex Wiltshire's companion volume *Britsoft* before it, *Japansoft* is more than just a survey of old, outmoded games: it's a snapshot of an entire industry, taken just before it passes out of living memory.

JAPANESE VIDEO GAME OBSCURITIES



Obscurities

Less packed with depth, but still an entertaining read, is Kurt Kalata's recently published *Japanese Video Game Obscurities*. As you can probably guess by the name, it gathers together a wealth of eighties and nineties games that are largely unknown outside Japan. You may recognise – or even own – a few of the 101 titles covered here if you're into importing games (*Gimmick!*, *Umihara Kawase*, or *Segagaga*, for example).

But the book's RPG section alone shows how wide-ranging and daring in subject Japan's games could be at the time; Compile's 1987 release *Jagur 5* was about taking out a drug cartel in the jungle, but there were also side-quests that involved going on shopping trips. *Love Quest* was a 1995 parody of *Dragon Quest*, except it starred a Tokyo office worker whose bride-to-be vanished in the middle of their wedding ceremony.



Speed Link

If, like me, you got stuck on *The Legend of Zelda: Ocarina of Time*'s notoriously irksome Water Temple for what felt like an eternity, here's some humbling news: a speedrunner named Lozoots has managed to complete the entire game in under ten minutes – nine minutes and 57 seconds, to be precise. To be fair, this is a kind of speedrun known as 'Any%', which means those going for the record can use all the glitches they like, as long as they reach the end credits. In Lozoots' case, he uses an exploit that allows him to clip through the scenery in the game's opening area, Kokiri Forest, to the final confrontation with Ganon at the end. It's one way of avoiding the Water Temple, I suppose. You can see the full run at wfmag.cc/zelda-time.



Lost and found

One of the handy things about the internet is that, every so often, a game once thought lost to history will suddenly come bumbling back into the present. Late last year, for example, someone uncovered a prototype *Akira* game for the Sega Mega Drive – a project cancelled in 1993, and finally dumped on the web for posterity over a quarter of a century later. It's a similar story with *Cooly Skunk*, an infamously bad side-scrolling platformer originally released for the US PlayStation in 1998. That game first began life on the Super Nintendo two years earlier, but its production was suspended, and the finished game never saw release.

Remarkably, though, an eagle-eyed customer spotted a cartridge labelled '*Cooly Skunk*' in an Akihabara store in late 2019; once the cart was purchased – for around \$500 USD – a demo of the SNES version was discovered on it. Further investigation revealed that this demo – once broadcast on Nintendo's short-lived Satellaview service – could actually be hacked to make the full game playable from beginning to end. Admittedly, the SNES version of *Cooly Skunk* isn't any better than the PlayStation version, but the story behind its production, cancellation, and rediscovery is fascinating – you can read more at wfmag.cc/skunk.



Not-so-young guns

Still own an Amiga? Pining for a new shoot-'em-up to play on it? Then indie developer Tigerskunk's current work-in-progress, *Invijya*, is well worth a look. Like *R-Type* or Team17's *Project-X* before it, *Invijya*'s a horizontal blaster with six stages, aliens large and small to take out, and the kind of fancy parallax scrolling we'd expect from a quality Amiga release circa

1992. There's a demo available to download and try out now (wfmag.cc/invijya) in ADF format, which you could either play through an emulator or write to disk and play on the original hardware. No word on when *Invijya*'s likely to be finished yet, but it already looks like a solid little retro shooter – and, thankfully, a bit more forgiving than the brutally tough *Project-X*.



Punch-Out!!

An apple a day keeps the doctor away.
As does regenerating health

NINTENDO / 1983 / ARCADE

Call it the Mandela Effect, maybe, but the common thinking seems to be that it was *Halo* on the Xbox that gave us the first recharging health mechanic in an FPS. Not only was it not the first FPS to include the feature, but the original *Halo* didn't even feature recharging health – your shields recharged, but you had to collect medikits as in most of its precursors. No, the first recharging health FPS was *MIDI Maze*, a 1987 Atari ST release ported to SNES and other formats in 1992 as *Faceball 2000*.

As for the first game to feature recharging health full stop, we have to go back to 1983, to an arcade title featuring the work of an artist by the name of Shigeru Miyamoto: *Punch-Out!!* Yes, that's two exclamation marks.

Punch-Out!! was, as you've likely guessed, the first instalment of the beloved Nintendo series of boxing games. With competitors beating each other about the chops in a three-minute round of pugilistic action, something needed to be added to the game to accommodate the fact that a knockdown didn't immediately indicate the end of a fight. At least, not always.

Yes, in real life a hefty punch to the noggin and being temporarily knocked out doesn't exactly put you in good stead

for the whole 'having to stand up and keep on fighting' thing, but in a game, it would be seriously annoying to just go down and not be able to get up again. What possible way could this be fixed in a game? Why, by... restoring a bit of the stamina beaten out of you when you got up from a knockdown. Obviously. This was one of those introductions of a killer feature that was done not to change the world, but more because it just made sense in the context of the game.

You might not accept stamina as being health *technically*, so if you want the first game (we know of) to feature rechargeable health specifically, you'll be looking to 1984's *Hydlide*, which saw the player's health slowly

restore whenever they stood still. It's also the first game to feature a fully explorable open-world map, so we'll be coming back to this one at some point in a future issue.

The mechanic popped up throughout the 1980s and 1990s, but it wasn't until the early 2000s that regenerating health really became *the thing* to do in your game. But, again, it wasn't *Halo* that did it – unless you do want to count shields as health, like some kind of brute. Actually, the more accurate 'first' (it wasn't the first) to introduce recognisable regenerating health was 2002's *The Getaway* on PS2. But nobody wants to talk about that, because it was an overhyped train wreck. Ah well. ☹️

“It would be annoying to just go down and not be able to get up again”

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