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Going solo

Life as a lone game dev

Play detective

Inside the evolving deduction genre

DANCE of DEATH

Kong Orange's blackly comic puzzler, **Felix The Reaper**

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Disabled players deserve accessibility

No developer's public image has been defined by difficulty to the degree of FromSoftware. Ever since the days of *King's Field* in the nineties, its games have been known for their high skill ceilings, substantial challenge, and unforgiving nature. What From hasn't been known for, though, is its accessibility.

This recently sparked a sustained and heated argument thanks to the launch of From's newest game, *Sekiro: Shadows Die Twice*. The argument, simply put, had one side claiming games like *Dark Souls* and *Sekiro* should have accessibility options, while others argued that these would detract from a core part of the studio's games.

It's a simple enough argument, but somewhere, in the weeks of anger, disabled people got caught in the crossfire. The side in favour of accessibility options soon devolved into "all games should have an easy mode for the sake of disabled people," while the argument against roughly went, "this single disabled person on YouTube managed to beat *Sekiro*, and so all disabled players will have no problem." Being a disabled player myself, watching *Sekiro*'s launch was absolutely exhausting.

Games have come a long way in supporting gamers with physical or motor disabilities thanks to the work of charities like AbleGamers, and hardware like the Xbox Adaptive Controller. They're essential tools for some disabled players, but a big thing both sides of the *Sekiro* debate forgot was that not all disabilities are physical. Not all disabled players struggle to press a button.

There are all sorts of players with all sorts of disabilities, and many of them you may have never encountered. There are players with sensory disabilities like autism or auditory processing disorder (APD), conditions that affect memory or elements of cognitive processing like Parkinson's and Huntington's. Brain injuries can cause all kinds of difficulties. The reductive image of disability adopted for the debate surrounding *Sekiro* ignores the challenges that come with all forms of disability.

JOE PARLOCK

Joe Parlock is a freelance games writer and founder of **Ubi-Source.com**. His favourite games are *Sonic*, *Left 4 Dead* and *Assassin's Creed*, but he also loves RPGs, simulators, and stealth games. When not writing, he loves nature, photography, and chilling with his dog.

Those who patronisingly argue that games need 'easy modes for disabled players' are harming disabled players. We don't need all the rough edges sanded off a game for fear we might hurt ourselves on them. We *want* to be able to experience a game's challenge. What we don't want is for our disabilities to interfere with that challenge. What we need are accessibility options – ways to support us in the areas of the game where our disabilities give us an unfair and unintended disadvantage. Providing options like running the game at 75% speed, or adding a pause menu, aren't an 'easy mode'; they're like the staggered start on a race track to prevent the runners on the outer edge having an unfair disadvantage. If *Dishonored* can include a whole suite of options to change how its systems work, and still be considered one of the best stealth games of all time, I don't see how other games predicated on their difficulty can't do the same.

As for those who vehemently dismiss these additions for the sake of 'bragging rights' – letting everyone see how difficult a game is only validates your bragging even further. But being the best at something only a specific few are even allowed to try isn't impressive; being the best at something *anyone* can try – now that is.

There are two key resources I'd recommend any developer should check out. The first is **gameaccessibilityguidelines.com**, for practical advice on how to implement accessibility into your game. The second is **themighty.com**, a community blogging platform dedicated to disability, mental health problems, and chronic illness. It's good to remind yourself who you're making your accessibility options for, and reading the life experiences of disabled people can help you understand that.

All disabled players deserve accessibility. We deserve to be able to talk about accessibility without being patronised with easy modes or shouted down for the sake of 'artistic integrity'. With some clever design, and by taking time to understand disability, developers can make adaptations that both maintain their vision, and allow more people to experience it.

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WELCOME

Open-world zombie banquet *Days Gone* was announced in 2016, but I can take a guess at when its first pitch meeting occurred: some time in 2013, when *Sons of Anarchy* and *The Walking Dead* were beginning to peak on telly, and undead disaster flick *World War Z* first appeared in cinemas. After all, *Days Gone* borrows unabashedly from all three: there are the tattooed bikers of *Sons* over here; the post-apocalyptic drama of *TWD* over there, and the heaving mountains of gnashing zombies – or 'Freakers' in *Days Gone* parlance – teetering about in the middle. This isn't to say that creative swiping is necessarily a bad thing – all art is built on the foundation of what's come before – but when the elements of your game look as nakedly familiar as they do here, it's probably not a good sign. If you're going to create a Frankenstein's monster from bits of pop culture, then you need to at least find imaginative ways to hide the joins. *Days Gone* is the equivalent of taking, say, the body of Superintendent Ted Hastings from *Line of Duty*, grafting on the head of Daenerys Targaryen from *Game of Thrones*, and maybe replacing the right arm with that cannon Megatron had in *Transformers* – three cultural items mashed together in a way that's recognisable, but doesn't necessarily make a convincing whole.

Ryan Lambie
Editor

Flouncing to FINALITY

We discover a whole new meaning to the phrase, 'dance of death' in Felix The Reaper

It's a sad fact of life, death. Inevitable and, at least in our Western European society, not exactly something to celebrate. Still, *Felix The Reaper*'s titular soul-harvester has a job to do: ensure that when someone's allotted time is up, they die. He does this by manipulating shadows in 3D puzzle environments, and moving objects around to create a series of outlandish and often slapstick deaths for his targets.

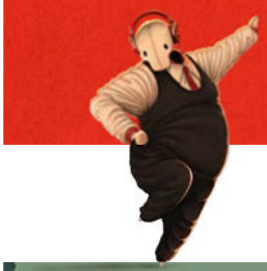
Felix The Reaper makes all kinds of nods to LucasArts' last great adventure game, *Grim Fandango*, and Felix himself is fond of a grim fandango now and again: our macabre hero does a jaunty hip-wiggle while he goes about his work. It's in this dance that *Felix* introduces a touch of levity to its otherwise ghoulish subject matter, with real-world dancers used as animation sources for our protagonist's jumps, squats, and pliés.

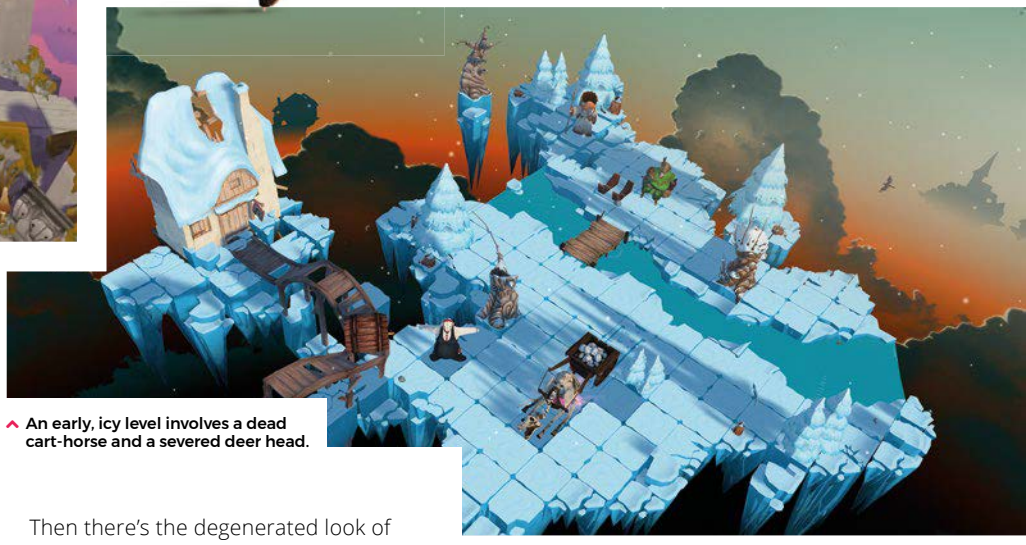
"Our macabre hero does a jaunty hip-wiggle while he goes about his work"

But why would a servant of the Ministry of Death – Felix's official job title – want to dance through his contractually obligated not-quite-murder? Well aside from the obvious 'dance of death' pun, there's another juxtaposition between dark and light at play here: romance. Felix has been working at the Ministry for a long while, and every day on his commute to the office, he sees Betty The Maiden. Asking her out for a date isn't on the cards though, given Betty's day job is at the Ministry of Life – and never the twain shall meet. Of course, if that were the end of the story we wouldn't have *Felix The Reaper*'s subtitle: 'A Romantic Comedy Game About the Life of Death'.

Those more well-read and culturally aware than this writer may spot the links and influences *Felix The Reaper* brings to the fore, from Schubert's *Death and the Maiden* through myriad stylistic hints and inspirations tickling the 'where do I recognise that from?' gland. There's even a touch of Cartoon Network's masterpiece *Adventure Time* here and there. It's unsurprising to hear the game is part-funded by both the Danish Film Institute and the West Danish Film Fund. There's a lot going on, and a lot to unpack – so why not enter one more dance of death and chat to *Felix The Reaper*'s producer-designer, and CEO of developer Kong Orange, Esben Kjær Ravn? Why not, indeed – after all, you only live once.

How will the sheep result in the human's death? Finding out is part of the fun.





An early, icy level involves a dead cart-horse and a severed deer head.

A romantic comedy isn't the usual genre we see in games, so how did *Felix* end up in that wrapper? Was it related to the fact we don't usually (ever) see these games?
We're sort of fond of long subtitles for starters, but as it turned out, it really was a romantic comedy – it felt right to put it in there, because it's an easier way to stand out. It doesn't seem like anyone ever labels their game a romantic comedy. And if you need to stand out, which you do, then pick the strength you have that stands out, I guess. Also, games have an infatuation with weird long genre descriptions, which it felt good to twist, too. So usually it's something like a Stealth Action Adventure 3D-based Asymmetric RPG or whatever – 'A Romantic Comedy Game About The Life of Death' just felt better to us, and clearer, too.

The art style is phenomenal – what's the story there? How did it come about? Where does it draw inspiration from?
So the art style comes from all over the map, and we take pride in that. We want to cover a thousand years of the art history of Death, but we also want to be a pop product and feel contemporary and true to what we like. And then naturally it becomes a mix of a lot of stuff.

On the art history side of things, the most obvious inspirations are Bruegel the Elder and Hieronymus Bosch. They laid the groundwork for elements that appear in the medieval levels, at least.

In terms of the look, there's a mix of the different affections Mikkel Maltesen, the lead artist, has carried into the project. Hayao Miyazaki and *Adventure Time* have especially inspired the look. He likes his colours, for sure! And I just love that we've ended up with one of the most colourful games imaginable, but then it's about Death.

Then there's the degenerated look of almost anything other than Felix. It's a play with the memento mori tradition of pictures of rotting fruit, broken stuff, or withered flowers, and so on.

Dancing is both inherently joyous and a big part of Felix, but the game itself focuses on death (less joyous): is this juxtaposition intentional? Something we've made up? Something else?
Almost everything in the game is intentionally juxtaposed. Shadow versus light, love versus death, Death versus dance, colours versus theme, cuteness versus actions, funny versus gruesome, and so on and so forth. The dancing, in particular, is first and foremost a part of the art history we portray. The Danse Macabre, the Dance of Death, Totentanz, or a *grim* fandango, if you will.

This is where the whole thing started. When we found out back in 2011 that the Dance of Death is such a central motif in art history, we had to do something with it, and gradually, *Felix The Reaper* emerged.

Then gradually we realised that the other central motif around Death was Death and the Maiden, which led us to add in the love story with Betty The Maiden.

So we sort of mashed these central motifs from the art of Death together and ended up with *Felix The Reaper*. So, really, he *has* to dance, and we love it because it's a wonderful juxtaposition with what he does for his day job.

Felix can only move in shadows, so manipulating the sun's angle to create paths for him is key.

How did the idea for dancing in the game develop?
When we settled on dancing as our foundation, it almost became a reason in itself to work with real dancers developing the animations. That's been a blast and fun for everyone. And also from a pure puzzle game perspective, it helps that you are entertained by the main character, even when you're stuck. It makes it less… heartless.

How tempting is it to make puzzles ludicrously hard?
It's tempting to make the puzzles hard in the sense that it's the easiest thing to do in a puzzle game. The hard part is to make them easy, or balanced, and follow a learning curve. That said, we kind of want them to be hard, so a lot of them *are* intentionally hard. And there's a hardcore version of each level that can be insane and infuriating from time to time, for sure.

From a more functional perspective, how does making a puzzle game challenge you as a developer?
As a developer, it's hard to step out of your role and keep remembering how this is to play for the first time. A huge percentage of our players will most likely only play a linear game like this the one time, so we need to nail it for them. But we play each level a thousand times in a random order and in different versions… and that just seriously [messes] with your perception. So you need conventions and trade shows for sure, so you can look over people's shoulders while they're playing, both to keep you grounded and informed.

And 3D shadow manipulation must be a tough one to get right. How much iteration/planning/reworking is involved in these puzzles?
A lot, and we could go on doing it forever. Plus we made a lot more levels [than are in the final game] to get to the levels we have. There's easily ten different levels made, plus several iterations of each for each of the ones in the final game.

How challenging is it to come up with a central theme – those 3D shadow elements – and make sure it's communicated well enough to the players?
It took several prototypes before we landed on it, but when we landed on that idea, it just felt intuitively right. But 'onboarding' – tutorials or whatever – are just difficult, and you want to do them as little as possible, but still [offer] plenty, all while trying to appease people who hate tutorials, but also to bring in those who wouldn't touch a game without them. So it's been… 'fun' is not the word. That said, it feels good each time you get an aspect right, and when you get to the stage where you can leave your game in the hands of the players and they just get on with it – that's bliss.

Is it possible to nudge people to the 'wrong' death? Or is it more a case of solving the puzzle ahead of you correctly or not at all?
You can only do one story in the game, it's completely fixed.

Do the aesthetics inform the puzzles, or the other way around? Or neither – are they entirely separate from each other?
In our case, the grid logic of the game has very much informed the graphics and not the other way around. At the same time, we've tried to play with it and make it less obvious.

What are your hopes for *Felix*?
Felix has to end up as unavoidable as Death for any puzzle gamer. With the money we've spent making this, we have to dream big.

And finally, will you be introducing a Battle Royale mode? It can be called… THE DANCE OF DEATH.
It would be lovely. We're considering a lot of different game modes that also involve Betty The Maiden, so hopefully, you'll see a DLC of something in that direction. But we also discussed a parallel to endless runners called endless Deaths, and much more.

***Felix The Reaper* releases on PC, PS4, Xbox One, Switch, and Mac in 2019.**

American Fugitive

How Fallen Tree Games' prison escape sandbox accidentally became an homage to classic GTA

Info

GENRE
Crime / Open-world sandbox

FORMAT
PC / PS4 / XBO / Switch

DEVELOPER
Fallen Tree Games

PUBLISHER
Curve Digital

RELEASE
21 May 2019

As big-budget studios continue accelerating with ever more technically complex (and expensive) open worlds, you might forget that Rockstar had actually embraced its roots with *Grand Theft Auto: Chinatown Wars*, which, though made for less powerful portable hardware, was no less acclaimed. *American Fugitive*'s top-down sandbox crime game looks set to recapture the same feeling of the classic *GTA* games.

Despite the obvious comparison, Fallen Tree Games art director Lewis Boadle tells me, "the strange thing is, we never set out to make a *GTA* game." While it is in the crime genre, the inspirations for *American Fugitive* primarily came from 1990s prison escape movies like *The Shawshank Redemption* and *The Fugitive*. You play as Will Riley, a man wrongly convicted of his father's murder, who escapes from the penitentiary with revenge on his mind. From an artistic point then, the top-down camera was, Boadle says, "more evocative of those police chase TV shows with the overhead surveillance videos," though as a small studio, this also means a large open world can be created without the time and resources spent on creating hugely detailed environments that need to hold up to scrutiny.

The world in question is the rural Red Rock County in the 1980s Deep South US, a contrast to the usual urban video game locales, and again inspired by prison escape movies where the escapees often find refuge in rural towns.

This setting also fed into Fallen Tree Games' initial vision for the game as being more survival-oriented. "You could live off the land, eat carrots and potatoes, hide in a bush, cook a chicken – but after about six months, we realised it wasn't really that fun," Boadle explains. "And by going down that route, we were going into a crowded marketplace we weren't really sure of."

The team pivoted, eventually adding vehicles and missions, giving the game a more playful, arcadey direction, though the vehicles really provided the epiphany. "Once we realised we were effectively channelling those classic *GTA* sensations, we just embraced that and went with it," says Boadle.

There are obvious similarities, such as how you can steal vehicles, while a stars-based 'Wanted' level escalates as you would expect. More interesting, however, are the differences. Unlike early *GTA* titles, *American Fugitive* is essentially a 3D game made in Unity, and it also deviates from a literal top-down perspective. The camera rather settles at an angle, making it

The game doesn't feature fast travel, but you can always catch a ride on the train as a fun alternative.

Fans of *The Shawshank Redemption* ought to appreciate this reference.

In true *GTA* fashion, maxing your 'Wanted' rating will see you being pursued by SWAT van and helicopter.

easier to discern details like players' poses, while it also moves contextually, zooming in certain details or moving up to a top-down view should you move behind a building.

There are also more subtle modern mechanics involved, such as how stealing a vehicle isn't always just a case of walking up to it and pressing a button. You might need a crowbar if you want to break into one quietly, or a brick to smash the window, or you can even be honourable, buy a car, then just use the actual key for it. The Wanted level can also quickly rise or fall based on multiple factors, especially by what you're wearing.

At the beginning of the game, just after Riley's escaped, you conveniently come across a washing line with some clothes you can change out of your orange jumpsuit into. Changing clothes then becomes a legitimate way of reducing your Wanted level, while vehicles can also reduce your visibility and therefore bring down your rating – it's actually a surprise that your stars suddenly shoot right back up when you step out of your car.

Perhaps the biggest departure from the *GTA* formula is that Boadle and his team have considered their social responsibility when making a game like this. So, far from the amoral chaotic rampage Rockstar's series has been infamous for, the adult content in *American Fugitive* is considerably toned down. For example, there's no gore – knocking out NPCs results in them comically seeing stars – while the script eschews expletives, "numbnuts" and "ass clown" frankly make far more amusing and very American vulgarities. That's not to say the game is aimed at children, but let's just say you won't be picking up prostitutes or flamethrowing Hare Krishnas, either. "There are cases where you're sent to do something to a particular person but in all those cases, they're a very bad person," Boadle explains. "Even with regard to the cops, they're all corrupt, given they put you in prison knowing you didn't commit that crime, so we also frame the cops as the bad guys."

"After about six months, we realised it wasn't really that fun"

Better still, this extends to the gameplay, where it's quite possible for Riley to achieve his goals through less violent or non-lethal means, which also means you can expect a pretty freeform approach to missions. "You're given the tools, and then you might be asked to make $200, but you can do that any way you want," Boadle elaborates. "You just need to come back with $200. We're trying to keep it as free-form a sandbox as possible."

One of Rockstar's tendencies is to give you a huge open world to play with, only to funnel you through heavily prescribed story missions; Fallen Tree Games, meanwhile, looks like it's taking a leaf from the past, but *American Fugitive*'s consistent sandbox approach is something other studios could arguably learn from.

THE GREAT OUTDOORS

Red Rock County's open world is split into three areas that gradually open up as the story progresses. As you might expect, apart from the core narrative of finding out just who framed Riley, there are also other activities you can get up to, such as taking part in time trials, performing secret stunt jumps, as well as a wealth of collectables – particularly stealing valuable paintings – you can sell off to a shady art dealer.

As concept artist, Anthony Jones previously worked on *StarCraft II*, *Overwatch*, and the *Warcraft* movie.

We Are The Caretakers

Is this rhino-centric XCOM-alike the first rumble in a coming stampede of Afrofuturist games?

Info

GENRE
Turn-based strategy

FORMAT
PC

DEVELOPER
Heart Shaped Games

PUBLISHER
Heart Shaped Games

RELEASE
2019

"Growing up, every depiction I saw of African people was bestial, savage, and often mocking," says *We Are The Caretakers* narrative lead, Xalavier Nelson Jr. "If you want to look at some of the popular comedies, whenever African imagery was used, it was debasing, and as a result, it gained a really negative connotation for me."

Then Nelson watched *Black Panther*. Initially, thanks to those early depictions, something in him recoiled at the Marvel movie's unabashed celebration of Africa. But two hours later, he saw heroism and beauty in his own African American heritage where previously he had seen only shame.

It's an outcome he and the developers of *We Are The Caretakers* want for the players of their Afrofuturist squad management RPG. It's a highly unusual project – funded by venture capitalists with backgrounds in biotech and pharmaceuticals, with the goal of promoting environmental consciousness. Fundamentally, the game is about anti-poaching, an *XCOM*-alike in which you're less worried about protecting civilians than hulking, endangered rhinoceroses.

"You're ultimately uniting as many cultures as possible towards this goal of protecting the wildlife and the world against a mutual threat," Nelson says. "It's very much coming from a place of seeing wildlife in a light that is typically reserved for fellow human beings."

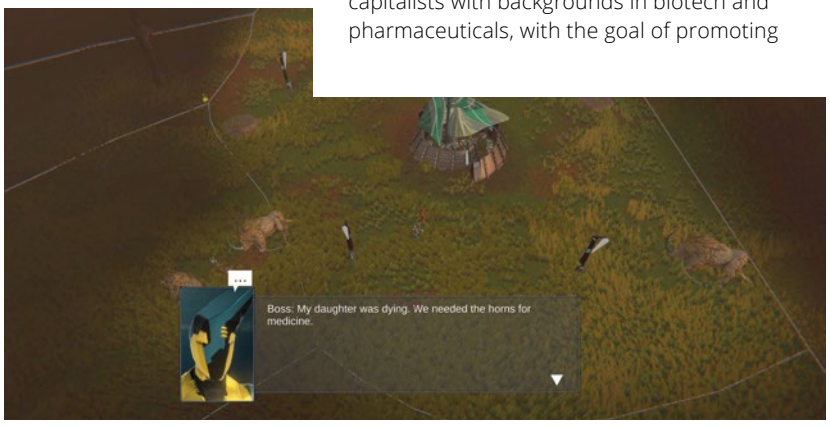
The rhinoceroses, or Raun, are coursing with a mysterious energy that might hold the key to saving the planet. It's up to you to assemble squads to patrol the lands they graze on, pulling together individuals from different cultures and negotiating the demands of international and community leaders.

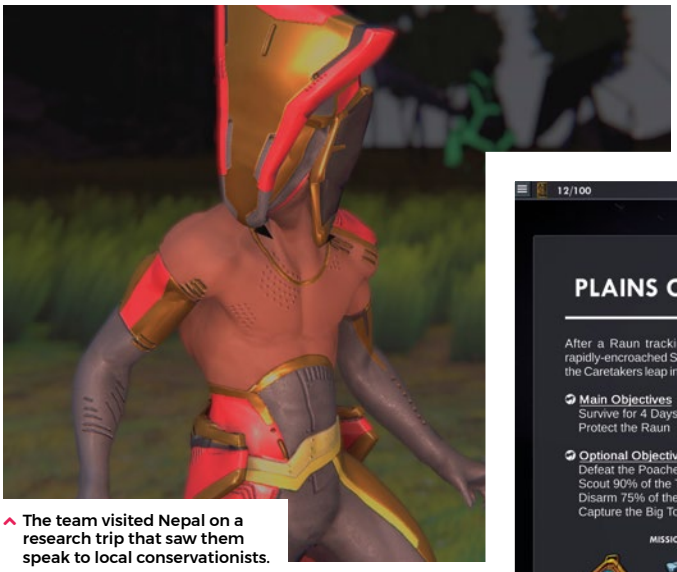
The Caretakers themselves wear their individuality and cultures as armour – bodysuits and headdresses that break from the sci-fi norm with their clear African inspiration. They exemplify the same vein of sci-fi that *Black Panther* comes from, one in which the future doesn't only belong to the West.

"As a team, we mutually found something very strong to cling onto in this setting of Afrofuturism," Nelson says. "It doesn't take for granted many of the things that sci-fi does, the realities of colonial impact. In sci-fi stories, we don't normally see a culture, how it emerged, and the gestalt that produced it – we get the United Federation."

We Are The Caretakers will show how these individuals and cultures make up the whole, concerning itself with a "great deal of macro and

Heart Shaped Games has brought humanity to the poachers too, so that you understand them even as you condemn them.





The team visited Nepal on a research trip that saw them speak to local conservationists.

We Are The Caretakers wears its *XCOM* influence proudly on the cerulean global strategy screen.

micro-level consideration." You'll be responsible for the high-level real-time strategy of a global map, all the way down to turn-based combat – although Nelson refers to that as "conflict resolution", since there'll be less violent means of resolving situations. As in *XCOM*, each layer of the game is lent weight by its impact on the rest.

Push a Caretaker too far in one day and they can get exhausted or sick, leaving them an ineffective drain on your coffers. Take one mission to top up those funds, and you might miss your window of opportunity for another that would have fed a particular community, or offered resources for technology upgrades. Any one of those options could make the difference when it comes to tracking trespassers; every action you take alters the world's perception of the Caretakers, and their consequent ability to protect the endangered species they rely on.

"You can be in a situation where, yes, you can deploy both of those units," Nelson says, "but you're spreading yourself thin in terms of currency, manpower, and various other factors that affect you later on in the game. It's a lot of mental juggling."

Your empathy for the Raun is central to *We Are The Caretakers*, and that's reinforced by the presentation of the animals in the game – imposingly large and majestic, yet emaciated in appearance, seemingly scarred either by poachers or the powerful energy flowing through their veins.

The game's distinctive art direction comes from former Blizzard concept artist Anthony Jones – and it's notable that one of his old stomping grounds, *Overwatch*, is responsible for easily the most prominent instance of Afrofuturism in video games, the city of Numbani, a utopia bordering the savannah where humans and robots live in harmony. You only have to look at the depictions of Africa in game history, as a backdrop for shooting zombies or mercenaries, to see how necessary and exciting this new wave is.

"Growing up, every depiction I saw of African people was bestial"

"Working on this game, getting engaged with this genre, and creating this story did help me to become a fuller person, and find beauty in cultures and civilisations that I had been taught to find shameful," Nelson says. "I had to reckon with my background in a way I've never had the opportunity to in my life. I'm excited to see how what we've crafted might help enable others to find beauty in those things as well."

CONSERVATION GOES CUTE

One of the advertising bullet points on *We Are The Caretaker*'s Steam page is an adorable baby Raun companion, which will nuzzle against your bed even after it grows to twice your height. As USPs go, it's undeniable.

"The baby Raun isn't just a meme, it's a tangible connection point for what could otherwise be faceless creatures that are numbers on a stat sheet at the end of a mission," Nelson says. "We thought about ways that connection could emerge throughout the campaign in a way that went beyond telling people, 'Hey, animals are important'. This idea was the solution we arrived upon."

Headlines
from the virtual front

01

02

03

01. Funding fun

The UK government has found a few million quid down the back of the settee, putting together a £4 million fund to back the development of mixed-reality games and experiences based on popular British intellectual properties. So yes, that means there's going to be a *Wallace and Gromit* AR/VR title with Aardman itself involved in the creation of whatever the project ends up being.

Aside from the obvious clay-based British institution, IP such as *Peaky Blinders* will also get the VR and/or AR treatment thanks to the funding. On that subject, there's also going to be a *Peaky Blinders* game – no word if it involves this funding – coming from brilliant British indies FuturLab, creators of *Velocity*, with publisher Curve Digital backing it all up. Depending on release dates, 2020 could be *a Blinder* of a year. Cough.

02. (Don't) let the bodies hit the floor

China restarted its approvals process for video games towards the end of 2018, but has recently implemented a new process for games seeking release inside the country's borders. One of the biggest updates requires games not featuring any dead bodies or pools of blood, at all. And any games already featuring bloody pools may not simply change their colour – there can be no pools, at all, ever. No pooling blood. Got it?

The process, which should be in full swing by the time you read this, also requires minigames made with the likes of HTML5 to be approved, and promotion of 'traditional culture and historical accuracy' in games – specifically, games made by Chinese devs should focus on China's 'core social values'. It'll be enlightening to see how this all pans out, and we'll be keeping an eye on the more unique titles coming from the East to see how those social values are presented.

03. Not-ch for you

First, his name was stripped from the front end of the game, now *Minecraft* creator Markus 'Notch' Persson has been left out of the game's tenth-anniversary plans by its current owner, Microsoft. A spokesperson for the firm said the Swede would not be involved because of his 'comments and opinions', which are 'not representative of *Minecraft*'. At a complete guess – and at the risk of editorialising somewhat – this is probably because Notch is both terrible and awful on Twitter.

In less horrid-person-news, Mojang managed to raise a whopping £70,000 – plus a £7500 donation of its own – for charity: water, a non-profit aimed at making sure everyone in the world has access to free water. The fundraising required players to download the free 'Travelling Trader' content pack – once it hit 100,000 downloads, the donation would be finalised. The number was hit in less than a day. Which is nice.

Claims unlocking everything in MK11 costs £5000 'complete bullshit', says Ed Boon

Second, secret *Stranger Things* game was in works by *Oxenfree* devs; died with Telltale

04

05

06

04. Roll with the crunches

Following on from reports focused on Riot, BioWare, and others, it's now Epic's turn in the spotlight of controversy. According to a report on Polygon, the studio has been putting its *Fortnite* team through intense bouts of crunch, ostensibly to keep on top of the demands that come with updating and running one of the world's most popular games. Though just because it's popular, does that mean people should be working those reported 70–100-hour weeks?

A culture of fear, 'voluntary' (read: 'mandatory') overtime, health issues – it all paints a bleakly familiar picture of working in the triple-A space, and offers part of the explanation as to why unionisation in the industry is talked of increasingly. For its part, Epic claims 'extreme' situations like 100-hour work weeks are rare, and the company seeks to remedy them 'to avoid recurrence'.

05. An invisible room

Developer Amir Rajan released his Ruby-coded RPG *A Dark Room* onto Nintendo's Switch store, and two weeks later revealed he had hidden inside the game a rather special Easter egg: a Ruby interpreter and code editor. This meant owners of the game would be able to muck about in a simplified Ruby environment, drawing lines, testing sounds from the game, and other little coding-related fun stuff. Nintendo then promptly pulled the game from the store, and there's no word – at the time of writing – if it'll be coming back.

It's an understandable move from Nintendo – the company can't be seen to allow Hello World features like this to go unchecked on a closed system such as the Switch – but one that's raised some hackles.

For his part, Rajan has apologised for the move, mainly for the issues it has caused the game's publisher, Circle Entertainment.

06. Mario C64 no more

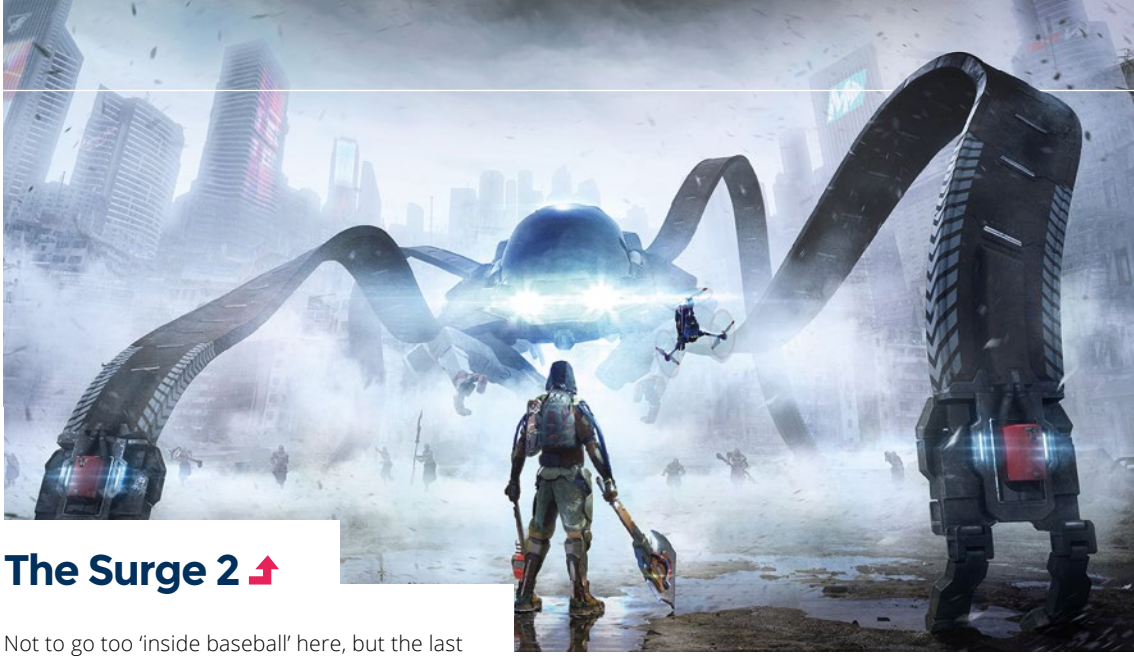
More Nintendo takedown news? Oh, go on then. A fan port of *Super Mario Bros.* for the Commodore 64 – yes, really – was released and soon after culled from the internet by a heavy-handed Nintendo response. DMCA takedowns: tool of the devil? We couldn't possibly say.

Coded by ZeroPaige (probably not their real name) over a span of seven years, *Super Mario Bros. 64* is an impressive recreation of the NES original for Commodore's computer. It might be 30-odd years since both the game and machine released, but it's still bewildering to see Nintendo's finest hour running on a machine we once thought capable of *Terry's Big Adventure* and not much else. But coding prowess and nostalgia mean nothing under the fiercely litigious eye of Nintendo's legal team, and the *Super Mario Bros. 64* project, all those years in the making, was removed from (legitimate) sites just a few days after its 18 April release. It's entirely understandable why from a legal perspective, but it doesn't change the fact it's a seriously frustrating thing to have happen after so much hard work. If only there was a way to source the game from other places online...

Uni of Georgia championship-winning *Fortnite* team: "We don't like the game much anymore."

Real-life lobbyist banned from *EVE* innocent; allowed to play again

incoming



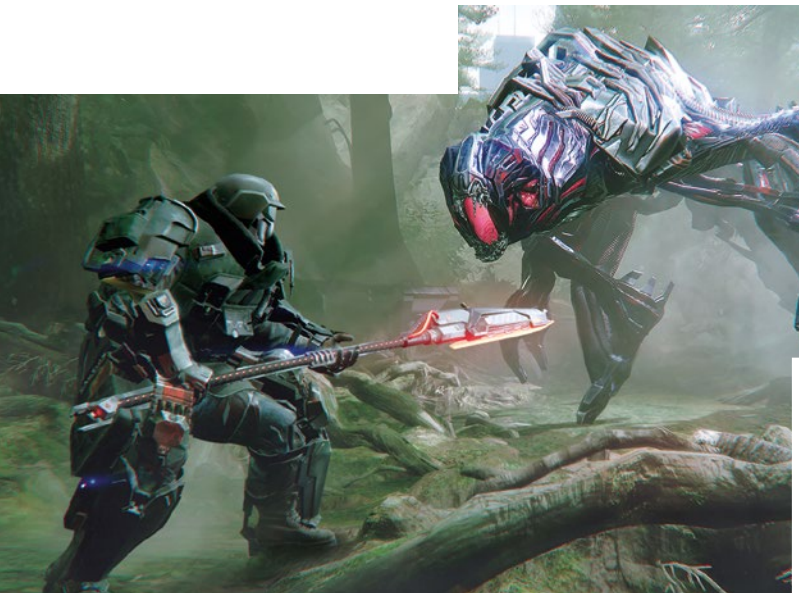
The Surge 2

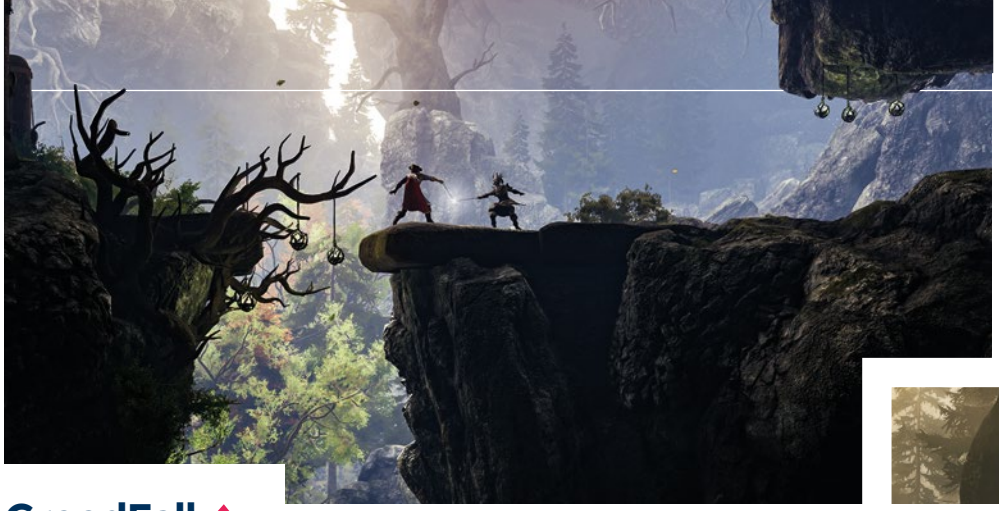
Not to go too 'inside baseball' here, but the last thing you want on an incredibly early start to go and see a bunch of games in Focus Home Interactive's back garden (not literally) is to be plonked down in front of something like *The Surge 2* as soon as you arrive. It may seem a little 'oh, poor me' to complain about this, but trust me, dear reader, there is a point. See, *The Surge 2* is incredibly difficult, and in my hour or so with the game, I did not have a good time, leaving angry and dissatisfied with what I saw as a basic attempt to (continue to) ride the coat tails of the *Soulsborne*(kiro) trend expertly headed up by FromSoftware. But I wanted to point out the circumstances behind this opinion as it was formed, for the very pertinent reason that games of this ilk are very much attuned to the mood of the player playing them. I was tired, cranky, and unprepared for the required reactions and tactical, on-the-fly thinking. I was not in the right place to play *The Surge 2*, but I had to, and so my opinion of it can be considered compromised.

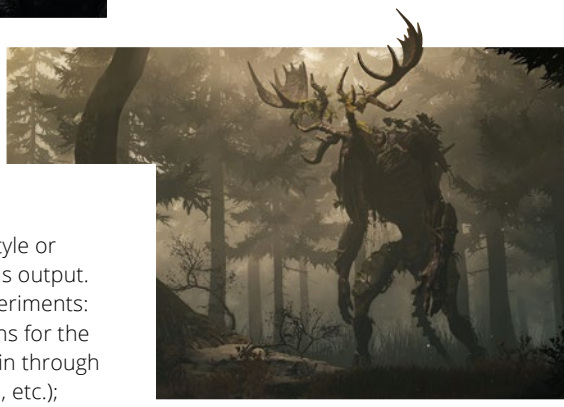
That said, Deck 13's follow-up to the serviceable 2017 original *did* leave a bit of a sour taste because of one factor that will need closer inspection in future: its sense of clunkiness. Controls need to be snappy when you're engaged in one-on-one (or two, three, four) combat in which one wrong move can spell disaster. They *don't* need to be relaxed at best, registering dodge or block inputs too slowly to be effective, and making it feel as though the game isn't trying to make you learn – as with *Sekiro* and the like – but rather just trying to punish you 'for the lulz', as no kids say any more. Like I said, though, the player's state of mind while tackling these challenges is key.

The Surge 2 does have potential that can't be ignored, and if Deck 13 follows through with its promises, we could be looking at a fine alternative to the From hegemony. These promises include: a less linear, more open world to explore; more colour (which was already apparent in the verdant forests of the demo); a more dynamic customisation system (lop off limbs of enemies and attach them to yourself, see also Capcom's classic *Armored Warriors*); drones; and a deeper story involving more factions than before to immerse yourself in.

Could this be the sci-fi *Dark Souls* the original tried and fell short of? Maybe. Could it be an irritating exercise in 'git gud' over challenging, intelligent design? Also maybe. One thing's for sure: next time this one's being tackled with a lot more shuteye under the belt.







GreedFall

Looking at French studio Spiders' output over the years, you'd be forgiven for swiftly moving on from *GreedFall*. The team has put out a bunch of just-about serviceable, but ultimately rather lacking story-led RPGs for the past decade, and *GreedFall* doesn't look to strike out into particularly bold new territory on that front. And yet... there's something intoxicating about Spiders and its style of game – these are classic European RPGs that strive to be something more than what their small team and modest budget would otherwise allow. *The Technomancer* and *Bound By Flame* might not be legends in their own right, but each arguably tried to do more than the big players in the genre, and with BioWare et al's output pivoting to multiplayer in recent years, there are fewer studios actively pumping single-player adventures involving meaty reams of text backed up by a character you dressed yourself.

So here enters *GreedFall*, a mixture of 17th-century pirates and decidedly folklorish fantasy, a step away from the hard medieval style or the Martian setting of Spiders' previous output. This new locale brings with it new experiments: companion AI systems; broader options for the player's approach to situations (burst in through the front door, bribe a guard, sneak in, etc.); and generally polishing an in-house engine, Silk, to the point where it does a decent job of emulating the *Mass Effects* of the world. And, honestly, it probably does a better job of making an RPG than Frostbite does, but that's by the by.

Few would look forward to *GreedFall* with especially high expectations, and there's zero cynicism or malice intended in that statement. It's just how things are: Spiders makes mid-level RPGs, and *GreedFall* is unlikely to upset that balance. But, at the same time, there's genuine passion in the studio and a real effort is always made to at least try and do something more, and better, with the next game. So it is, with expectations firmly in check, that we hope *GreedFall* might just blow them away.

MudRunner 2

We live in such a delightfully rich time for games in this modern era; one where even a game focused almost entirely on moving large vehicles slowly through mud not only gets itself an audience and a fair few plaudits (79% in Wireframe #6, no less), but a sequel, too. *MudRunner 2* looks to be, at least from an extended hands-off session, a gentle evolution of the first game's core concepts rather than any radical overhaul. Who'd want it to be massively different anyway?

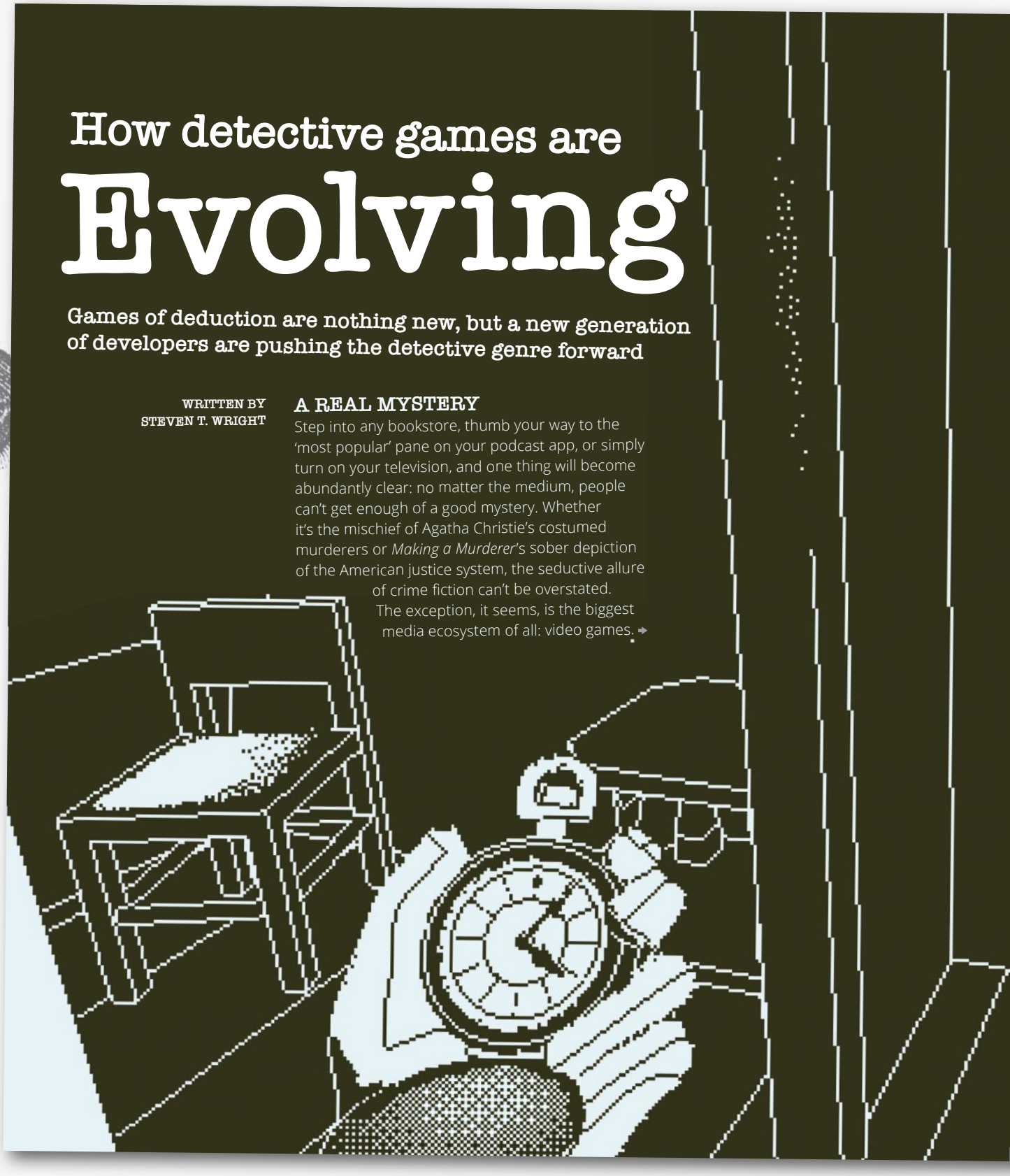
The sequel still focuses on getting vehicles – and, oftentimes, cargo – through difficult terrain, with upwards of 15 minutes often required to navigate through a mere few metres of mud and rocks. With an updated physics engine backing it all up, returning favourites like the winch will still prove invaluable in the right hands, and you'll need to be paying close attention to any hazards to navigate the multiple, larger maps which take in regions around the US and the rest of the world. But what tickled our fancy more than anything else was a brief video shown at the end of the session, in which improving tests of snow physics were demonstrated. If you thought getting through mud was satisfying, wait until you try and blast through some snowdrifts.

And everyone else? Well, other games still exist, and a sequel to a niche title focused on incredibly challenging travails through environmental micro-hellscapes won't ever change that. So stop sniggering at the back.

How detective games are Evolving

Games of deduction are nothing new, but a new generation of developers are pushing the detective genre forward

WRITTEN BY
STEVEN T. WRIGHT



A REAL MYSTERY

Step into any bookstore, thumb your way to the 'most popular' pane on your podcast app, or simply turn on your television, and one thing will become abundantly clear: no matter the medium, people can't get enough of a good mystery. Whether it's the mischief of Agatha Christie's costumed murderers or *Making a Murderer*'s sober depiction of the American justice system, the seductive allure of crime fiction can't be overstated. The exception, it seems, is the biggest media ecosystem of all: video games.

Obra Dinn uses a '1-bit' aesthetic in the style of early Macintosh games; Pope says it's the only part of the game he's completely happy with.

"It really is quite strange," says Sam Barlow, the mind behind 2015's indie investigative hit, *Her Story*. "When I worked with publishers, I would pitch something in the detective genre all the time. My logic was that if you were to launch a new venture almost anywhere in media, you would want to have at least one procedural set up, your *NCIS*, your *Law & Order*. In games, you just don't really see that at all. Eventually, that's what made me figure, 'well, everybody else has figured this out. Why can't I do it?'"

"The closest thing I could find to what I wanted was *L.A. Noire*. But that game was more interested in making you feel like a cop than letting you investigate"

That's not to say that deductive games don't exist; most of us are at least passingly familiar with the blaring "objection!" of everyone's favourite spiky-haired attorney, Phoenix Wright. But as Barlow points out, though the *Ace Attorney* games have become classics in their own right – as well as popularising the visual novel form worldwide – their investigation mechanics leave a lot to be desired. The out-of-court scenes come off as a corridor crawl version of point-and-click adventure games like *Monkey Island*, waiting on the player to uncover every vital clue before moving on to the next act in the sequence. True failure can only occur in the courtroom, where pounding on the wrong piece of evidence enough times will eventually cause the judge to declare your hapless client guilty on the spot.

Players use a search engine to plumb the depths of the interview footage, but specificity counts: each string only returns a maximum of five results.

UNLIKELY ORIGINS

In the early 2010s, coming off a string of positively-received *Silent Hill* spin-offs and the high-profile cancellation of *Legacy of Kain: Dead Sun*, Barlow left Climax Studios to pursue his independent dreams. While trying to determine what kind of game to make, he fell into a vortex of true-crime media, like the first season of the acclaimed podcast *Serial*, which invaded his imagination and haunted his dreams. That's when he began to fathom just how barren the market for detective games was – and he wondered if he could do anything to change it.

"At the time, the closest thing I could find to what I wanted was *L.A. Noire*," he recalls. "But that game was more interested in making you feel like a cop than actually letting you investigate. I remember the first time I drove a car in that game, I accidentally swerved onto the sidewalk, and hit three people. That just broke my immersion immediately, because it had just become *Grand Theft Auto*. In real life, I would've lost my job for that many times over... There were car chases, gunfights, fist-fights. I'm sure those are all things the publisher wanted, since it was a big-budget game, but it just didn't add up to what I wanted as a player."

When Barlow finally decided to strike out with his take on the procedural genre, his core concept was flipping *L.A. Noire*'s maximalist scale on its head: instead of building a simulacrum of a living world, he strove to make the investigative space as tight as possible. Inspired by an award-winning episode of David Simon's nineties TV show, *Homicide: Life on the Street*, where detectives interrogate the same suspect for the entire hour-long runtime, Barlow cut out the arguably tedious clue-gathering entirely, focusing instead on the electric tension between the intrepid investigators and their elusive quarry.

Unlike *Ace Attorney*, where players are shepherded from waypoint to waypoint in service of an overarching plot, *Her Story* has the player embark on a query of their own, using a search engine to sift through interview clips in any order they desire. While the player has absolute autonomy over their own approach to the interview clips, they are limited by the questions that the police asked the subject, making the game essentially an echo, an investigation of an investigation. Other

Her Story uses a lo-fi aesthetic in combination with real-life footage, in imitation of full-motion video games.

deduction games might offer the player a sort of detective's journal, filling it out for them when they stumble on a key piece of evidence.

In contrast, when I played *Her Story*, I found myself taking copious notes, all to figure out the magical search string that would unlock another vital video clip. (When I stumbled on them six months later in a drawer, I didn't even recognise their origin – they struck me as incomprehensible ramblings.)

LOOSE LIPS

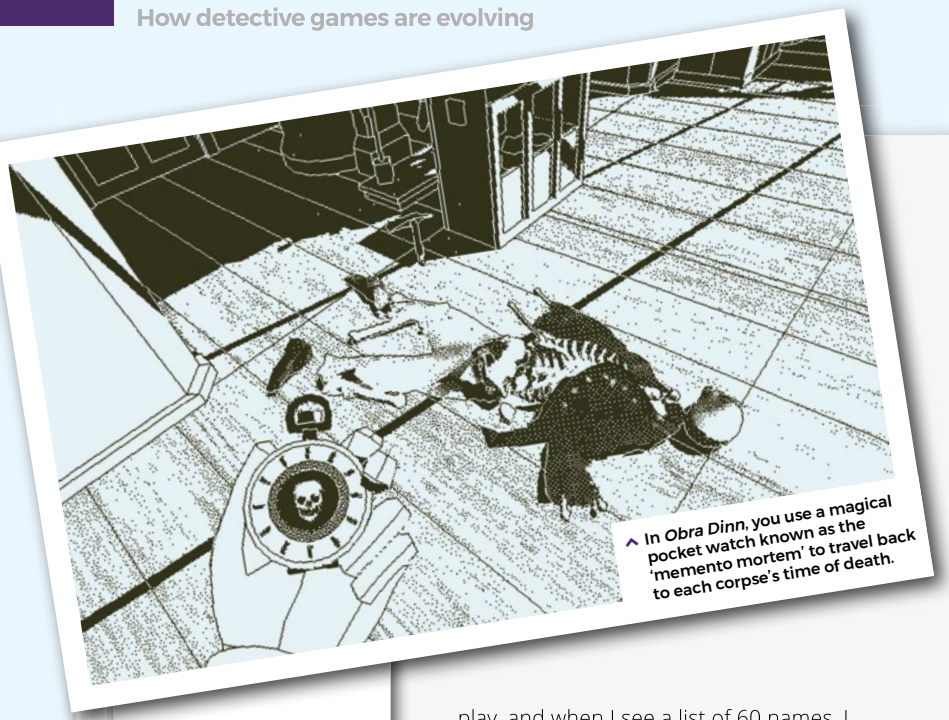
While *Her Story* asks you to draw your own conclusions from the compelling web of evasions and half-truths that its enigmatic suspect throws your way, never asking you to express your suspicions through the game itself, Lucas Pope's hit 2018 indie game *Return of the Obra Dinn* takes a different tack. Inspired by real-life maritime mysteries like the disappearance of the brigantine Mary Celeste, you play as an insurance agent tasked with determining the fates of the 60 missing crew members now that the moribund ship has hobbled its way back to port. Unlike Barlow's game, which focuses exclusively on one core crime, *Obra Dinn*'s overarching tale of betrayal and murder at sea plays out through 60 micro-investigations, where the agent must determine the identity and manner of death of each member of the luckless crew.

It might sound hard to believe, but as Pope tells it, he didn't really set out to make a deductive game. Rather than simply investigating deaths, the original schematic of what became *Obra Dinn* called for the player to live it themselves, through the eyes of the deceased. If they managed to succumb to the right source – drowning overboard, falling off a crow's nest, diving under a falling cannon – they would progress to the next victim, and so forth. (If not, the Grim Reaper would take their soul instead – no pressure.) While it made for an interesting concept on-paper, Pope quickly deemed it too ambitious for his one-man operation, and he proceeded with the still-life approach instead.

"There was no point where I said, 'I want to make a deductive game,'" Pope says. "It just sort of happened. Whether it's [2013's] *Papers, Please* or *Obra Dinn*, my design mentality is always to set up a matrix and fill in the columns. When you walk on-board that ship, you really know nothing, and that's a big part of what makes it work. I make games that I want to ➔

PERFECT CASTING

Barlow says that the choice to cast actor Viva Seifert as the suspect Hannah Smith was one of the easiest he made in the course of creating *Her Story*. "Everybody knows this, but women are far less likely to murder, and there are usually extenuating circumstances when they do, like in the Jodi Arias case," he says. "It made for a more interesting situation."



In *Obra Dinn*, you use a magical pocket watch known as the 'memento mortem' to travel back to each corpse's time of death.

SLOW AND STEADY

Obra Dinn has received a fair bit of vocal feedback from antsy players complaining that it takes upwards of two to four minutes to shuffle from murder scene to murder scene. Pope considered adding this sort of 'fast-travel' to the game, but he ultimately decided against it. "It breaks immersion," he says. "You're supposed to be an investigator, and I wanted the physical space of the ship to feel consistent."

play, and when I see a list of 60 names, I have this compulsion to fill in those names. I wanted it to snowball for the player to want to solve everything."

Obra Dinn might be one of the most acclaimed games of 2018, but by Pope's own admission, its open design and minimal tutorials have proven divisive in some quarters. (For my part, I've enthusiastically recommended it to at least half-a-dozen veteran gamers, and only one has made it past the hour mark.) It's easy to see why: most other deduction games attempt to simulate the 'grizzled detective' experience in the same way that *Call of Duty* grants couch warriors the feeling of crawling behind enemy lines as a trained operator. When you roleplay as brilliant crime-solver Sherlock Holmes or *L.A. Noire* detective Cole Phelps, all their training becomes implicit, and you live out the easy fantasy of putting evil-doers behind bars – after all, you don't learn how to fire a gun from the Weaver stance in your favourite first-person shooter. In contrast, *Obra Dinn* grants you no such superpowers – though it trains you in its own way, you have to really pay attention to receive its instructions.

"Honestly, I didn't know if it would work, but now it's clear that people want more of *Obra Dinn*," Pope says. "It's the deduction element, sure, but it's also the fact that you come in blind, and the game tells you almost nothing. Over time, though, it gives you everything you need to know. I think the open-endedness is key. It looks so impossible when you start, but the game lets you figure it out at your own pace... If there's one reason I think *Obra Dinn* succeeds, it's that it starts with a very basic plot, just a mutiny, before it hits you with the crazy supernatural stuff. It teaches you how to play itself, and that's why it works."

STILL NOT FOR EVERYONE

Despite its stellar sales, Pope says that the 'on-boarding' – pardon the pun – is the one element of *Obra Dinn* that he wishes he'd given himself just a little more time to tweak. From his perspective, if you accidentally button through the prompts that explain the game's basic mechanics, especially those concerning the labyrinthine book that the player fills out, the entire experience begins to take on water. "If you miss a tick there, accidentally skip some tutorials, they're probably going to quit out, give up," he says. "I wish I had integrated that more, but I think that's the price you have to pay for that openness."

"Now it's clear that people want more of *Obra Dinn*"

Both Pope and Barlow point to the minimal playspace of their investigative games as key to their success – by keeping the actual investigative area as narrow as possible, they prevent players from becoming stuck, or barrelling down the wrong

track for hours with no progress. When it comes to higher-budget fare, like Frogwares' *Sherlock Holmes* series, the developers are saddled with a high-wire balancing act. As a mid-range developer based in Ukraine, they have the capability to build out a scope greater than that of *Obra Dinn*'s tiny ship, but they can't quite create the living, period-accurate Los Angeles of *L.A. Noire*. Instead, with their upcoming Lovecraftian deduction adventure, *The Sinking City*, Frogwares is trying to split the difference by crafting an open-world that doesn't hold your hand or bombard your UI with hints to where you go next.

"*Sherlock Holmes* and *The Sinking City* are two sides of the same coin," says a spokesperson for the studio. "In *Sherlock*, everything must be coherent, each case must have a reasonable and logical explanation... In *The Sinking City*, it's exactly the opposite due to its supernatural core. Our hero, Charles Reed, possesses some quite unique, even paranormal abilities that allow him to see what's not there, or tap into the past. We found that these mechanics create a completely different experience which you simply wouldn't be able to find in our previous games."

Checking a physical map every time you want to go anywhere in *The Sinking City* might sound like a hassle, but Frogwares thinks that you'll eventually warm up to it.

In *The Sinking City*, you'll find yourself talking with folks who aren't exactly human.

A SURPRISING PROPOSITION

In order to distance themselves from their previous milieu, Frogwares has taken the somewhat risky step of extracting traditional point-and-click-style puzzles from *The Sinking City* entirely. Instead, players will be confronted with less contrived logical conundrums that investigators run into every day. Frogwares believes that the current crop of open-world games are too "hand-holdy," even going so far as to eschew the genre-standard mini-map that emerged from the formula-defining *Grand Theft Auto III* back in 2001.

"For example, you know that an unidentified suspect just took an arrow to the knee," a studio rep says. "Where would you go to learn more about the guy? Maybe... the hospital? And when you are there, you can't just brute force it to get the information from the archive. You gotta use what you know, connect some dots, and find the right entry. Otherwise, you won't get anything useful. So, in a way, we give you the subtle treatment. We only explain how certain things work once, and then it's up to you to find out how to use them, when, where, and why."

While these handful of games have managed to pierce the mantle, it's not at all clear that the deduction games will ever overcome their niche origins to become one of gaming's première genres. Still, as *Obra Dinn* and *Her Story* show, there's a tremendous amount of potential for even small studios to continue to radically shape the space beyond the starkly linear whodunits that marked its early days.

It's impossible to be sure if we'll ever truly see gaming's *Serial*-like breakthrough, but for the moment, it's clear that the future of the genre is sloping upward – like the curve of an archetypal detective's battered fedora.

As it turns out, The Sinking City has indeed seen better days, so watch your step out there.

PyBadge can run PICO-8, which means you can play the original version of the mighty *Celeste*.

Specs

- SAMD51 (120MHz Cortex M4, 512kB of Flash, 192kB of RAM)
- 2 DACs for audio out
- 2MB QSPI flash chip for storage
- 1.8" colour screen
- 8 clicky buttons
- Accelerometer
- Buzzer

It's the size of a credit card, but the PyBadge crams in a 1.8" screen, eight buttons, and a 120MHz Cortex processor.

The console you can wear as a badge

We take a look at a tiny coding handheld – and badge – for beginners: Adafruit's PyBadge

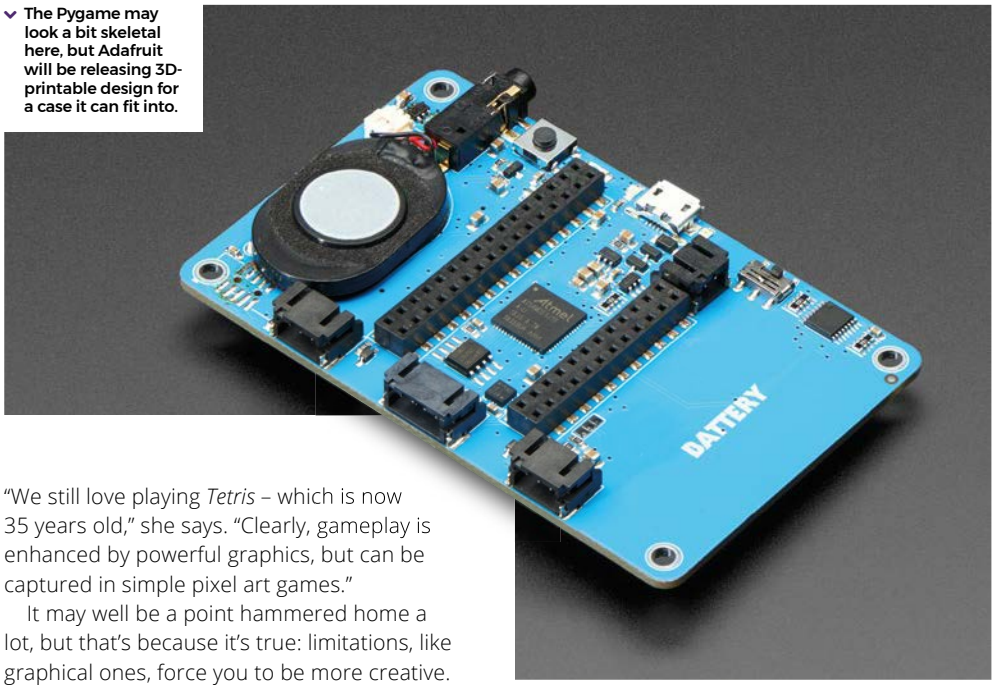
Adafruit will be known by a fair few readers, we're sure – it's a hardware company operating under an open-source remit, and has produced plenty of useful gadgets and gizmos for the hacker and maker audience over the years, along with a fair few bits and pieces aimed at gamesplaying folks. And now there's another one: the PyBadge.

The credit card-sized platform is aimed at beginner-level coders, and has been designed with CircuitPython and MakeCode Arcade in mind, allowing those just starting out to put together their own handheld adventures and play them on the go. Oh, and the 'badge' part of the name doesn't just refer to its small size – the PyBadge can literally be worn as a badge for, say, a cosplay event.

We spoke with Limor Fried, founder of Adafruit Industries, to find out just what this nifty little bit of hardware can do. "For the badge part," Fried explains, "we see a lot of people attending tech, gaming, cosplay, and sci-fi events, and sometimes groups pool together to design cool badges, but that takes a lot of skill and time."

As for actually making and playing games on the PyBadge, Fried explains why coders of all ages and experience levels might be interested in the device. Not unlike PICO-8, the virtual console we explored in Wireframe issue 12, PyBadge is a useful platform for developers to quickly test out game ideas. "We're super-inspired by PICO-8," Fried explains of the PyBadge's genesis, "and seeing *Celeste* go from indie PICO-8 cart to a full-blown Switch game shows the power of fast iteration and release."

Fried also points out that the PyBadge's hardware encourages fledgling developers to favour quality of design over fancy visuals.



The Pygame may look a bit skeletal here, but Adafruit will be releasing 3D-printable design for a case it can fit into.

"We still love playing *Tetris* – which is now 35 years old," she says. "Clearly, gameplay is enhanced by powerful graphics, but can be captured in simple pixel art games."

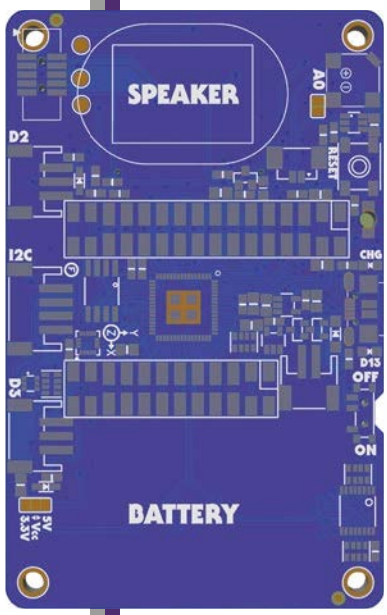
It may well be a point hammered home a lot, but that's because it's true: limitations, like graphical ones, force you to be more creative. The PyBadge throws that in the face of those getting to grips with coding as a challenge. Sure, the SAMD51 microcontroller – "a 120MHz Cortex M4 with 512kB of Flash and 192kB of RAM" with a 2MB flash chip for storage, we're reliably informed – is more than you'd expect from a teeny handheld like this, but you're still limited to a 1.8-inch screen capable of pushing out a

"The credit card-sized platform is aimed at beginner-level coders"

resolution of 128×160 pixels; and the battery life is in the realms of four hours, tops. With that, what can you do? Well, finding out is the fun part, isn't it?

While the PyBadge is designed for use with CircuitPython and MakeCode Arcade, Fried has already shown the device working with Arduboy libraries, so there's scope to hack together all sorts of fun things for the more advanced coder. We won't say you *should* try and get a Game Boy or Atari 5200 emulator working, but we won't say *don't* do that, either. Just probably hold fire at that sort of retro hardware level, as you're not going to be getting the PyBadge to pump out Super Nintendo-level emulation.

The PyBadge should have released by the time you're reading this – to find out more, head to the Adafruit blog (**wfmag.cc/PyBadge**) for further info.

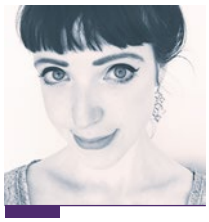


The PyBadge packs a lot into its compact form factor.

TILT 'N' TUMBLE

Among the components squeezed onto the PyBadge's tiny board, you'll find an accelerometer – a device that, as Fried points out, would've been prohibitively expensive to include on something like this even a few years ago. "We love accelerometers," Fried says. "These chips used to be $20 an axis, but now are under $1 for a triple axis, with all sorts of extras like tap and fall detection."
So does this mean we could get the equivalent of, say, *Spaceship Tilt* or *Kirby Tilt 'n' Tumble* working on the PyBadge? The answer's yes, according to Fried. "You can write motion-activated games where you can control by tilt or tap," she says. "Just be gentle."

Too cheap, perchance, to stream?



LOTTIE BEVAN

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

This is an ode to organic indie streaming strategies, and I'm confident Shakespeare will forgive me. Firstly, he sounds like a hip kinda guy. Secondly, if streaming were a thing in Elizabethan England, he'd have been *all over it*. Our closest gaming comparison is probably Lucas Pope in a ruff, and he doesn't set up paid streams. He waits for influencers to come to him and simply gives them keys.

"Bully for him," you might be thinking. "Shame I'm not a multi BAFTA-winning genius." And that's fair enough. It might take you a little longer than ShakesPope to tap into the 'free' streaming network, but if you put the time in and have a game that isn't terrible, it's entirely within reach.

Streaming is now the indie developer's number one way to convert eyeballs to sales. It's your most direct way to connect with consumers and their purses. People watch streams because they're interested in games and because they like the person streaming. If someone's watching a stream, it means they're theoretically up for buying a new game, and they're likely to be swayed by their chosen influencer's opinion (hence the name). If you get an influencer genuinely enjoying themselves while playing your game, the marketing funnel you've been dripping consumers through suddenly gets a lot shorter.

literally everyone
+
[streamer who likes your game]
↓
people who like your game
↓
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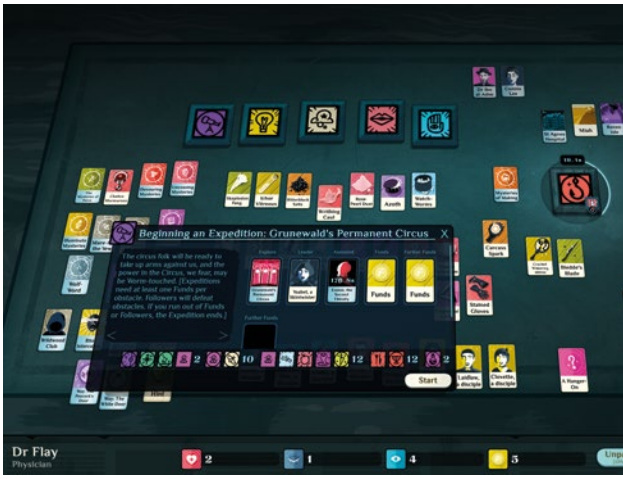
The way this worked for *Cultist Simulator* was simple but time-consuming. I drew up a list of similar games to the one I was developing, then went looking for streamers who'd played those games or similar titles. I reached out directly to offer keys, then repeated the exercise with YouTubers, Steam curators, and whoever else I could think of. Once we'd seen a bit of pick-up, I started getting enquiries from streamers who'd seen other streamers playing it. We all watch our direct competitors to see what they're doing, and so do influencers, too. They saw a bunch of people playing this weird game, and a bunch of nice audience responses to it. So they wanted in.



▲ **Positive word-of-mouth via YouTube streamers helped turn *Cultist Simulator* into a cult success.**

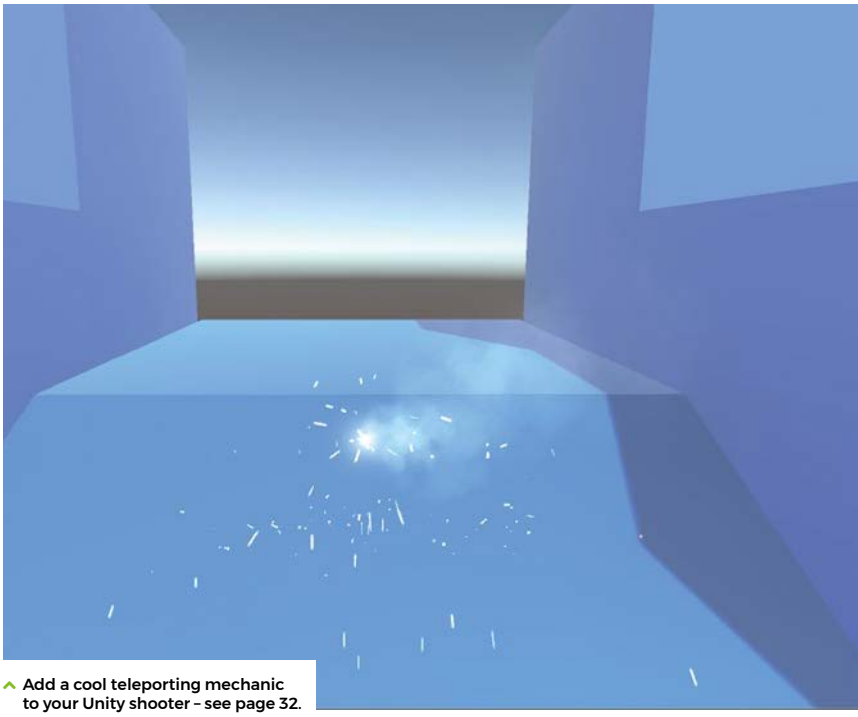
In my experience, you can leverage this vast, unknowable community of photogenic game enthusiasts without a budget, so long as you put the time in. Time is something indies actually have. Anything that builds a community over the course of development is great for us. The author Roger Zelazny has an excellent phrase for this: "An army, great in space, may offer opposition in a brief span of time. One man, brief in space, must spread his opposition across a period of many years if he is to have a chance of succeeding." And, you know, just replace the gendered language. It was the sixties.

I don't believe that spending on influencers is the key to indie success. Rather, influencers themselves are – but in an unusual twist in the natural order of things, you don't need cash to leverage the system.

"Streaming is now the indie developer's number one way to convert eyeballs to sales"

Toolbox

The art, theory, and production of video games



Add a cool teleporting mechanic to your Unity shooter – see page 32.

Find out more about creative direction – and why it's important – on page 40.

The principles of game design

What exactly is a video game? Howard explains why answering that question can result in better design

AUTHOR
HOWARD SCOTT WARSHAW

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

Given any task, I'll do it better when I understand what I'm doing. I take this to be a fundamental truth. It follows then, when designing video games, that it's helpful to understand exactly what the term 'video game' means. Take a moment and compose your answer to this question: what is a video game? Imagine explaining it to someone who's totally unaware of them. Have you got it? Was it easy? Did you tell them the truth? Was your explanation accurate?

There's a difference between truth and accuracy, and I believe the difference is this: truth may vary from person to person. Accuracy must be objective, or it isn't accuracy. Now I'll give you my answer to this question; let's see how it compares with yours.

Several things come to mind as I ponder, "What is a video game?". My first thought: it's a computer program. Naturally I think this, given my background as a game developer. But I've developed all kinds of software, and video games have an extra requirement that very few programming projects do: in addition to meeting all functional specifications, a video game must be fun, thus adding a subjective criterion to a technical production, which is a tad paradoxical. I'm inclined to reject this answer because, as a computer program, video games are more the exception than the rule.

Next is the obvious take: it's a game. Yes, but there are all sorts of games, aren't there? And this begs the question, what is a game? A game, at its root, is simply a set of rules in a well-defined environment with a goal and an initial configuration from which play begins. At this level, there is no distinction between *Tetris*, tennis and tic-tac-toe (and all three are video games as well). There's also the popular refinement: it's interactive entertainment. Yeah, but so is conversation and charades, and they've been around much longer. This still doesn't quite nail it.

Here's one of my original favourites: it's a piece of broadcast media. No doubt, as this product is available to the public at large, and each person gets the same thing. But how does this differentiate a video game from a radio show, skywriting, or even a notice pinned to a wall?

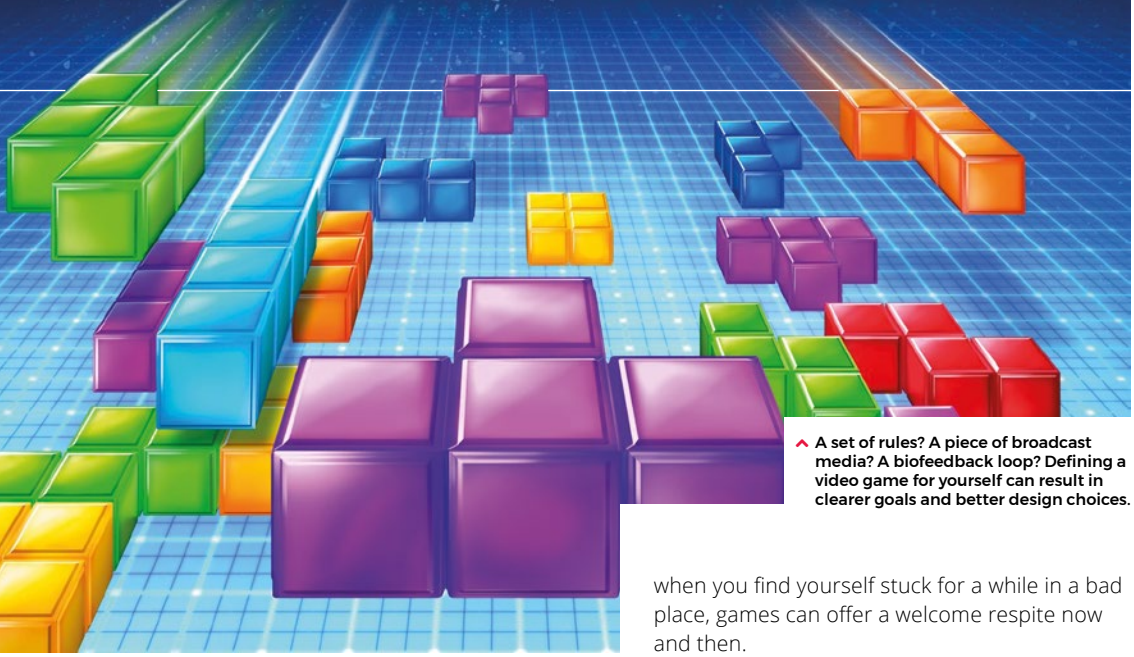
Each of these answers is undeniably true, but they don't seem to delineate or convey the unique experience of video games. Where's the quintessence? Surely there's a better answer...

"My entire ambition with *E.T.* was simply to get something reasonable done in five weeks."

IN THE LOOP

Here's a closer next step: it's a real-time control system. Now, this is knocking on the door insistently. At this point, we're only a subtle refinement away from bursting through. I believe it's most accurate to say that, at its essence, a video game is a biofeedback loop.

One of Howard Scott Warshaw's most beloved biofeedback loops: *Raiders of the Lost Ark* on the Atari 2600.



A set of rules? A piece of broadcast media? A biofeedback loop? Defining a video game for yourself can result in clearer goals and better design choices.

Think about it. A video game is a device which responds to you in a consistent manner. As you shift, it adapts instantaneously. There is a constant flow from the display and speakers into the player's eyes and ears, through the player's brain, down to the hands (or mouth or however you use the controller) into the video game's controller port, through the game's processor and back out through the display and speakers. You act, and it responds by continually reflecting the consequence of your action. This is the embodiment of a biofeedback loop. The only difference is a video game measures your degree of attunement with some designer's creation rather than with your own physiology.

"A video game is a device which responds to you in a consistent manner"

Of course, this is a very impersonal and functional approach to answering the question. There is also the more person-oriented or humanistic view. As a therapist, I have come to recognise video games as a provider of intimate and well-needed services for people.

When I was working at Atari, video games were already being used as therapy for stroke victims, facilitating recovery of cognitive and physical functioning. In general, games are an excellent exercise for mental and physical dexterity. Video games can also increase one's sense of agency and ability. Working through challenges and finding success can increase my inclination to work through difficulties in other areas of life as well.

Video games are also an escape. They provide a compelling alternative to a very stressful life at times. I've received fan mail from people in abusive situations, saying my games helped them through some tough moments. It's incredibly meaningful for me to hear this, and I'm grateful to have provided any relief. Video games do not fix your life, of course, but when you find yourself stuck for a while in a bad place, games can offer a welcome respite now and then.

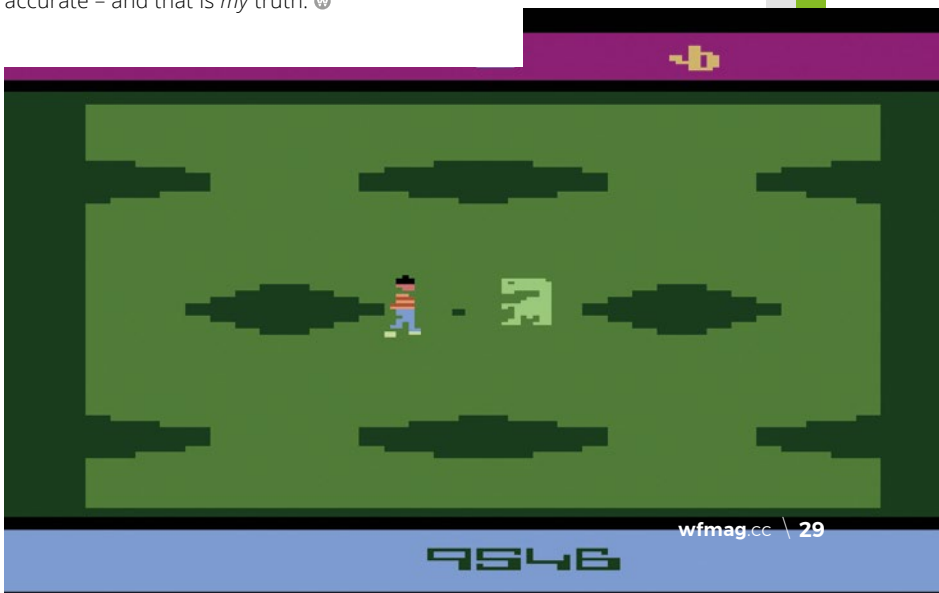
So, what does all this mean for game design? Well, understanding the experience from this point of view can help us tune our goals and plans in creating a game. When making design choices, I can always check in with myself to see if this enhances or interferes with any of the aforementioned possibilities. Ask yourself: Why am I making this game? Is this a puzzle game to test problem-solving skills, or a twitch game to challenge dexterity and quick-witted response? And in either case, will my next change to the game add to or detract from the quality of this experience? Or maybe it will have no real impact at all on the player experience, in which case I should rethink it and perhaps use my efforts and resources elsewhere.

Knowing what you're doing enables you to be more effective in the delivery. That's why I feel it's important to address this most fundamental question of video game creation. I hope these musings have opened some new perspectives in your designing mind.

This was my answer to: 'what is a video game?'. I'm not saying my answer is better or worse. I'm just saying I believe my answer is accurate – and that is *my* truth.

Design goals

Each of my games had a very specific design goal right from the start. With *Yars' Revenge*, I was trying to make an action game I would enjoy. On *Raiders of the Lost Ark*, my goal was to make the biggest adventure game imaginable on the VCS. Many people have wondered what was going through my mind when I did *E.T.* Here it is: My entire ambition with *E.T.* was simply to get something reasonable done in five weeks. Sometimes the design goal is about the product, and sometimes it's about the circumstances. But either way, it's always something.



E.T. The Extra-Terrestrial **– a video game made in just five weeks.**

CityCraft: Make your streets come to life

How to bring vibrancy, believability, and immersive realism to the streets of your video game city

AUTHOR
KONSTANTINOS DIMOPOULOS

Konstantinos Dimopoulos is a game urbanist and designer, currently working on the *Virtual Cities* atlas, and consulting on several games. **game-cities.com**

Streets are crucial in shaping our first impressions of any city we visit. It is, after all, streets we have to cross to go anywhere, and on streets where we'll be spending much of our time experiencing the ebb and flow of civic life. Local fashion, politics, weather, architecture, billboards, and public art are all encountered while walking or driving around town, and it's on streets where the poorest sleep and survive, where car traffic and shop windows can be observed, and where the sounds of the city can be heard.

When it comes to game cities in particular, streets are even more important. Whether imaginary, historical, or contemporary, the streets, boulevards, avenues, and alleys of virtual cities define an urban setting's ambience. The neon-sign labyrinths of Kamurocho, the dark Gothic alleys of Yharnam, and the paved roads of Novigrad's streets encapsulate the spirit of each game city. They connect its important nodes, showcase its history, convey atmosphere, hide minigames and adversaries, offer gameplay and narrative opportunities, and in many cases, act as the game's core environment.

THE PHYSICALITY OF THE ROAD

Transportation technologies, architecture, and engineering can all be experienced while traversing the complex historical, technological, and societal construct that is the urban road. Covering all of its aspects would, of course, be impossible in a couple of pages, so I'll try to answer some fundamental questions, and provide a few suggestions that should be useful when designing and populating the roads of your settlements.

After deciding the overall shape and organisation of your street network – is it a grid, is it axial? – you should consider the materials your roads will be made from. Depending on geography and era, they could be the asphalt highways of a metropolis or the cobblestone roads still surviving in the heart of almost every European city. They could be made of concrete, stone, or even dirt. More intriguingly – and taking Venice as an example – streets could be substituted with canals. Local materials, climate, needs, and building technologies can further influence road design, and lead to arches, covered or subterranean paths, zebra crossings, or even the widespread use of coloured stone.

Time and daily use tend to wear down anything. Maintaining and rebuilding roads is a necessity in real life, but a few virtual potholes can always make driving more interesting, while some exaggerated cracks could be used to show economic decline. You should thus decide how well preserved your town's roads will be.

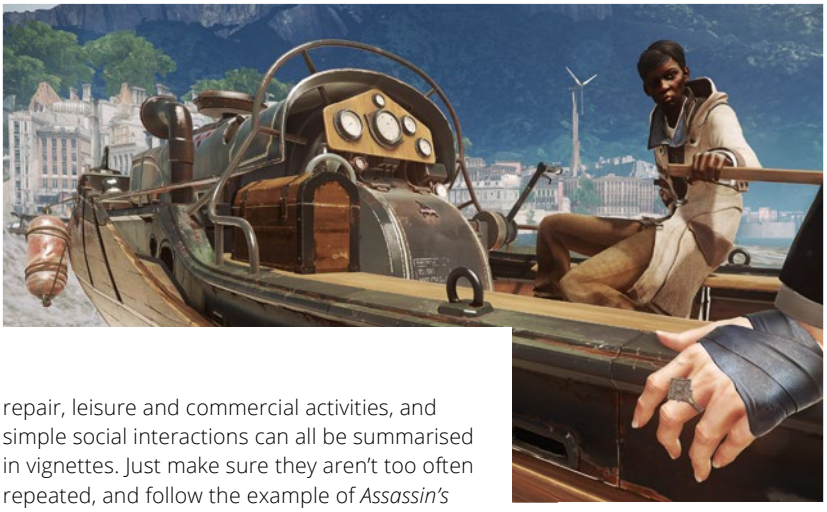
The Hong Kong of *Shenmue II* featured densely packed, vibrant streets and alleys that have gracefully aged.

Street Walls Tell Stories

In most cases, urban streets are lined with buildings, and thus also with walls. The importance of graffiti, posters, signs, advertisements, decorations, and art on these walls cannot be overstated. Not only do such elements provide great environmental storytelling opportunities, but they're also expected. The street wall has been an integral part of cities throughout history. From ancient Egyptian graffiti, and 19th-century posters, to WWII resistance slogans, to North American hobo sign language, street-facing walls should never be silent.

An ancient graffito from a Pompeii wall, commenting on a then-recent gladiatorial match.

Clothes are always important in quality world-building.



Dishonored 1 and *2* are both excellent showcases of how deeply our perception of the urban image can be influenced by its vehicles.

Also, how easily will they flood, and why? Will sewage commonly spill out on them as was the case in early 19th-century Paris? And what about sidewalks? Deciding whether these exist or not, and what material they are constructed from, will influence both how a city functions and looks. Separating pedestrian from animal or vehicular traffic is as important a choice as the actual vehicles (or beasts of burden) that will travel your roads.

The exact same London street can look vastly different when occupied by double-decker buses, black cabs, and private cars, than when traversed by Victorian horse-drawn carriages and omnibuses. Fifties American cars defined a whole era, whereas a neighbourhood exclusively reserved for pedestrians will smell and sound more pleasant than a packed ring road, which might only compare favourably to an island town where donkeys are the only means of transportation.

"When it comes to game cities, streets are even more important"

HUMAN (STREET) ACTIVITY

Besides the design of streets – besides even the surrounding architecture, which can be anything from the modern urban canyons of skyscrapers or the paved paths on Anor Londo – the social aspect of streets shouldn't be ignored. These open, public spaces are where much of life actually happens. Merely modelling the built environment, then, is never enough.

People travelling around, merchants with packed (or desperately empty) stalls, shops opening up to the street, kids playing, adults shouting at each other, lovers kissing, and a variety of other scenes can and should play out on streets – provided these haven't been bombed or overrun by the undead. Maintenance activities like garbage collecting and street light repair, leisure and commercial activities, and simple social interactions can all be summarised in vignettes. Just make sure they aren't too often repeated, and follow the example of *Assassin's Creed: Syndicate* in researching what those activities should be, and how to masterfully hide those necessarily reused character models.

Whenever possible, show people doing everyday stuff. Praying, laughing, gambling, looking at the sky, carrying things, going places, begging for money, flying on weird jet-shoes, and driving to work can all be part of the urban ecosystem. Mentally constructing such a system, and then abstracting it into a game system that will believably guide your NPC citizens, and provide them with sensible schedules, can work surprisingly well – even when it's as simple as the one in classic 1990s adventure, *Beneath a Steel Sky*. Adding a political element to such a system with demonstrations, elections, and political gatherings, as *Dreamfall Chapters*' Propast did, can offer further glances into simulated societies, and their processes.

Finally, consider fashion. The way people dress, their colours, styles, headwear, and accessories can all help to paint a picture of a more vibrant world, but also offer insights into their imagined lives. *We Happy Few* may be a rather outrageous example, but its makeup and stylistic choices definitely set the tone.

And gendered, religious, formal, and informal attires can all help to describe power relations and ideologies, and effectively signpost specific time periods. The Western working class, for example, always dressed its best on Sundays, and during holidays.

Light and Shadow

Games like *Thief* need dark streets with shadowed alcoves; games like *GTA* have to allow for comfortable driving, even at night, while Victorian London's atmosphere owed much to the combination of gaslight and fog. My point? Lighting your streets is an important consideration that is absolutely worth the time you will invest researching it. Besides, street lamps (or public torches) can be truly beautiful, blinking lights ominous, and hanging electrical wires almost cosy.

Creating a Blink ability in Unity

Download the code from GitHub: **wfmag.cc/wfmag13**

Want to teleport around levels like Tracer in Overwatch? Stuart Fraser shows you how to recreate the mechanic

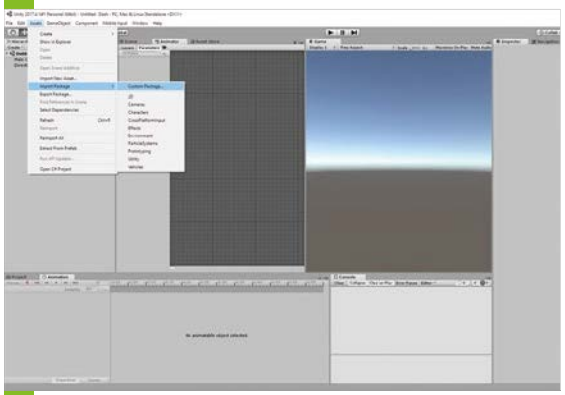
AUTHOR
STUART FRASER

Stuart is a former designer and developer of high-profile games such as *Rollercoaster Tycoon 3*, and also worked as a lecturer of games development.

CHARACTERS

You're welcome to use your own FPS character; the reason we're using the one in Unity is so that everyone can achieve the same outcome, regardless of their start point.

We're going to look at creating a game mechanic that will allow the player to instantaneously teleport a short distance. This is commonly called a blink mechanic, and can be seen in games like *Dishonored* – it's one of the skills that the player can unlock when playing as Corvo, or in games like *Overwatch* with Tracer's ability. As with our earlier tutorials, we can use Unity's tools and C# to create a prototype of this mechanic. We will also use some Unity-developed assets to speed up the process of getting into the position of having our base first-person character. Or, if you prefer, you can use the first-person character we set up in the tutorial published in Wireframe issue nine.



Unity has a bunch of useful assets that come as standard in the installation. You can always add them to help you to prototype levels or mechanics.

STARTING A NEW PROJECT

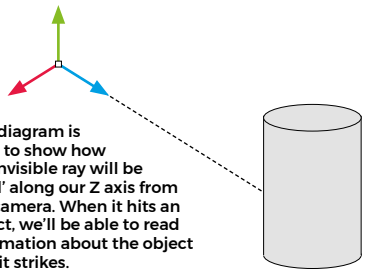
The first step is to get a new project started in Unity. As in our earlier tutorials, we can open Unity Hub and create a new project in the options provided. However, if you're new to these tutorials and want to join in, I recommend installing Unity Hub and using it to download the 2017.4 version of Unity. It should also have the letters LTS next to it – this stands for the Long-Term Support stream, meaning it should be the most stable version.

Once you have Unity installed, you can use the Projects tab in the Unity Hub to create a new project; simply select New and follow the instructions. I recommend calling your project something memorable like Blink. Once you have a new project set up and are in the Editor, we can move on to get the initial template character from Unity imported.

USING UNITY PACKAGES

We're going to use Unity's packages to speed up the process of building an FPS character. While the template is somewhat overly complex for our needs, it will give us instant results. To achieve this, move to the taskbar and select Assets > Import Package > Characters and at this point, you can choose what to import. We will select All, and then press the Import button.

The next step is to select the Camera in the Hierarchy and delete it, as the FPS character will contain its own camera. We then want to add



This diagram is used to show how the invisible ray will be 'fired' along our Z axis from the camera. When it hits an object, we'll be able to read information about the object that it strikes.

a plane to the level by selecting GameObject > 3D Object > Plane, and this will be our floor. We then go to the Project window and navigate to Standard Assets > Characters > FirstPersonCharacter > Prefabs, then select the FPSController.prefab and drag this into the Hierarchy window. Next, with the FPSController still selected in the Hierarchy, move to the Scene window, and select the green up arrow (Y) from the three directions available. Once selected, drag this arrow until the wireframe capsule is above the plane we added. You can simply press the Play button to preview the FPS template character; do remember to press this again to stop the preview.

CHECKING THE DESTINATION

Before we implement the mechanic, we need to do some groundwork. In our example, we're going to first do something like the *Dishonored* blink ability, where you can set a destination and teleport there.

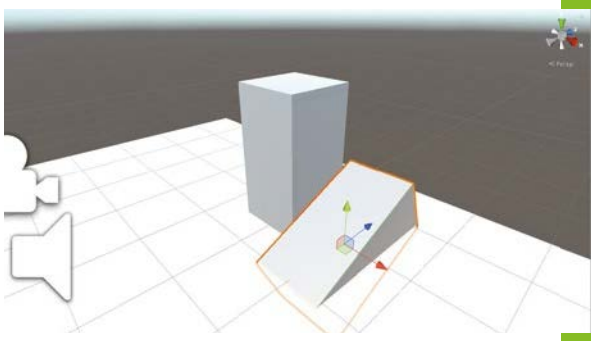
We'll use a raycast, which is something that we looked at in an earlier tutorial. Effectively, we'll shoot out an invisible beam to see if these destinations are possible to reach before we blink between them. Ideally, we want a surface such as a floor or walkable slope to be valid to blink to; meanwhile, a wall should be invalid as we would end up inside it. We can differentiate these two types by looking at the normal directions of where the ray hits.

So that we can test this, we'll also build out a level using some basic cubes. First, select GameObject > 3D Object > Cube. In the Inspector window, set the Y value for the Scale to 2. We want to move this cube object so it's not in the same space as our FPSController object and also that it's touching, but not in, the ground. If we hold the **CONTROL** key and then click the left mouse button while selecting one of the transform arrows on our cube object, we can accurately snap our cube object into a suitable position.

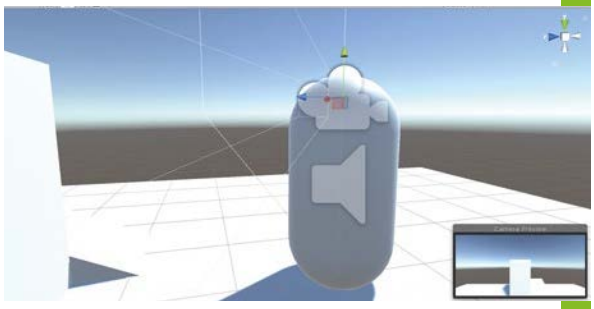
We'll now make a slope by duplicating our cube by selecting Edit > Duplicate. We then move to the Inspector and change the X value for the Rotation to around 65 degrees. Using the positioning tools again, we use the **CONTROL** key and select the red arrow (X) to move this cube so it's next to the first. We can then release the **CONTROL** key and manually move this using the green arrow (Y) so that a slope is formed by effectively submerging the cube in the ground.

"We'll send out an invisible beam to see if destinations are possible to reach"

Next, we'll create our initial script on the player camera object. In the Hierarchy, look for the FPSController and select the arrow next to it. This will expand, and you should then see an object called FirstPersonCharacter. Select this object, and then in the Inspector look for the Add Component button. Now scroll down the list and select New Script; we can call this Blink, and then select Create and Add. We can now add our code to preview the logic of our blink ability by replacing the template code with our own. We do this by double-clicking on the script name to open our script editor.



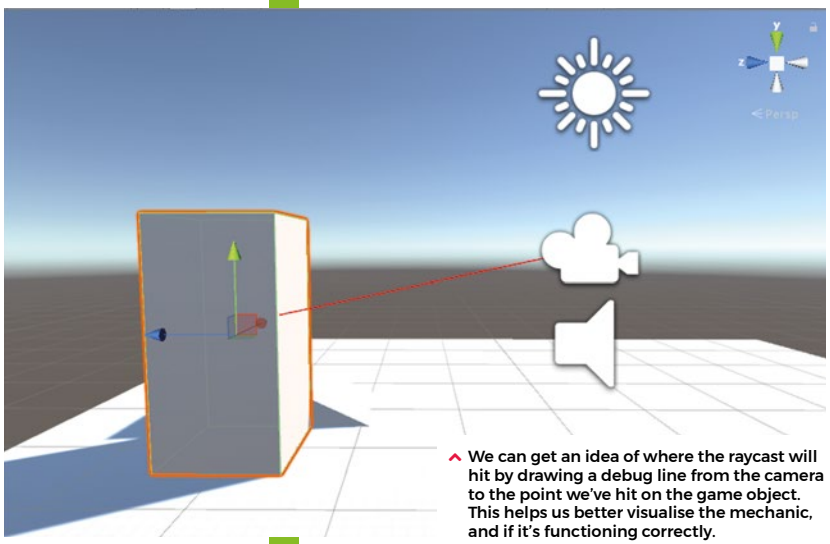
You can easily create geometry by using the basic shapes in clever ways; level designers often do this to block out levels, which will be replaced later by artists.



We'll add an additional script to the imported first-person character prefab created by Unity. As we want to blink to a point we are looking at, we attach the script to the player camera.

NORMAL DIRECTION

A normal direction is something that exists for all polygons in a game. It usually tells the renderer that a valid polygon should be drawn in a certain orientation. In 3D packages, it's often shown as a small line that points in an opposing direction to the rendered polygon face. We're using this knowledge to determine if our surfaces are valid for teleporting onto.



We can get an idea of where the raycast will hit by drawing a debug line from the camera to the point we've hit on the game object. This helps us better visualise the mechanic, and if it's functioning correctly.

PREVIEWING RAYCASTS

Raycasts are usually invisible. We can preview this in the scene view by using built-in Unity functions for debugging raycasts. This is one of the many useful debug functions that are available in Unity, and typical in most game engines.

```
using UnityEngine;

public class Blink : MonoBehaviour {

        // Update is called once per frame
        void Update () {
       if (Input.GetMouseButton(0))
       {
           RaycastHit hit;
           Ray ray = Camera.main.
ScreenPointToRay(Input.mousePosition);

           if (Physics.Raycast(ray, out hit))
           {
               // Draw debug lines to aid
visualisation.
               if (hit.normal.y > 0.5f)
               {
                   Debug.DrawLine(transform.
position, hit.point, Color.green);
               }
               else
               {
                   Debug.DrawLine(transform.
position, hit.point, Color.red);
               }
           }
       }
   }
}
```

Once we save this in the code editor and move back to Unity, we can preview this in the scene view. We need to make sure both the Scene and Game are both visible to achieve this. If you haven't done this already, undock the Game tab by left-clicking and dragging this to the right. This will allow you to dock with another empty area of the editor interface.

Press play now, and as the FPS character, go find your cube objects in the level. If you hold the left mouse button, you will see that the raycast will be drawn. In our code, the valid locations are a green debug line, and invalid locations are red. With this tested, we can stop the preview and add our basic blink mechanic.

BLINKING BETWEEN LOCATIONS

As the debug lines aren't drawn, and our goal is to emulate the mechanics from popular games, we want some sort of visualisation of the end locationTo achieve this, we'll use some of the ready-made particle assets in Unity, and use this to preview the end location. In the taskbar, select Assets > Import Package > ParticleSystems and then Import the package.

Our next step is to update our script to include the mechanic: select the blink script in the Project window, and double-click to open it. We can simply replace the current script with the updated one below.

```
using UnityEngine;

public class Blink : MonoBehaviour {
    public GameObject particlePrefab;
    GameObject particleFX;
    Vector3 destination;
    bool FXVisible=false;

    private void Start()
    {
        particleFX =
Instantiate(particlePrefab);
    }

    // Update is called once per frame
    void Update () {
        if (Input.GetMouseButton(0))
        {
            RaycastHit hit;
            Ray ray = Camera.main.
ScreenPointToRay(Input.mousePosition);
```

```
            if (Physics.Raycast(ray, out hit))
            {
                // Draw debug lines to aid
visualisation.
                if (hit.normal.y > 0.5f)
                {
                    Debug.DrawLine(transform.
position, hit.point, Color.green);
                    destination = hit.point;
                    FXVisible = true;
                }
                else
                {
                    Debug.DrawLine(transform.
position, hit.point, Color.red);
                    destination = transform.
position;
                    FXVisible = false;
                }
            }
            else
            {
                destination = transform.
position;
                FXVisible = false;
            }
        }
        if(Input.
GetMouseButtonUp(0)&&transform.
position!=destination)
        {
            destination.y += 0.5f;
            transform.parent.position =
destination;
            FXVisible = false;
        }
        if(FXVisible)
        {
            particleFX.transform.position =
destination;
            particleFX.SetActive(true);
        }
        else
        {
            particleFX.SetActive(false);
        }
    }
}
```

Save the script and return to Unity editor. We're now going to make some final tweaks before we try out the mechanic. First, select the FirstPersonCharacter game object in the Hierarchy, and then in the Inspector, look for your script. You should see a new slot named Particle Prefab – this is where we can assign our particle. If we look in the Project window and navigate to Standard Assets > Particle Systems > Prefabs, we have several effects at our disposal.

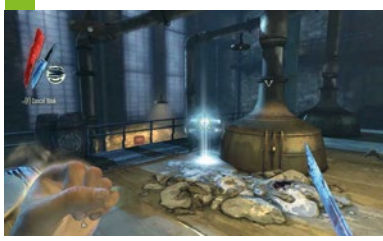
I suggest that we use the Flare effect, and drag this onto the Particle Prefab slot in the Inspector. A final change, and that allows us to easily see the particle effect, is to change the light colour. Select the Directional Light in the Hierarchy, and then in the Inspector, set the colour to something other than white; my suggestion is blue.

We can now try out the mechanic. Press the play button to preview, and then hold the left mouse button; you'll see the particle effect appearing on valid surfaces, and disappearing when this is not the case. We can also teleport to these locations if we release the left mouse button. Once you've finished testing this out, remember to click the button to stop playing the game preview.

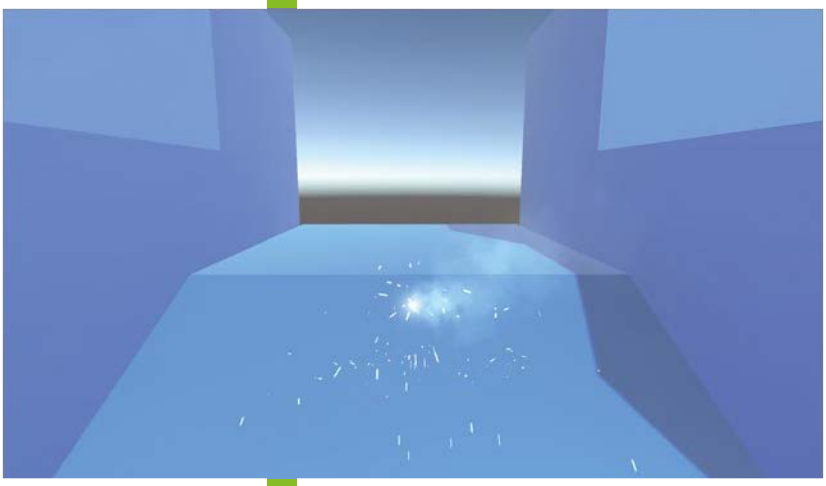
EXPANDING THE BLINK MECHANIC

Now, let's think about how we can change this to make the blink mechanic work more – as it does with Tracer in *Overwatch*. To do this, we can simply use the same setup and make a few modifications to the code. Note that with this code there is no test for the ground surface – this is because Tracer will attempt to blink forward regardless of obstacles. If you wanted to, you could make a new script so you could easily switch between both versions; or you can modify the existing blink script with the updated code below.

```
using UnityEngine;

public class Blink : MonoBehaviour {
    public float maxDistance = 4.0f;
    public GameObject canvas;
    Vector3 destination;
    Animator anim;
```



A blink ability was among the many powers at Corvo's disposal in *Dishonored*.



Our particle will render on the position that is hit by our raycast – this gives the player a good indication of where they will be moved to when they use the blink mechanic.

```
    private void Start()
    {
        if (canvas != null)
        {
            anim = canvas.
GetComponentInChildren<Animator>();
            anim.enabled = false;
        }
    }

    // Update is called once per frame
    void Update ()
    {
        if (Input.GetMouseButton(0))
        {
            RaycastHit hit;
            Ray ray = Camera.main.
ScreenPointToRay(Input.mousePosition);

            if (Physics.Raycast(ray, out hit,
maxDistance))
            {
                destination = hit.point;
            }
            else
            {
                destination = transform.
position+transform.forward*maxDistance;
            }
        }
        if(Input.
GetMouseButtonUp(0)&&transform.
position!=destination)
        {
            destination.y += 0.5f;
            transform.parent.position =
destination;
            if (anim != null)
            anim.enabled = true;
        }
        if(anim==null)
        {
            return;
        }
        if (anim.
GetCurrentAnimatorStateInfo(0).
normalizedTime>=1)
        {
            anim.Rebind();
            anim.enabled = false;
        }
    }
}
```

PARTICLES AND SOUND

You can always consider making your own particle effect, or even adding a sound when you're using the blink mechanic. These are elements that can be fleshed out as you iterate on your design.

In the case of Tracer, she has a full-screen effect that appears when she blinks, which is designed to represent speed lines. A cheap alternative we can add is to quickly fade out the alpha on a white overlay. We've previously used a canvas in other tutorials, but this time we'll animate it to simulate this effect. I've also built in the trigger for it in our code above, but the mechanic will still work regardless. If you want to add this effect, then create a new canvas by selecting GameObject > UI > Canvas from the taskbar. We can then select the Canvas in the Hierarchy, and then right-click and select UI > Panel. The panel is the actual object that will display our white flash, so with this still selected, move to the Inspector.

In the Inspector, you'll see the Image (script) and a parameter called Source Image. We want to select the circle to the right of this entry and change the Source Image to None. You'll have probably noticed there seems to be a white tint on the whole scene. The reason is that the panel image always gets set to around 50% opacity. We can change that by selecting the white box to the right of the Color parameter. You should see a standard colour palette where we can adjust the value to the right of the letter A to be 0.

We're also going to make a very short animation to create the fade from white to transparent on this panel. We can achieve this by going to the Project window, then right-clicking and selecting Create > Animation.

Tracer's blink ability makes her one of the more mobile characters in *Overwatch*.

SPECIAL EFFECTS

A standard canvas element will always be rendered on top of the game scene – this means we can add full-screen effects like player damage, colour tints, and fades to our player camera to enhance the experience.

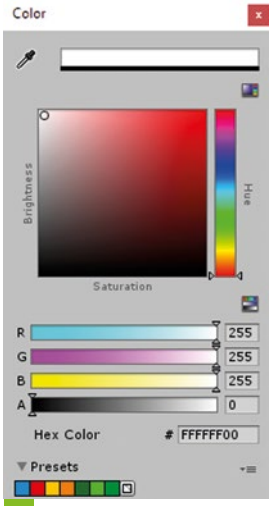
I would simply rename the new Animation to Blink, so we know what it will be used for. We then select the Panel in the Hierarchy and drag our Blink animation onto the objects Inspector. At this stage, we might need to make the Animation window visible. For this, just select Window > Animation and dock the new window suitably. We then select the Panel in the Hierarchy and then select the button Add Property in the Animation window. You should then drop down the arrow next to the listing for Image (Script) and select Color from the further options by clicking the + symbol.

In the Animation window, you should see an entry labelled Panel : Image Color, and again, we expand this by clicking the arrow. You should see the entries for the Red, Green, Blue, and Alpha channels (RGBA), and a timeline with keyframes on. The keyframes will look like diamonds on the timeline. Next to the text that shows color.a, you should see a value: this is probably 0 in our case. We select this and change it to 1. We then scrub the timeline to the end of the animation. This is achieved by placing the mouse at the very top of the Animation window along the bar with the time value visible. We select the white vertical line and drag it to the right until we have the next set of keyframes selected. We can now make sure that the value for the color.a entry is 0, and if it isn't, alter it to this value.

Finally, we can select our FirstPersonCharacter in the Hierarchy and drag the Canvas object onto the slot in our script, labelled as Canvas. When we play the game, we should be able to blink in the direction our character faces. We'll have similar limitations as before, but be able to traverse forward a short distance if there's nothing that would block the player's path.

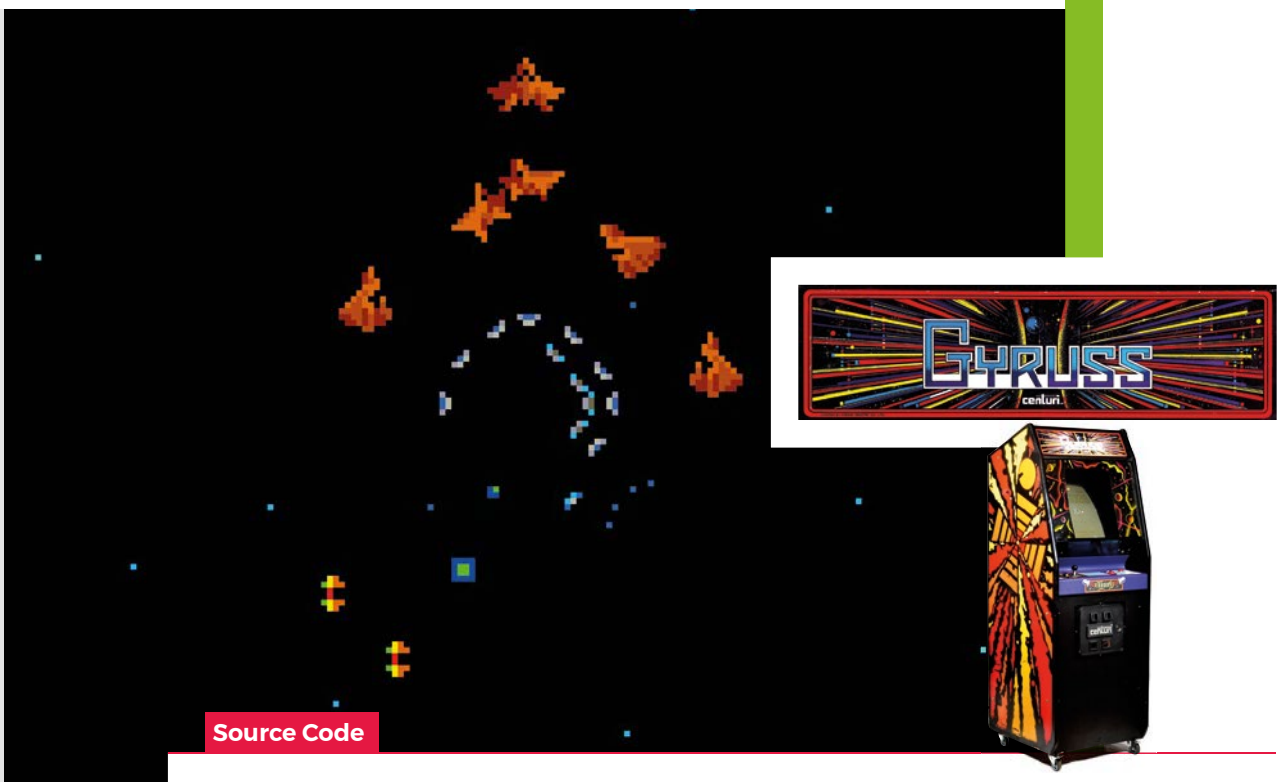
We should also see our blink screen effect show up – you can easily tweak the animation timings for yourself if you like.

Another option is that we could limit the number of blinks the character can attempt within a timeframe, as with the real Tracer character. For now, though, we've successfully developed two different ways of handling a blink mechanic – feel free to experiment with it, and see how you can tailor the movement for your own game.



Adjust the alpha value so that it's fully transparent – or, in other words, has no opacity.

The animation timeline lets us set keyframes, which in turn let us set specific values during the animation playback.



Source Code

Recreate Gyruss's zooming starfield

It gave a 2D shooting game unparalleled depth. Here's how to recreate Gyruss's zooming stars

AUTHOR
RYAN LAMBIE

The crowded, noisy realm of eighties amusement arcades presented something of a challenge for developers of the time: how can you make your game stand out from all the other ones surrounding it? *Gyruss*, released by Konami in 1983, came up with one solution. Although it was yet another alien blaster – one of a slew of similar shooters that arrived in the wake of *Space Invaders*, released in 1978 – it differed in one important respect: its zooming starfield created the illusion that the player's craft was hurtling through space, and that aliens were emerging from the abyss to attack it.

This made *Gyruss* an entry in the 'tube shooter' genre – one that was first defined by Atari's classic *Tempest* in 1981. But where *Tempest* used a vector display to create a 3D environment where enemies clambered up a series of tunnels, *Gyruss* used more common hardware and conventional sprites to render its aliens on the screen. *Gyruss* was designed by Yoshiki Okamoto (who would later go on to produce the hit *Street Fighter II*, among other things, at Capcom), and was born from his affection for *Galaga*, a 2D shoot-'em-up created by Namco. Under the surface, *Gyruss* is still a 2D game like *Galaga*, but the cunning use of sprite animation and that zooming star effect created a sense of dynamism that its rivals lacked – the tubular design also meant that the player could move in a circle around the edge of the play area, rather than moving left and right at the bottom of the screen, as in *Galaga* and other fixed-screen shooters like it.

"The zooming star effect created a dynamism that its rivals lacked"

Gyruss was one of the most popular arcade games of its period, probably in part because of its attention-grabbing design. The code sample on the right, written by Daniel Pope, shows you how a zooming star field can work in PyGame Zero – and how, thanks to modern hardware, we can heighten the sense of movement in a way that Konami's engineers couldn't have hoped to achieve about 30 years ago.

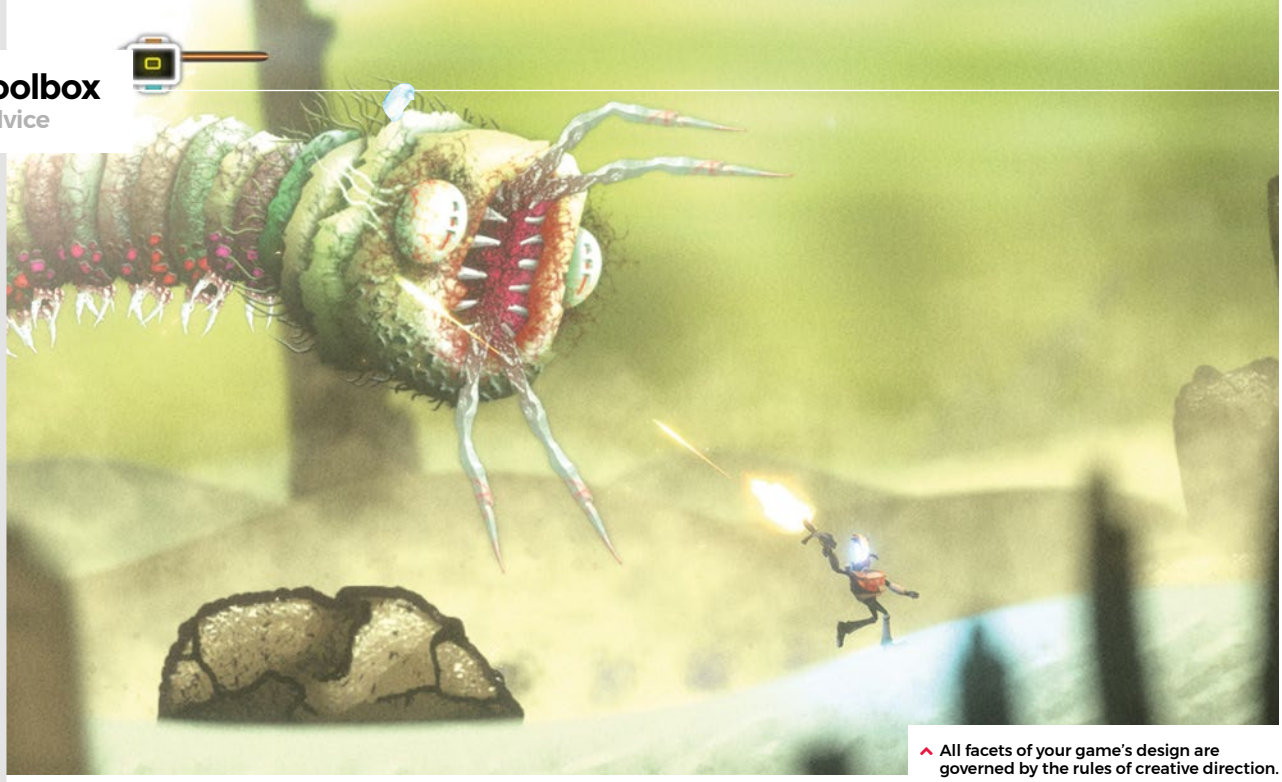
The code generates a cluster of stars on the screen, and then creates the illusion of depth and movement by redrawing them in a new position in a randomly chosen direction each frame. At the same time, the sense of depth is furthered by having the stars gradually increase their brightness over time, as if they're getting closer.

As a modern twist, Pope has also added an extra warp factor: pressing and holding the **SPACE** bar will increase the stars' velocity, making that zoom into space even more exhilarating.

A zooming starfield in Python

Here's Daniel Pope's example code, which creates a *Gyruss*-style zooming starfield effect in Python. To get it running on your system, you'll first need to install Pygame Zero – you can find full instructions at **wfmag.cc/pgzero**


```
import math
import random

WIDTH = 1000
HEIGHT = 1000 * 9 // 16
ACCEL = 1.0  # Warp factor per second
DRAG = 0.71  # Fraction of speed per second
TRAIL_LENGTH = 2
MIN_WARP_FACTOR = 0.1
BOUNDS = Rect(0, 0, WIDTH, HEIGHT)

warp_factor = MIN_WARP_FACTOR
centerx = WIDTH // 2
centery = HEIGHT // 2
stars = []

class Star:
    __slots__ = (
        'pos', 'vel', 'brightness',
        'speed', 'position_history'
    )

    def __init__(self, pos, vel):
        self.pos = pos
        self.vel = vel
        self.brightness = 10
        self.speed = math.hypot(*vel)

    @property
    def end_pos(self):
        """Get the point where the star trail ends."""
        x, y = self.pos
        vx, vy = self.vel

        return (
            x - vx * warp_factor * TRAIL_LENGTH / 60,
            y - vy * warp_factor * TRAIL_LENGTH / 60,
        )

def draw():
    screen.clear()

    for star in stars:
        b = star.brightness
        color = (b, b, b)  # a grey
        screen.draw.line(star.end_pos, star.pos, color)

    screen.draw.text(
        "||| Warp {:0.1f} |||".format(warp_factor),
        fontsize=40,
        midbottom=(WIDTH // 2, HEIGHT - 40),
        color=(180, 160, 0),
    )
    screen.draw.text(
        "Hold SPACE to accelerate",
        fontsize=30,
        midbottom=(WIDTH // 2, HEIGHT - 8),
        color=(90, 80, 0),
    )

def update(dt):
    global stars, warp_factor

    if keyboard.space:
        warp_factor += ACCEL * dt

    warp_factor = (
        MIN_WARP_FACTOR +
        (warp_factor - MIN_WARP_FACTOR) * DRAG ** dt
    )

    while len(stars) < 300:
        angle = random.uniform(-math.pi, math.pi)
        speed = 255 * random.uniform(0.3, 1.0) ** 2
        dx = math.cos(angle)
        dy = math.sin(angle)
        d = random.uniform(25 + TRAIL_LENGTH, 100)
        pos = centerx + dx * d, centery + dy * d
        vel = speed * dx, speed * dy

        stars.append(Star(pos, vel))

    for s in stars:
        x, y = s.pos
        vx, vy = s.vel
        x += vx * warp_factor * dt
        y += vy * warp_factor * dt
        s.pos = x, y

        s.brightness = min(s.brightness + warp_factor * 200 *
dt, s.speed)

        s.vel = vx * 2 ** dt, vy * 2 ** dt

    stars = [
        star
        for star in stars
        if BOUNDS.collidepoint(star.end_pos)
    ]

for _ in range(30):
    update(0.5)
for _ in range(5):
    update(1 / 60)
```



All facets of your game's design are governed by the rules of creative direction.

Indie reflections: Making Anew Part 4

Developer Jeff Spoonhower discusses the concept of creative direction, and why it's important

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

How do you make a game that looks and feels unique? In this article, I will discuss what creative direction is and how it functions to unify the aesthetic components and systems of play in a game. Setting clear goals for creative direction early on in production will help you to create a game that stands out from the crowd.

WHY DIRECTION'S IMPORTANT

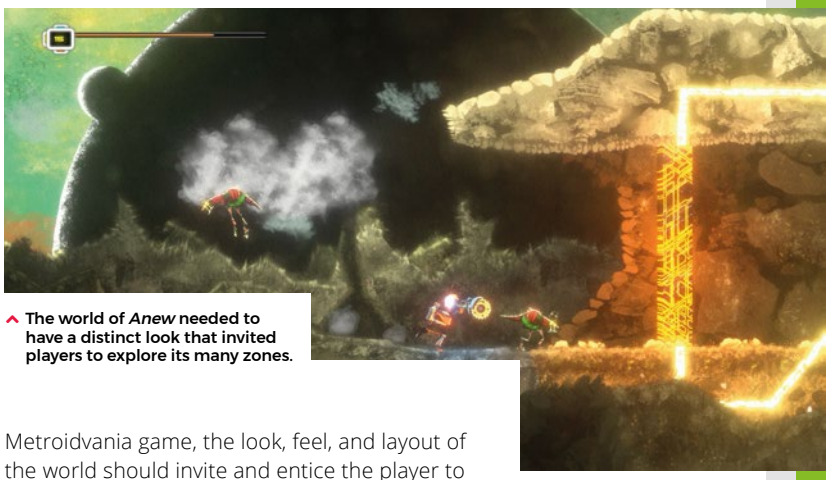
What exactly is creative direction? Think of it as a set of global rules that each component of your game must follow in order to create a unified gameplay experience. These rules govern every design element in your game such as its colour palette, lighting, texture, environment, character proportions, animation, and much more.

A game's creative direction also ties in to its mechanical systems and elements of play, such as character controls/responsiveness, movement types/patterns of enemies, and layout of buildings and play spaces, to name just a few. The game's genre informs the art design, which informs the environment layout, which informs the platforming, which informs the combat encounters, which informs the enemy design, which informs the animation style, which informs the music implementation – and so on, in an infinite loop!

Deciding on your game's creative direction is incredibly important, because it will set the tone of the overall play experience for the end user. The ways in which you choose to visualise your game's world and characters could go in any number of directions, from dead-serious photorealistic, to light-hearted stylised, to something completely new and original. Before you dig too deeply into the nitty-gritty of your game's creative direction, first make sure that you have a clear understanding of the type of game you are making – its key gameplay elements, the design and function of the player-character, the overarching story that will unfold, and any other important design elements.

And remember, just because the term 'creative direction' contains the word 'creative', it doesn't mean it should be decided solely by the artist on your team. Discussions regarding look, feel, and tone should take place between team members in each key discipline – art, programming, and design – because the rules you're creating will affect every facet of your game's design.

Bloodborne and *Yoshi* represent vastly different creative directions. And yes, I'd like to see them both in the same game just as much as you.



The world of *Anew* needed to have a distinct look that invited players to explore its many zones.

BLOOD AND YARN

Let's examine the creative direction of two very different games, *Yoshi's Woolly World* and *Bloodborne*. *Yoshi's Woolly World* has a cartoony, stylised creative direction. The characters and environments are made of colourful fabric and yarn. Lighting is bright and even, and the characters and world rarely fall into shadow or darkness. Cheerful music and sounds play consistently throughout each level. Enemies have bouncy animations, simple movement patterns, and act fairly non-aggressively towards the player. The gameplay is forgiving, which means the player rarely 'dies.' Each specific component of the game's aesthetics and mechanics contributes to the playful tone.

Likewise, *Bloodborne* has its own unique look and feel. You play as The Hunter, a character shrouded in darkness. His black leather garments cover every square inch of his body, creating a mysterious, menacing persona. The world is covered in filth and grime. Shafts of light poke through dense cloud cover, creating deeply contrasting areas of light and shadow. Sparsely placed, ominous sound effects and music create a sense of foreboding. The creatures are grotesquely designed, and combat encounters with them must be carefully considered and timed in order to avoid death. The creative direction fosters a unified experience that is lonely and frightening.

In both of these examples, specific, carefully considered and executed creative directions impose rules on each and every component of the games' designs. As a result, the experience of playing these games feels unique.

"Deciding on your game's creative direction is important"

ANEW'S CREATIVE DIRECTION

Our indie game takes place on a distant alien moon, 20 light years from Earth. You play as a child who must explore and fight through a variety of strange, hostile landscapes in order to unravel several mysteries. As the sole artist on *Anew*, I have been tasked with conceptualising and executing the creative direction of the game – mainly with the art, sound, story, and environment design. My high-level goal with the creative direction has been to support the notion of a lonely journey through a beautiful, dangerous, alien world. Since this is a Metroidvania game, the look, feel, and layout of the world should invite and entice the player to explore it at every turn. The creative direction of our game needed to be unique on several fronts (visuals, sound, gameplay, emotional tone) in order to achieve this high-level goal.

I've always been fascinated by surrealist and impressionist art and music, so I did quite a bit of research and experimentation early on in production for the visual style of the game. The paintings of Salvador Dali, René Magritte, Max Ernst, and Zdzisław Beksiński have fundamentally inspired the look of the environments and characters in our game. As a musician myself, and a lover of 20th-century orchestral music, the works of Béla Bartók, John Adams, Claude Debussy, Einojuhani Rautavaara, and Samuel Barber influenced the overall emotional tone of the game and the compositional style of *Anew*'s score. The syncopated rhythms, atonalities, and dissonant harmonies contained in these pieces speak to me on a very personal level, and have provided me with a wealth of creative ideas. The stark, suggestive visual techniques and uncomfortably cold emotional tones of Stanley Kubrick's films have played into the design and telling of our game's story. It's been incredibly fun, rewarding, and challenging to fuse the work of these figures into my own artistic style.

Of course, all of the assets I create must work with the game's systems and mechanics. My development partner Steve Copeland and I spend a great deal of time discussing and planning out how these elements must 'play nicely together' to create a unique, unified gameplay experience. As new enemies, zones, and bosses are added to the game, we do our best to ensure that their gameplay and aesthetic designs mesh in fun, meaningful ways. This is creative direction!

Find your motivation

If you're struggling to settle on a creative direction for your game, try the following: go for a walk or bike ride, watch a few movies in the same wheelhouse as your game, listen to music you'd normally not enjoy, or go to the library and check out art and photography books. These activities should break up your day and wake up the imaginative part of your brain.

An important concept of creative direction – each major subset of your game's design informs the other, in an endless loop.

Directory

Upcoming events for game developers

Courtesy of Ukie, here's a selection of game dev events coming up around the UK this spring and summer

15 May
MGS UK 19, London

A one-day conference designed to help developers connect with marketing professionals who specialise in things like user acquisition, monetisation, data science, and analytics.

wfmag.cc/mgs-uk-19

15 May
Game Bridge X Animex 2019, Teesside University

A networking event for developers, industry professionals, indie devs, graduates, and games students.

wfmag.cc/animex

22 May
Ukie Hub Crawl: Getting Investment Ready, Cambridge

Join fellow games developers and publishers and identify new opportunities and strategies to support the growth of your business.

wfmag.cc/hub-crawl

28–30 May
Casual Connect, London

A trade show that covers game design, esports, funding, next-generation tech, and best practices, while Peter Molyneux and Ian Livingstone are among the guest speakers.

wfmag.cc/casual-connect

21–23 June
Gamedev.world: Ukie Offices, London

This summer, Ukie will be opening its office doors for everyone to watch gamedev.world, a global game developer conference translated into eight languages, for free.

wfmag.cc/gamedev

9–11 July
Develop:Brighton, Hilton Brighton Metropole

Hear from the industry's leading lights, get up to date with the latest tools, techniques, and industry trends, plus network with over 2000 game dev professionals.

wfmag.cc/develop-brighton

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**

Sony's Shuhei Yoshida was one of the highlights of last year's Develop:Brighton. Among this year's speakers are developers from Rare, Frontier, and EA.

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BIRD ALONE

Life as a solo game developer

We speak to three indie developers about the highs and lows involved in single-handedly producing a game

Written by: Ian Jones

At some point, just about every gamer has an idea for a video game, and will daydream about making it – an original idea conceived, created, and successfully brought to the market by a single mind. Of course, few do it, for various reasons: time, work commitments, and the general messiness of everyday life. But there are a growing number of dedicated coders who've managed to pull it off, weaving their development work around their full-time jobs and family lives.

But what's this lifestyle like? What are the sacrifices that need to be made, and ultimately, is it worth it? To find out, we spoke to three solo developers from around the world, each at different stages of the game-making process: one at the start of their journey, one deep in the nuts and bolts of creating the game, and one about to step into the murky world of promoting and marketing their precious pet project.

STARTING OUT

Kerry Turner is a developer based in Brighton, England. She's been involved in the industry for over a decade, focusing largely on mobile games, and her day job involves leading a team of support engineers at Unity. Showing just how varied the modern gaming market can be, Turner's as-yet-untitled creation can only loosely be described as a 'game', taking inspiration from Jan Švankmajer's stop-motion films, David Lynch, and, as Turner puts it, "that bit in Roald Dahl's *The Witches* where a child gets trapped inside a painting."

"You could say it's like playing an experimental film," says Turner. "It's a short experience that's intended to create uncomfortable sensations in the player – these are normally classified as horror games, but I think this one's more unsettling than scary. We don't have a good genre name for games that evoke interesting and not entirely pleasant feelings."

The game itself is still in its early stages, despite being conceived over a year ago. ➔

In George Batchelor's *Bird Alone*, the player can create music by interacting with its background details. The waterfall, lily pads, and lotus flowers all make a variety of sounds.

"It's been very stop-start," says Turner. "Life got in the way last year. It's probably actually only a few days, spread over that time."

She takes a relaxed approach to game-making, dipping in and out whenever the urge strikes. "It's easy when I'm in the mood," says Turner. "But it can be difficult to find the mood. I'm in no rush though. Most weeks, I don't work on it at all. Then there'll be the odd week where I'll spend an evening or two on it."

"The creative process for this is very organic. In the evening, I'll drink wine and sit in a very dimly-lit room and work on a single moment in the game, something I want the player to experience. When I'm happy with how that moment feels, I'll move on to another."

It's precisely this approach that allows for the creation of such a unique type of game. Indeed, Turner doesn't treat it like 'work', more an artistic expression to be harnessed whenever inspiration strikes, and left alone until the moment is right.

"I have a very free-flowing and creative approach to making games and I'm guided by serendipity," explains Turner. "I'm using found images for this game's artwork, so I spend a lot of time searching archives for public domain art. I'll often start with a very vague idea of what I'd like – a person walking, say, or an image of a landscape – and end up with something I never could have come up with on my own."

REACTING TO CHANGE

This loose approach also means obstacles are more likely to crop up, with the result that the original idea can change dramatically during the process. And while that means the final product will invariably be something the creator is wholly happy with, it can also prove a lot more time-consuming.

"I originally intended this game to be a point-and-click adventure game," says Turner. "After a few months, I realised the controls were completely wrong for the feelings that I was trying to evoke in the player – clicking and watching is far too passive, and I wanted the player to feel active. I stripped out almost all of the code I'd written, leaving only the art assets, and started again."

However, when it comes to the reality of life as a solo developer in the modern era, Turner is effusive. "From a purely creative point of view, the gaming landscape is better now than it has been. There are lots of good quality, accessible tools available and it's so easy to share your work with people now."

As to be expected from someone working in the realm of games as art, Turner takes most pleasure from the act of creating. "Making the game itself," says Turner when asked what part of the process she enjoys the most. "Sitting and conjuring something that didn't exist before into existence."

Kerry Turner, an indie developer based in Brighton. You can see her previous game releases at reallyfancy.itch.io and follow her on Twitter at @reallyfancy

KERRY GOLD

What advice would you give to anyone starting out as a solo developer? "Make small projects and finish them," says Turner. "Don't worry about them being perfect, just keep making things and finding your voice." As the old saying goes, finished is better than perfect.

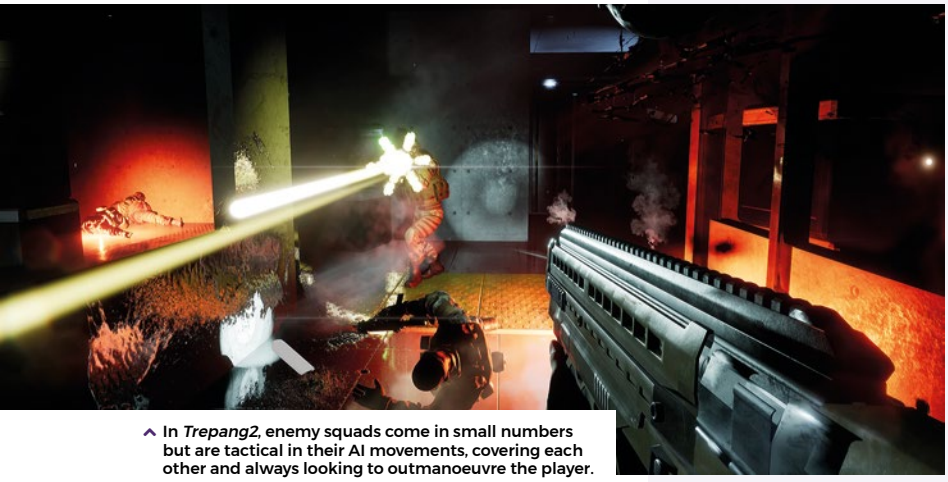
THE MIDPOINT GRIND

Wilson Chung, from Vancouver, Canada, is midway through a very different type of game. His project, which has the placeholder name *Trepang2*, is a first-person shooter featuring slow-motion action, kung-fu, gore, stealth, and next-generation enemy AI. It's inspired by blockbuster games such as *Max Payne*, *F.E.A.R.*, and *Splinter Cell*.

His game couldn't be more different from Kerry Turner's experimental work, but his background is also in technology. "I currently work in simulations, which take the same kind of tools used in games but applied to practical, real-world use," says Chung. "Plus I spent about five years working on mods where I gained a lot of experience working with triple-A code and tools.

"I've been interested in tech for as long as I can remember, trying to teach myself as much

Turner's game employs found artwork which has been defaced. The intent is to create an experience that's not quite horror, but still unsettling.



In *Trepang2*, enemy squads come in small numbers but are tactical in their AI movements, covering each other and always looking to outmanoeuvre the player.

as I can, and also trying to reverse-engineer most of the cool games I play. It all started with *Halo 1*, where I used a hex editor to make really simple mods before the editing kit came out."

Rather than stemming from a single moment of inspiration, Chung describes the creation of *Trepang2* as more like a process. "There wasn't really an idea that it started from – it just kept evolving from a simple FPS game I made when learning how to use Unreal Engine 4. A lot of the ideas, like grabbing enemies, dismemberment, and slide-kicking, came from various experiments over the years."

But that doesn't mean there haven't been lightbulb moments along the way. "I originally added slow motion because it was just too hard as a straight tactical shooter – nobody was having fun playtesting it," says Chung. "This simple change made the game a lot more fun and added depth to the combat. After adding slow motion, testers would die and get slightly frustrated but they'd ask to try again and again, which made me realise I was onto something."

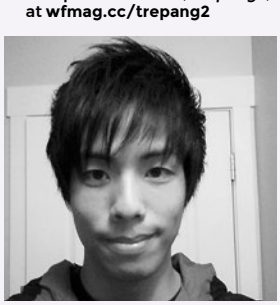
BEING GREAT ISN'T EASY

When it comes to the question of whether making a game solo is easy or not, Chung is under no illusions. "It's difficult, definitely! It's software engineering, film-making, and UX design, all in one. There are no lazy people in the games industry – whether you're working on triple-A games or indie releases, most people clock in insane hours for relatively low wages."

This came to a head when putting out the demo of *Trepang2* last year. "I work as much as I can without burning out," says Chung. "This ranges from 20 to 80 hours per week alongside my main job. But in the few weeks before the 2018 demo, I put in a lot of extra hours, barely sleeping. It totally sucked, but it was necessary. It's important to stay disciplined and stick to your own deadlines."

> "There are basically no lazy people in the games industry – whether you're working on triple-A games or indie releases, most people clock in insane hours"

Wilson Chung is a coder based in Vancouver, Canada. You can follow the progress of his first-person shooter, *Trepang2*, at wfmag.cc/trepang2



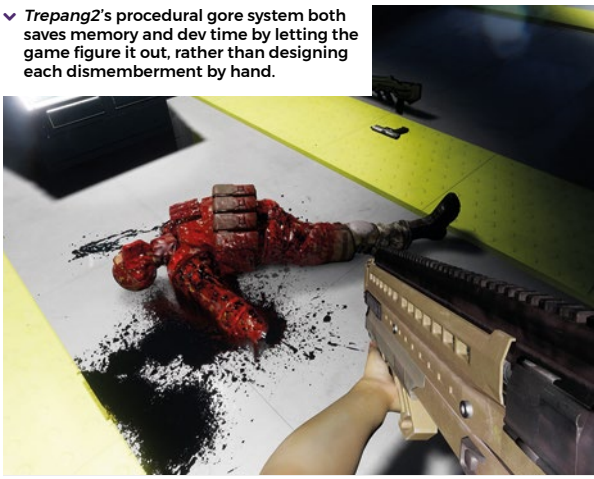
TESTING IDEAS

"Don't put ideas on a pedestal," says Chung. "Ideas are just thoughts written down – don't get attached to them, especially when they don't work. Also, avoid committing too much to an idea that you're not 100% sure will work – it's a waste if you have to throw it away. It's better to just prototype everything; this keeps your ideas concrete, and you can easily measure the time and costs involved. If your idea is so grand that you can't prototype it, then it's definitely too big to make a full game out of it."

Like Turner, Chung believes we're in a great era for the independent developer. "We have so many free engines to work with, and platforms to release on," he says, "not to mention people who help us, such as streamers and influencers, and tons of free or cheap resources online to learn about the latest tools and workflows. So it's not necessary to spend a fortune on learning all this any more.

"This has really levelled the playing field when it comes to solo developers versus big studios. Of course, we have less manpower, but on the flipside, it makes us more agile and able to adapt faster. Not only this, the community has really grown, and it seems like the modern gamer is more proactive when it comes to seeking out indie games – plus digital distribution means we reach people all over the world."

Trepang2's procedural gore system both saves memory and dev time by letting the game figure it out, rather than designing each dismemberment by hand.



Players answer questions from the bird with a drawing. It's also where the time of day, weather, moon, and other things match what's happening in real time.

While he admits to taking pleasure from watching people have fun playing something he created, he's remarkably unromantic about the process. "The truth is, most of game development is very tedious. It's not fun or flashy at all, and requires a ton of patience – lots of time is spent identifying and fixing broken stuff. It sucks when you prototype something only to realise it doesn't work and have to throw it out."

But Chung combines this pragmatic outlook with a focus on what really matters: the person playing the game. "It's OK to not be particularly fond of the development process. Devs who enjoy the process too much often forget about the result, making a mediocre game that only impresses other devs. I think that's why my games are usually well received – because they're made for people to enjoy playing."

George Batchelor is a developer currently based in London. His website is georgebatchelor.com and you can follow him on Twitter at @georgebatch.

KEEP IT PERSONAL

"Make things you actually care about!" says Batchelor, when it comes to advice for those new to game development. "Everything I've made has started in some way or other because of this. Like, I want to learn how to write, or to just do it more. I want to do more animation. I want to create a story with characters. I want to make people think about fun things, like mortality and loneliness. If you start from that perspective, I think it's a lot healthier and fulfilling and will probably lead to a more interesting experience for players."

NEARING THE FINISHING LINE

George Batchelor is a game developer based in London. He's worked in the games industry for four years, for companies such as Preloaded and State of Play, creating award-winning mobile games such as *INKS*, and the BAFTA-nominated *KAMI 2*. And he's previously released a couple of indie games as a solo developer (*Hot Date* and *Far from Noise*), and recently completed work on his current project, *Bird Alone*, which he describes as "the story of a lonely bird figuring out what life is all about."

It's a mobile game, intended to be played for a few minutes at a time, with real-world time playing a significant role. "It's about building up this friendship with the bird, and opening yourself up to questions and subjects you might not usually think about," says Batchelor. "That's why the game being on mobile and its real-time aspect are important – getting messages throughout the day makes the bird feel more like a friend you always have with you."

Bird Alone is an intensely personal project, with the initial idea arising from the death of Batchelor's uncle over a year ago. "I had all these questions and feelings about it that I wanted to channel somewhere," he says. "And maybe create a space where death doesn't have to be this bleak, negative part of life, but a thing that happens that we don't have to shy away from. The game became an outlet for me to get all my thoughts out, like a diary."

The development process wasn't easy, but brought satisfaction in its own way. "It was quite difficult, actually," says Batchelor. "A lot of the design is fairly new ground for me. The dialogue works in an adaptive conversation system that changes based on all kinds of things, and developing that whole thing has been hard but actually so much fun – this game is the summation of everything I love."

Much like Chung, working on his game eats up a hefty amount of Batchelor's free time. "Typically, when I'm working I get three to five hours in an evening, hopefully for three nights a week, maybe more," he says. "Then I'll aim to get at least one full weekend day. I try and have a regular life and not have this consume me to the point where I miss my twenties and lose touch with my friends. I think that's really important."

A CROWDED MARKETPLACE

When it comes to the modern gaming landscape for indie developers, Batchelor is largely positive, with a few caveats. "It's exciting and fun to be in an industry with so much untouched possibility space," he says. "But it's definitely become more difficult to get noticed. Probably five years ago, if you released a game on Steam, chances are a good amount of people would see it and you would have some success. Nowadays, it's harder for your game to stick.

"I've had a lot more success on iOS than any other platform, and now we're seeing a lot of indie games you would never expect to see on a phone getting ported or sim-shipped to mobile platforms. It's just adapting to the times and the market."

As you'd expect, once the creation part is done, then the hardest – and least pleasurable – part begins. "Marketing is definitely the least enjoyable part," says Batchelor. "Towards the release of my previous games, my days were occupied with emails and nothing else. This means keeping a list of people in the press, YouTubers, and streamers, and updating them constantly.

"Then there's going through the game and finding all the best screenshots, making trailers and promotional material, plus having an up-to-date website. This stuff takes forever, especially with different requirements for all the stores. There are also exhibitions and awards, and deciding which are worth submitting to, attending, and flying all over the place for, along with making things to give to people at events like posters, stickers, business cards, pins, and so on."

This seems to be the key complaint of indie developers. "It can be frustrating when you think what you're making could connect with people," says Batchelor. "But there are so many steps involved in getting them to see that you made it for them, or to just see it in the first place. At the moment, I'm having fun making things related to the game, but all the emailing will begin soon enough. And never end."

Pacing is important to allow the player breathing space between shoot-outs. This environment was made with placeholder assets, but the lighting's undeniably impressive.

"Most of game development is very tedious. It's not fun or flashy at all"

NEXT STEPS

Once the coding ends, the real hard work begins. The promotional and marketing trail is something few developers relish, though there's pleasure to be gained from showing off their creation to a whole new audience. Thankfully, it doesn't have to be as intimidating or difficult as it might at first seem. There are plenty of tools online to help with this part, and you'll find lots of helpful people in the gaming community who are more than willing to share their knowledge.

AND NOW THE HARD PART

This gets to the heart of the problem for the modern solo game developer: the need to wear many hats. Conceiving an idea for a game is clearly a source of pleasure for each of the coders we spoke to, and while the actual creation can be a chore, it brings undeniable joy along the way when ideas come to fruition.

But when it comes to the slog of promotion and marketing, this requires a whole new set of abilities that the typical developer can struggle with, or at the very least, be reluctant to act on.

Making an indie game can be a deeply satisfying process, but as we've seen, it clearly isn't easy and requires an immense amount of sacrifice and a commitment to learning all manner of new skills. It takes a certain type of person to pull it off, a single-minded determination and belief that the wider world deserves to experience their vision.

But budding coders shouldn't be disheartened – in 2019, all the tools are there to help the dedicated developer succeed at every step of their journey. After all, just take a look at the exciting and endlessly varied indie game scene we enjoy today.

Developer Profile

Toaplan

From 1984 to 1994, Japanese developer Toaplan made some stone-cold shooter classics

Let's start with the obvious: in terms of mainstream pop cultural consciousness, Toaplan arguably peaked in the late 1990s with a meme: the infamous 'All your base are belong to us' bit of mangled localisation taken from the Western release of *Zero Wing*, a shoot-'em-up first released for arcades (and later the Sega Mega Drive) in 1989. By then, Toaplan had already long since shuffled into history, leaving behind it a catalogue of relatively obscure shooters and action games – and what a catalogue it was.

Toaplan's reign lasted for about a decade, beginning around the time the Japanese games industry exploded in the early-to-mid-eighties, and ending as the global arcade scene began to dwindle in the middle of the nineties.

At its peak, Toaplan was pumping out a game or two each year, just about all of them in the same genre: the vertically scrolling shoot-'em-up. *Tiger Heli*, released in 1985, was its first ocean-crossing hit – a 2D blaster ported over from arcades to home systems including the NES, and establishing Toaplan's formula of a lone player ranked against an army of hostile craft and even greater flurries of enemy bullets. Even if you're unfamiliar with Toaplan's name (which roughly translates to 'East Asia Project'), you may have played at least one of its releases if you're into retro action games: *Slap Fight*, *Twin Cobra*, *Truxton*, *Twin Hawk*, *Zero Wing*, *Fire Shark* – they're all marked out by their simple yet precise design, crisp controls, and fiercely catchy music.

The studio's story began earlier in the 1980s, when two even more obscure development outfits – Orca and Crux – abruptly collapsed, leaving several personnel from those firms to create Toaplan in a Tokyo apartment building. Music was written into Toaplan's DNA from its inception; the studio's founder programmers, Tatsuya Uemura and Masahiro Yuge, also created the soundtracks for their own games, which certainly explains why they so often felt as driven by beats and melodies as they were by their action.

Although marketed by Taito and ported to home computers by other firms, games like *Flying Shark* were quietly made by Toaplan.

Knuckle Bash: a rare foray into brawler territory.

Truxton's screaming skull smart bomb is one of its most memorable weapons.

THE BIG BANG

Toaplan's arcade success saw the company grow through the eighties, and their games flourished in terms of scale and chaotic action – even as most of them stuck to the shooter template. *Tiger Heli*'s most eye-catching feature was its smart weapon – a screen-clearing bomb that vaporised enemies at the touch of the second button. It was a small innovation that Toaplan would keep tinkering with in subsequent games, from the gigantic grinning skull smart bomb in *Truxton* (also known as *Tatsujin*) to *Twin Hawk* (or *Daisenpuu*) and its kamikaze planes that surround the player and can be used to crash into enemy tanks.

The precision of Toaplan's games belied a certain level of chaos behind the scenes. According to contemporary interviews translated by the invaluable website Shmuplations, Toaplan was populated by artists and coders who liked riding motorbikes at hair-raising speeds and embarking on lengthy drinking sessions. According to Uemura, it was a studio "where someone needed bandages almost every day." Development was also a bit of a free-for-all, according to Tatsuya; games frequently emerged from coding experiments, or from notes hurriedly scribbled on bits of paper. *Zero Wing*, which became one of Toaplan's most famous games in spite of itself, was never even meant to be released to the public at all – it was a "training project" that new starters at the studio could play with and sharpen their skills on.

> **"The precision of Toaplan's games belied a certain level of chaos behind the scenes"**

Toaplan's combination of skill and attitude made their shooters stand out in an increasingly crowded marketplace, and their affection for big explosions and increasingly complex patterns of bullets eventually made them the unwitting founders of a new sub-genre: the danmaku, or bullet hell shooter, a bewildering style of game that still has a cult following decades later. Sadly, Toaplan's concentration on arcade shooters left it vulnerable to changing market tastes; it's no coincidence that the company's fortunes declined with the rise of brawlers like *Street Fighter II* and *Mortal Kombat* in the 1990s.

For their comparatively brief existence, though, Toaplan was a prolific studio that lived and died by its independent spirit. As Uemura later said, "We were able to make what we wanted – in that sense, it was incredibly fun. Though it might be why we went bankrupt..."

Aftermath

Just as Toaplan was formed from the remains of other fallen companies in 1984, so Toaplan's closure saw the rise of several other studios in the wake of its demise. Studios created by former Toaplan personnel included Gazelle – a short-lived outfit that still gave the world the 1996 shooter *Air Gallet* – and Eighting, which made such games as *Battle Garegga* and *1944: The Loop Master*. Most famous of the post-Toaplan studios was arguably Cave, a company that's still going today, and still flying the flag for the bullet hell genre: among its deep cuts, you'll find the likes of *Deathsmiles*, *DoDonPachi*, and *Mushihimesama*.

Its last release, *Batsugun*, was a vibrant swansong that pointed to the bullet hell shooters Cave would go on to make afterwards.

Bullet time

A decade of Toaplan

Ten of Toaplan's finest coin-munchers – and not all of them are shooters

01

Tiger Heli

Arcade / NES / PlayStation – 1985

Founder and programmer Tatsuya Uemura once said that his company favoured shooters because they're accessible enough to be instantly understood by office workers who've finished a 15-hour day and polished off their fifth beer. *Tiger Heli* set the Toaplan tempo, with fast-moving enemy bullets and screen-clearing smart bombs.

02

Slap Fight

Arcade / Mega Drive / Various – 1986

The original *Slap Fight* was a perfectly decent shooter. The 1993 Mega Drive port, meanwhile, is an obscure masterpiece: it comes with an almost flawless port of the coin-op, and a spectacular arrange mode, which features new weapons systems, updated graphics, and a pounding soundtrack by *Streets of Rage* composer Yuzo Koshiro.

03

Flying Shark

Arcade / ZX Spectrum / various – 1987

This biplane shooter got a number of ports to home systems, including a great ZX Spectrum edition. *Flying Shark* also appeared to introduce a Toaplan trademark: shooting a tank once would destroy its turret, leaving its body trundling harmlessly around on the ground below. It was a touch that appeared repeatedly in Toaplan's later military-themed shooters.

04

Twin Cobra

Arcade / Mega Drive / various – 1987

A sequel to *Tiger Heli*, *Twin Cobra* pits another lone helicopter against relentless waves of military hardware. What sets it apart is its aggressive enemies – they fire with worrying accuracy, while formations of choppers fly directly at you. The weapons and smart bombs even the odds, but *Twin Cobra* still requires practice – and strong coffee – to master.

05

Truxton

Arcade / Mega Drive / PC Engine – 1988

Truxton is known as *Tatsujin* in Japan – literally, 'master', which says something about how difficult this space shooter is. What you get in return for all your repeated fiery deaths is the expected selection of catchy Toaplan tunes and some of the most colourful, baroque graphics the developer ever produced. The screaming skull smart bomb is a particular favourite.

06

Fire Shark

Arcade / Mega Drive – 1989

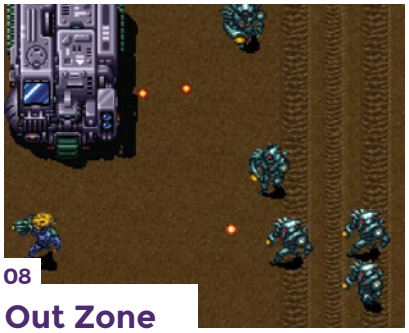
Toaplan's arcade games ran on 68000 hardware, which is why so many ended up on the Mega Drive – the commonalities made porting one to the other straightforward. *Fire Shark* is one of Toaplan's best for the console, with an array of over-the-top weapons to power up. We're not sure how you'd attach a six-way flamethrower to a tiny biplane, but the results are dazzling.

07

Hellfire

Arcade / Mega Drive / PC Engine CD – 1989

We've chosen this over *Zero Wing*, mainly because – memes aside – we'd argue that it's the more memorable game. Where *Zero Wing* felt like other horizontal shooters of its day, *Hellfire* changes things up with a control system where the player has to switch between directional firing patterns at precisely the right moment – resulting in a simple yet intriguing puzzle element.



08

Out Zone

Arcade – 1990

One of a small number of Toaplan games that was never ported to home systems, *Out Zone* is the studio's take on the top-down run-and-gun genre. It's a terrific take, too: it's clearly from the same design team that came up with *Truxton*'s graphics, because its sci-fi hardware is packed with gorgeous mechanical detail, and everything expires in satisfying bursts of golden fire.

09

Snow Bros

Arcade / Mega Drive / various – 1990

Toaplan mixed up its output with this iteration (or clone, if you're feeling uncharitable) of Taito's *Bubble Bobble*. It's a platformer where enemies are captured in snowballs and then slaughtered by kicking them around the screen. *Snow Bros*' cute characters are joined by a weird sushi-and-graffiti theme, but the wealth of bonuses and two-player co-op make this a fun diversion.

10

Batsugun

Arcade / Sega Saturn – 1993

Toaplan went out on a high with this thrill-a-second blaster. Again, it remixed ideas they'd been working on for almost a decade, but *Batsugun*'s colourful stages, rocking soundtrack and sheer speed made it difficult to resist. The bosses' waves of ordnance also pointed to the bullet hell shooters that would emerge from one of Toaplan's successors, Cave.

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Review

Days Gone

The Walking Dread

Info

GENRE
Open-world adventure

FORMAT
PS4 (tested)

DEVELOPER
SIE Bend Studio

PUBLISHER
Sony Interactive Entertainment

PRICE
£49.99

RELEASE
Out now

REVIEWED BY
Aaron Potter

From the outset, *Days Gone* strikes you as another one of those titles that seemingly ticks all the boxes you'd expect any fetch quest-driven open-world game to. Not only that, but it also places itself in a setting witnessed in games dozens of times and in dozens of different ways: the zombie apocalypse. There might have been 2687 days gone between Bend's last game – *Uncharted: Golden Abyss* – and this one, but there's something very 2011 about *Days Gone*.

It starts out innocently enough, offering insight into the hows of Oregon's collapse, two years before it descends into the ravaged landscape you eventually get to travel in and make your playground. Protagonist Deacon St. John is instantly forced to make a tough decision in the surrounding chaos, and it's one that plagues him for the bulk of the 30-hour journey *Days Gone* sets him on. This is a story about love, redemption, and trying to discern right from wrong in a lawless land, even if some stilted pacing and misjudged voice acting renders it a rather melodramatic one.

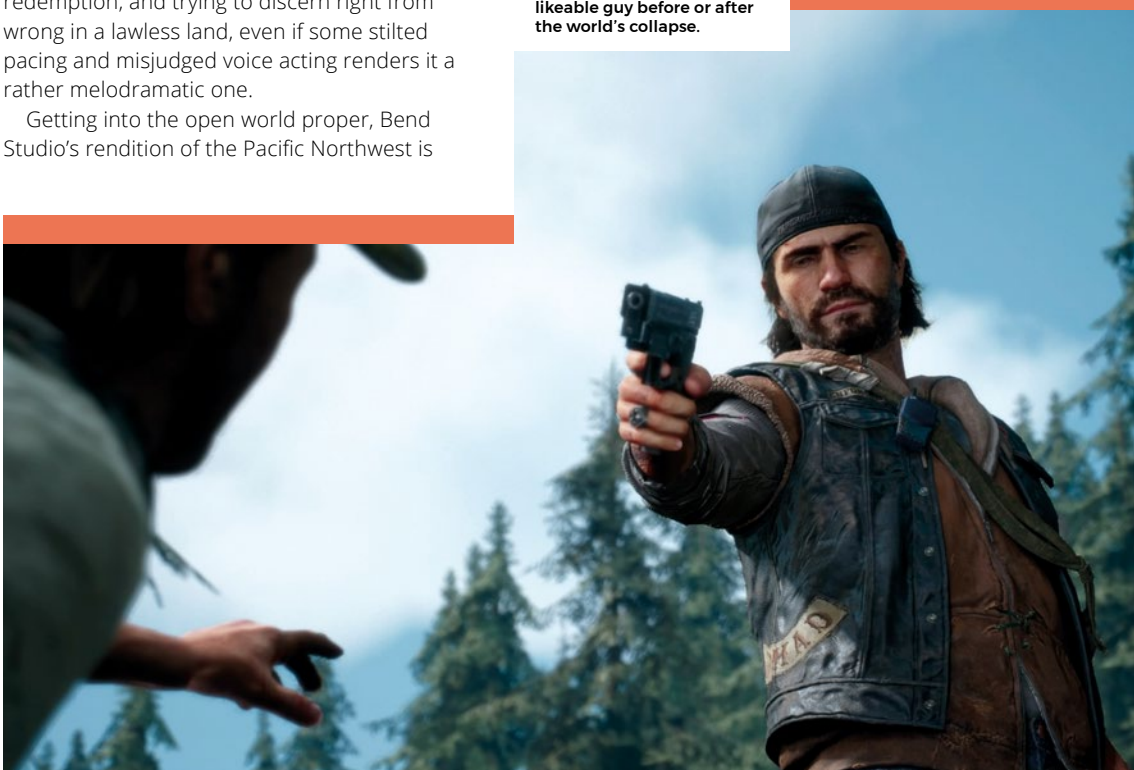
Getting into the open world proper, Bend Studio's rendition of the Pacific Northwest is truly stunning. Even when playing on a standard PS4, there were numerous times where I found myself riding up to a ravine, stepping off my bike and just soaking up the atmosphere created by the near-endless view of dense forests, dilapidated towns, and bandied-together community encampments. Every part of *Days Gone*'s large map is stacked with things to do, and getting to them is always made fun, thanks to being able to hop on your bike at any time. Initially, *Days Gone*'s centrepiece feels sloppy to handle, but it's nothing a few upgrades like a bigger engine, added nitrous, and grippier tyres can't fix.

Survival is key in the world of *Days Gone*, and this is reinforced in how much of your time spent within it involves taking down ambush camps, combing through run-down buildings for precious scrap used for repairs and upgrades,

HIGHLIGHT

Much like the bike at the centre of *Days Gone*, Deacon himself can also be upgraded to help make him a far more effective drifter. Skill trees are split out into three separate categories: Melee, Ranged, and Survivor, encouraging players to experiment with their own play style.

Deacon St. John isn't a likeable guy before or after the world's collapse.



Deacon is punching well above his weight in the relationship department.

Weather effects like rain can unexpectedly affect how your bike handles.

Melee enemies for long enough and you'll get an appropriately grisly kill animation.

and completing jobs for local community camps in order to build up trust so they can sell you things. All in all, there's not too much asked of you here that separates *Days Gone* from, say, a *Far Cry*. But it's through this simple trust mechanic where it feels like your actions carry more weight than in most games of this ilk.

You see, Deacon is a drifter, which ostensibly makes him a glorified handyman for survivors in need – albeit a reluctant one. Complete any of the long list of tasks each portion of the map presents you with – take down a horde, uncover a research site, clear an area of infestation – and other survivors will take notice. This plays into one of *Days Gone*'s better ideas in which every mission falls under what's known as Storylines, where everything you do doesn't just happen in a vacuum, but also feeds into a spider-web of interlinking narratives. It works better in theory than in execution, but it still feels good to know that clearing a tunnel of freakers won't just make my future commutes across the map far easier – it'll result in rewards at a nearby community base, too.

As solid as *Days Gone* appears on paper, however, I couldn't help feeling that so much of what I was doing I had experienced numerous times before in other – far better – open-world games. Sure, *Days Gone* is a first-party triple-A title, and as such can make the most of the performance boons that come from being developed exclusively for one console, but it still boils down to having you perform endless fetch quests in service of a wider story that feels clichéd. "Don't buy into any of the biker stereotypes you see on TV," our hero enthuses to his beloved in one scene, "we're actually quite charming." Deacon, my boy, you're living in a dream world.

It's made even more disappointing when you consider that *Days Gone*'s much-publicised standout feature, the *World War Z*-style freaker hordes capable of pouring on top of one another to create an endless river of flesh-eaters, turn out to be more of an annoyance than a fair challenge. You're advised to go in smartly equipped to deal with a situation before engaging with a horde head on, but their tendency to appear in places you'd least expect is at odds with this.

Even with a full stock of grenades, Molotovs, and enough scrap to keep my melee weapon fighting fit, hordes would always become too tricky to handle, forcing me to just ignore them and do something else. The role of hordes in the main campaign is practically non-existent until the late game. Leaving the 'best' until last may have been Bend Studio's intention, but the hordes' existence as just another optional side objective says a lot about how integral it is to the core *Days Gone* experience.

"Deacon, my boy, you're living in a dream world"

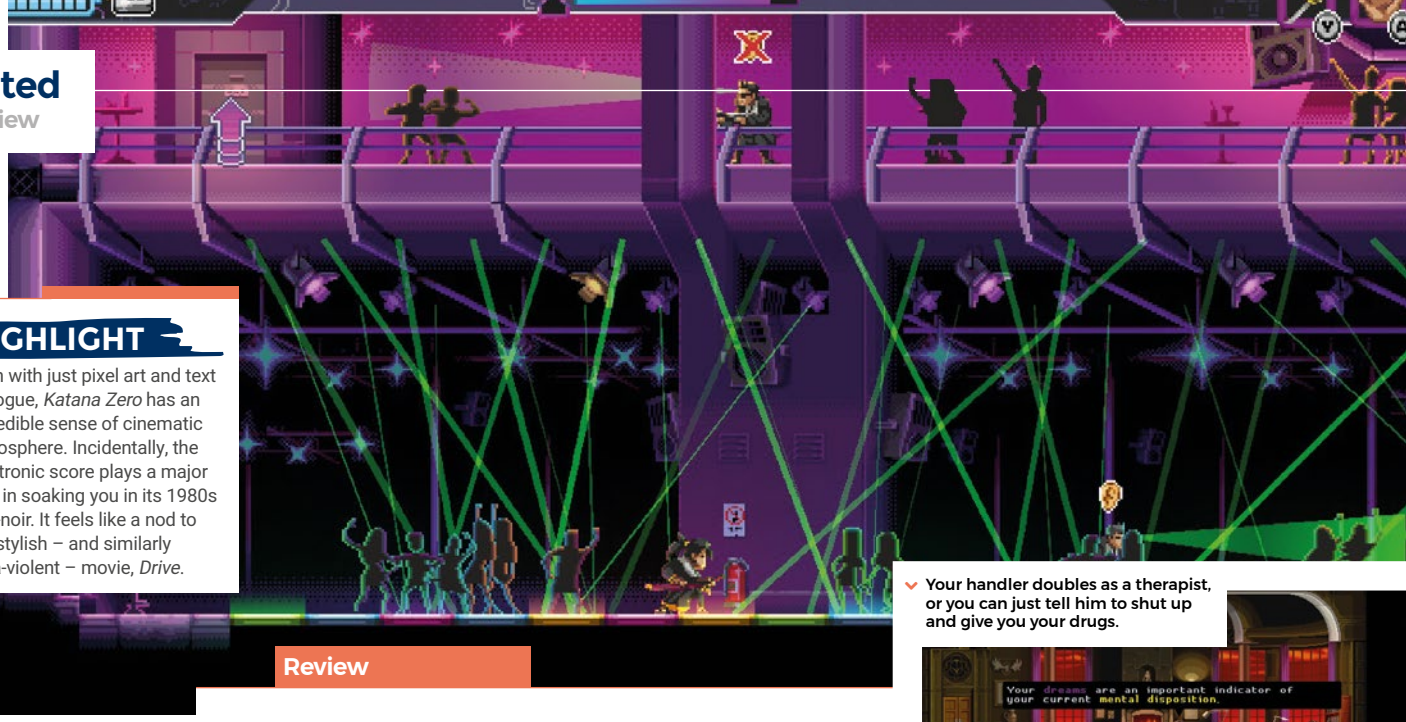
Overall, *Days Gone* is a competently made open-world game, but it somehow manages to feel lesser when you realise it doesn't particularly excel in any area; whether that's combat, exploration, missions, or even traversal. It's unacceptable for this style of game not to advance at least one factor in a post-*Witcher 3* world (that being 2015-on), especially when it's a first-party game with all the expectations that come along with one. Rather than reinvent any of these wheels, *Days Gone* is often left spinning them instead.

This is what happens when freakers get wind of the free food.

VERDICT

While stunning to look at and fun to ride through, *Days Gone* disappoints as just another textbook open-world game.

61%



HIGHLIGHT

Even with just pixel art and text dialogue, *Katana Zero* has an incredible sense of cinematic atmosphere. Incidentally, the electronic score plays a major part in soaking you in its 1980s neo-noir. It feels like a nod to the stylish – and similarly ultra-violent – movie, *Drive*.

It's not all about dropping bodies. This mission starts off with you getting your rave on to blend in with the crowd.

Your handler doubles as a therapist, or you can just tell him to shut up and give you your drugs.

Review

Katana Zero

From zero to anti-hero

Info

GENRE
Action platformer

FORMAT
Switch (tested) / PC

DEVELOPER
Askiisoft

PUBLISHER
Devolver Digital

PRICE
£13.49

RELEASE
Out now

REVIEWED BY
Alan Wen

Deadly individuals have a knack for looking a bit ridiculous. Think Javier Bardem and his awful haircut in *No Country For Old Men* or the realisation that Ryan Gosling in *Drive* sports a seriously tacky jacket. Just as well then that early on in *Katana Zero*, someone makes an observation that your samurai protagonist is in fact just wearing a bathrobe, even if the only type of bath you'll be running is the bloody kind.

In a story spanning ten days, Askiisoft's 2D action platformer has you playing as an assassin tasked with bumping off a number of high-profile targets. Getting to them, however, will require clearing multiple rooms of armed henchmen, whether by slashing them up with your katana or improvising by hurling the nearest vase or kicking down doors – and of course, you can also slow down time, which comes in handy for timing a bad-ass bullet deflection. While the presentation may have you immediately thinking of *Ninja Gaiden* – albeit with modern stylish effects like screen shake and grainy video filters – the brutal one-hit death of both you and your foes makes proceedings more akin to publisher Devolver Digital's other hit, *Hotline Miami*. The added twist is that you have precognitive powers, so the gameplay unfolding is actually you planning your future actions until you've killed everyone, whereby your protagonist remarks, "Yes, that should work."

"Someone makes an observation that your samurai protagonist is just wearing a bathrobe"

Each level's like a fast-paced action film sequence where you're charged with nailing its violent choreography – the successful end result then plays back as a black-and-white videotape (which does lose its novelty, since I eventually skipped them and moved to the next challenge).

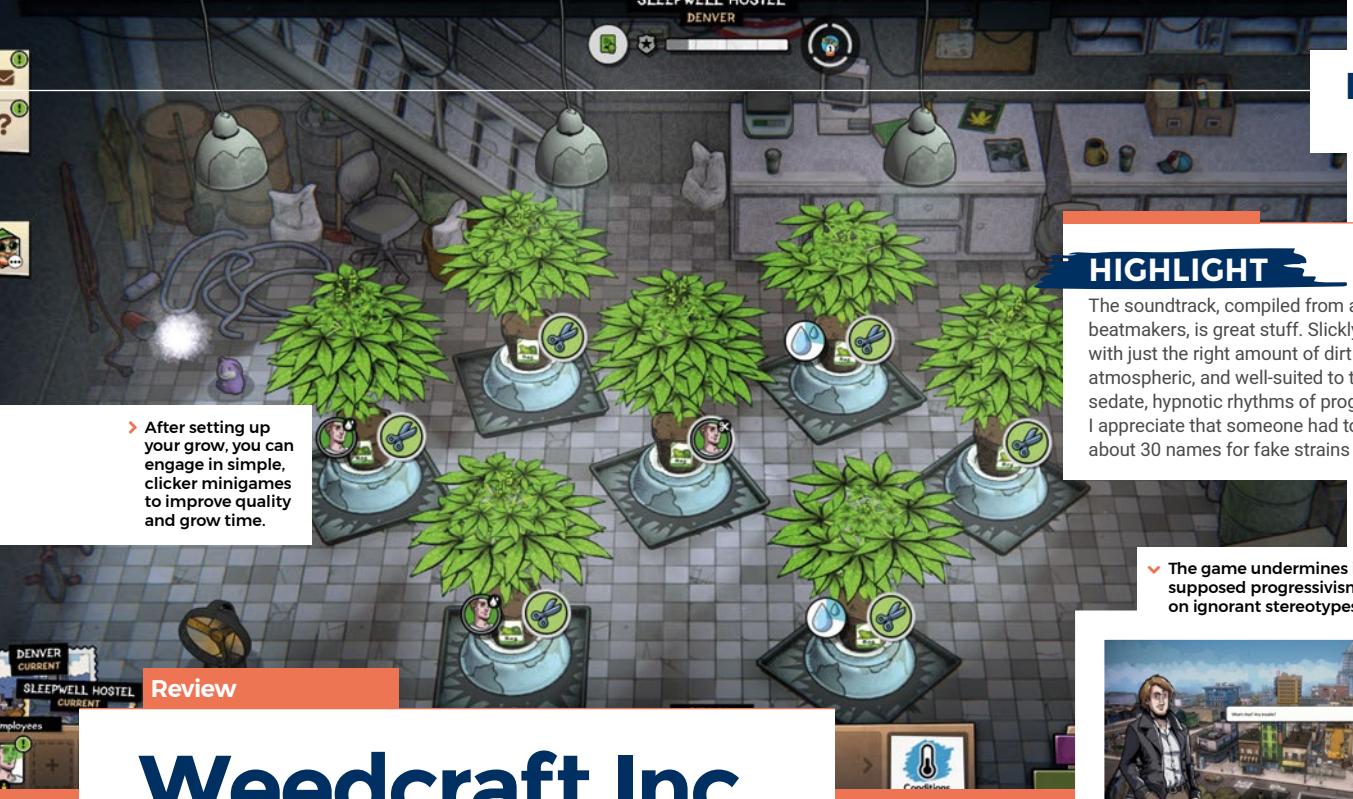
The action's stylish and polished enough by itself, but what elevates *Katana Zero* is that it's equally engaging when you're not being a cold-blooded killing machine. The way the story unfolds – as you gradually discover how you've come to be blessed (or rather cursed) with your time-bending powers, and what it is you're getting routinely injected with after every job – offers genuine twists. The seemingly straightforward *Hitman*-like structure of a new contract each day also goes off the rails, such as when you drop into one mission only to find everyone already mysteriously massacred. Although it's not exactly a branching narrative game, there's nonetheless some inspired use of dialogue choices – including the option to outright interrupt NPCs mid-sentence – though its tendency to highlight key words in multiple colours does seem like overkill.

This year' s proving to be a vintage one for mainstream action games, and while the likes of *Sekiro: Shadows Die Twice* and *Devil May Cry 5* arguably provide more mastery and replayability, the taut and varied set pieces in *Katana Zero* makes it a hi-octane pixel blockbuster you shouldn't miss.

VERDICT

Katana Zero **balances slick combat set pieces with atmospheric storytelling. In short, yes, that definitely works.**

76%



After setting up your grow, you can engage in simple, clicker minigames to improve quality and grow time.

HIGHLIGHT

The soundtrack, compiled from a list of Polish beatmakers, is great stuff. Slickly produced with just the right amount of dirt and static, atmospheric, and well-suited to the game's sedate, hypnotic rhythms of progression. I appreciate that someone had to come up with about 30 names for fake strains of weed, too.

The game undermines its own supposed progressivism by relying on ignorant stereotypes.

Review

Weedcraft Inc

Buzzkill

Weedcraft Inc has me wondering if the publisher's apparent difficulty in advertising the game through traditional means wasn't just a stunt to drum up interest, since it's hard to find much else remarkable about this business sim.

I feel it's useful to know a writer's personal biases, even if you don't agree with them, so here's mine. I think everything to do with weed should be legal, except talking about weed once somebody's already told you that they don't care about weed. The harsher laws surrounding the plant are draconian at best, Kafkaesque at their most infuriatingly nonsensical, and there's a conversation that needs to be had. *Weedcraft Inc* has a habit, though, of making its characters spout reams of dry statistics and advocate talking points on the plant's various economic and personal benefits. Witnessing a character morph from a human to a helpful pamphlet halfway through a conversation never stops being jarring.

It would be easier to forgive this as well-meaning enthusiasm if it wasn't for some truly gross character art. If, when I go to hire employees, my only option among several professional-looking, attractive white students is an exhausted, extremely worse for wear black woman, poverty-stricken to the point of parody, you're sending a message, even if it isn't intentional. It's bizarrely self-defeating to lean on stereotypes for grit or comedy, at the same time as attempting to level a critique at this sort of ignorant demonisation of users. At its worst, *Weedcraft Inc* approaches its characters through the voyeuristic lens of racist, reactionary law enforcement, undermining its own purported progressive stance in the process.

Tedious framing aside, there's an engrossing management sim here. Hypnotic lo-fi beats lull you into a moreish rhythm of watering, trimming, expanding, and selling. You can sell illegally for huge profits, but risk having to use that money to bribe cops and set up front businesses, or buy licences and pay tax on your earnings. You can befriend your rivals, sabotage them, or just run them out of business by selling the better product. Each strain has optimal conditions you'll have to research if you want the best crop, and each location in a city has its own purchasing habits. There are always multiple risk-reward factors you need to consider at any one time.

It's just a shame the careless and juvenile writing decisions kill the buzz. When I think of games that make a positive case for the beauty and possibility of altered states of consciousness, I think of Jack King Spooner's *Dujanah* or Nathalie Lawhead's *Everything is going to be OK* – art that doesn't seem to care about the drugs themselves as much as the shifts in perception and artistic freedom that drugs are claimed to facilitate, and make a much more convincing case for the exploration of themes around the culture in the process.

It's something to click on that won't get you in trouble with the law, I suppose, but even putting the poor writing aside, *Weedcraft Inc*'s simulated business treadmill glorifies calculated accumulation of profit, in precisely all the ways the proponents of drug culture tend to eschew.

Info

GENRE
Business Sim / Clicker

FORMAT
PC (tested)

DEVELOPER
Vile Monarch

PUBLISHER
Devolver Digital

PRICE
£15.49

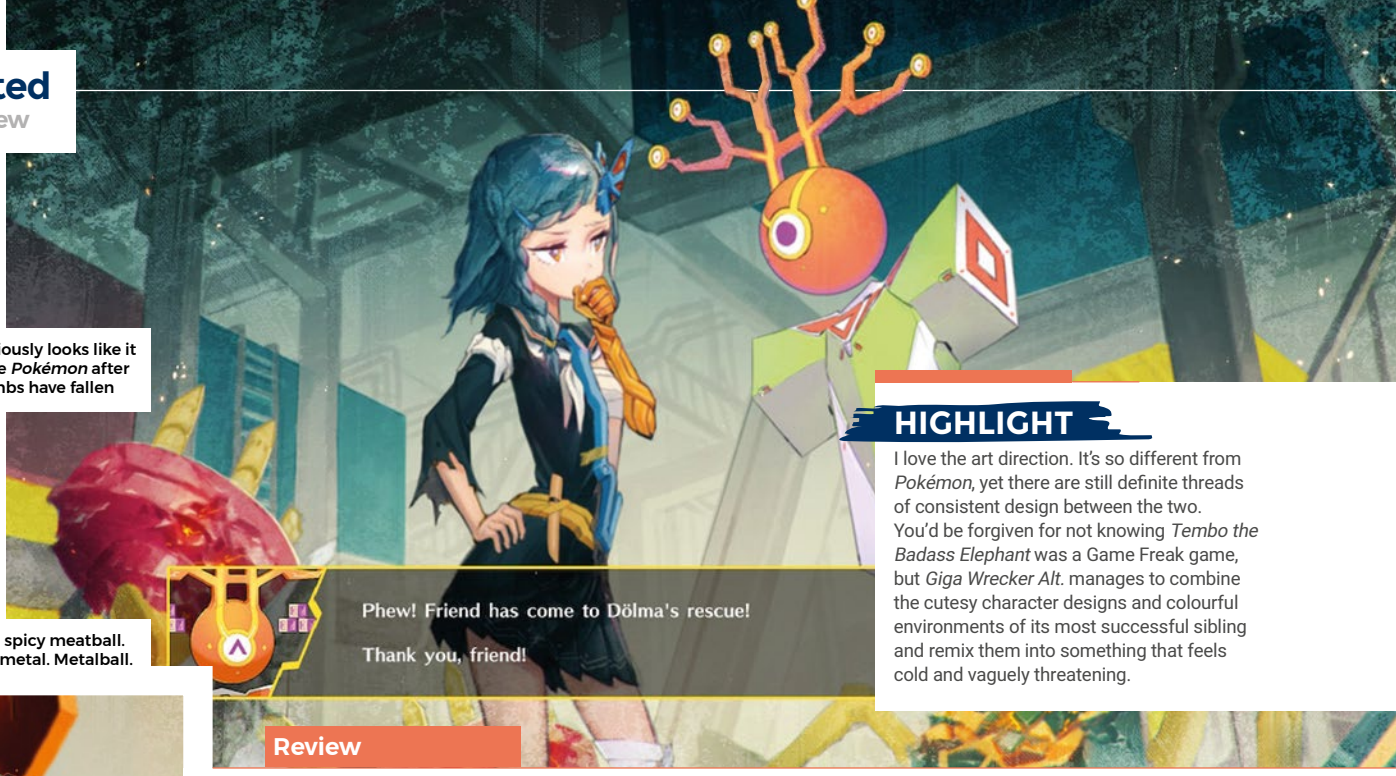
RELEASE
Out now

REVIEWED BY
Nic Reuben

VERDICT

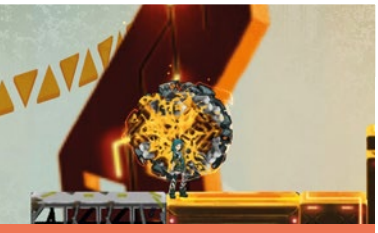
A fleshed-out Flash game I might have bookmarked in my browser to show off to my 13-year-old mates back when this sort of thing still felt subversive.

50%



This seriously looks like it could be *Pokémon* after the bombs have fallen

That's a spicy meatball. Except metal. Metalball.



HIGHLIGHT

I love the art direction. It's so different from *Pokémon*, yet there are still definite threads of consistent design between the two. You'd be forgiven for not knowing *Tembo the Badass Elephant* was a Game Freak game, but *Giga Wrecker Alt.* manages to combine the cutesy character designs and colourful environments of its most successful sibling and remix them into something that feels cold and vaguely threatening.

Review

Giga Wrecker Alt.

A Metroidvania marred by laggy controls

Info

GENRE
Platformer / Metroidvania

FORMAT
Switch (tested)

DEVELOPER
Game Freak

PUBLISHER
Rising Star Games

PRICE
£22.49

RELEASE
Out now

REVIEWED BY
Joe Parlock

VERDICT

Captivating worlds, mechanics, and puzzles can't make up for platforming that makes you feel like you've had a few too many.

60%

Game Freak is a familiar name – after all, it's the brains behind the highest-grossing media franchise of all time, Pokémon. Not beholden to Pikachu, though, Game Freak regularly experiments outside its main franchise with games like *Drill Dozer* and *Tembo the Badass Elephant* – they're fun, if janky, platformers. And now there's *Giga Wrecker Alt.*

Giga Wrecker Alt. is an improved port of 2017's Metroidvania, *Giga Wrecker*. Set in a future where the Ajeet, a robotic alien species, has enslaved humanity, it's up to newly awoken cyborg Reika to investigate the invasion and find the mysterious girl who killed her.

Reika's main ability is to absorb the scraps left behind by the Ajeet and combine them into new forms. Very quickly, Reika can run around with a ball of metal multiple times bigger than herself, using it as a devastating weapon that can destroy elements of the environment, or transform it into different shapes to use as tools.

In true Game Freak fashion, *Giga Wrecker Alt.* is oozing with a distinctive art style full of bright colours, clever character designs, and awesome weapons. While it isn't as cutesy or clean as *Pokémon*, being full of death and grunge and cybernetic horrors, you can still tell it's a Game Freak title at a glance. The tilesets could've been masked better, though, as levels with lots of solid space often give way to repeated textures that strain the eyes and make what could've been a gorgeous game look rough around the edges.

The physics puzzles are intense, and cerebral moments give way to dynamic destruction and unexpected chain reactions. At times it can feel almost Indiana Jones-y, with butt-clenching leaps of faith made at the last second as an entire area falls apart thanks to your antics. It's a shame, then, that the simple act of jumping is *Alt*'s primary downfall.

Alt's movements feel sluggish and laggy, with a noticeable input delay that makes traversal a royal pain in the neck. When you're dodging enemy fire while also navigating a complex platforming section, the last thing you want is for your controls to respond a third of a second late. The map is also difficult to interpret, with rooms being connected by teleporters that effectively make you guess where you'll go next.

Giga Wrecker Alt. has so much going for it: a fascinating world, gorgeous art style, meaty destructive powers, and physics puzzles that feel fresh. That's then bulldozed by controls that simply do not function. All of Game Freak's design chops can't help a platformer where the jumping feels like you're playing via telegram.

Navigating an environment as it's falling apart is an exhilarating experience.

Review

Yuppie Psycho

This is Brian's first job, so he's often unclear on whether any of this is 'normal' for office life.

An office horror game where your boss isn't the only monster

If there's one thing immediately apparent about *Yuppie Psycho*, it's the developers' feelings towards corporate culture. You play as Brian Pasternack, a young man attending his first day of work at Sintracorp, an enormous company that promises to promote its workers to a higher tier of society. Dressed in a cheap supermarket suit and holding a job offer letter for a position he never applied for, Brian is immediately caught up in the most pressing of office politics – the building is haunted by a witch, and the AI program that lives in his office computer needs him to hunt it down.

Yuppie Psycho is satire, a send-up of the feeling of being trapped in a job, forced to make friends with weirdos who are ladder-climbers, and pompous bosses, all while being brainwashed by company slogans and value statements. It's also a committed survival horror game. You need to manage limited resources necessary to progress (including special pieces of paper you need to collect to save your game), explore punishing environments, and face numerous enemies with no real way of combating them. The vibe is *Office Space* meets Junji Ito, and it rides the line between these two disparate aesthetics expertly.

"The vibe is *Office Space* meets Junji Ito"

You spend the game exploring the building, solving adventure game-style 'use X on Y' puzzles, and dealing with various enemies and hazards. There are some light stealth elements and plenty of puzzles contingent on you examining your environment to learn information and find items. The puzzles are occasionally tricky though rarely obtuse, but the escalating hostility you experience can be exhausting.

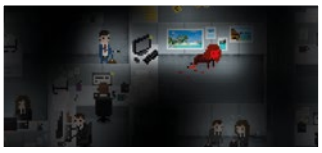
The pixel-art graphics do a great job of conveying the game's lo-fi horrors, but it's in the sound mix where the real chills come to the fore, with jarring and realistic cries, sobs, and demonic whispers riling up fears over what might be through the next door or around the next corner in an effective fashion.

A few hours in, the game opens up a bit, which will either entice or push you away, depending on what sort of experience you're after. When you're faced with multiple potential objectives and no clear way to resolve any of them, the grimness can start to intimidate in a way that it doesn't when you're on a clear path forward, and when a sudden injury or death can drain your healing resources or undo everything you've achieved since your last save, it's easy to get frustrated. It's worth noting this is an intentional design choice to ramp up tension, and it's effective at doing so, but it won't be to everyone's taste.

Yuppie Psycho has multiple endings and secrets to discover, and anyone willing to dive deep and power through the frustrating sections will find their determination and patience rewarded with some smart writing, fun characters, and genuine scares. It's inventive, weird, and unique, and might make you feel better about your own workplace – assuming it's not also haunted by a witch.

HIGHLIGHT

Yuppie Psycho's sense of humour is its secret weapon. It's in the exaggerated sound effects, the photocopied pictures of your face that appear on screen whenever you save, and the general tone of the script. It's creepy, but strikes an interesting balance in its tone where the comedic lines are never jarring.



Your flashlight needs batteries to keep powered up, but thankfully they're plentiful throughout the game.

Info

GENRE
Survival Horror / Adventure

FORMAT
PC (tested)

DEVELOPER
Baroque Decay

PUBLISHER
Another Indie

PRICE
£16.66

RELEASE
Out now

REVIEWED BY
James O'Connor

VERDICT

A smart, scary satire that justifies its more frustrating moments with compelling storytelling.

71%

You often get given multiple cards of each type, allowing you to select duplicates if required.

SteamWorld Quest

These knights are actually made of shining armour

Info

GENRE
RPG

FORMAT
Switch (tested)

DEVELOPER
Image & Form

PUBLISHER
Image & Form

PRICE
£22.49

RELEASE
Out now

REVIEWED BY
Jon Bailes

SteamWorld is a place where robots have free will and desires, while everything else follows strict mechanical procedures. This underlying law remains the same whichever genre developer Image & Form turns its hand to, from tower defence to platform adventure – the scrap metal characters supply personality and charm, as a fine-tuned rule set defines the world's unbreakable logic. Now it's the turn of the fantasy RPG to be moulded into the formula.

SteamWorld Quest is a bigger and more ambitious proposition than its franchise predecessors. Visually, it's impressive, with large, distinctive characters taking centre stage against richly detailed backgrounds, and it sets up for a longer runtime, with elements arriving and evolving over the space of 15–20 hours. There's also a change of setting, from the usual western-themed mining colonies to a fairytale book within the same universe. Characters are still constructed out of metal and bolts, but take the form of heroic knights, magic-wielding alchemists, and fearsome dragons.

At the heart of the game is an accessible but intricate system of card- and turn-based combat. Each member of your three-android party holds eight character-specific cards, which are shuffled together to form your deck. At the start of a turn, you deploy three from a selection of six, with used cards being replaced from the deck as you go. You can also redraw up to two cards if you don't like what you've been dealt. Other considerations include 'cogs', which determine when you can use more powerful cards, and bonus effects gained either by chaining cards from the same character together, or creating combos by playing certain cards in order.

The system's potential is instantly clear, and it expands as you acquire more cards and a full character roster. Deck organisation is crucial. It's important not to overload on costly powers, else you'll struggle to create chances to use them, and you'll need a good balance of abilities, from physical attacks and elemental magic to buffs, status effects, and healing. Then, in battle, you quickly learn to recognise when to play each card for maximum effect, looking for opportunities for buffs and chains and biding your time until you can unleash big damage.

Outside the battles and menus, however, the game lacks density and impetus. Each location is made up of interconnected rectangular spaces, where you encounter various monsters. Between fights, you chop up destructible scenery for extra cash, poke around for hidden entrances, and methodically exhaust the routes on offer. There are treasure chests to find and a shop to browse, giving you access to more cards

This wagon follows wherever you go and fulfils your consumer needs, from purchasing items and weapons to upgrading cards.

Your initial band of three characters expands at key points on the journey, with each new addition adding a new dimension to the party.

and equipment, and maps become increasingly complex. But a lot of new cards don't introduce anything qualitatively different, and level design never progresses beyond basic key searching, which merely ensures that you scour the area before continuing. It's all rather lifeless. Barring an arena mode, there are no side quests or secondary paths to uncover, and no changes of pace or meaningful decisions to make other than your combat setup.

Walking through yet another set of barely interactive rooms, no matter how attractive the scenery, gets tiresome, especially when enemy types regularly repeat. Battles aren't quick, nor are they trivial enough to plough through mindlessly. After you've seen each enemy a couple of times, interesting individual challenges and progress feels attritional.

"The loop's baggy, and the lightweight narrative can't cover for it"

The story and characters keep things moving to an extent, with a script full of gently humorous banter, and light riffing on various fantasy and RPG tropes. But by the same token, the mocked clichés are still being employed, and it all feels well-worn and predictable. In *SteamWorld Heist* and *Dig*, the quick-fire dialogue and daft plot complemented a tight loop. Here, the loop is baggy and monotonous, and the lightweight narrative can't cover for it.

More surprisingly, even the core experience isn't as smooth as in other *SteamWorld* games. The difficulty curve on the game's middle setting, for example, is mostly very shallow, then ramps up dramatically towards the end, as if to encourage grinding. There are also balancing issues with the game's status effects, with poison, in particular, being overpowered. Using it against enemies, including bosses, is an invariably reliable tactic, and when you succumb, it can prove deadly with its cumulative damage, especially if you then get hit with despair, which prevents characters from healing.

There are cards that can counter these effects, but the problem then is the element of luck built into the system. If a card is sitting at the bottom of the deck when you need it, tough. And if you stack your deck with healing cards in anticipation, you'll neuter your offensive capabilities. It would help at least if you could switch some characters, cards, or equipment at the start of battle, once you know what you're facing. As it stands, you sometimes find yourself struggling through with the wrong gear or an ineffective hand.

With their last game, *SteamWorld Dig 2*, Image & Form rewarded experimentation and exploration with interesting bonus areas and upgrade possibilities. In *Quest*, too much rests on the cards, and they can't carry the whole game. Perhaps it's a problem of genre, in that an RPG needs a quantity of content and wildness of imagination that *SteamWorld*'s slim, refined template isn't equipped to deliver. Regardless, while there's plenty of polish in *Quest*, it provides the mildest of entertainment.

As impressive as the enemies are, battles can be slow. The option to play in fast forward soon becomes welcome.

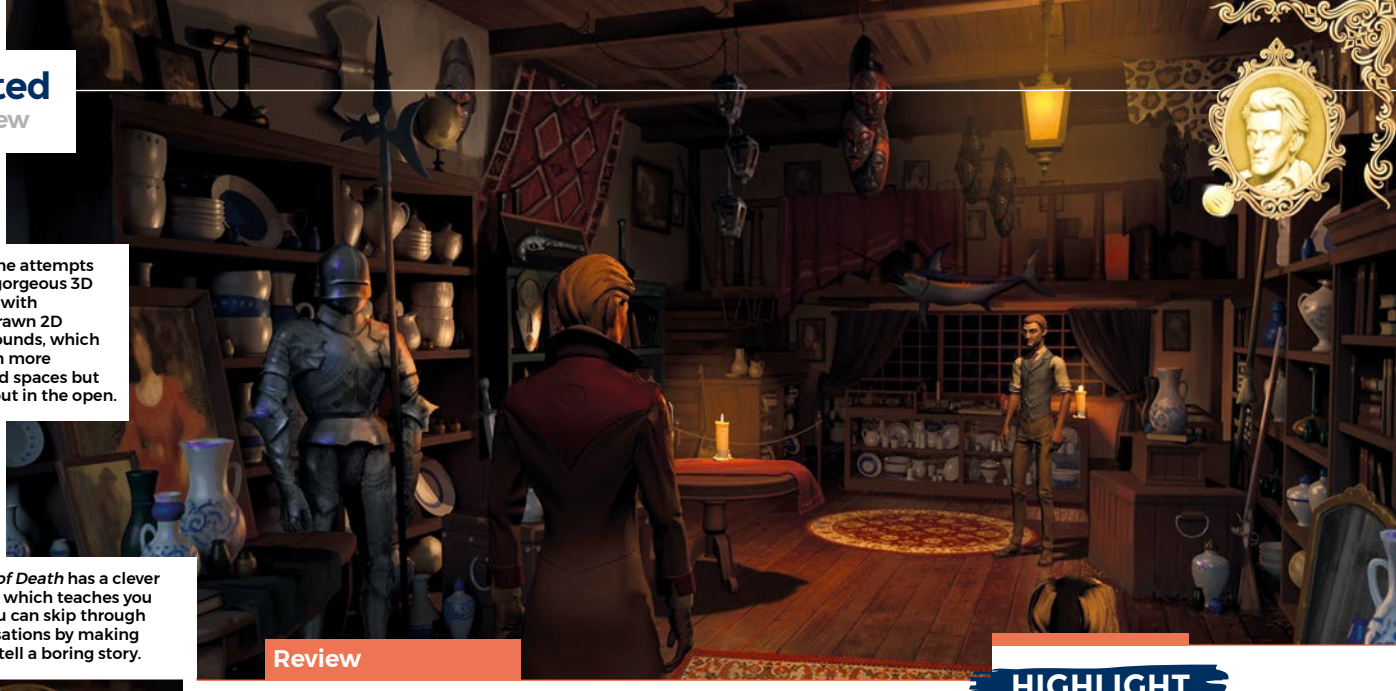
HIGHLIGHT

The cog meter is a clever mechanic that replaces magic points and demands strategic management within individual battles. Simply put, basic attack and buff cards add cogs to your meter, while more powerful abilities cost cogs to use. It forces you to think ahead and consider the order of your actions.

VERDICT

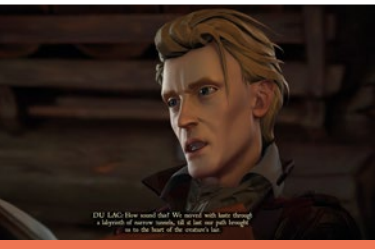
Despite smart presentation and system design, *SteamWorld Quest* is a repetitive and uninspiring adventure.

58%



The game attempts to mix gorgeous 3D models with hand-drawn 2D backgrounds, which works in more enclosed spaces but falters out in the open.

Dance of Death has a clever tutorial which teaches you that you can skip through conversations by making Du Lac tell a boring story.



Review

Dance of Death: Du Lac & Fey

Rip it up and start again

HIGHLIGHT

Swapping between the two main characters in *Dance of Death* is handled by a fancy cameo in the top right of the screen. Changing between protagonists can open up extra conversation options in the story, as Le Fey can communicate with London's wildlife, whereas Du Lac is locked to human chatter.

Info

GENRE
Point-and-click

FORMAT
PC (tested)

DEVELOPER
Salix Games Ltd, Tea Clipper Games Ltd

PUBLISHER
Salix Games Ltd

PRICE
£24.99

RELEASE
Out now

REVIEWED BY
Jordan Oloman

VERDICT

***Dance of Death*'s clever premise is murdered by a serial bug affliction.**

40%

The debut title from Salix Games, *Dance of Death: Du Lac & Fey* is a devilishly verbose point-and-click set in Victorian London, at the height of the Ripper murders. You swap between a trio of characters but spend most of your time with Arthurian legends Lancelot Du Lac and Morgana Le Fey, who is... trapped in the body of a dog.

As much as I long to champion this unique concept, however, the game behind it is harder to recommend. Despite its fancy costumes and hairstyles, *Dance of Death* is stuck in concrete shoes. A plethora of bugs and a general lack of polish hack away at its inspired art direction and clever script. Most of this is down to the bold decision to place 3D characters in a 2D hand-drawn world – a style last seen in the point-and-clicks of yore, like the 1996 adventure, *Toonstruck,* in which a digitised Christopher Lloyd wandered a world of hand-drawn and pre-rendered characters.

In this instance, it really doesn't work. For the most part, the building interiors are rendered with meticulous detail, allowing the carefully sculpted 3D models to pop, but when you venture into open spaces, things immediately fall apart. The way you control the protagonist by clicking around gigantic collision maps often led me to glitch up and into the geometry itself – and with slow turning circles, even simple movement was utter agony. It all detracts from the fluid character animations that the team clearly worked so hard on.

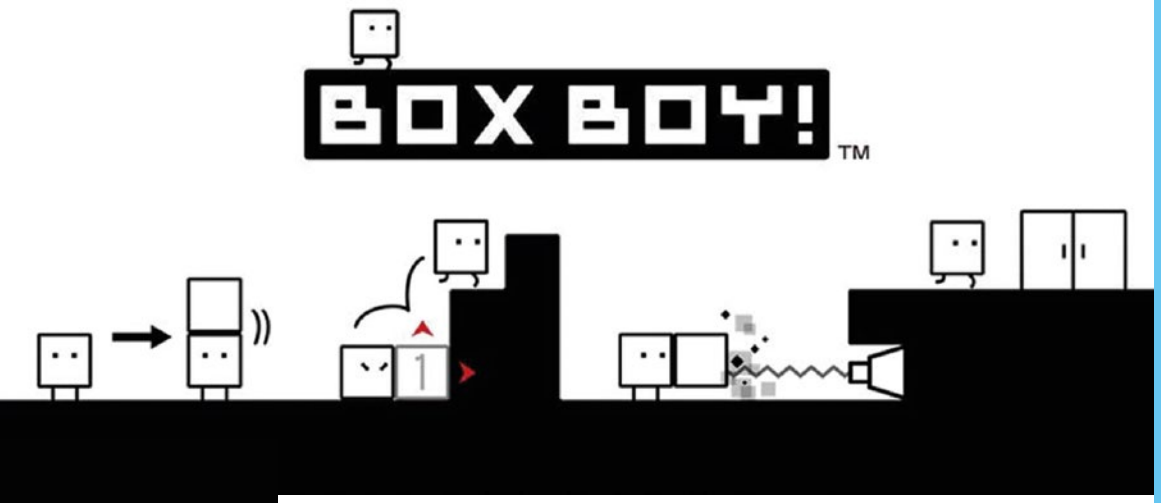
When you switch into conversation mode, though, everything changes gear. With solid depth-of-field effects and multiple dialogue choices, the strength of the script means you're soon drawn into the game's world. If only the mouth movements weren't so robotic.

Unfortunately, *Dance of Death* commits a great adventure game sin by omitting manual saves, a run button, and a prompt to highlight intractable objects, which is poison in a game that blurs artistic dimensions. The UI is so finicky that pressing Escape at the wrong moment can shut down the game – and don't even ask about the barren options menu.

Puzzle-wise, *Dance of Death* does attempt to innovate in some of its QTEs, but I'd hesitate to call them exciting. One had me searching a coffin with my paws by scratching through a flat texture with the cursor, an idea I haven't seen since the *Disney Activity Center* CD-ROMs of the late nineties.

The worst part of all this is that there's an ambitious, gritty story with some clever twists hiding behind all of the glitches. Outside of a few howlers, like the time a drunk asked Mary Kelly to "drain his baubles," I really liked the dialogue, with clever quips lining the period-appropriate back and forth between characters.

A lot of talent and passion has evidently been poured into *Dance of Death*, but the struggle to funnel that creative magic into a serviceable game – one that also services the expectations of a modern audience – is, unfortunately, all too plain to see.



Boxing clever

HAL Laboratory's BoxBoy! games are some of the finest puzzlers on the 3DS

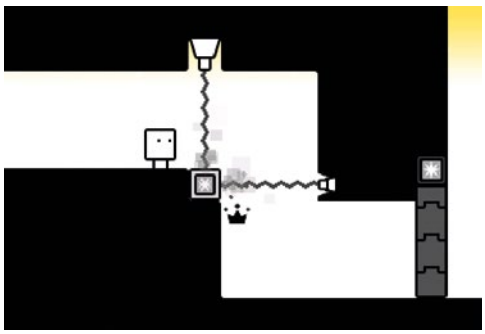
The recent, surprising release of *BoxBoy! + BoxGirl!* on the Nintendo Switch's eShop prompted us to revisit the earlier entries in this unassuming little series. In case you haven't heard of it already, *BoxBoy!* first emerged in 2015 on the 3DS, and spawned two sequels – *BoxBoxBoy!* and *Bye-Bye BoxBoy!* – before taking a two-year hiatus. The games' premise is as simple as their black-and-white, minimalist graphics: they're platform-puzzlers where the object is to guide the angular hero Qbby to an exit punctuated by pitfalls and hazards. Qbby's a fragile little chap, but he's equipped with the ability to clone his own body and use the copies as bridges across gaps, or as a ladder to pull himself up to higher places.

Whether it's intended to or not, the *BoxBoy!* series feels like a summation of HAL Labs' long history as a developer. Its graphics hark back to the monochrome titles it was making for the Game Boy a few decades ago, while its brain-tickling puzzles recall its half-forgotten *Eggerland* series, best known in the West as *Adventures of Lolo*. Above all, though, *BoxBoy!* continues HAL's predilection for light, approachable games: the Japanese studio is, of course, most famous for *Smash Bros.* – a series of brawlers that favour ease of access over intricate combos – and *Kirby*, a platforming franchise that, from its inception in 1992, was designed specifically for newcomers and younger players.

In fact, *BoxBoy!* was thought of as a potential *Kirby* spin-off during its early development, before its designers concluded that creating a new central character was preferable to forcing the round, soft-edged *Kirby* into *BoxBoy!*'s format. The result is a charming puzzle series that we'd argue is ideal for Nintendo's handheld; its initially straightforward concept soon gives way to complex level designs that take in devious combinations of switches, spikes, deadly lasers, and moving conveyor belts. Their pace is more cerebral and less pulse-quickening than, say, *Super Meat Boy*, but *BoxBoy!*'s levels can still provide a stern challenge. *BoxBoxBoy!* and *Bye-Bye BoxBoy!* added more mechanics to the mix – the third game added bombs and rocket-propelled boxes, among other things – while this year's *BoxBoy! + BoxGirl!* takes advantage of the Switch's Joy-Cons by adding a two-player co-op mode.

As you can probably tell from the still image printed above, the *BoxBoy!* games entirely lack *Kirby*'s vibrant colour palette or the *Super Mario* series' expensive gloss, but there's still something endearing about the little world HAL manages to create with a few simple rules and lines.

Even HAL can't quite leave Qbby behind; as you've probably gathered by now, *Bye-Bye BoxBoy!* wasn't quite the series finale its name suggested. Still, as long as HAL can keep coming up with new twists on *BoxBoy!*'s gently taxing cuboid puzzles, we'll happily keep heading back for more.



Wireframe Recommends

Eggerland

NES, MSX, GAME BOY

Also known as *Adventures of Lolo*, this series of box-pushing puzzlers isn't dissimilar to *BoxBoy!*: friendly looking on the surface, but devious and taxing when you get into them.

EarthBound

SNES, GBA

Its cult status is already assured, but worth reiterating for those who might have missed it: surreal sci-fi adventure *EarthBound* is nothing short of a stone-cold classic.

Revenge of the 'Gator

GAME BOY

Like *BoxBoy!*, this cute pinball title has charming monochrome graphics, while its simple action is perfect for a portable experience.

Earth Defense Force

Step one: insert massive enemies. Step two: ... ?

SANDLOT, THINKARTS, VICIOUS CYCLE, YUKE'S / 2003-ON / MULTI

The *Earth Defense Force* (*Monster Attack/Chikyū Bōeigun*) series has hardly changed since its 2003 inception. Vast overstatements are made about other series' lack of advancement over the years, but with *EDF* it's resoundingly true: the graphics look a bit better each generation, but there are only ever a few other changes of note. Far from being consigned to the scrapheap though, the series trundles along with a band of fiercely loyal fans in tow, all of who just can't get enough of that one big (very big) element: massive monsters to blow away.

I'd love to offer some kind of deep and meaningful psychological assessment here, but that's more or less the whole story. The *EDF* games have been going for nearly 20 years and from the beginning have seen human-sized players shooting guns at building-sized monsters (ants, spiders, definitely-not-Godzillas et al), with little variation in that activity throughout each game and across entire generations. Yet still it compels – the series manages to avoid being collectively scorned, and people manage to have actual, real-life, genuine fun with the game.

Both main *EDF* titles made by studios other than Sandlot – namely Vicious Cycle's *Insect Armageddon* (2011) and Yuke's *Iron Rain* (2019) – suffered from the same issue. Basically, in trying to legitimise the series by polishing it more, by adding in storylines beyond 'big bads, kill big bads, EDF! EDF! EDF!' and by actively trying to *make jokes* rather than being funny by accident, both studios ended up highlighting just how boring a series this is compared to other blockbuster titles with massive budgets.

"It's in that B-movie scope where *EDF* really shines"

It's in that B-movie scope where *EDF* really shines, making it the thing that's always waiting to be slapped on to kill a few empty minutes between more rewarding games, pastimes, or medical appointments. Focusing on anything beyond what's at the end of your crosshairs serves to highlight how little else there is on show. In that way, the core Sandlot *Earth Defense Force* series actually pulls off some superb sleight of hand; a street magician focusing your attention on the big things and their accompanying bluster while hiding the creaking, simplistic, hardly working nonsense behind the scenes.

It might be a statement thumbing its nose at conventional wisdom (as well as some elements of the series' plot, frankly), but *EDF* need not evolve in order to remain just as much fun now as it has always been. All it needs to do is give us the same fairground pop-up shooting gallery we've craved since the beginning: massive monsters, unlimited ammo, and a city where collateral damage isn't a recognised concept.

All together now: "*To save our mother Earth from any alien attack / From vicious giant insects who have once again come back / ...*"

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In way over our heads with Broken Bear's crime RPG

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JOIN THE PRO SQUAD

RED EAGLE™

GB260HSU | GB270HSU | GB2760QSU

1ms
75Hz
Free Sync

GET IN THE GAME

BLACK HAWK™

GE2288HS | G2530HSU | G2730HSU | GB2530HSU | GB2730HSU

4K
Free Sync

IMMERSE YOURSELF IN THE GAME

GOLD PHOENIX™

GB2888UHSU

2560 x 1440
1ms
75Hz
Free Sync

ENTER A NEW DIMENSION

SILVER CROW™

GB2783QSU